

# **Board of Directors Meeting**

Wednesday, April 18, 2018 6:00 pm San Leandro Civic Center 835 East 14<sup>th</sup> Street San Leandro, CA 94577

Meetings are accessible to people with disabilities. Individuals who need special assistance or a disability-related modification or accommodation to participate in this meeting, or who have a disability and wish to request an alternative format for the meeting materials, should contact the Clerk of the Board at least 2 working days before the meeting at (510) 736-4981 or <u>Scabrera@ebce.org</u>.

If you have anything that you wish to be distributed to the Board please hand it to the clerk who will distribute the information to the Board members and other staff

1. Welcome & Roll Call

# 2. Pledge of Allegiance

#### 3. Closed Session

CONFERENCE WITH LEGAL COUNSEL--ANTICIPATED LITIGATION Significant exposure to litigation pursuant to paragraph (2) of Subdivision (d) of California Government Code Section 54956.9--one case.

#### 4. Public Comment

This item is reserved for persons wishing to address the Board on any EBCE-related matters that are not otherwise on this meeting agenda. Public comments on matters listed on the agenda shall be heard at the time the matter is called. As with all public comment, members of the public who wish to address the Board are customarily limited to three minutes per speaker.

# **CONSENT AGENDA**

# 5. Approval of Minutes from March 21, 2018

6. Approval of Payment of CalCCA Dues and Share of Litigation Fund Authorize the CEO to submit payment to the California Community Choice Association for EBCE's operational membership dues and litigation fund contribution for FY17-18, in the amount of \$112,500. 7. Authorize CEO to Negotiate and Execute an Agreement for Accounting Services Authorize the CEO to negotiate and execute an agreement with an outside accounting firm to support all facets of financial operations for a contract not to exceed \$200,000 a year, for a two-year term.

#### 8. Approval of Corrected Traffic Control Light (TC1) Rate

Approve the corrected Traffic Control Light (TC1) rate to account for the adjusted Power Charge Indifference Adjustment (PCIA) fee. These rates remain at 1.5% below PG&E for Bright choice and on par with PG&E for Brilliant 100.

#### 9. Contracts Entered Into

Accept the CEO's report on Contracts Entered in between March 21 and April 18

#### **REGULAR AGENDA**

#### **10. CEO Report (Informational Item)**

Accept CEO report on:

- A. Executive Committee Meeting; and
- B. Local Development Business Plan Update

#### 11. Approval of 100% Renewable Energy Product (Action Item)

Review and Adopt:

- A. 100% Renewable Energy Product Timeline;
- B. Product Premium; and
- C. Mechanics for Offering Product

#### 12. Approve Stipends for the Community Advisory Committee Members for Meeting Attendance (Action Item)

Adopt a Resolution approving stipends for Community Advisory Committee members for meeting attendance.

#### 13. Board Member and Staff Announcements

<b>14. Adjournment</b> – to	Date:	Wednesday, May 2, 2018
	Location:	City of Hayward,
		Council Chambers
		777 B Street
		Hayward, CA 94541



# DRAFT

**SUMMARY MINUTES** 

# **Board of Directors Meeting**

Wednesday, March 21, 2018 6:00 pm

Meetings are accessible to people with disabilities. Individuals who need special assistance or a disability- related modification or accommodation to participate in this meeting, or who have a disability and wish to request an alternative format for the meeting materials, should contact the Clerk of the Board at least 2 working days before the meeting at (510) 736-4981 or <u>Scabrera@ebce.org</u>.

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#### 1. Welcome & Roll Call

Present: Pilch (Albany), Hahn (Berkeley), Hernandez (Dublin), Martinez (Emeryville), Bonaccorsi (Fremont), Mendall (Hayward), Kalb (Oakland), Rood (Piedmont), Thomas (San Leandro), Spedowfski (Livermore), Dutra-Vernaci (Union City), Eldred (Community Advisory Committee), and Haggerty (Alameda County)

#### 2. Pledge of Allegiance

#### 3. Public Comment

This item is reserved for persons wishing to address the Board on any EBCE-related matters that are not otherwise on this meeting agenda. Public comments on matters listed on the agenda shall be heard at the time the matter is called. As with all public comment, members of the public who wish to address the Board are customarily limited to three minutes per speaker.

**21 members** of the public spoke in support of the Local Development Business Plan; proposed energy mixes; need for local jobs, local clean energy and the programs/community benefits the program should provide.

**Gary (Hayward Resident)** – Spoke regarding concerns with phase-in process and City of Hayward default product.

Tom Kelly – Spoke regarding the Energy mix, Rates, and discount rates.

Larry Kelp- Spoke regarding the need for local energy and programs.

# **CONSENT AGENDA**

#### 4. Approval of Minutes from February 28,2018

#### 5. Approval of EBCE Rate Sheets

Adopt a Resolution approving the rate sheets for the Bright Choice and Brilliant 100 product services.

**Tom Kelly** – Spoke regarding PG&E pricing and requested clarification on Brilliant 100 product.

6. Authority to Negotiate and Execute a Professional Services Agreement with Circlepoint in Continuation of Existing but Expiring Contract with Alameda County Adopt a Resolution authorizing the Chief Executive Officer (CEO) to negotiate and execute a contract with Circlepoint with a term of April 12, 2018 to June 30, 2019, in an amount not to exceed \$350,000 which is the remaining contract amount budgeted under the Alameda County Procurement Contract No. 14862.

# Director Mendall motioned to approve the consent calendar. Director Rood seconded the motion which passed 11/0; Excused: Vice-chair Kalb.

#### REGULAR AGENDA

- 7. CEO Report (Informational Item) Receive update on workflow priorities. <u>Presented</u>
- 8. Discussion of Potential Amendments to the Joint Powers Agreement (Discussion Item)

Discuss potential amendments to the East Bay Community Energy Authority Joint Powers Agreement and give direction to staff with respect to any amendments to bring back to the Board for consideration, after providing proper notice.

#### The Board Discussed

- Potential JPA amendments for the Community Advisory Committee
- Stipend payments
- Executive Committee composition
- Jurisdiction representative terms

#### **Potential Amendments:**

- Community Advisory Committee member will receive \$50 stipend for up to two meetings per month. Chair will receive the Board stipend of \$100 in lieu of the CAC stipend if attending Board meetings, up to 2 a month. Stipends will begin with the March 21, 2018 Board meeting.
- Alternates for Community Advisory Committee.
- Updating Local Developed Business Plan due date
- Allow current Board members to serve until Cities appoint a new representative

Jessica Tovar – East Bay Clean Power Alliance supports the CAC stipends and having alternates.

Tom Kelly – Spoke regarding Chair elections and operational budget requirements.

**9.** JPA Member Election to Default Phase 1 Customers onto Brilliant 100 (Action Item) Adopt a Resolution directing staff to make the necessary arrangements to allow the default service for the Phase 1 enrollment in certain cities to be Brilliant 100 for all nonresidential customers and approving amendment to the terms and conditions.

#### The Board discussed:

- Jurisdictions Defaulting communities to Brilliant 100
- Default Process and Customer ability to opt-down to Bright Choice
- Supporting Local Jurisdictions
- Climate Action Plan

**7 members** of the public spoke in opposition of Brilliant 100 energy mix; Cities defaulting accounts to Brilliant 100 instead of the default product; and encouraged residents to opt-up on their own

Audrey Ichinose – Commended the cities for their work on their Climate Action Plans.

#### <u>Director Mendall motioned to approve JPA Member Election to Default Phase 1</u> <u>customers onto Brilliant 100 as amended:</u>

A. <u>Remove Emeryville from current request</u>. <u>Director Pilch seconded the motion which carried 11/1 No: Bonnacorsi</u>

10. Board Member and Staff Announcements

#### <u>Director Eldred invited the Board of Directors to the Local Development Business Plan</u> <u>Symposium on 3/26/18 at Preservation Park Oakland from 9:00am to 5:00pm</u>

11. Adjourned – to Wednesday, April 18, 2018.



# **Staff Report Consent Item 6**

то:	East Bay Community Energy Board of Directors
FROM:	Nick Chaset, Chief Executive Officer
SUBJECT:	Approval of Payment of CalCCA Dues and Share of Litigation Fund
DATE:	April 18, 2018

# **RECOMMENDATION**

Authorize the CEO to submit payment to the California Community Choice Association for EBCE's operational membership dues and litigation fund contribution for fiscal year 2017-2018 (FY17-18), in the amount of \$112,500.

# **BACKGROUND**

In October 2017, EBCE joined California Community Choice Association (CalCCA) as an operating member. CalCCA is a trade association representing the legislative and regulatory interest of Community Choice Energy (CCE) agencies in California. The association's membership dues are comprised of two portions; one is fixed regardless of agency size and another that's proportional to the agency size. Payment for dues are made quarterly, however, when EBCE joined CalCCA, the payment for the first 3 quarters of FY 2017-18 was postponed post launch.

In September 2017, the CPUC initiated proceeding to reexamine the proper calculation of the PCIA, prompting CalCCA to intervene and promising a lengthy and rather expensive process to protect the interest of CCEs.

During its annual meeting in October 2017, CalCCA Board established a litigation fund to support the hiring of a legal firm and technical consultant to handle the CalCCA interventions.

In February 2018, the CalCCA Board voted to increase the litigation fund, bringing the total members' obligation to cover CalCCA's annual expenses for FY17-18 to over \$2.5 million.

#### ANALYSIS & DISCUSSION

We believe that the value we obtain from being a member of CalCCA far exceeds the cost and that acting in concert with other CCEs strengthens our ability to influence the legislative and regulatory process.

Based on EBCE's estimated revenue of \$30 million from July 2017 to June 2018, our dues and litigation fund balance was calculated at \$114,000. As we have already contributed \$1,500 as an affiliate member prior to becoming an operating member in Q3 2017, the remaining balance payable to CalCCA for FY17-18 becomes \$112,500.

#### **ATTACHMENTS**

A. Revised FY17-18 Q4 Member Contribution Update to Litigation Fund Methodology

B. CalCCA FY17-18 Q4 Updated Dues Letter



# Revised Q4 Member Contributions: Update to Litigation Fund Methodology for FY17-18

#### **Board Approval to Revise Q4 Litigation Fund Methodology**

At the Board Meeting on 2-28-2018, the CalCCA Board discussed the shortfall in the Litigation Fund (Regulatory Cases) to cover the cost of several California Public Utilities Commission (CPUC) proceedings including the Power Charge Indifference Adjustment (PCIA), Resolution E-4907, Integrated Resource Planning, etc.<sup>1</sup>

The Board agreed to the following changes to the litigation fund methodology.<sup>2</sup>

Motion (Balachandran/Hale) to approve the recommendation from the Resource Use Subcommittee that the FY17-18 budget update be approved using a new budget allocation methodology as shown in Option 3 of Attachment 3, and that CCA revenue input values for 2018 be updated. Motion was approved by unanimous consent. Directors Marshall and Bardacke abstained.

**NOTE:** This budget amendment does not include the following:

- Additional cost to fund the Petition for Modification response, which was the subject of a separate cost-sharing agreement by Directors (Director Pepper email of 2/5/2018 and emailed responses providing a majority vote in the affirmative). Invoices will be sent separately.
- 2. Additional cost of engaging a Public Relations firm which will be funded by eight CalCCA members.<sup>3</sup> Invoices will be sent separately.

The Resource Use Subcommittee developed three methodologies to fund the estimated shortfall of \$775,000. The Board approved Option 3 estimated to provide an additional \$648,580. Option 3 increases the litigation fund fixed fee from \$25,000 to \$50,000, increases the litigation fund variable charge from 0.07% to 0.13%, and increases the litigation fund cap from \$150,000 to \$200,000.

<sup>&</sup>lt;sup>1</sup> Refer 2-28-2018 Board Meeting Packet, Agenda Item #8, Budget Update Report, Attachments 1, 2, and 3.

<sup>&</sup>lt;sup>2</sup> 2-28-2018 Board meeting minutes.

<sup>&</sup>lt;sup>3</sup> Refer 2-28-2018 Board Meeting Packet, Agenda Item #6: CPA, CPSF, EBCE, LCE, MCE, PCE, SCP and SVCE agree to cost-share funding of PR Firm.

MCE and Sonoma Clean Power offered to advance FY2018-19 dues to address any cash flow issues.

The request for updated estimated revenue for FY17-18 for each CCA resulted in a reduction in total revenues which in turn decreased the additional Q4 contribution from the estimated \$648,580 to \$622,620.

The new methodology **only** applies to FY2017-18. The Executive Director will begin development of the FY2018-19 Budget and, in consultation with the Resource Use Subcommittee, bring a proposal to the April 2018 Board Meeting.

#### <u>Matrix</u>

The attached matrix, dated 3-19-2018, illustrates the CalCCA FY2017-18 New Litigation Fund Methodology and Q4 Payment. It reflects the New Litigation Fund allocation as per the new formula, the New Q4 payment (Litigation Fund Delta plus Old Q4 Payment) and the updated total contribution from each CCA for FY2017-18 (dues and litigation fund).

#### Implementation of New Q4 Payment

The Executive Director will reconcile the dues and litigation fund payments for FY2017-18 and issue Q4 invoices in March 2018 that reflect the updated methodology.

#### CalCCA FY 2017-18 New Litigation Fund Methodology And Q4 Payment (New Total FY17-18 by CCA)

#### FY 2017-18 New Q4 Litigation Fund Methodology

(to cover budget shortfall for regulatory cases including PCIA, Draft Resolution, IRP, etc. Refer 2/28/2018 Board Meeting Packet Item # 8, Attachments 1, 2 and 3.)

		Revenue in \$\$ M	New Fund (as p Opti adop	Litigation d allocation per 2-28-18; on 3 pted)	D	elta in \$\$	Delta in %	Curr Litig Payr	ent total ation Fund nent	Old Q (botl litiga (as p	4 Payment: h dues and ation fund) per 10-4-17)	Tota Pay + Ol	al New Q4 ment (Delta ld Q4)	NEV FY20 due litig	V TOTAL 017-18 s and ation fund			
1	AVCE	16.5	\$	71,450	\$	34,900	95%	\$	36,550	\$	8,388	\$	43,288	\$	89,700			
2	CPSF	55	\$	121,500	\$	58,000	91%	\$	63,500	\$	11,500	\$	69,500	\$	159,000			
3	EBCE	30	\$	89,000	\$	43,000	93%	\$	46,000	\$	69,500	\$	112,500	\$	114,000			
4	CPA	40	\$	102,000	\$	49,000	92%	\$	53,000	\$	8,000	\$	57,000	\$	132,000			
5	LCE	36.6	\$	97,580	\$	46,960	93%	\$	50,620	\$	14,418	\$	61,378	\$	125,880			
6	MBCP	60	\$	128,000	\$	61,000	91%	\$	67,000	\$	105,500	\$	166,500	\$	168,000			
7	MCE	210	\$	200,000	\$	50,000	33%	\$	150,000	\$	43,750	\$	93,750	\$	300,000			
8	PCE	249	\$	200,000	\$	50,000	33%	\$	150,000	\$	43,750	\$	93,750	\$	300,000			
9	PRIME	4.8	\$	56,240	\$	27,880	98%	\$	28,360	\$	9,815	\$	37,695	\$	68,640			
10	PIONEER	35.7	\$	96,410	\$	46,420	93%	\$	49,990	\$	77,840	\$	124,260	\$	124,260			
11	RCEA	46.6	\$	110,580	\$	52,960	92%	\$	57,620	\$	17,418	\$	70,378	\$	143,880			
12	SCP	175	\$	200,000	\$	52,500	36%	\$	147,500	\$	44,063	\$	96,563	\$	297,500			
13	SVCE	254	\$	200,000	\$	50,000	33%	\$	150,000	\$	43,750	\$	93,750	\$	300,000			
14	SJCE	1.6 FY18/19	\$	-	\$	-										\$	35,000	FY17-18
15	VCEA	50 FY18/19			\$	-										\$	35,000	FY17-18
16	DCE	47 FY18/19			\$	-										\$	35,000	FY17-18
														\$	2,322,860	Nev	v Total	
														\$	(1,700,240)	Old	Total	
			\$	1,672,760	\$	622,620		\$	1,050,140	\$	497,690	\$	1,120,310	\$	622,620		Delta	

Note 1: Board appoved adjustment to litigation fund: increase cap to \$200,000 for litigation fund, increase fixed portion to \$50,000 and increase variable charge to 0.13% of expected 2017-18 revenue Note 2: SJCE, VCEA and DCE FY17-18 contribution is \$35,000 each, to be billed in Q4 and paid 1 month after launch.



#### Updates to Budget and Litigation Fund Methodologies FY17-18 Q4 Payment

EBCEA Reconciliation (3-19-18)

Dear Nick Chaset,

As agreed at the October 4, 2017 Board Meeting, the CalCCA dues and litigation fund contributions from Operational Members were updated to reflect the additional funding needed to meet anticipated operational and regulatory expenses for FY2017-18. An invoice was sent to Operational Members serving load, in November 2017 to cover Q1, Q2, and Q3 contributions, and included an estimate for the Q4 invoice to be sent in March 2018 noting that this was subject to change.

At the Board Meeting on February 28, 2018, the CalCCA Board discussed the shortfall in the Litigation Fund (Regulatory Cases) to cover the cost of several California Public Utilities Commission (CPUC) proceedings including the Power Charge Indifference Adjustment (PCIA), Resolution E-4907, Integrated Resource Planning, etc.<sup>1</sup>

The Board agreed to modifications to the litigation fund methodology as per the attached, *Revised Q4 Member Contributions: Update to Litigation Fund Methodology for FY17-18*.

East Bay Community Energy Authority has contributed \$1,500 toward its FY17-18 total contribution of \$114,000. Attached is an invoice for EBCE's remaining contribution of \$112,500.

Please contact me if you have any questions.

Beth Vaughan Executive Director CalCCA 925-408-5142 <u>beth@cal-cca.org</u>

<sup>&</sup>lt;sup>1</sup> Refer 2-28-2018 Board Meeting Packet, Agenda Item #8, Budget Update Report, Attachments 1, 2, and 3.



# **Staff Report Consent Item 7**

ТО:	East Bay Community Energy Board of Directors
FROM:	Nick Chaset, Chief Executive Officer
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SUBJECT:	Authority to Negotiate and Execute an Agreement for Accounting Services

# **RECOMMENDATION**

Adopt a resolution authorizing the Chief Executive Officer (CEO) to negotiate and execute a contract with an outside accounting firm to support all facets of financial operations for a contract not to exceed \$200,000 a year with a maximum term of two years.

# ANALYSIS & DISCUSSION

As EBCE begins the process of transitioning away from its reliance on Alameda County for financial management and control services, EBCE is seeking an accounting firm to support its full suite of financial management needs. Based on EBCE's Administrative Procurement Practices for Professional Services, EBCE sought three bids from accounting firms with experience serving local government agencies and/or the energy sector. EBCE is currently evaluating the three proposals, which range in price from \$3,000 to \$14,000 a month depending on the scope of work and level of experience of the vendor.

EBCE Staff is seeking the authority to negotiate and execute a contract with the accounting vendor that demonstrates the most direct experience dealing with the dual complexities of a Community Choice Energy (CCE) program - on the one hand it is a local government agency that is subject to specific requirements and on the other hand it is an energy provider that must process hundreds of thousands of billing transactions a month working with PG&E. The reason staff is seeking authority to negotiate and

execute instead of proposing a selection of a specific vendor is due to the fact EBCE needs to have an accounting firm in place by the end of April to support the transition away from Alameda County in preparation for launch in June. Waiting until the May Board meeting, while not detrimental to launch activities, would delay starting the process of putting in place necessary financial controls which staff believe are critically important. If this item is approved, EBCE will report back on the selection and final contract at the next Board meeting.

# **ATTACHMENTS**

- A. Resolution Authorizing CEO to Negotiate and Execute a Consulting Services Agreement for Account Services
- B. Form of Consulting Services Agreement

#### **RESOLUTION NO.**

#### A RESOLUTION OF THE BOARD OF DIRECTORS OF THE EAST BAY COMMUNITY ENERGY AUTHORITY AUTHORIZING THE CHIEF EXECUTIVE OFFICER TO NEGOTIATE AND EXECUTE A CONSULTING SERVICES AGREEMENT FOR ACCOUNTING SERVICES

# THE BOARD OF DIRECTORS OF THE EAST BAY COMMUNITY ENERGY AUTHORITY DOES HEREBY FIND, RESOLVE AND ORDER AS FOLLOWS:

Section 1. The East Bay Community Energy Authority ("EBCE") was formed on December 1, 2016, under the Joint Exercise of Power Act, California Government Code sections 6500 *et seq.*, among the County of Alameda, and the Cities of Albany, Berkeley, Castro Valley, Dublin, Emeryville, Fremont, Hayward, Livermore, Oakland, San Leandro, and Union City to study, promote, develop, conduct, operate, and manage energy and energy-related climate change programs in all of the member jurisdictions.

<u>Section 2.</u> Since its inception, EBCE has relied on Alameda County for financial management and control services. Given the anticipated volume of transactions related to supplying electricity, the Board hereby finds that it is in EBCE's best interest to hire an accounting firm to support EBCE's financial management needs.

<u>Section 3.</u> EBCE staff has solicited bids associated for accounting services and is in the process of selecting the successful bidder. EBCE desires to have an Agreement in place with an accounting firm by the end of April 2018.

<u>Section 4.</u> The Chief Executive Officer is hereby authorized to negotiate and execute an agreement with the selected accounting firm in a form substantially similar to the attached Consulting Services Agreement in an amount not to exceed \$200,000 a year for a two-year term.

ADOPTED AND APPROVED this \_\_\_\_\_ day of \_\_\_\_\_, 2018.

Scott Haggerty, Chair

ATTEST:

Stephanie Cabrera, Clerk of the Board

# Consulting Services Agreement for Services By And Between East Bay Community Energy Authority and

This Consulting Services Agreement ("Agreement") is made this \_\_\_\_\_ day of \_\_\_\_\_, 201\_, ("Effective Date") by and between East Bay Community Energy Authority, a joint powers authority formed under the laws of the State of California ("EBCE") and \_\_\_\_\_\_, a \_\_\_\_\_ ("Consultant") for the purpose of providing \_\_\_\_\_\_ services to EBCE.

#### Section 1. Recitals

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

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

**NOW THEREFORE,** for good and valuable consideration, the amount and sufficiency of which is hereby acknowledged, the Parties to this Agreement, agree as follows:

#### Section 2. Term

The term of this Agreement is from the Effective Date of this Agreement through \_\_\_\_\_\_, unless terminated earlier pursuant to Section 8.

# Section 3. Scope of Work/Compliance with Laws and Regulations

**3.1** Consultant agrees to perform the scope of work (the "Work") in <u>Exhibit A</u> in accordance with the compliance schedule in <u>Exhibit B</u>.

**3.2** Consultant represents and warrants that it has the skill and expertise to perform the Work. Consultant agrees to obtain any and all necessary licenses, approvals or permits necessary to perform the Work.

**3.3** Consultant and its Subconsultants must comply with all federal, state and local laws and regulations in performing the Work under this Agreement.

# Section 4. Consultant Staffing

<u>Exhibit C</u> contains a list of Consultant's project manager and all team members. Consultant will not change or substitute the project manager or any team members or add additional team members without EBCE's advanced consent.

# Section 5. Subconsultants

**5.1** Consultant agrees to use only those Subconsultants listed on <u>Exhibit D</u>. Any changes to <u>Exhibit D</u> to add or remove a Subconsultant must be approved by EBCE in advance, in its sole and absolute discretion.

**5.2** Consultant agrees to require all Subconsultants to comply with the terms of this Agreement, including without limitation, maintaining insurance in compliance with the insurance obligations under Section 9, the Confidentiality requirements under Section 11 and indemnifying EBCE under Section 12.

# Section 6. Compensation and Payment

**6.1** The maximum compensation under this Agreement is \_\_\_\_\_\_.

**6.2** If the Work under this Agreement is to be performed on a time and materials basis, Consultant must submit invoices to EBCE on a monthly basis complete with the name of the individual that conducted the Work, the time spent and a brief description of the tasks performed during that time. On all invoices, Consultant must include the total compensation left on the Agreement after deducting the amount of the invoice and must submit invoices to EBCE by the 20<sup>th</sup> of the month following the month in which Consultant performed the Work.

**6.3** If the Work under this Agreement is to be performed on a task or project basis, the Consultant will submit an invoice within thirty (30) days of completing the project to the satisfaction of EBCE for full payment, unless other arrangements have been made.

**6.4** EBCE will not agree to pay any markups on Subconsultant Services or supplies unless such markups are included in <u>Exhibit E</u>, Compensation/Budget and such markups were included in Consultant's bid, if applicable.

**6.5** The following are conditions on EBCE's obligation to process any payments under this Agreement:

**6.5.1** If the Consultant is a U.S. based person or entity, the Consultant must provide to EBCE a properly completed Internal Revenue Service Form W-9 before EBCE will process payment. If the Consultant is a U.S based person or entity, but has neither a permanent place of business in California nor is registered with the California Secretary of State to do business in California, the Consultant must provide EBCE with a properly completed California Franchise Tax Board form related to nonresident withholding of California source income before EBCE will process payment.

**6.5.2** If the Consultant is not a U.S. based person or entity, the Consultant must provide EBCE with the applicable Internal Revenue Service form related to its foreign status and a California Franchise Tax Board form related to nonresident withholding before EBCE will process payment.

**6.6** EBCE agrees to pay invoices within forty-five (45) days of receipt. Invoices may be sent to EBCE by U.S. mail or electronic mail to <u>SCabrera@ebce.org</u>. Invoices will be deemed received on the next business day following the date of transmission via electronic mail or three days after placement in the U.S. mail.

**6.7** EBCE, as a Joint Powers Authority, is a separate public entity from its constituent members and will be solely responsible for all debts, obligations and liabilities accruing and arising out of this Agreement. Consultant acknowledges that it will have no rights and agrees not to make any claims, take any actions or assert any remedies against any of EBCE's constituent members in connection with this Agreement.

# Section 7. Records Retention and Ownership of Work Product

**7.1** The Consultant must retain all ledgers, books of accounts, invoices, vouchers, cancelled checks, background materials, or other records relating to its performance under this Agreement for a period of three years following termination of this Agreement.

**7.2** EBCE owns all rights, including without limitation, all licenses, copyrights, service marks and patents, in and to all Work Product(s), whether written or electronic, without

restriction or limitation upon their use and immediately when and as created by the Consultant, any Subconsultants, or any other person engaged directly or indirectly by the Consultant to perform under this Agreement. Work Product(s) includes, but is not limited to, all writings, reports, drawings, plans, data, video, media, photographs, renderings, plans, software, models, documents or other materials developed or discovered under this Agreement. All Work Product(s) will be considered "works made for hire." And all Work Product(s) and any and all intellectual property rights arising from their creation will be and remain the property of EBCE without restriction or limitation upon their use, duplication or dissemination by EBCE. Consultant agrees not to obtain or attempt to obtain copyright protection in its own name for any Work Product.

# Section 8. Termination

**8.1** EBCE may terminate this Agreement for any reason by giving Consultant written notice. The termination notice may set the date of termination, but if no such date is given, termination is effective seven (7) days following the date of the written notice.

**8.2** EBCE may terminate this Agreement immediately upon written notice for any material breach of this Agreement by Consultant or any of its Subconsultants. If EBCE terminates this Agreement for cause and obtains the same services from another consultant at a greater cost, the Consultant is responsible for such excess costs in addition to any other remedies available to EBCE.

**8.3** Upon termination for any reason, EBCE has the option of requiring the Consultant to complete work up to the date of termination or to cease work immediately. EBCE has the further option to require Consultant to provide EBCE any finished or unfinished Work or Work Product prepared by the Consultant up to the date of termination.

**8.4** EBCE will pay Consultant the reasonable value of services satisfactorily rendered by the Consultant to EBCE up to the date of written Notice of Termination. If EBCE authorizes Consultant to continue performing the Work through the date of termination, EBCE will pay Consultant the reasonable value of services satisfactorily rendered up through the date of termination, providing such services are in compliance with the Compensation/Budget in Exhibit E.

**8.5** Upon termination of this Agreement, and at no cost to EBCE, Consultant, its Subconsultants and anyone working for EBCE under control of Consultant must return all Work Product to EBCE. Consultant may only retain copies of the Work Product by express written permission of EBCE.

# Section 9. Insurance

**9.1** Consultant must procure, maintain and comply with the insurance requirements in Exhibit F throughout the full Term of this Agreement. Consultant must provide proof of insurance either in the form of a certificate of insurance or, if requested by EBCE, a copy of the insurance policy, prior to performing any work under this Agreement.

**9.2** Consultant agrees not to terminate any of the required insurance coverage during the term of this Agreement. Consultant must give EBCE ten (10) days written notice and obtain EBCE's written approval prior to making any modifications in the insurance coverage.

**9.3** Consultant must either include Subconsultants under its insurance policies or require each Subconsultant to comply with the insurance obligations in <u>Exhibit F.</u>

# Section 10. No Discrimination or Conflict of Interest

**10.1** Consultant represents and warrants, on behalf of itself and its Subconsultants, that it has not and will not discriminate against anyone based on his/her age, color religion, sex, sexual orientation, disability, race or national origin.

**10.2** Consultant represents and warrants, on behalf of itself and its Subconsultants, that it is familiar with local, state and federal conflict of interest laws, that in entering into this Agreement it is not violating any of the conflict of interest laws, that it will avoid any conflicts of interest during the term of this Agreement, and that it will notify EBCE immediately if it identifies any conflicts of interest Consultant understands that violations of this Section 10 could result in immediate termination of this Agreement and disgorgement of compensation.

**10.3** In accordance with the California Political Reform Act (Cal. Gov't Code section 81000 *et seq.*), Consultant will cause each of the following people performing services under this Agreement to file a Form 700 within 30 days after the person begins performing services under this Agreement and subsequently in conformance with the requirements of the Political Reform Act by filing the original with the EBCE Clerk to the Board of Directors. Each of the identified positions must disclose interests in accordance with the EBCE Resolution-2018-7, Conflict of Interest Code as may be amended from time to time.

///

Name	Position or Assignment

# Section 11. Confidentiality

**11.1** Except as authorized by EBCE or as otherwise required by law, Consultant shall not disclose to any third party(ies) any draft or final Work Product, discussions or written correspondence between Consultant and its Subconsultants or discussions or written correspondence between Consultant and EBCE staff. In the event Consultant receives a request from any third party requesting disclosure of any Work Product, discussions, communications or any other information Consultant is prohibited from disclosing, Consultant will immediately notify EBCE and wait for direction from EBCE before disclosing the information.

**11.2** For the purposes of this Section 11, "third parties" refers to any person or group other than EBCE staff and Board members. For example, "third parties" include community groups, Board advisory groups, other governmental agencies, other consultants or members of the community.

**11.3** This Section 11 will survive the expiration or termination of this Agreement.

# Section 12. Indemnity

**12.1** Consultant agrees, at its sole cost and expense, to indemnify, defend, with counsel reasonably approved by EBCE, protect and hold harmless EBCE, its officers, directors, employees, agents, attorneys, designated volunteers, successors and assigns, and those EBCE agents serving as independent contractors in the role of EBCE staff (collectively "Indemnitees") from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, penalties, judgements, liens and losses of whatever nature that arise, directly or indirectly, in whole or in part, out of or are in any way related to Consultant's or Subconsultant's performance or failure to perform the Work under this Agreement, regardless of whether

the Consultant or its Subconsultants acted or failed to act intentionally, willfully, recklessly or negligently. Consultant agrees that its indemnity and defense obligations include all costs and expenses, including all attorney fees, expert fees, mediation, arbitration, or court costs in connection with the defense. Consultant further agrees to indemnify, defend, protect and hold harmless Indemnitees from and against any breach of this Agreement and any infringement of patent rights, trade secret, trade name, copyright, trademark, service mark or any other proprietary right of any person(s) caused by EBCE's use of any services, Work Product or other items provided by Consultant or its Subconsultants under this Agreement.

**12.2** Consultant's obligations in Subsection 11.1 do not apply to the extent any claim, loss, damage, injury, expense or liability that results from the sole negligence or willful misconduct of Indemnitees.

**12.3** Consultant's obligation to defend EBCE applies to the maximum extent allowed by law and includes defending Indemnitees as set forth in California Civil Code sections 2778 and 2782.8.

**12.4** The Consultant's obligations under Section 12 applies regardless of the existence or amount of insurance the Consultant carries or has made available to EBCE.

**12.5** The Parties agree that this Section 12 survives the expiration or earlier termination of the Agreement.

# Section 13. Consultant is an Independent Contractor

**13.1** Consultant and its Subconsultant(s) are and at all times will be independent contractors. Consultant has complete control over its operations and employees and is not an agent or employee of the EBCE, and must not represent or act as the EBCE's agent or employee. Consultant agrees, on behalf of itself and its employees and Subconsultants, that it does not have any rights to retirement benefits or other benefits accruing to EBCE employees, and expressly waives any claim it may have to any such rights.

**13.2** As an independent contractor, Consultant has complete control over its Subconsultants, Sub, suppliers, affiliates agents and any other person or entity with whom the Consultant contracts in furtherance of this Agreement (collectively "Subconsultants"). Subject to the requirements of Section 5 of this Agreement, Consultant is solely responsible for selecting, managing and compensating its Subconsultants, and for ensuring they comply with this Agreement.

# Section 14. Miscellaneous Terms and Conditions

#### **14.1** <u>EBCE Authority</u>.

The Chief Executive Officer or his/her designee is authorized to take all actions under this Agreement, including without limitation, amendments that fall within the Chief Executive Officer's signing authority, termination or modification of terms.

#### **14.2** <u>Waiver</u>.

Waiver by either party of any one or more conditions, Sections, provisions or performance of this Agreement will not be a waiver of any other provision; nor will failure to enforce a provision or Section in one instance waive the right to enforce such provision or Section in the future. In no event will payment by EBCE to Consultant constitute or be construed as a waiver by EBCE of any breach or default of this Agreement, nor will such payment prejudice any of EBCE's other rights or remedies.

#### 14.3 Governing Law.

Consultant and EBCE agree that this Agreement will be interpreted under the laws of the State of California.

#### 14.4 <u>Venue</u>.

Any litigation resulting from this Agreement will be filed and resolved by a state court in Alameda County, California, or if appropriate, the federal courts in the Northern District of California located in San Francisco.

#### 14.5 Audit Rights.

All records or documents required to be kept pursuant to this Agreement must be made available for audit at no cost to EBCE, at any time during regular business hours, upon written request by EBCE. Copies of such records or documents shall be provided to EBCE at EBCE's offices unless an alternative location is mutually agreed upon.

#### 14.6 <u>Recitals and Exhibits</u>.

The Recitals in Section 1 above are intentionally made a part of this Agreement. All Exhibits and any other documents incorporated by reference are a part of this Agreement.

# 14.7 <u>Notices</u>.

Any notices required to be given under this Agreement must be made in writing and may be delivered a) personally, in which case they are effective upon receipt; b) by U.S. Mail, in which case they are effective three (3) days following deposit in the U.S. Mail, unless accompanied by a return receipt in which case, they are effective upon the date on the receipt; or c) by electronic mail, in which case they are effective upon confirmation of receipt, and if no confirmation of receipt, they are effective one day after

transmission, providing that a hard copy is also sent via U.S. mail. All notices must be sent to the addresses below:

EBCE

Attn: C/o WeWork 1111 Broadway, 3<sup>rd</sup> Floor Oakland, CA 94607 Email: @ebce.org Phone:

Consultant

Attn:

Email: Phone:

#### 14.8 Assignment.

Except to the extent this Agreement authorizes Consultant to use Subconsultants, Consultant will not assign any part of this Agreement without the EBCE's prior written consent. EBCE, at its sole discretion, may void this Agreement if a violation of this provision occurs.

#### 14.9 Integrated Agreement.

The Recitals, this Agreement and the Exhibits attached to this Agreement contain the complete understanding between EBCE and Consultant and supersedes any prior or contemporaneous negotiations, representations, agreements, understandings and statements, written or oral respecting the Work up through the Effective Date of this Agreement.

#### 14.10 Amendments.

Any and all amendments or modifications to this Agreement must be made in writing and signed by each Party before such amendment will be effective.

#### 14.11 <u>Government Claims Act</u>.

Nothing in this Agreement waives the requirements to comply with the Governmental Claims Act, where applicable.

///

#### 14.12 Severability.

If a court of competent jurisdiction holds any Section or part of this Agreement to be invalid or unenforceable for any reason and the Work can still be performed, the Parties agree to sever the invalid or unenforceable Section from this Agreement and that all remaining Sections or parts of this Agreement will continue to be enforceable.

**IN WITNESS WHEREOF**, the duly authorized representatives of the Parties have executed this Agreement on the dates below to be effective upon the Effective Date.

**EBCE**, a California Joint Powers Authority

(full name of consultant and the entities status e.g. "a California Corporation")

Nick Chaset, CEO

By: Title:

Date:

By: Title: Date:

Approved as to form:

Leah S. Goldberg General Counsel

# LIST OF EXHIBITS

EXHIBIT A: SCOPE OF WORK

- EXHIBIT B: SCHEDULE
- EXHIBIT C: CONSULTANT STAFFING
- EXHIBIT D: SUBCONSULTANTS
- EXHIBIT E: COMPENSATION/BUDGET
- EXHIBIT F: INSURANCE REQUIREMENTS

# EXHIBIT A

# SCOPE OF WORK

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# EXHIBIT B

# EXHIBIT C

# **CONSULTANT STAFFING**

# EXHIBIT D

# SUBCONSULTANTS

# EXHIBIT E

# COMPENSATION/BUDGET

#### Exhibit F

#### INSURANCE REQUIREMENTS

A. <u>Minimum Scope and Limits of Insurance</u>. Consultant must procure and at all times during the term of this Agreement carry, maintain, and keep in full force and effect, insurance as follows:

1) Commercial General Liability Insurance with a minimum limit of One Million Dollars (\$1,000,000.00) per occurrence for bodily injury, personal injury and property damage and a general aggregate limit of Two Million Dollars (\$2,000,000.00) per project or location. If Consultant is a limited liability company, the commercial general liability coverage must be amended so that Consultant and its managers, affiliates, employees, agents and other persons necessary or incidental to its operation are insureds.

2) Automobile Liability Insurance for any owned, non-owned or hired vehicle used in connection with the performance of this Agreement with a combined single limit of One Million Dollars (\$1,000,000.00) per accident for bodily injury and property damage. If Consultant does not use any owned, non-owned or hired vehicles in the performance of Services under this Agreement, Consultant must obtain a non-owned auto endorsement to the Commercial General Liability policy required under subparagraph A.1) of this <u>Exhibit F</u>.

3) Workers' Compensation Insurance as required by the State of California and Employer's Liability Insurance with a minimum limit of One Million Dollars (\$1,000,000.00) per accident for bodily injury or disease. If Consultant has no employees while performing Services under this Agreement, workers' compensation policy is not required, but Consultant must execute a declaration that it has no employees.

4) Professional Liability/Errors & Omissions Insurance with minimum limits of Two Million Dollars (\$2,000,000.00) per claim and in aggregate.

B. <u>Acceptability of Insurers</u>. The insurance policies required under this <u>Exhibit F</u> must be issued by an insurer admitted to write insurance in the State of California with a rating of A:VII or better in the latest edition of the A.M. Best Insurance Rating Guide.

C. <u>Additional Insured/Additional Named Insured</u>. The automobile liability policies must contain an endorsement naming EBCE, its officers, employees, agents

and volunteers as additional insureds. The commercial general liability policy must contain an endorsement naming EBCE, its officers, employees, agents and volunteers as additional named insureds.

D. <u>Primary and Non-Contributing</u>. The insurance policies required under this Agreement must apply on a primary non-contributing basis in relation to any other insurance or self-insurance available to EBCE. Any insurance or self-insurance maintained by EBCE, its officers, employees, agents or volunteers, will be in excess of Consultant's insurance and will not contribute with it.

E. <u>Consultant's Waiver of Subrogation</u>. The insurance policies required under this Agreement will not prohibit Consultant and Consultant's employees, agents or Subconsultants from waiving the right of subrogation prior to a loss. Consultant hereby waives all rights of subrogation against EBCE.

F. <u>Deductibles and Self-Insured Retentions</u>. Any deductibles or self-insured retentions must be declared to and approved by EBCE. At EBCE's option, Consultant must either reduce or eliminate the deductibles or self-insured retentions with respect to EBCE, or Consultant must procure a bond guaranteeing payment of losses and expenses.

G. <u>Cancellations or Modifications to Coverage</u>. Consultant agrees not to cancel any insurance coverage during the Term. Consultant further agrees not to, reduce or otherwise modify the insurance policies required by this Agreement during the term of this Agreement, without the prior written approval of EBCE. The commercial general and automobile liability policies required under this Agreement must be endorsed to state that should the issuing insurer cancel the policy before the expiration date, the issuing insurer will endeavor to mail 30 days' prior written notice to EBCE. If any insurance policy required under Agreement is canceled or reduced in coverage or limits, Consultant must, within two business days of notice from the insurer, phone and notify EBCE via electronic mail and certified mail, return receipt requested, of the cancellation of or reductions to any policy.

H. <u>EBCE Remedy for Noncompliance</u>. If Consultant does not maintain the policies of insurance required under this Agreement in full force and effect during the term of this Agreement, or in the event any of Consultant's policies do not comply with the requirements of this <u>Exhibit F</u>, EBCE may either immediately terminate this Agreement or, if insurance is available at a reasonable cost, EBCE may, but has no duty to, take out the necessary insurance and pay, at Consultant's expense, the premium thereon. Consultant must promptly reimburse EBCE for any premium paid by EBCE or EBCE, in its sole discretion, may withhold amounts sufficient to pay the premiums from payments due to Consultant.

I. <u>Evidence of Insurance</u>. Prior to the performance of Services under this Agreement, Consultant must furnish EBCE with a certificate or certificates of insurance and all original endorsements evidencing and effecting the coverages required under this Agreement. The endorsements are subject to EBCE's approval. EBCE may

request, and Consultant must provide complete, certified copies of all required insurance policies to EBCE. Consultant must maintain current endorsements on file with EBCE. Consultant must provide proof to EBCE that insurance policies expiring during the term of this Agreement have been renewed or replaced with other policies providing at least the same coverage. Consultant must furnish such proof at least two weeks prior to the expiration of the coverages.

J. <u>Indemnity Requirements not Limiting</u>. Procurement of insurance by Consultant will not be construed as a limitation of Consultant's liability or as full performance of Consultant's duty to indemnify EBCE under Section 12 of this Agreement.

K. <u>Subconsultant Insurance Requirements</u>. Consultant's insurance coverage must include its Subconsultants or Consultant must require each of its Subconsultants that perform Work under this Agreement to maintain insurance coverage that meets all of the requirements of this <u>Exhibit F</u>.



#### **Staff Report Consent Item 8**

TO:	East Bay Community Energy Board of Directors
FROM:	Nick Chaset, Chief Executive Officer
SUBJECT:	Approval of Corrected Traffic Control (TC1) Rate
DATE:	April 18, 2018

#### **Recommendation**

Approve the corrected Traffic Control Light (TC1) rate to account for the adjusted Power Charge Indifference Adjustment (PCIA) fee. These rates remain at 1.5% below PG&E for Bright choice and on par with PG&E for Brilliant 100.

#### **Background**

EBCE rates are calculated using system fees (PCIA + Franchise Fee) that vary by rate class. For one rate schedule for traffic control lights, the incorrect PCIA amount was applied in the calculation, resulting in an EBCE rate that was higher than it should have been. This item requests that the Board approve the corrected amounts shown below. These rates remain at 1.5% below PG&E for Bright Choice, and on par with PG&E for Brilliant 100.

Rate	Pr	eviously Posted Amount	Co	rrected Amount
TC1 - Bright Choice	\$	0.08711	\$	0.06833
TC1 - Brilliant 100	\$	0.08854	\$	0.06976



# **Staff Report Consent Item 9**

TO:	East Bay Community Energy Board of Directors
FROM:	Nick Chaset, Chief Executive Officer
SUBJECT:	Contracts Entered Into from March 21, 2018 to April 18, 2018
DATE:	April 18, 2018

# **RECOMMENDATION**

Accept the CEO's report on Contracts Entered in between March 21 and April 18

#### **ANALYSIS & DISCUSSION**

The following are contracts that EBCE CEO Nick Chaset has entered into over the last month under his Board-granted contracting authority:

**ALH Economics**: ALH Economics is the prime contractor for the Local Development Business Plan project. On March 28, 2018, their contract with Alameda County ended. EBCE has entered into a contract, based on the same terms, scope and budget as the County contract, so that ALH Economics and their consultant team can complete their work on the LDBP. The Contract covers the residual \$33,980 not billed to Alameda County.

**Circlepoint**: Circlepoint was selected through a competitive process in April 2017 to provide community outreach, marketing, and customer notification services. The agreement between Circlepoint and the County Development Agency ended on April 11, 2018. EBCE entered into a contract with Circlepoint on April 12, 2018 to complete the scope of work with the budget remaining from the original contract. Authority to negotiate and execute this agreement was approved by the board on March 21, 2018.


#### Staff Report Item 10

**TO:** East Bay Community Energy Board of Directors

FROM: Nick Chaset, Chief Executive Officer

SUBJECT: CEO Report (Informational Item)

**DATE:** April 18, 2018

#### **RECOMMENDATION**

Accept Chief Executive Officer (CEO) report on update items below.

#### **EXECUTIVE COMMITTEE MEETING**

On March 30, 2018, the Executive Committee of the East Bay Community Energy Board met for its first meeting. The agenda for the Executive Committee meeting covered the general scope of work for the Executive Committee, an overview of the next three Executive Committee agendas, and presentations on Regulatory and Legislative issues, Marketing and Outreach activities, and Procurement planning. The presentations given to the Executive Committee are attached.

#### LOCAL DEVELOPMENT BUSINESS PLAN

On March 26, 2018, the Local Development Business Plan (LDBP) team held its symposium that covered nine of the new work products and the methodologies for evaluating community benefits. Attached for your reference are the slides that were presented throughout the day at the symposium. Public comments on these nine work products will be submitted to EBCE by April 20, 2018.

EBCE has executed a contract extension with ALH Economics, the prime contractor on the LDBP project, as their contract with Alameda County expired on March 29, 2018. As part of this contract extension, EBCE and ALH developed a final schedule for the remaining work products and the development of the final Local Development Business Plan which is included below.

Local Development Business Plan (LDBP) Schedule												
Task/Description	Target for Completion											
Task 1 - 6:												
Finalize Drafts (to address feedback received)	Monday, April 30, 2018											
Task 7:												
Finalize Drafts (to address feedback received)	Monday, April 30, 2018											
Complete Initial Scenario Analysis and Summary Reports	Friday, April 20, 2018											
Complete Jobs, Labor Income, and Financial Impact Report	Friday, April 20, 2018											
Final Analysis of Recommended Scenario	Monday, April 30, 2018											
Submit Draft LDBP Document	Monday, May 7, 2018											
Final LDBP:												
EBCE posts Draft LDBP for public comment (due May 25)	Week of May 7-11, '18											
EBCE holds community meetings to review LDBP	Weeks of May 14-18/21-25, '18											
Review and Discussion of Final LDBP Document at Executive Committee	Friday, May 25, 2018											
Final LDBP Issued	Friday, June 8, 2018											
LDBP brought to the Board for a vote	Wednesday, June 20, 2018											

#### **ATTACHMENTS**

- 1. Executive Committee Presentations
- 2. LDBP Symposium Presentation



# **Regulatory Update**

PRESENTED BY: Melissa Brandt DATE: 3/30/18

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- •EBCE interfaces with multiple regulatory bodies in various forums to ensure that the way regulations and state policies are shaped and implemented enables us to achieve our goals.
- •California Agencies:
  - •Pursuant to California's Administrative Procedures Act, open rulemakings or conduct other regulatory proceedings with Administrative Law Judges such as review of applications
  - •Decisions or Regulations must be approved by the agency's Commission or Board
  - •After Commission/Board approval, regulations are submitted to the Office of Administrative Law for final approval

#### •California Public Utilities Commission (CPUC)

- •Based in SF; 5 Commissioners appointed by the Governor
- •Regulates investor-owned utilities
- •Regulates CCAcompliance with:
  - •CARenewable Portfolio Standard (RPS; CA's renewables law)
  - •CPUC Resource Adequacy requirements (RA; ensuring enough capacity, i.e. availability of resources on the grid at all times)
  - •Integrated Resources Plan (IRP; each load-serving entity (LSE) plan will cover how its procurement will contribute to achieving state greenhouse gas emissions reductions goals)

#### •California Energy Commission (CEC or Energy Commission)

- •Based in Sacramento; 5 Commissioners appointed by the Governor
- •Regulates municipal utilities' compliance with RPS and RA
- •Focused on facilitating transition to low-carbon economy through electrification, energy efficiency including building standards, distributing grants for energy innovation

#### •California Air Resources Board (CARB or ARB)

- •Based in Sacramento; 16 Board members (12 appointed by the Governor, 4 appointed by the Senate and Assembly)
- •Designed CA's cap-and-trade system for greenhouse gases
- •Designs air quality policy and regulates economy-wide greenhouse gas emissions; sets GHG reduction targets for each sector
- •Runs Low Carbon Fuel Standard (LCFS) program including credits/rebates for clean fuel use

- •California Independent System Operator (CAISO or ISO)
  - •Based in Folsom; 5 ISO Governors appointed by the Governor
  - •Nonprofit public benefit corporation created by AB 1890
  - •Manages the flow of electricity across the high-voltage, long-distance power lines that make up most of California's grid
  - •Promulgates tariffs (rules) subject to FERC approval
  - •Interfaces with CCAs on grid reliability
- •Federal Energy Regulatory Commission (FERC)
  - •Based in Washington, D.C.; 5 Commissioners appointed by the President
  - •Independent agency that regulates the interstate transmission of natural gas, oil, and electricity
  - •Affects CCAs indirectly; primarily through CAISO tariffs

## **Regulatory Proceedings**

•EBCE is actively engaged with CalCCAto support a variety of regulatory proceedings where CCAinterests align or where the outcome could affect EBCE

CPUC – EBCE is a party to at least 5 proceedings:
 Power Choice Indifference Amount (PCIA) Rulemaking
 Resource Adequacy (RA) Rulemaking

•Integrated Resources Plan (IRP) Rulemaking

•PG&E Rate Design Window (RDW) Application

•PG&E Application for Energy Storage Cost Recovery

• CCABond Rulemaking (request for party status pending)

### **Regulatory Proceedings**

•CEC – EBCE is engaged in one proceeding: •AB 1110 Power Source Disclosure Regulation amendments

CARB – EBCE is engaged in two proceedings:
SB 350 GHG target-setting
Low Carbon Fuel Standard amendments

•CAISO – EBCE is engaged in one stakeholder initiative:

•Backstop Capacity Resource-Must-Run / Capacity Procurement Mechanism Initiatives and Contracts

### Key Legislative Issue

#### •Regionalization (Holden, AB 813)

- •Informational Hearing was held on 3/14
- •Key issue: Governance
- •Benefit: Renewables Procurement



# Executive Committee Marketing Update

PRESENTED BY: Annie Henderson DATE: 3/30/18

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# **CUSTOMER NOTIFICATION**

- First Notice printing this week
- First batch delivered to customers week of 4/9





# EARLYADOPTERS

- Request form available Monday, 4/2
- Only 100 spots
- Must receive Brilliant 100 service
- Will receive two postenrollment customer notifications
- Per regulatory code, Early Adopters do not receive a 60-day grace period after enrollment

	ABOUT HOW IT WORKS DUB IC MEETINGS DECIDENTE BU	ICINECCEC DECONDECE
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Brilliart ideal Please fill ou rules apply <sup>3</sup>	EARLY ADOPTER SIGN UP Therka for your interest in joining East Bey Community Energy. It he below form to request enrolment as an Early Adopter with EBCE Specific eligibility and enrolment	e 1
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# **EBCE MDEOS**

- 30-second video focused on commercial customers
  - Facebook, EBCE website, Digital ads



- 3-minute animated video for general audience
  - Still in final production



# EBCE OUTREACH

- Facebook and Twitter postings
- Local newsletters
- Municipal communications
- Pre-launch press release (April/May)
- Launch Event (early June)





# **WEB UPDATES**

- "Soft Launch" Updates
  - New pages for Rates, Solar Customers, Power Mix, Team Bios, and Communities
  - Call Center number: 1-833-699-EBCE (3223)
  - Web enrollment forms
  - Early Adopter form



modern light. Founded by Rana Lehmer-Chang in 2009, it's become an integral part of the San Francisco Bay Area's thriving food economy.

communities and businesses here in Alameda County, and have a strong customer base in the East Bay. We fully support the economic transition to clean, locally generated energy, and look forward to Rage 50 of 215 opportunities with East Bay Community Energy to

# **ADVERTISING**

- Social Media Ads
- Print Ad in Oakland Tribune, Hayward Daily News, and Fremont Argus on 5/4
- Bay Area News Group Digital Ads





# PG&E COMMUNICATIONS

- PG&ECCAweb page
- PG&E Bill messaging
- Joint Rate Mailer





# **Energy Procurement Overview**

PRESENTED BY: Howard Chang DATE: 3/30/18

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# 2018 Procurement Planning

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		March	arcn	April						may	Y			June			1.000	yın			10000		August		10000	A	NOVE	moer		-	Dece	December		
Procurement Category	Initiate	Complete	19-25	5 26-1	2-8	9-15	16-22	23-29	30-6	7-13	14-20	21-27	28-3	4-10	11-17	18-24	25-1	2-8	9-15	16-22	23-29	30-5	6-12	13-19	20-26	27-2	5-11	12-18	19-25	26-2	3-9	10-16	17-23	24-30
Energy - 2018	20-Mar	29-Mar																																
Resource Adequacy - 2018	22-Mar	3-Apr																																
Carbon-free - 2018	9-Apr	25-Apr																																
Renewables - 2018	9-Apr	25-Apr																																
Energy - 2019	Exact tir	ning TBD	-																															
Resource Adequacy - 2019	23-Apr	3-May																																
Carbon-free - 2019	7-May	23-May	-																															
Renewables - 2019	7-May	23-May											_									-												
IRP	23-Mar	1-Aug																		1	Filing de	eadline												
Oakland Clean Energy Initiative	13-Apr	EOY 2018				RFP is	sued										Offers	due								Shorti	ist				Contra	ict Exec	ution	
Alameda/CA RFP	20-May	EOY 2018										RFP (st	sued					Offers	due						Shortli	st		Contra	ct Exect	uton				
Local RE Phase 1	1-Aug	EOY 2018																			Start working to develop loc					cal RE Phase 1								

- **Energy:** EBCE's energy procurement is primarily for 1-2 year blocks of energy
- **RA:** EBCE's RA procurement is focused on fulfilling the CPUC obligation that every energy provider (CCA or IOU) procure a defined quantity of capacity to ensure that there are enough resources when usage spikes or there is an event that stresses the system
- **CO-2-free**: EBCE's CO-2-free energy procurement is primarily for 1-2 year quantities of CO-2-free energy like hydro power
- **Renewables**: EBCE's Renewables procurement is primarily for 1-2 year quantities of CA RPS eligible renewable energy
- OCEI: EBCE's OCEI procurement, which in partnership with PG&E, will seek to procure 20-40 MWs of solar and energy storage to support to closing of an old peaker power plant
- Alameda/CA RFP: EBCE's Alameda/CA RFP will seek proposals from large scale renewable energy projects in both Alameda County and across CA to meet EBCE's long term renewable energy goals
- Local RE Phase 1: EBCE's Local RE Phase 1 will be the first phase of EBCE's efforts to spur the development of local renewable energy programs and projects that are part of the Local Development Business Plan



# East Bay Community Energy **Local Development Business Plan**

LDBP Project Team:

ALHECON ALH Urban & Regional Economics **Community Engagement Symposium** March 26, 2018







Special Advisors: Betony Jones & Gary Calderon

## **General Housekeeping**

- Restrooms and Emergency Exits
- Notes on Format:
  - There will be opportunities for Questions & Interactions on each topic throughout the day.
    - Please use either the Microphones or the Note Cards
  - Two Scheduled 15-min Breaks + Lunch Break
  - Slides will be made available on the EBCE LDBP web page (<u>https://ebce.org/local-development-business-plan/</u>)

## Agenda

- 9am-10am: Opening Remarks
- 10am-11am: New Work Products w/Q&A- Part I
- 11-11:15am: Break
- 11:15am-12:15pm: New Work Products w/Q&A- Part II
- 12:15-1pm: Lunch
- 1-2pm: New Work Products w/Q&A- Part III
- 2-3:15pm: Workshop #1: Development & Implementation Strategies
- 3:15-3:30: Break
- 3:30-4:45pm: Workshop #2: Community Benefit & Planning Tools
- 4:45-5pm: Closing Remarks

## **Opening Remarks**

- **Nick Chaset-** CEO of East Bay Community Energy
- Anne Olivia Eldred- Chair of EBCE Community Advisory Committee
- Chris Sentieri- The Offset Project/Project Manager, LDBP Project

## **A Few Words of Appreciation**

- To the EBCE Community, the EBCE Community Advisory Committee, & Engaged EBCE Stakeholders
- To the EBCE Member Jurisdictions, esp. Alameda County
- ► To the EBCE Board of Directors & EBCE CEO/Staff
- To the Local Development Business Plan Project Team

### **EBCE LDBP Project Team**

#### ALH Urban & Regional Economics

Prime Contractor & Chief Economist Amy L. Herman, Principal aherman@alhecon.com

#### The Offset Project

Project Management & Stakeholder Outreach Chris Sentieri, Senior Project Manager chris@theoffsetproject.org

#### **Clean Coalition**

Solar Site Mapping & Tariff Design Craig Lewis, Executive Director craig@clean-coalition.org

#### **EcoShift Consulting**

Energy Analysis & Scenario Planning Zoe Elizabeth, Senior Consultant zelizabeth@ecoshift.com

#### Optony Inc.

Integrated Resource Assessment & Planning Jonathan Whelan, Director of Operations jonathan.whelan@optonyusa.com

#### Betony Jones Labor & Workforce Advisor betony.jones@gmail.com

#### Gary Calderon

Energy Storage & Demand Response Advisor gcalderon1@comcast.net

## **EBCE LDBP Development Tasks**

#### Task # Description

- 1 Grid-side DER Assessment: Solar/Wind Siting Surveys & Large-scale DER Potential
- 2 Customer-side DER Assessment: Hot-spot Analysis, Heat Maps, EE & DR Potential
- 3 **Development Models and Strategies:** Feed-in Tariff Design, NEM, OBF, Agency as Developer
- 4 **EBCE Development Issues:** Labor/WFD Policies, Financing, Ownership Models
- 5 Implementation and Policy Issues: Contracting, Permitting, Equity, Citizen Participation
- 6 Integrated Resource Planning: Integrating Local Resources w/Long-term Planning
- 7 Preliminary Plan Scenarios: Scenario Modeling, Fiscal/Economic Impacts, Final LDBP

## **Current Draft LDBP Work Products**

- 1. LCOE for Behind-the-meter Resources (from Tasks 2)
- 2. Recommendations for Clear and Transparent Reporting (from Task 5)
- 3. Considerations for Local Approvals (from Task 5)
- 4. Recommendations for Enhancing Long-term Stability and Reliability (from Task 5)
- 5. Integrated Resource Plan Methodologies (from Task 6)
- 6. Integrating LDBP Goals with IRP (from Task 6)
- 7. Analysis of Risks and Mitigations (from Task 6)
- 8. Integration of DER Development with Procurement & Scheduling (from Task 6)
- 9. New Generation (from Task 6)

\*Important Note- All of the Draft LDBP Work Products can be accessed here: <u>https://ebce.org/local-development-business-plan/</u>

### Remaining LDBP Work Products- April 2018

- Rate Design as Incentive Recommendations
- On-bill Financing/Repayment Recommendations
- Opportunities for Fuel Switching (Natural Gas & Transportation)
- Scenario Analysis Reports: Recommended Scenario, and Analysis of Jobs, Labor Income, and Financial Impacts
- Draft Local Development Business Plan

### **EBCE Goals and Priorities**

- EBCE's relationship with its customers is the highest priority
- Prioritizing the development and utilization of local clean energy resources in ways that maximize <u>local</u> benefits is highly important to the EBCE community
- Maintaining stable and competitive rates is essential
- Supporting the local economy & workforce through "new energy programs and local energy investments" is a core value
- The Local Development Business Plan is an important tool that will support EBCE's ongoing efforts to deliver on each of these core goals and priorities

### **Overarching Principles of the LDBP**

- Develop a roadmap and framework for accelerating local DER deployment and maximizing community benefits
- Innovative program designs can overcome market failures & incentivize meaningful community & organizational benefits
- Development of clean, dispatchable, and distributed energy resources supports EBCE's core values and goals
- EBCE can support a vibrant local economy and workforce, and protect its most vulnerable customers through targeted local energy programming
- A diversified portfolio of local programs coupled with retail rate savings can deliver greater benefit than rate savings alone

### Recurring LDBP Concepts & Mechanisms

- Effective delivery of LDBP Programs depends on a robust, integrated data platform & advanced data management
- A phased-in approach is necessary, & supports successful implementation of the LDBP
- Community Benefit Adders (CBA's) can be an effective tool to ensure & enhance beneficial local outcomes
- Market responsive pricing (MRP) can maximize impacts, constrain costs, & minimize risks associated w/LDBP implementation
- Contractual relationships with EBCE customers & stakeholders can create lasting, mutually beneficial partnerships



# **East Bay Community Energy** Local Development Business Plan

# **Overview of New Draft Work Products** Part I

LDBP Project Team:

ALHECON

ALH Urban & Regional Economics







Special Advisors: Betony Jones & Gary Calderon

March 26, 2018

**Community Engagement Symposium** 



- Levelized Cost of Energy for Behind-the-meter Resources\*-Chris Sentieri, The Offset Project (\*Optony Work Product)
- Recommendations for Clear and Transparent Reporting-Zoe Elizabeth, EcoShift Consulting

\*Important Note- All of the Draft LDBP Work Products can be accessed here: <u>https://ebce.org/local-development-business-plan/</u>

# **BTM LCOE Analysis - Overview**

#### Purpose

- Show current costs for likely behind-the-meter DER/DSM Resources in Alameda
- Provide basis for comparing one resource type to another resource type

#### Format and Content

- Costs expressed in levelized cost of energy ("LCOE")
  - LCOE is the net present value of all energy supplies/reductions from a resource over a fixed period of time
- LCOE tool is an excel spreadsheet
  - User has ability to adjust resource mix and see affect on overall portfolio LCOE
  - User can also adjust inputs to derive new LCOE analyses
# **BTM LCOE Analysis - Approach**

#### Methodology

Cost

- For solar, since data is widely available, cost estimates derived ground-up using known pricing for individual components
- For other technologies, cost estimates derived from industry reports and supplemented with vendor quotes and empirical data
- Cost broken down by initial capital cost, annual fixed costs, and annual variable costs

#### ► LCOE

- LCOE is a simple summation once cost and energy output numbers are known
- The LCOE calculation is done on a separate tab of the spreadsheet. NREL's online LCOE calculator was used to validate.

#### **Key Source for Energy Efficiency Costs**

#### Table 1. Savings-weighted average total cost of saved electricity at the national level by market sector

Sector	Total Cost of Saved Electricity (2012\$/kWh)*	Program Administrator Cost of Saved Electricity (2012\$/kWh)	Participant Cost of Saved Electricity (2012\$/kWh)	
All Sectors	\$0.046	\$0.023	\$0.022	
Residential	\$0.033	\$0.019	\$0.014	
Commercial, Industrial, and Agricultural	<mark>\$0.055</mark>	\$0.025	\$0.030	
Low Income	<b>\$0.142</b>	\$0.134	\$0.008	

\*Note: Totals may differ from sum of component values due to rounding.

#### "The Total Cost of Saving Electricity through Utility Customer-Funded Energy Efficiency Programs" - Lawrence Berkeley National Labs, 2015

[by Hoffman, Rybka, Leventis, Goldman, Schwartz, Billingsley, and Schiller] Retrieved here: <u>https://emp.lbl.gov/sites/all/files/total-cost-of-saved-energy.pdf</u>

	<b>BTM</b>	LCOE	Tool	-	Main	<b>Tabl</b>	e
--	------------	------	------	---	------	-------------	---

Resource			Energy					Cost		I	LCOE
Toggle resources on/off here				Annual				Annual	Annual		
	Capacity	Capacity	Conversion	Production	Сар	ital Cost	Fix	ed Cost	Variable Cost	20 \	/ear LCOE
Resource Type	(MW)	Factor (%)	Losses (%)	(MWh/yr)		(\$/W)	(\$,	/kW-yr)	(\$/kWh)		(\$/kWh)
Generation											
Solar PV - 5 kW Roof - Oakland	25	16.4%	0%	35,900	\$	3.09	\$	15.00	\$-	\$	0.198
Solar PV - 5 kW Roof - Livermore	25	17.2%	0%	37,600	\$	3.09	\$	15.00	\$-	\$	0.189
Solar PV - 250 kW Roof - Oakland	25	16.4%	0%	35,825	\$	1.82	\$	15.00	\$-	\$	0.121
Solar PV - 250 kW Roof - Livermore	25	17.2%	0%	37,775	\$	1.82	\$	15.00	\$-	\$	0.115
Fuel Cell	2	95%	0%	16,644	\$	5.50	\$	-	\$ 0.065	\$	0.123
Storage											
Batteries - Lithium Ion - Residential	5	11.4%	7%	4,650	\$	4.00	\$	50.00	\$-	\$	0.429
Batteries - Lithium Ion - Commerical/Industrial	10	11.4%	7%	9,300	\$	3.00	\$	50.00	\$-	\$	0.335
Thermal - Ice-based technologies	2	12.3%	5%	2,052	\$	0.59	\$	23.00	\$-	\$	0.073
Demand Response											
Demand Response - Base Interruptible Program	1	2.1%	0%	180	\$	-	\$	102.00	\$-	\$	0.567
Demand Response - Capacity Bidding Program	1	2.1%	0%	180	\$	-	\$	59.39	\$ 0.045	\$	0.375
Demand Response - Scheduled Load Reduction Program	n/a	n/a	n/a	n/a		n/a		n/a	n/a	\$	0.100
Energy Efficiency											
Energy Efficiency - Residential	n/a	n/a	n/a	n/a		n/a		n/a	n/a	\$	0.033
Energy Efficiency - Commercial/Industrial	n/a	n/a	n/a	n/a		n/a		n/a	n/a	\$	0.055
Energy Efficiency - Low Income	n/a	n/a	n/a	n/a		n/a		n/a	n/a	\$	0.142
TOTALS & WEIGHTED AVERAGES (Visible Rows Only)	121	1,488		180,106	\$	2.54	\$	20.31	\$ 0.00	\$	0.169
GRAND TOTALS & WEIGHTED AVERAGES	121	1,488		180,106	\$	2.54	\$	20.31	\$ 0.00	\$	0.169

Totals in this row update to reflect selected resource mix

LCOE of total portfolio \$0.169/kWh over 20 years

IN	IPUTS	Year	Delivered Energy (kWh)	Capital Cost (\$)	Annual Cost (\$)
Resource:	Thermal - Ice-based technologies	0	0	\$ 1,180,000	\$ -
Capacity (MW):	2 2	1	1,935,849	\$ -	\$ 43,396
Capacity Factor:	12%	2	1,826,273	\$ -	\$ 40,940
Conversion Losses: Sel	ect resources 5.0%	3	1,722,899	\$ -	\$ 38,622
Capital Cost (\$/W):	here 0.59	4	1,625,376	\$ -	\$ 36,436
Annual Fixed Cost (\$/kW-yr):	23	5	1,533,374	\$ -	\$ 34,374
Annual Variable Cost (\$/kWh):	Adjust 0	6	1,446,579	\$ -	\$ 32,428
	assumptions here	7	1,364,697	\$ -	\$ 30,593
Analysis Period (years):	20	8	1,287,450	\$ -	\$ 28,861
Discount Rate:	6%	9	1,214,576	\$ -	\$ 27,227
		10	1,145,826	\$ -	\$ 25,686
LCOE:	\$ 0.073	11	1,080,968	\$ -	\$ 24,232
	<b>—</b>	12	1,019,781	\$ -	\$ 22,861
		13	962,058	\$ -	\$ 21,567
	See resulting 💙	14	907,602	\$ -	\$ 20,346
	LCOE here	15	856,228	\$ -	\$ 19,194
		16	807,762	\$ -	\$ 18,108
		17	762,040	\$ -	\$ 17,083
		18	718,905	\$ -	\$ 16,116
		19	678,213	\$ -	\$ 15,204
		20	639,823	\$ -	\$ 14,343

#### **BTM LCOE Tool - Calculator Tab**

Allows the user to select a DER/DSM technology type from a dropdown list (yellow cells) and adjust any of the input associated with that technology (grey cells) to see the effect on LCOE. User can also adjust the analysis period or discount rate.

# **BTM LCOE Analysis - Results**

#### **Overview of Findings**

- **BTM Solar** LCOEs range from \$0.115/kWh to \$0.198/kWh
- Energy Efficiency has a low overall LCOE, ranging from \$0.033/kWh to \$0.142/kWh
  - Energy Efficiency is less predictable and dispatchable than other DER/DSM resources like Energy Storage or Demand Response
- Demand Response has the highest costs, ranging from \$0.1/kWh to \$0.567/kWh
  - Higher costs of Demand Response are offset by the higher value associated with dispatchability during high-cost peak load periods
- BTM Energy Storage had a wide range, the range is from \$0.073/kWh to \$0.429/kWh
  - Ice-based Cold Thermal technology had a notably low LCOE of \$0.073





### **Clear and Transparent Reporting**

**Zoe Elizabeth** Principal, EcoShift Consulting, LLC

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# **PRESENTATION OVERVIEW**

#### 1. Mandatory reporting

- Power content label
- GHG Intensity
- (Integrated resource planning)

#### 2. Voluntary GHG reporting

- GHG intensity
- 3. Voluntary performance metrics
- 4. Reporting standards and quality





### **POWER CONTENT LABEL**

#### **CALIFORNIA THANKS YOU!**

In 2016, MCE customers like you added more renewable energy to the grid.

ENERGY RESOURCES	2016 MCE LIGHT GREEN POWER MIX	2016 MCE DEEP GREEN POWER MIX	2016 CA POWER MIX** (for comparison)		
Eligible Renewable	55%	100%	25%		
Biomass & biowaste Geothermal	5% 0%	25% 0%	2% 4%		
Small hydroelectric Solar Wind	7% 9% 34%	0% 25% 50%	2% 8% 9%		
Coal	0%	0%	4%		
Large Hydroelectric	13%	0%	10%		
Natural Gas	12%	0%	37%		
Nuclear	0%	0%	9%		
Other	0%	0%	0%		
Unspecified sources of power*	19%	0%	15%		
TOTAL	100%	100%	100%		

#### **2016 POWER CONTENT LABEL**

 "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.

\*\* Percentages are estimated annually by the California Energy Commission based on the electricity sold to California consumers during the identified year.



# **GHG INTENSITY**

#### AB 1110

- GHG Emissions Intensity Reporting: Retail Electricity Suppliers (Ting, 2016).
- Requires all retail electricity suppliers to report on the GHG intensity of their retail products beginning in 2020 (later for EBCE and other new CCA's).
- Rulemaking led by CEC is still in process.
- Final rule will lay out methodology for calculating GHG intensity
  - Draft proposal suggests that unbundled renewable energy credits (RECs) will be considered to have the GHG intensity of "unspecified power."
  - CCA's with significant unbundled RECs in their portfolio could exceed RPS standards, but report relatively high GHG intensity.





# **VOLUNTARY GHG REPORTING**

Developing a third-party verified emissions factor through The Climate Registry, would allow EBCE customers to calculate their own carbon footprint using EBCE specific GHG intensity.







# **VOLUNTARY PERFORMANCE METRICS**

The following performance metrics will provide more information, context and transparency:

- Total direct jobs created through EBCE power procurement, energy efficiency, demand response and energy storage programs
- Dollars invested in community programs (and a description of those programs)
- Direct jobs created through EBCE community investments
- MWh's of new renewable generation created through EBCE procurement and programs
- MWh's electricity reduced through demand response and EE programs





# **REPORTING STANDARDS**

How information is reported is as important as what information is reported.

- Be clear, direct, concise.
- Display all metrics in one place on the website.
- Include methods used for calculations.
- Develop annual report as an addendum to web-reporting.
- Report all metrics annually.
- Develop additional metrics when new programs are developed.





# **Thank You!**

Zoe Elizabeth EcoShift Consulting, LLC

zelizabeth@ecoshift.com





# **Discussion**

LDBP Project Team:

ALH ECON ALH Urban & Regional Economics

> Offset Clean Coalition Making Clean Local Energy Accessible Now



Special Advisors: Betony Jones & Gary Calderon

March 26, 2018

Community Engagement Symposium



# **East Bay Community Energy** Local Development Business Plan

# **Overview of New Draft Work Products** Part II

LDBP Project Team:

ALHECON

ALH Urban & Regional Economics







Special Advisors: Betony Jones & Gary Calderon

March 26, 2018

**Community Engagement Symposium** 

#### New Draft LDBP Work Products\*- Part II

**Considerations for Local Approvals-** *Jonathan Whelan, Optony* 

**New Generation-** Jonathan Whelan, Optony

\*Important Note- All of the Draft LDBP Work Products can be accessed here: <u>https://ebce.org/local-development-business-plan/</u>



Optony focuses on enabling government and commercial organizations to bridge the gap between clean energy goals and real-world results.

Optony's core services offer a systematic approach to planning, implementing, and managing commercial and utility-grade renewable power systems, while simultaneously navigating the dramatic and rapid changes in the energy industry; from emerging technologies and system designs to government incentives and private/public financing options.



Jonathan Whelan Director of Operations Optony

#### **Overview-** Considerations for Local Approvals

#### Purpose of this LDBP Report

- Assess local jurisdictional approval processes that affect solar development in the County
  - Building permits
  - Zoning ordinances
  - CEQA
- Make recommendations for improvements to streamline development and guide development to best benefit EBCE and distribution grid
  - ▶ How can we reduce administrative burden on developers?
  - How can we make sure building and planning staff have all the tools available to efficiently make determinations (without jeopardizing their responsibilities to ensure the safety of these systems and to maintain the integrity of public land)?

Note: This report is focused on solar PV, since it is the predominant DER technology being deployed in the County in terms of quantity of approvals. The recommendations are applicable to review/approval of solar projects, though there is some overlap with approvals for other DER technologies.

### Background

#### Importance of "Soft Costs"

- Rapid declines in solar hardware costs in recent years have left "soft costs" as the main cost driver
  - Soft costs are anything that is not physical hardware
  - According to the DOE, soft costs account for 64% of the cost of a residential solar PV installation, on average
  - This report focuses on the soft cost areas that local jurisdictions can impact (mostly the top 2 items in the stack at the right)
  - Proportionately higher for small residential solar systems—smaller capacity over which to spread costs



### Local Permitting: Background

### Local permitting adds expense to residential solar projects

- \$2,516 per residential project, on average, according to a 2011 SunRun installer study
- Permit fee is a relatively small portion; bigger contributor is preparing application and multitouch waiting for approvals

Some previous work has been done to address speed in the County

East Bay Green Corridor worked to streamline permitting in 2011

> 2014 AB 2188

					Small		Large		
		Res	idential	Cor	mmercial	Со	mmercial		Utility
		(!	5 kW)	(1	100 kW)		(1 MW)	(	10 MW)
а	Alameda County	\$	280	\$	2,078	\$	18,363	\$	77,563
g,a	Alameda	\$	250	\$	1,813	\$	1,813	\$	1,813
g,a	Albany	\$	232	\$	2,107	\$	10,857	\$	88,357
g,a	Berkeley <sup>2</sup>	\$	26	\$	12,014	\$	94,194	\$	822,074
а	Dublin	\$	250	\$	1,432	\$	5,415	\$	46,149
g,a	Emeryville	\$	250	\$	1,350	\$	6,150	\$	51,150
а	Fremont	\$	237		\$ 90/hr		\$90/hr		\$ 90/hr
g,a	Hayward	\$	300	\$	1,350	\$	6,150	\$	51,150
а	Livermore	\$	361	\$	1,418	\$	6,218	\$	51,218
	Newark	\$	360	\$	2,327	\$	12,502	\$	98,527
g,a	Oakland	\$	546	\$	677	\$	939	\$	939
а	Piedmont	\$	300	\$	300	\$	300	\$	300
а	Pleasanton	\$	250	\$	1,350	\$	5,850	\$	50,850
g,a	San Leandro	\$	267	\$	973	\$	5,773	\$	50,773
а	Union City	\$	431	\$	2,109	\$	5,669	\$	21,832

Legend: g = East Bay Green Corridor participant, a = Adopted AB 2188 ordinance Note: City of Berkeley fees derived using a fee calculator on City's website, may not be accurate

### Local Permitting: Recommendations

#### Push for adoption of AB 2188 Toolkit

- AB 2188 (2014), the Expedited Solar Permitting Act, required all jurisdictions in the state to pass an ordinance creating an expedited solar permit process for small systems
- > There is a Toolkit of standardized documents to use for this purpose
  - Adoption of all toolkit documents by all County jurisdictions would create a standard permit process for residential rooftop systems, reducing installer overhead and lowering system costs
  - A working group with reps from each jurisdiction and from industry could implement this in under 1 year

#### Modify permit fee structure for larger systems

- Valuation-based permit fees result in high costs for larger systems that are out of sync with actual cost to administer permit
- Base the fee on cost recovery, or put in ceilings on valuation-based fees
- Example: Piedmont has a fixed cost for all solar permits

# **County Zoning: Background**

#### Land-Use Considerations in Alameda County

- Larger PV arrays, which are a part of the LDBP strategy, are likely to be located on open land administered by the County
- > There are many competing interests and land-use constraints that must be considered
  - ► Farmland
  - Williamson Act parcels
  - Wind development priority zones

Map of major land use constraints in East Alameda County, from Community Development Agency staff



### **County Zoning: Recommendations**

#### Develop Amendment to East County Area Plan

- County investigated this topic in 2011
  - Planning Department laid out a series of new policies for large solar arrays, with a goal of amending the County General Plan
  - Process was suspended indefinitely before completion

#### Goals

- Formalize where solar arrays are permitted and/or conditional uses
- Formalize the review and approval process for solar applications
- Establish "renewable energy zones" hotspot map where development of renewable facilities is prioritized
  - EBCE involvement could ensure that hotspot consideration includes electrical high congestion and load pocket areas

### **CEQA: Background**

About CEQA (California Environmental Quality Act)

- Requires state and local public agencies to analyze environmental impacts of physical development projects
- > No state level enforcement, each public agency entrusted with upholding

#### **CEQA** for Solar

- Applicability
  - Rooftop systems statutorily exempt from CEQA review
  - Carport systems also exempt if over existing lots (some restrictions)
  - Some categorical exemptions can apply
- Lead agency conducts Initial Study which leads to either:
  - Negative Declaration (no impacts)
  - Mitigated Negative Declaration (potential impacts, but mitigations can alleviate impact)
  - Environmental Impact Report (impacts beyond mitigation, further study needed)

### **CEQA: Recommendations**

#### Implications for Large Solar Arrays

- Larger (multi-MW) arrays will often require an Environmental Impact Review (EIR)
  - Lengthy and time-consuming (often >1 year)
  - Must solicit public comments
- Many construction-phase mitigations to be followed
  - Dust control measures, limiting idle time of diesel equipment, flagging work area boundaries, periodic wildlife inspections by biologist, fire risk management plans, etc

#### Recommendations

- Direct projects to favorable Neg Dec or MND "renewable energy zones"
- Maintain list of typical mitigation measures, so developers can include this in initial plan and lessen likelihood of triggering EIR requirement
- Plan for lengthy approval processes when considering large scale solar as a component of EBCE's IRP



# East Bay Community Energy Local Development Business Plan:

#### **New Generation**

LDBP Project Team:

ALHECON

ALH Urban & Regional Economics







Special Advisors: Betony Jones & Gary Calderon

March 26, 2018

**Community Engagement Symposium** 

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#### **Overview**

#### Purpose of this LDBP Report

- Support the development of EBCE's Integrated Resource Plan (IRP) with projections and considerations of new energy sources in the service territory, specifically those associated with proposed LDBP initiatives
  - IRP needs to plan for long-term power and energy procurement, while integrating new generation sources
  - IRP can limit more-expensive short-term energy procurements by offsetting needs with publicly- or privately-procured dispatchable distributed energy resource (DER) assets
- Make recommendations for program implementation parameters and timing to best benefit EBCE, distribution grid, and community
  - Recommendations and projections will change based on timing, budget, and effectiveness of LDBP (and other) program implementation, which should be subject to regular review
  - See other LDBP sections, including EcoShift scenario-modeling tool, for more detail and modeling ability around proposed programs

### Background

Importance of integration into IRP

- Impact of expected new generation on contracted energy needs
- Timing of new generation
  - Phasing plan for implementation
  - Time-of-day generation: intermittent or dispatchable
- Ultimate goal of EBCE/CCE:
  - Service territory meets all energy needs through local DER, with CCE responsible for managing dispatch of stored energy to meet those needs at the right time and place
  - Realistic?
  - Creates appropriate framing of DER deployment onto grid
  - Focus is on integrating new DER with energy storage and capability to remotely control discharge scheduling
    - Creates framework for future Virtual Power Plant (VPP)

### **Initial Projections**

- Estimated, based on draft LDBP sections
- Will change based on final program details, implementation, budgets, macro-economic forces
- Incentive levels should be regularly measured and adjusted to quantify uptake and determine if changes are necessary or desired

Technology	<b>Total Potential Generation</b>	Planned Generation Capacity	LCOE (\$/kW) <sup>1</sup>
	Capacity	through LDBP Programs in 5-Year	
		Planning Window (estimated)	
Solar	650 MW (sites > 1000 kW-	144 MW	\$0.10-\$0.156
	AC)		
Wind	110 MW	12 MW	\$0.10-\$0.24
Biofuels	11 MW <sup>2</sup>	0 MW	\$0.092-\$0.119
TOTAL	771 MW	156 MW	

Graphic from draft LDBP section: New Generation

### **Initial Projections - Solar**

- Solar Siting Survey identified 650 MW of potential, just on 1 MW+ sites
  - Much more potential on small sites
  - Includes limitations based on electrical feeder sizing
- 144 MW of new solar projected over 5-yr planning horizon
  - Includes both proposed Net Energy Metering (NEM) and Feed-In Tariff (FIT) programs
  - Existing PG&E NEM has led to ~30 MW new solar per year, for last 3 years
- Average service territory demand
  - 500-1700 MW (could meet 25-30% min avg. daytime load)
  - More in summer, less in winter
  - Needs energy storage and dispatchability to avoid potential curtailment, utilize (and monetize) ancillary grid benefits, smooth load curve



Graphic from draft LDBP section: New Generation

### **Initial Projections - Solar**

- Considerations about potential for 144 MW new local solar:
  - ▶ In short-term, solar demand is unlikely to be significantly reduced
    - Tariffs will be largely offset by price reductions
    - NEM value will continue to exist
  - After NEM, successor tariff (like Value of Distributed Energy Resources (VDER)) will still encourage distributed solar installations
    - NEM customers are important to EBCE
      - ▶ Either NEM or migration away from EBCE leads to CCE load reduction
      - Support EBCE goal of maintaining and engaging DER customers:
        - Incent use of integrated storage and telemetry
        - ▶ Get highest EBCE value out of new DER
        - Use program parameters to enable CCE dispatchability and associated benefits and opportunities

### **Initial Projections - Wind/Biofuels**

- Focus on draft report was on new, distributed single-turbine development
  - Opportunity exists to re-purpose existing Altamont wind turbines or locations—increase generation from wind sources
- Biofuel studied by local StopWaste Project
  - Not extensive opportunities locally
  - Local preference to use for local waste-hauling fleets

Technology	Total Potential Generation Capacity	Planned Generation Capacity through LDBP Programs in 5-Year Planning Window (estimated)	LCOE (\$/kW) <sup>1</sup>
Solar	650 MW (sites > 1000 kW-	144 MW	\$0.10-\$0.156
	AC)		
Wind	110 MW	12 MW	\$0.10-\$0.24
Biofuels	11 MW <sup>2</sup>	0 MW	\$0.092-\$0.119
TOTAL	771 MW	156 MW	



Graphic from draft LDBP section: Wind Siting Survey

#### **Phased New Generation**

- Timing of the deployment of planned new generation and yield estimate to enable planning on energy (MWh/kWh) basis
- Projections subject to change based on actual deployment
  - Key takeaway: EBCE procurement plan has to be ready for small but significant local new generation
- At ~12 MWh per utility customer: 240,000 MWh from DER within 5 years is equivalent to providing all energy needs to 20,000 of the ~560,000 current planned EBCE customers, or 3-4% of total expected annual energy usage

	Solar (MWh)	Wind (MWh)	Annual Total (MWh)	Cumulative Total (MWh)
Year 1	7,500	0	7,500	7,500
Year 2	36,000	2,000	38,000	45,500
Year 3	72,000	8,000	80,000	125,500
Year 4	70,500	10,000	80,500	206,000
Year 5	30,000	4,000	34,000	240,000

Graphic from draft LDBP section: New Generation

#### **Incentives and Adjustments**

- LDBP incentives and adders: Provide value to local DER, with particular focus on projects with features that meet EBCE financial and community goals
  - Include low-income adders for social equity; municipal agencies who are ineligible for federal tax benefits; workforce adders to support livable wages; and supply-shift adders that incent westfacing solar, energy storage, and wind

Re-visit program effectiveness/ineffectiveness regularly

- Make adjustments to incentives on clear, transparent, and gradual timelines
  - Development community and customers need to understand dates certain, grandfathering of incentives, and length of terms of incentives

### **Framework for Future Planning**

- Plan NEM successor tariff
  - Consider model of New York VDER tariff, which includes value of environmental and locational benefits with energy value
- Prepare for eventual Virtual Power Plant approach
  - Build energy storage and dispatchability capabilities into new generation

#### CCE 2.0

- EBCE can be a leader in the development of a VDER tariff that can set an important precedent as we prepare for the possibility of a post-NEM energy valuation structure
- VPP capabilities open the door for microgrid grants and opportunities
- Focus on community benefits with new commitment

#### Recommendations

PPAs

- Focus on local generation, using 1-3 MW FIT projects and larger 3-30 MW projects on land in the service territory
- Support integration of energy storage and capability for remote dispatchability
- Include buyout clauses for future local control of resources
- Prepare for a VPP reality by working with the distribution system operator (PG&E) to determine ideal siting opportunities to meet load and congestion needs and opportunities
- Credit rating and credit enhancement
  - Utilize public-partnerships, including through PPAs, to leverage tax benefits, spur local investment, and meet community goals, all before EBCE has fully developed its own credit rating
  - For example, the Oakland Clean Energy Initiative is working to replace a local jet fuelpowered peaker plant, with local DER plus storage
    - Represents rare opportunity to specifically address local pollution reduction and to provide associated local health benefits
#### **Recommendations (continued)**

- Pay for Performance contracting
  - Leverage private funds with pay-for-performance contracting for services that might include energy efficiency, demand response, load-shaping or shifting, and fuel-switching
  - Address EBCE requirements and opportunities while minimizing risk and capital investment
  - Could include innovative pilots around blockchain or microgrids that may interest EBCE, while potentially too risky for EBCE to desire to spend its own funds
- Market Responsive Pricing (MRP)
  - Evaluate and adjust incentive and payment levels based upon market uptake and the meeting of EBCE financial and community goals
  - Again--need to be clear, transparent, and gradual in making adjustments in order to enable the development community to effectively model project benefits for prospective customers

Graphic from draft LDBP section: Wind Siting Survey

#### **Recommendations (continued)**

- Community Solar
  - With local public agency partners, develop larger DER systems with subscription opportunities for all customers in the load service territory
    - Low-income / low-credit customers, or those without suitable roof or other solar installation location
  - Structure 1: Enhanced Market Access
    - ▶ Green energy premium price: MCE Clean Energy Local Sol, SMUD Solar Shares
    - Roof lease: LADWP LAANE Program
  - Structure 2: Community Ownership
    - Community Shared Solar model that links actual system production and value to customer subscriber bills
    - After tax benefits have been monetized, a buyout could enable ownership flip to EBCE or community organizations who could provide credits and some level of system ownership to subscribers
    - > On-bill financing, low-income carve-out, storage integration
    - Example: Proposed East Bay Community Shared Solar Collaborative

#### **Recommendations (continued)**

- VPP aggregation and regulatory compliance
  - Plan for near-term or mid-term potential of utilizing and directing dispatchable local DER
    - The technology exists and is being used, including in at least one citywide roll-out in Australia
- Dispatchable DER can meet energy storage mandates, resource adequacy requirements, power demand needs, RPS and Local Portfolio Standards goals, job creation goals, while also opening opportunities for EBCE to seek revenues from congestion revenue rights, energy sales to neighboring load-service entities, and planned ancillary grid benefits that can be monetized

Graphic from draft LDBP section: Wind Siting Survey

#### Conclusion

- Work closely with developers of IRP and procurement team to understand current and planned energy generation and needs
- Offer enhanced NEM and FIT with adders that incent designs and construction that support EBCE, PG&E, and community goals
- As often as possible, incent and plan for energy storage and dispatchability with all programs and procurements, through PPAs and future VPP planning
- Partner with public and private collaborators to enhance credit, reduce investment and risk, including through pay-for-performance models
- Explore community solar programs to spur local development and expand accessibility to renewable, local energy sources to all community residents
- Plan for measurement and verification of program effectiveness, and adjust program parameters appropriately, including through Market Responsive Pricing
- Adjust parameters clearly and gradually for industry and consumers to be able to plan

Graphic from draft LDBP section: Wind Siting Survey



# **Discussion**

LDBP Project Team:

ALHECON ALH Urban & Regional Economics

> Offset Clean Coalition Making Clean Local Energy Accessible Now



Special Advisors: Betony Jones & Gary Calderon

March 26, 2018

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## **East Bay Community Energy** Local Development Business Plan

## **Overview of New Draft Work Products** Part III

LDBP Project Team:

ALH ECON

ALH Urban & Regional Economics







Special Advisors: Betony Jones & Gary Calderon

March 26, 2018

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#### New Draft LDBP Work Products\*- Part III

Integrating LDBP with Integrated Resource Planning (Task 6)-Samuel Irvine, Optony

\*Important Note- All of the Draft LDBP Work Products can be accessed here: <u>https://ebce.org/local-development-business-plan/</u>



Optony focuses on enabling government and commercial organizations to bridge the gap between clean energy goals and real-world results.

Optony's core services offer a systematic approach to planning, implementing, and managing commercial and utility-grade renewable power systems, while simultaneously navigating the dramatic and rapid changes in the energy industry; from emerging technologies and system designs to government incentives and private/public financing options.



Sam Irvine, MBA/MPA Senior Program Manager Optony

## Integrated Resource Planning In Task 6

- 1. What is an IRP?
- 2. Three legged stool of an IRP
- 3. Policy Requirements under SB350
- 4. IRP Methodologies
- 5. Integrating IRP with the LDBP
- 6. Procurement and Scheduling
- 7. Risks and Mitigation
- 8. Stability and Reliability

## What's an IRP?

#### IRP is a planning document that defines a Utility's:

- Policy Goals (energy mix)
- Operational Constraints
- Energy priorities and resource choices
- Includes Customer-side resources

\*The LDBP is **not** the IRP But it does recommend local resources for the IRP



market

All at different time horizons



# **Three Legged Stool of IRPs**

Resource Adequacy

- Fill forecasted needs with energy resources to 115% of total peak load
- Traditionally done at wholesale market where cost is low due to scale
- Energy mix and carbon footprint procurement alongside costs





# SB350 uses IRPs to ensure utilities meet renewable and EE goals



Doubling EE savings in the electricity and natural gas sectors 2030

50% renewable electricity procurement goal by 2030



Goal to reduce GHG emissions 40% below 1990 levels by 2030.

CEC reviews IRP for LSE's with a load > 700 GWh/yr to ensure this is happening.

#### IRP goals under SB350

- Serves customers energy needs reasonable rates
- Ensures system and local reliability
- Strengthens the diversity, sustainability, and resilience of the grid
- Enhances distribution systems and demand-side energy management and resource options
- Minimizes localized pollution and emissions with early priority on disadvantaged communities

### LDBP goals align with IRP goals

**LDBP Goals** 

- Select energy resources that result in economic development and local jobs while meeting RA and supply
- Reduce carbon intensity through customer programs (DSM)
- Meet or exceed RPS standards
- Prevent economic leakage (keeping money local)
- Engagement of community, & offering programs for disadvantaged communities
- Low competitive rates

With goals in mind, a main LDBP question becomes how can supply and demand requirements be met through local energy resources?

Supply and Demand Recommendations

Incentives/Adders including under NEM or FIT

Provide New Generation Local Solar and Wind

Resource Adequacy & Load Management

Energy Efficiency

Demand Response

Energy Storage

#### Supply and Demand Recommendations

- Include FIT, NEM, DR programs Incentives and adders designed address market failures while providing flexible local capacity
  - Supply and Demand Management (dispatchability)
  - Projects in DAC/Low Income &
  - Municipal/Non Profit customers
  - Workforce development



#### **Resource Adequacy Management**

- Dispatchability is essential for DERs interacting with procurement
- Local RE Capacity is not enough... Just as important are renewables at the right time and place
- GHG reductions depend on timing the energy market, or else renewables risk replacing other renewables, and emissions are not reduced
- RA traditionally comes from Peaker Plants
- Dispatchable assets include:







Recommended Mechanisms to unlock local DERs as supply or RA tools

- 1. Tariff Design & Price Signals
- 2. Control Clauses in PPAs and Energy Contracts
- 3. Integrated Data Platform
- 4. Virtual Power Plant (VPP) Aggregation

#### 1. Tariff Design

- Tariffs can change energy consumption behavior incentivizes (TOU)
- Move towards rates that rewards RE for its time and place (VDER)
- Requires sophisticated scheduling coordination
- Can displace Peaker Plant use with renewables, reducing emissions



## 2. Control Clauses

- Built in as language of PPAs, or incentive contracts
- EBCE to send automated price signals to customer to incent dispatchable power or load shaping or shifting services
- Customer can opt-out of price signals
- CARE small storage, 20% state of charge



#### 3. Integrated Data Platform

database of energy data:

- weather, market prices, forecast, orange button etc.
- Allows data exchanges between EBCE, Customers, and Portfolio Managers
- Automated or Manual signals to customers or energy traders



#### Integrated Data Platform

Energy Data, Forecasts, Risk, Total Available local capacity...



#### Procurement & Scheduling with a VPP



Integrated Data platform Energy Data, Forecasts, Risk, Total available capacity...

Local Market - Virtual Power Plant





## Procurement with Virtual Powerplant



#### Integrated Data platform

Energy Data, Forecasts, Risk, Total available capacity...

Price Signal









#### Integrated Data platform

Energy Data, Forecasts, Risk, Total available capacity...











#### **Risks and Mitigations**

- EBCE is setting best practice by:
- Contracting a portfolio manager & creating ERM prior to entering the wholesale market
- ERM is comprehensive and will protect EBCE from risk
- LDBP Risk supplements with mitigation from local resources.

## **Risks and Mitigations**

Risk	Mitigations	
Volumetric	Dispatchable assets, fuel switching	
Supplier	Pay for Performance	
Model	External checks, checks in back/mid/front office	
Operational	Training, HR practices	
Market	Reserve Accounts	
Regulatory	Collaborations with other CCAs for advocacy purposes	
Financial	Credit enhancement, collaborative procurement	
Reputation	Competitive rates, Env & Social program impacts	

#### **Stability and Reliability**

- Grid and operational stability
- Stable rates, reliable service
- View PG&E as a transmission and distribution partner critical to moving power to and through the service area
- Oakland Clean Energy Initiative at Jack London square

#### Task 6 In summary:

LDBP recommends the use of local resources to supplement wholesale power procurement. The phase in of local DERs with dispatchable features can align environmental and economic requirements of the IRP with local economic development outcomes.



# **Discussion**

LDBP Project Team:

ALHECON ALH Urban & Regional Economics

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# **East Bay Community Energy** Local Development Business Plan

# Workshop #1: Development & Implementation Strategies

LDBP Project Team:

ALHECON

ALH Urban & Regional Economics





Community Engagement Symposium

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Special Advisors: Betony Jones & Gary Calderon



# East Bay Community Energy Local Development Business Plan:

### **Net Energy Metering (NEM) Strategy**

LDBP Project Team:

ALH ECON

ALH Urban & Regional Economics





**Community Engagement Symposium** 

March 26, 2018



Special Advisors: Betony Jones & Gary Calderon

# Why offer NEM?

- Without NEM, opt-out risk increases
- Expectation of offering; some CCEs offer enhancements to support development
- Support local generation and job-creation
- Local demand curve can accept more DER in the shortterm
- Use NEM structure to incent storage and other solutions to help manage the neck and tail of the duck curve

OPTOM

# **EBCE Enhanced NEM Adders**

**Other CCAs:** MCE, PCE, SCP offer \$0.01/kWh for export; SVCE \$0.008/kWh if subscribing to Green Prime premium product

#### **EBCE:**

Export Adder \$0.005/kWh For all existing and new NEM customers (prevent opt-out)

#### Community Benefit Adder: \$0.005/kWh

Additional incentive to income-qualified residential customers and local tax-exempt entities who may otherwise not be able to access solar installations

#### Workforce Adder: \$0.005/kWh

Addresses the pressing desire in the EBCE community to incent projects that use skilled local labor paid at livable wages

#### Supply-Shift Adder: \$0.005/kWh

Incents west-facing solar, small wind, energy storage—with capacity-sharing

\*Qualified projects only get one adder per category Room for more adders overtime

# **Additional NEM Program Parameters**

- Transition existing customers after true-up date
- True-up on a monthly billing basis, rather than on annual basis
- Pay-out credits in late Spring
- Clear term of NEM adder eligibility
- Plan for NEM successor tariff (Value of Distributed Energy Resources - VDER)

OPTON

# **Initial NEM as Approved by Board**

#### EXPORT AND SURPLUS CREDIT

NEM Customer	EXPORT Credit	SURPLUS Credit	Compared to PG&E	
Existing at Enrollment	Retail based on product selected	Match PG&E NSC offer (\$0.026-\$0.035/kWh)	Same	
New after Enrollment	Retail	Retail capped at \$2.5k or NSC without a cap	Better	
Low Income (New only)	Retail + \$0.01/kWh	Retail + \$0.01/kWh	Better	
Municipal (New only)	Retail + \$0.01/kWh	Retail + \$0.01/kWh	Better	
Workforce (New only)	Implementation cor	Implementation considerations under review		
Supply-Shift (New only)	Implementation cor	Implementation considerations under review		

- · Limited resources should be focused on
  - New installations
  - Hard-to-reach communities where the market has failed to deliver significant penetration
  - Municipal customers where savings is immediately reinvested into community services, like schools
  - Supporting local workforce

Item 13

Adders on export credit:

Adder	Amount/ kWh	Eligibility	Proposed Initial NEM Policy
Standard	<mark>\$0.005</mark>	All NEM customers	No adder, but improve surplus credit
Community <ul> <li>Income-qualified</li> <li>Non-profit/gov1</li> </ul>	\$0.005	New NEM customers	\$0.010
Workforce • Livable wage	\$0.005	New NEM customers	TBD but noted in initial policy
Supply-Shift <ul> <li>West-facing solar</li> <li>Small wind</li> <li>Energy storage</li> </ul>	\$0.005	New NEM customers	TBD but noted in initial policy

Monthly billing with annual cash-out in Spring

93

• Enrollment per True-Up date

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### In Discussion, Based on Public Comments

- Higher value for NEM+Storage adder (or link to kW capacity, instead of export energy)
- New/better valuation mechanism for storage exports
- Forego EBCE control of NEM+Storage—instead offer monetary incentives (price signals) for desired CCE utilization
- Storage-friendly rate design
- Workforce adder (keep as "carrot", not "stick")
- Clarification on adder terms and grandfathering
- More discussion around proposed transition to VDER tariff
- Virtual Net Energy Metering (VNEM)
- Net Energy Metering Aggregation (NEM-A)
- Premium value for Net Surplus Compensation (NSC)



# East Bay Community Energy Local Development Business Plan:

### **Agency as Developer- Collaborative Procurement**

LDBP Project Team:

ALHECON

ALH Urban & Regional Economics

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Special Advisors: Betony Jones & Gary Calderon

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# Introduction

- What does "Agency as Developer" mean?
  - Now: "Collaborative Procurement"
- Context
- Program Goals:
  - Offer low-cost means of stimulating local energy development
  - Create standardized procurement approach for meeting EBCE needs and goals through local collaboration
- Method: Pooled Procurement
  - Pool procurement between like sites and assets
  - Coordinate with Joint Powers Authority member agencies to find opportunities
  - Take advantage of economies of scale in procurement and transactions



OPTONY

### Small Cities Climate Action Partnership (ScCAP)

Albany, Piedmont, El Cerrito, San Pablo

- Lower costs
- Save staff time
- Utilize economies of scale and purchasing power
- Open door for procurement for small cities and sites that would otherwise not gain industry interest

Silicon Valley <u>Renewable Energy</u> <u>Procurement (SV-REP)</u>

45 sites, 9 agencies, 1 RFP 12 MW Constructed

#### - Outcomes -

- 12-14% lower cost than one-off similar projects
- 50-75% lower admin + legal costs
- Better negotiated contract terms and conditions
- Best Practices Guide for Collaborative
   Solar Procurement

### Regional Renewable Energy Procurement (R-REP)

#### 186 sites,

31 MW, including in EBCE territory

- 13 MW built to-date with more in construction/dev.
- ALCO, Oakland, Fremont, Cal, Berkeley, etc.
- Replicated by Fed Gov, also in NY and new areas



### **SEED Fund**

- Removes barrier to entry, enables self-sustaining program
- Covers the cost of feasibility analysis and procurement
- Third party covers the upfront cost, in this case CSI
- Only if projects happen would money be reimbursed to the "seed" revolving fund
- No financial risk for Agencies

SEED FUND LOCATION:	NORTH SF BAY	MONTEREY BAY	SIERRA MOUNTAINS
LEAD AGENCY	City of San Rafael	County of Santa Cruz	County of Amador (proposed)
CONVENER	Marin Clean Energy Practitioners	Association of Monterey Bay Area Governments	Sierra Business Council
FUNDING BY	California Solar Initiative	SEED Fund North Bay	SEED Fund Monterey Bay, US Department of Energy
# OF RFP PARTICIPANTS	13	8	6-10 (target)
# OF SITES (BUNDLED)	29	28	20-25 (target)
# OF MW IN RFP	~ 4.3 MW	$\sim 7.0 \text{ MW}$	3-5 (target)
# OF MW CONTRACTED	~ 3.1 MW	~ 2.3 MW +	TBD
<b># OF MW BUILT</b>	~ 1.3 MW +	TBD	TBD



### Benefits of SEED to EBCE

- Support member agencies in reaching long-time sustainability goals
- Provide local energy at or near wholesale rate -> energy bill savings
- Reduce EBCE wholesale procurement needs
- Operate with a small staff and one-time budget expenditure
- Stimulate local economic development
- Build goodwill within community w/ high-visibility co-branded projects
- Competitive advantage in building strong relationship w/ member agencies
- Control procurement processes and locations; understand costs
- Pursues ideal end-goal: local clean energy to meet all demand at all times
- Leaves room for innovation...
  - ► Target groups, collaborate w/ utility, VPP/EV capability, EBCE procurement



### Example: Oakland Clean Energy Initiative

- Innovative Collaborative Procurement with PG&E, as recommended in LDBP ES Contracting Strategy and Agency as Developer sections.
- Joint PG&E/EBCE RFO to procure 20-45 MW's of energy, capacity, and reliability products
- Will replace an aging, jet-fuel powered peaker plant in Oakland's Jack London Square
- Directly supports EBCE's JPA and LDBP goals, and Energy Storage procurement mandate

# **Clean** Coalition

### Solar Siting Survey and Feed-In Tariff

Recommendations for East Bay Community Energy (EBCE)

Craig Lewis Executive Director 650-796-2353 mobile craig@clean-coalition.org

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26 March 2018



- Searchable spreadsheet including detailed results and linking to the interactive maps
- Interactive maps in the form of Google Earth .kml files with icons marking structures and aggregations with details available in pop-up windows
  - F Google Map versions are also made available
- Summary report of key findings and methodology

#### Summary of EBCE Solar Siting Survey findings



- Ver 650 MW of technical solar siting potential was found on built environments in the projected EBCE service territory that can support at least 1 MW sized projects
  - Note that the technical solar siting potential will be reduced by constraints that were not considered like structures that cannot support extra weight without significant upgrade and grid bottlenecks that would result in excessive solar curtailment (or require time-shifting dispatchability via energy storage)
- 7 30% of the total comes from parking lots/garages
- Extrapolations to lower minimum project sizes:
  - 1.2 GW minimum total potential for projects sized at least 500 kW
  - 2 GW minimum total potential for projects of at least 100 kW

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#### SSS interactive map: Alameda County overview





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#### SSS interactive map: Marina Square with ICA

#### **Clean** Coalition



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#### Solar siting capacity by site count



Solar Siting Survey	Summary by Sites							
	Count	kW_Total	PV W_AC >=	5,000 kW	> and >=	2,000 kW	Less than	2,000 kW
	Sites		Sites		Sites		Sites	
Totals:	252	662,224 kW	20	244,609 kW	71	190,041 kW	161	227,574 kW
Darbalan CA 04710		F (00	-	F (00				
Berkeley, CA 94710	1	5,699	1	5,699	-	-	-	-
Emeryville, CA 94608	2	7,637	1	5,387	1	2,250	-	-
Oakland, CA 94601	5	7,650	-	-	1	2,619	4	5,031
Oakland, CA 94602	1	5,712	1	5,712	-	-	-	-
Oakland, CA 94603	2	2,618	-	-	-	-	2	2,618
Oakland, CA 94605	2	2,921	-	-	-	-	2	2,921
Oakland, CA 94606	1	1,476	-	-	-	-	1	1,476
Oakland, CA 94607	1	1,240	-	-	-	-	1	1,240
Oakland, CA 94621	11	53,368	2	37,490	3	6,748	6	9,130
San Leandro, CA 94579	2	3,734	-	-	1	2,424	1	1,310
San Leandro, CA 94578	4	10,882	1	6,390	1	2,040	2	2,452
San Leandro, CA 94577	27	55,645	-	-	13	34,415	14	21,230
Castro Valley, CA 94546	1	2,690	-	-	1	2,690	-	-
San Lorenzo, CA 94580	2	2,610	-	-	-	-	2	2,610
Hayward, CA 94544	14	32,067	1	7,675	4	10,898	9	13,494
Hayward, CA 94545	30	72,478	2	20,046	9	24,221	19	28,211
Hayward, CA 94541	1	2,702	-	-	1	2,702	-	-
Hayward, CA 94542	1	5,800	1	5,800	-	-	-	-
Union City, CA 94587	27	54,437	1	9,249	7	18,320	19	26,868
Newark, CA 94560	18	50,766	2	17,145	6	20,293	10	13,328
Fremont, CA 94536	1	2,265	-	-	1	2,265	-	-
Fremont, CA 94538	38	83,755	1	21,125	9	22,861	28	39,769
Fremont, CA 94539	5	8,931	-	-	1	2,088	4	6,843
Dublin, CA 94568	12	30,408	2	12,504	3	8,133	7	9,771
Pleasanton, CA 94566	7	12,606	-	-	2	5,465	5	7,141
Pleasanton, CA 94588	7	22,512	1	11,541	3	6,819	3	4,152
Livermore, CA 94550	14	23,891	-	-	3	9,280	11	14,611
Livermore, CA 94551	15	95,723	3	78,846	1	3,510	11	13,367

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#### **EBCE FIT project eligibility**



- Open to all renewable energy technologies that meet California's Renewables Portfolio Standard (RPS) eligibility requirements
- Projects must be sited in the EBCE service territory
- Projects can sized up to 3 MW \*

\*All project size capacity references in this presentation are Alternating Current (AC) rated, unless noted otherwise.

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#### **EBCE FIT program size**



A 50 MW FIT will provide roughly 1.29% of EBCE annual electric load

FIT capacity	Annual energy production from each kW of FIT capacity	Annual energy deliveries through FIT	Annual CCA energy sales	Percent of total CCA retail sales
50 MW	1,600 kWh	80,000 MWh	6,200,000 MWh	1.29%

 Annual production of 1,600 kWh/kW of FIT capacity is based on solar resource analysis for Alameda County, as we expect PV to be the dominant FIT technology

Location	Solar resource quality (kWh/m²/day)	System type	Capacity factor	Annual energy production (kWh/kWAc/year)
Oakland Airport	4.63	Fixed rooftop installation	19.1%	1521
Livermore	5.00	Fixed rooftop installation	20.1%	1605
Livermore	5.00	Single-axis tracking installation	25.4%	2024

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#### **EBCE FIT initial pricing**



- Initial baseline FIT pricing of 9¢/kWh fixed for 20 years.
  - This price is expected to support larger, ground-mounted solar PV projects in eastern Alameda County.
  - Modeling was done using NREL's System Advisor Model.

Type of system	Size of solar PV system (WAC)	Installed cost (\$/WDC)	20-year fixed PPA price (¢/kWh) Oakland	20-year fixed PPA price (¢/kWh) Livermore
Built environment	100 kW roof	\$2.30	15.6¢	14.8¢
Built environment	350 kW roof	\$2.12	14.5¢	13.8¢
Built environment	500 kW roof	\$2.06	14.2¢	13.5¢
Built environment	1 MW roof	\$1.90	13.5¢	12.8¢
Ground-mount	1 MW tracking	\$1.86	n/a11	10.0¢
Ground-mount	3 MW tracking	\$1.78	n/a	9.74¢

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#### **EBCE FIT Market Responsive Pricing (MRP)**



Once baseline pricing is set for the initial FIT tranche, MRP governs baseline pricing, which can never exceed a universal maximum of 11¢/kWh.



Market Responsive Pricing for EBCE FIT

#### **EBCE FIT pricing adders**



- The concept of pricing adders is simple
  - An LSE identifies the characteristics it would like to see in its FIT projects and then creates adders to its baseline FIT price to incentivize projects with these characteristics.
- The Clean Coalition recommends East Bay Community Energy implement four pricing adders:
  - Built-environment adder at 20%
    - Rooftops, parking lots, parking structures, etc.
  - Small project adder at either 10% or 20%
    - 10% for projects larger than 100 kW and less than or equal to 350 kW.
    - 7 20% for projects less than or equal to 100 kW.
  - Community benefit adder at 5%
    - Tax-exempt and/or disadvantaged zone.
  - Dispatchability adder at 15 cents/kWh
    - Eligible for guaranteed daily dispatchable renewable energy at 2-4 hours of nameplate renewable energy FIT project.

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#### Highlights from public comments on the FIT



- Numerous parties expressed strong support for the FIT because it will drive local renewable energy development and local job creation (CalSEIA, Borrego Solar, East Bay Clean Energy Alliance, others)
- Some parties (Borrego, EBCPA) would like to see a larger program and more adders; however, there are rate impacts to consider when it comes to expanding FIT program capacity and increasing the pricing.
- F Borrego Solar recommended rolling unselected applications from one tranche into the next tranche. We agree with this suggestion and will clarify this in the final FIT design recommendations.
- More than Smart expressed concern about the benefits of the FIT to EBCE customers, as well as the untested nature of the proposed Market Responsive Pricing (MRP) mechanism.
  - In alignment with the goal of the LDBP, the FIT is designed to drive local economic and environmental benefits through local renewables. It also unleashes commercial-scale projects that are ill-suited to NEM (non-owner occupied, split-metered/multi-tenant, low on-site load) and avoids the tremendous inefficiency of auctions that kill any participation from the commercial-sale market segment.
  - The MRP is similar to California's ReMAT program, which has effectively driven down pricing for sub-3 MW renewable energy projects using a market adjusting tariff. An MRP has also driven German rooftop solar pricing to less than 5 cents/kWh equivalent.

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# **Energy Efficiency**

### Phased Recommendations

- Phase I: Support existing EE, build integrated data platform, comprehensive COS Study, RFQ for EE service providers
- Phase II: Targeted revenue-based programs, integrate Metered EE capabilities & CBA's, implement P4P contracting
- Phase III: ETA ratepayer-funded programs, cost-causation targeting, close coordination w/EE Program Administrators

### Public Comments

- Strong support for EE Assessment and Recommendations
- Some concerns re: P4P supplanting Direct Install/Deemed EE Programming

# **Demand Response**

### Phased Recommendations

- Phase I: Support PG&E's existing DR programs
- Phase II: Offer customized DR programs in partnership w/established DR provider, rely on 3<sup>rd</sup>-party expertise/resources
- Phase III: Offer suite of in-house DR programs designed to shape/shift/shed load, leverage integrated data platform

### Public Comments

- Grid-enabled EV Charging Infrastructure is an important segment for EBCE to focus on
- Energy Storage is also maturing, but control clauses can create some concerns re reduced value to customers or asset owners

# **Energy Storage**

### Phased Recommendations

- Phase I: CARE Customer Energy Storage Giveaway, NEM/FIT Adders & TOU Rate Pilots
- Phase II: Collaborative Procurement of Utility-scale ES, Implement VDER Tariff
- Phase III: VPP Aggregation of deployed ES systems

### Public Comments

- Strong Public Support for recommendations, including CARE Customer ES Giveaway
- Concerns regarding control clauses, recommended value of Energy Storage Adders, and Performance Penalties
- Suggested that we increase system size of CARE Customer giveaways

### Pending Assessments/Recommendations

- Opportunities for Fossil Fuel Switching
  - **Natural Gas Sector** (aka- Building Electrification)
  - Transportation Sector (aka- Vehicle Electrification)
- Rate Design as an Incentive
- On-bill Repayment and On-bill Financing



#### LOCAL SOLAR ECONOMIC BENEFITS VS COSTS

In 2018 dollars

	100,000 MWh from local solar generation (@ \$90/MWh)	50 MW new local solar development (single axis) (@ \$1.86/W)	Impact of \$50/MWh price premium of 100,000 MWh from local solar (@ non-local solar cost of \$40/MWh)	Net Impacts (Alameda County)
Local Investment	\$9 million	\$93 million	(\$5 million)	
Direct Jobs	3	54	0	57
Total Jobs	31	85	(29)	87
Total Labor Income	\$2,060,857	\$6,375,580	(\$1,667,935)	\$6,768,503
Direct Employee Compensation	\$130,805	\$3,375,864	0	\$3,506,669
Proprietor Income	\$80,216	\$1,090,762	0	\$1,170,978
Total Economic Output	\$13,482,587	\$14,395,807	(\$4,559,176)	\$23,319,218



The net benefits of purchasing local solar yields job, income, and economic benefits that far exceed the negative impacts from the higher cost. 100,000 MWh of local solar would create 54 construction jobs and 3 ongoing maintenance jobs.

#### ENERGY EFFICIENCY OR ROOFTOP SOLAR VS RESIDENTIAL RATE REDUCTIONS

In 2018 dollars

	\$1 million invested in local ground-mounted renewable development	\$1 million invested in local commercial EE or rooftop solar	\$1 million in residential rate reductions
Direct Jobs	5.8	5.0	0
Total Jobs	9.2	8.9	5.9
Labor Income (Employee Compensation + Profits)	\$685,546	\$646,353	\$333,587
Direct Employee Compensation	\$362,996	\$340,342	0
Total Economic ( Output	\$1,547,936	\$1,612,460	\$911,835



Local investment in solar or EE create jobs and stimulate more local economic activity than rate reductions.

#### **RESIDENTIAL RATE REDUCTIONS COMPARISONS**

		\$1 million in residential reductions	rate	\$1 million residential rate reductions (households <\$100K)		\$1 million residential rate reductions (households <\$70K)	
Direct Jobs		0		0	(	0	
Total Jobs		5.88		6.48	(	6.53	
Labor Incom	e	\$333,587		\$369,492		\$371,855	
Total Economic \$911,835 Output		\$911,835	>	\$1,003,971		\$1,005,036	
In 2018 dollars			Rate re househ benefits househ cause r due to r	ductions targeted olds generate mo s, than uniform rate olds. Uniform rate net leakage of mo non-local spendin bouseholds	to re l te r re ney g pa	lower income local economic reductions across duction actually out of the County atterns of higher	all

#### CONCLUSIONS

- Investing in local renewables, energy efficiency, and other clean energy activities generates greater local economic benefits, <u>by every measure</u>, than rate reductions.
- Union and prevailing wage job creation, an explicit goal of EBCE, only occurs when there is investment in actual projects (when you get "direct" jobs). (Prevailing wage or union jobs are <u>not</u> created by providing discounts on energy bills).
- Due to non-local spending patterns of higher-income households. Residential rate reductions result in a small net flow of money <u>out of</u> the County. Targeting rate reductions to lower-income households neutralizes this negative impact.
- While low or competitive rates are a priority in the EBCE the Joint Powers Agreement, they must be balanced with direct local investments to achieve the full measure of goals stated in the JPA Agreement.

Prepared by: Betony Jones, Climate and Workforce Research and Advising http://betonyjones.com

#### **ECONOMIC BENEFITS DEFINED**

\*\*\*ALL benefits are specific to Alameda County\*\*\*

- **Direct Jobs:** These are the jobs created from capital investments in the Alameda County. In the construction industry, we assume these jobs will provide prevailing wages and benefits, per the goals of EBCE.
- Total Jobs: This figure includes all of the direct, indirect, and induced jobs created by the change in spending. Indirect jobs are those that supply the industries directly affected (mainly retail and real estate jobs), and induced jobs are the number of jobs affected by a general change in economic activity (mainly retail, restaurant, and health care jobs).
- Labor Income: Includes total employee compensation + proprietor income (business profits). For these examples, profits are assumed to be 8 12 percent of the investment (in solar, wind, EE, etc.)
- **Direct Employee Compensation:** Includes the wages and benefits for the jobs created, and can be considered one measure of job quality.
- Total Economic Output: The value of the sale of all goods and services in Alameda County associated with a \$1 million change in spending.



All benefits extracted from IMPLAN using 2016 data in IMPLAN. Rate reduction calculations by income class based on household income distribution from 2016 census data, and household electricity consumption data by income class from EIA (2009)

#### JOINT POWERS AGREEMENT

By establishing the Authority, the Parties seek to:

- (a) Provide electricity rates that are lower or competitive with those offered by PG&E for similar products;
- (d) Establish an energy portfolio that prioritizes the use and development of local renewable resources and minimizes the use of unbundled renewable energy credits;
- (f) Demonstrate quantifiable economic benefits to the region (e.g. union and prevailing wage jobs, local workforce development, new energy programs, and increased local energy investments);
- (j) Provide and manage lower cost energy supplies in a manner that provides cost savings to low-income households and promotes public health in areas impacted by energy production;



The Joint Powers Agreement establishing EBCE provides clear direction on the local development and economic benefit goals


# **Discussion**

LDBP Project Team:

ALHECON ALH Urban & Regional Economics

> Offset Clean Coalition Making Clean Local Energy Accessible Now



Special Advisors: Betony Jones & Gary Calderon

March 26, 2018



## East Bay Community Energy Local Development Business Plan

# Workshop #2: Community Benefit & Planning Tools

LDBP Project Team:

ALHECON

ALH Urban & Regional Economics







Special Advisors: Betony Jones & Gary Calderon

March 26, 2018



## East Bay Community Energy **Community Benefit Impacts**

LDBP Project Team:

ALHECON ALH Urban & Regional Economics

> Olfset Clean Coalition Seco-shift Making Clean Local Energy Accessible Now



OPTONY

Special Advisors: Betony Jones & Gary Calderon

March 26, 2018



### **APPROACH TO ASSESSING COMMUNITY BENEFIT IMPACTS**

- Assess Job, Labor Income, and EBCE Financial Impacts of Recommended Plan Strategies and Options
  - Prepared by ALH Urban & Regional Economics
  - Presenters, Amy Herman, Sarah Murley, and Thomas Jirovsky
- Scenario Analysis, Compare Impacts Across Multiple Scenarios and Support Programmatic Decision-Making
  - Prepared by EcoShift Consulting
  - Presenters, Zoe Elizabeth and Rick Betita



### **COMMUNITY BENEFIT IMPACT ANALYSIS**

- EBCE has been created by citizens of Alameda County to control electric power production, distribution, and ultimate cost to consumers. EBCE is designed to use surplus revenues (in lieu of profit) to provide significant community benefits in the form of:
  - Lower electric rates
  - Local economic development/job creation
  - Renewable energy
  - Greenhouse gas reduction
  - Energy efficiency investments
- > 2021 stabilized operations expected to generate \$50 million in annual surplus



### **JOB CREATION AND LABOR INCOME IMPACTS**

- Sources of impacts
  - Installation of equipment (one-time)
  - Annual maintenance of equipment or on-going operations of utility-scale generation facilities
  - > Annual customer savings translated into additional household and business purchases
- Job and labor income impacts are driven by the level of capital investment (regardless of source)
- All impacts estimated are in Alameda County
- Job impact includes estimated average wages as well as total labor income
  - Prevailing wage for large commercial, industrial, and utility-scale installations and maintenance
  - > Non-union labor assumed for residential installations and maintenance



## **ECONOMIC IMPACT MODELING**

Primarily relied on IMPLAN

- IMPLAN is a national vendor of input-output software and data used to create economic impact models and is widely used in government, higher education, and in the private sector
- IMPLAN breaks down the U.S. economy into over 500 industry sectors
- Model creates county-level values by adjusting the national level data, such as removing industries that are not present in a particular region
- > Multipliers used in this analysis are specific to the economy of Alameda County
- Data are updated annually most current data are for 2016
- To model EBCE job impacts, industry-specific multipliers were used for maintenance and repair of residential and non-residential structures as well as construction of new nonresidential structures for installation and maintenance
- IMPLAN model estimates direct, indirect, and induced jobs



## **ECONOMIC IMPACT MODELING**

- The JEDI model was used to estimate the installation portion of capital investment and to compare direct job impacts from IMPLAN
  - Created by National Renewable Energy Lab (NREL) with models specific to PV Solar, Distributed Wind, and Land-Based Wind
  - Uses state-level IMPLAN multipliers (not specific to Alameda County)
  - Provides significant detail on breakdown of costs for specific sizes of solar and wind projects based on user-input on total cost



### **COMMUNITY BENEFIT OPTIONS**

- The LDBP team has identified numerous community benefit investment options/strategies to apply the surplus revenues for EBCE consideration, including:
  - ▶ Feed In Tariff ("FIT") programs for solar and wind power generation
  - Net Energy Metering ("NEM") programs for solar and wind power generation
  - Direct investment in solar/wind power production
  - > Efficiency programs for Commercial/Industrial, Residential and CARE customers
  - Energy Storage systems (individual to utility scale investments)
  - > Demand response programs to reduce peak hour power demand
  - Electric vehicle incentives (autos, buses, trucks)
  - Fuel switching programs to encourage electric appliance uses
  - Lower electricity rates for all customers / low income HH's



### **Representative Draft Findings - Illustrative Programs**

- Feed In Tariff ("FIT")
- Direct Investment
- Energy Storage
- Electric Vehicles
- Fuel Switching
- Reduced Electricity Rates





### Representative Draft Findings - Illustrative Impact Metrics

- Program description
- EBCE Costs
- Private capital investment
- Direct and total job impacts
- Labor income impacts
- Net cost to EBCE over 10 years
- Job creation index per \$1.0 million in capital investment



### FEED IN TARIFF ("FIT")

- EBCE solicits proposals for wind/solar power development in Alameda County
- EBCE identifies specific goals (built environment, small scale, energy storage, etc.)
- EBCE offers to buy all power generated at \$0.09 to \$0.13 per kwh (FIT)
- EBCE paying premium of \$0.054 per kwh versus existing renewable power contracts
- ► For every 5 MW of solar production capacity:
  - Private sector capital investment of \$9.5 million
  - EBCE will incur \$420,000 in increased power costs per year
  - > 28 direct jobs related to installation (\$41.83 per hour)
  - 48 total jobs
  - > 1.1 total annual maintenance jobs will be required
  - > \$3.8 million in labor income impacts for installation and maintenance
- Over 10-year period: 6.2 direct, indirect, and induced jobs generated per \$1 million in capital investment



### **DIRECT INVESTMENT**

- Once EBCE has established a good credit rating EBCE directly contracts to build wind/solar power systems in Alameda County applying specific goals (union labor, energy storage, etc.). With economies of scale and as a non-profit, EBCE's amortized cost of power will be similar to the cost from the normal grid
- ► For every 5 MW of solar production capacity:
  - EBCE capital investment of \$8.9 million
  - > 25 direct jobs related to installation (\$45.00 per hour)
  - 40 total installation jobs
  - > 1.2 total annual maintenance jobs will be required
  - > \$3.4 million in labor income impacts for installation and maintenance
- Less labor is needed for large scale installations, but EBCE has no net capital investment (funded by debt)
- Over 10-year period: 5.8 direct, indirect, and induced jobs generated per \$1 million in capital investment



## **ENERGY STORAGE**

- Solar power generation is concentrated around mid-day, while demand peaks in the evening hours, creating a significant demand/supply imbalance and the need for storage capacity
- Investment in energy storage reduces reliance on natural gas peaker plants
- For every \$5 million capital investment:
  - 5 to 6 direct jobs related to installation (\$47.56 per hour utility-scale and commercial/industrial, \$25.00 per hour residential)
  - 9 total installation jobs
  - > 0.7 total annual maintenance jobs will be required
  - \$613,000 in labor income impacts for installation and maintenance
- EBCE has \$1.5 million net capital investment over 10 years
- Over 10 year period: 3.0 direct, indirect, and induced jobs generated per \$1 million of capital investment



## **ELECTRIC VEHICLES**

- Illustrative example 400 participating customers at a cost of \$37,420 for vehicle and charger installation, with EBCE contributing \$2,500 per customer
  - **EBCE** capital investment of \$1.0 million, total capital investment of \$15.0 million
  - 18.4 direct jobs related to retail purchase and charger installation, average \$34.66 per hour
  - 28.7 total jobs
  - > \$2.1 million in total labor income impacts
  - All job impacts are one-time
- 1.9 direct, indirect and induced jobs per \$1 million of capital investment
- Electric vehicle subsidies are primarily a GHG and air pollution reduction investment



### **FUEL SWITCHING**

- Illustrative program 2,300 customers with appliance replacement cost of \$5,500 per home with EBCE contributing \$1,600 per home
  - **EBCE** capital investment of \$3.7 million, total capital investment of \$12.6 million
  - > 106 direct jobs related to retail purchase and installation, average \$28.62 per hour
  - 188 total jobs
  - \$11.2 million in total labor income impacts
  - All job impacts are one-time
- 7.6 direct, indirect, and induced jobs per \$1 million of capital investment
- With profits from recommended Off-Gas program, EBCE will be able to recoup investment in fuel switching subsidies



## **REDUCED ELECTRICITY RATES**

- EBCE plans to sell power under a rate structure similar to PG&E
- ▶ For 1.5% overall rate reduction relative to PG&E rates:
  - EBCE will forego \$9.9 million in annual revenue
  - Customers savings will result in increased demand for other goods and services
  - 71 annual local jobs supported (average \$30.49 per hour)
  - \$4.5 million total labor income per year
- Over 10-year period: 7.2 induced jobs generated per \$1 million in customer savings



### **SCENARIO ANALYSIS**





## **SCENARIO ANALYSIS**

- A dynamic assessment framework that pulls together results and recommendations from across the LDBP research team
- The purpose of scenario analysis is to:
  - support decision-making
  - clarify complex relationships
  - communicate complex data simply and clearly to multiple audiences
- Analysis is ongoing













## **COMPARE MULTIPLE SCENARIOS**

- What will the impacts be if...
  - FIT and NEM uptake is really strong or really slow?
  - more small-scale solar is built in Oakland vs. large-scale in Livermore?
  - an aggressive demand response program is adopted?
  - there is more investment in electric vehicles and less in energy storage?





### REAL PEOPLE, REAL IMPACTS, REAL ANALYSIS







### **KEY RELATIONSHIPS**

- New local renewables create jobs (at the highest cost to EBCE), but do not result in GHG or air quality improvements.
- Energy storage, electric vehicle programs, and fuel switching have the potential to reduce GHG emissions and improve air quality over time, but create fewer direct jobs.
- Energy efficiency and demand response also have potential to reduce GHG and air pollution over time. The benefits are less direct than the above programs, but these programs also support grid resiliency and are thus essential to long term carbon reductions and sustainability.





## **BEYOND THE NUMBERS**

- The purpose of the scenario analysis is to clarify and communicate a variety of impacts from a variety of programs in one place.
- CCAs generate dollars for community investment, not shareholder profits. The scenario analysis displays one set of options for this investment.
- Additional pathways are possible.
- There are important impacts of all of these programs that cannot be quantified; the final draft will include qualitative analysis.
- In a diverse region, there will be a variety of goals, priorities, and opinions.





### FIRST OF ITS KIND DATA-DRIVEN ANALYSIS

- **EBCE** is the first CCA to invest in sophisticated analysis of local development.
- The results from across the LDBP enable a wide-variety of stakeholders to understand the costs and benefits of a variety of programs and thus to meaningfully engage in program development.
- Ultimately data-driven decision-making will lead to better outcomes for EBCE, its customers, stakeholders, board, and entire community.





## **QUESTIONS AND ANSWERS**

- Thank you for your participation.
- We will be pleased to answer questions on our presentation and analysis.







## **East Bay Community Energy Local Development Business Plan**

## **Closing Remarks**

LDBP Project Team:

ALHECON

ALH Urban & Regional Economics





OPTONY

Special Advisors: Betony Jones & Gary Calderon

March 26, 2018



### **Staff Report Item 11**

**TO:** East Bay Community Energy Board of Directors

FROM: Nick Chaset, Chief Executive Officer

SUBJECT: Approval of 100% Renewable Energy Product

**DATE:** April 18, 2018

#### **RECOMMENDATION**

Review and Adopt:

- 1. 100% Renewable Energy Product Timeline;
- 2. Product Premium; and
- 3. Mechanics for Offering Product

At the February 7, 2018 East Bay Community Energy Board of Directors meeting, staff presented a recommendation to offer a 100% renewable energy product after Phase 2 (residential) launch in early to mid-2019. At that time, the Board took no specific action. Subsequently, at the March 17, 2018 East Bay Community Energy Board of Directors meeting, a resolution was approved allowing the Cities of Hayward and Albany to default their Phase 1 (commercial) customers into the *Brilliant 100* service, which is 100% carbon-free energy. Additionally, staff has communicated to the member jurisdictions of EBCE that they must take action by June 6, 2018 if they want to default their Phase 2 (residential) customers onto a service other than Bright Choice, which is 85% carbon-free and offered at a 1.5% discount to the PG&E generation rate. In this context, staff believes it is important to determine when EBCE will offer a 100% renewable energy so that EBCE jurisdictional members that are considering whether to change their default service will be able to do so with a full understanding of the products, and their underlying prices. To this end, staff has developed two options for how EBCE could rollout its 100% renewable energy service, with each case including the expected premium associated with this product. Staff also separately developed a recommended methodology for calculating the product premium, and a recommended set of steps to take to offer the product.

#### 1) 100% Renewable Energy Product Timeline

#### Option A (*Staff Preferred Approach*):

Offer 100% renewable energy product starting in Q1/Q2 2019 with product being rolled out through a stand-alone marketing campaign focused on driving commercial and residential customer adoption.

#### Option B:

Offer 100% renewable energy product starting at Phase 2 Launch as a third product in addition to *Bright Choice* and *Brilliant 100*. Phase 1 customers would also be eligible to opt-up to the 100% renewable energy product.

#### 2) 100% Renewable Energy Product Premium

Staff recommends calculating the 100% renewable energy product premium based on forecast prices for short term (1 month to 1 year) California renewable energy minus the forecast cost of *Bright Choice*.

100% Renewable - *Bright Choice* = Premium

#### 3) 100% Renewable Energy Product Offering Mechanics

Staff recommends calculating the 100% renewable energy product premium as a \$/kWh adder on the customer bill. This is a common practice among other CCAs including Sonoma Clean Power and CleanPowerSF. As an example, if the premium is set at \$0.014/kWh and a customer uses 100 kWh in a month, they will be charged an extra \$1.40 on that bill.

#### ANALYSIS AND DISCUSSION

#### 1) 100% Renewable Energy Product Timeline

**Option A:** Offer 100% Renewable Energy Product starting in Q1/Q2 2019.

Advantages of Option A:

- By waiting to offer 100% renewable energy product until after Phase 2 launch, EBCE can develop a focused marketing effort that includes specific customer targeting and outreach that staff expects to result in higher adoption rates.
- At Phase 2 launch, the vast majority (95% or more) of customers are expected to take no action and be defaulted onto *Bright Choice* service. By offering only *Bright Choice* and *Brilliant 100* at Phase 2 launch, staff expects reduced customer confusion.

Disadvantages of Option A:

• A variety of key EBCE community stakeholders have expressed their interest in wanting to have a 100% renewable energy product available at launch and waiting until 2019 will not meet this customer demand

• Waiting until after Phase 2 launch to offer a 100% renewable energy product may miss an opportunity to engage customers who are thinking about EBCE products when Phase 2 launched

**Option B:** Offer 100% Renewable Energy Product starting at Phase 2 Launch as a third product in addition to *Bright Choice* and *Brilliant 100* 

Advantages of Option B:

- Meets community stakeholder demand for a 100% renewable energy product at Phase 2 launch
- Allows commercial and municipal customers, who expressed the greatest demand for *Brilliant 100*, to choose from a third product that meets specific needs like LEED certification

Disadvantages of Option B:

- Offering a third, 100% renewable energy product at Phase 2 launch may create customer confusion for consumers who are also trying to understand the underlying transition from PG&E to EBCE
- Introducing a third product, and making extensive changes to the customer relationship management system and billing engine to reflect this third product, creates a degree of operational risk that is currently hard to quantify, but could harm the customer experience

#### 2) 100% Renewable Energy Product Premium

Staff recommends calculating the 100% renewable energy product premium based on forecast prices for short term (1 month to 1 year) California renewable energy minus the forecast cost of *Bright Choice*. Below is an illustration of the process staff will use to calculate this premium. Staff will develop a forward price curve for the following rate making year which is used as the basis to calculate the projected costs of 100% renewable energy.

#### 100% Renewable - *Bright Choice* = Premium

Table 1 - Calculate the Cost of *Bright Choice* (costs are illustrative):

Bright Choice	Price (\$/MWh)	% of energy	Total Cost (weighted average)
Renewable Energy (including solar, wind, small hydroelectric)	\$60	38%	
Carbon-Free Energy (large hydroelectric)	\$45	47%	\$49.95/MWh
System (may include nuclear and natural gas)	\$40	15%	

#### Table 2 - Calculate the Cost of 100% Renewable Energy (costs are illustrative):

100% Renewable	Price (\$/MWh)	% of energy
Renewable Energy (including solar, wind, small hydroelectric)	\$60	100%

#### Table 3 - Calculate the Cost Premium of 100% Renewable Energy (costs are illustrative):

Cost of Bright Choice	Cost of 100% Renewable	100% Renewable Premium
\$49.95/MWh	\$60/MWh	\$0.1015/kWh

#### 3) 100% Renewable Energy Product Offering Mechanics

Staff recommends calculating the 100% renewable energy premium as a \$/kWh adder on the customer bill. This is a common practice among other CCAs including Sonoma Clean Power and CleanPowerSF. As an example, if the premium is set at \$0.014/kWh and a customer uses 100 kWh in a month, they will be charged an extra \$1.40 on that bill.



### Staff Report Item 12

TO:	Chairman Haggerty and East Bay Community Energy Board of Directors
FROM:	Leah S. Goldberg, General Counsel
SUBJECT:	Stipends for the Community Advisory Committee Members for Meeting Attendance

### **RECOMMENDATION**

Adopt a Resolution to provide stipends for each voting Community Advisory Committee Member for attending Community Advisory Committee meetings with a limit of up to two meetings in any one calendar month, in the amount of \$50.00 per meeting, with a special provision for the Chair of the Community Advisory Committee to receive a stipend commensurate with Board of Directors stipends when attending Board of Directors meetings, with a limit of two stipends during any calendar month.

#### **BACKGROUND AND DISCUSSION**

At the March 21, 2018 Board of Directors meeting, the Board discussed various policy issues and potential amendments to the Joint Powers Agreement, including the issue of whether to pay Community Advisory Committee members that attend meetings stipends to cover their costs of attending. The Joint Powers Agreement provides in pertinent part: "The Board of Directors shall determine whether the Community Advisory Committee will receive a stipend and/or be entitled to reimbursement for expenses."

The Board members discussed this item and directed staff to bring back a resolution for consideration at the April 2018 Board of Directors meeting.

The proposed resolution provides for a \$50.00 stipend for each Community Advisory Committee member that attends a Community Advisory Committee meeting in which he/she is eligible to vote. Stipends will be paid for attending no more than two meetings in any one calendar month.

For example, if the Community Advisory Committee choses to meet four times in any one calendar month, stipends would only be paid for attending the first two scheduled meetings. To qualify for the stipend, the Community Advisory Committee member must be a voting member, must attend the meeting in person by arriving on time, but in no event more than 30 minutes late, and must participate during the entire meeting.

The proposed resolution contains special provisions for the Community Advisory Committee Chair who also serves as an Ex Officio member of the Board of Directors, and therefore attends Board of Directors meetings as well. The Community Advisory Committee Chair is likewise subject to the two-meeting per calendar month stipend limitation, but the Chair would be eligible for the higher stipend paid to the Board of Directors when he/she attends Board of Directors meetings. For example, if during one calendar month, the Board of Directors holds one meeting and the Community Advisory Committee holds two meetings, the Chair would be eligible for two stipends--one \$100 stipend for attending the Board of Directors meeting and one \$50 stipend for attending one of the Community Advisory Committee meetings.

The resolution authorizes retroactive payment to Community Advisory Committee members who attended Community Advisory Committee meetings on or after March 21, 2018, and for the Chair, who attended the Board of Directors meeting on March 21, 2018.

### FISCAL IMPACT

Community Advisory Committee Stipends would cost EBCE up to \$1,000 per month or \$12,000 annually.

### <u>CEQA</u>

Not a project.

### **ATTACHMENT**

1. Resolution to Approve Stipends for the Community Advisory Committee Members
## **RESOLUTION NO.**

## A RESOLUTION OF THE BOARD OF DIRECTORS OF THE EAST BAY COMMUNITY ENERGY AUTHORITY TO APPROVE STIPENDS FOR THE COMMUNITY ADVISORY COMMITTEE MEMBERS

## THE BOARD OF DIRECTORS OF THE EAST BAY COMMUNITY ENERGY AUTHORITY DOES HEREBY FIND, RESOLVE AND ORDER AS FOLLOWS:

Section 1. The East Bay Community Energy Authority ("EBCE") was formed on December 1, 2016, under the Joint Exercise of Power Act, California Government Code sections 6500 *et seq.*, among the County of Alameda, and the Cities of Albany, Berkeley, Castro Valley, Dublin, Emeryville, Fremont, Hayward, Livermore, Oakland, San Leandro, and Union City to study, promote, develop, conduct, operate, and manage energy and energy-related climate change programs in all of the member jurisdictions.

<u>Section 2.</u> The Joint Powers Agreement provides for the formation of a Community Advisory Committee, composed of nine members, to advise the Board of Directors on all subjects related to the operation of the Community Choice Aggregation Program, as set forth in a work plan adopted by the Board of Directors, from time to time, with the exception of personnel and litigation decisions. The Joint Powers Agreement also obligates the Board of Directors to determine whether Community Advisory Committee members will receive a stipend and/or be entitled to reimbursement for their expenses.

Section 3. Each voting Community Advisory Committee member that attends a Community Advisory Committee meeting shall receive a stipend of \$50.00 per meeting to cover the costs of attendance of up to two Community Advisory Committee meetings in any one calendar month. To qualify as attending a meeting, the Community Advisory Committee meeting, but in no event later than thirty minutes after the scheduled time of the meeting as stated on the agenda, shall attend the meeting in person, and shall participate in the entire meeting.

<u>Section 4.</u> The Joint Powers Agreement provides that the Chair of the Community Advisory Committee shall serve as an Ex Officio Board Member. As an Ex Officio Board Member, the community Advisory Committee Chair shall be entitled to the same stipend Board members receive. In cases where the Community Advisory Committee Chair, or the Vice-chair sitting in the Chair's place at the Board of Directors meeting, attends both Board of Directors meetings and Community Advisory Committee meetings in one calendar month, the Chair, or Vice-chair as the case may be, shall be entitled to the highest compensation available for attendance at up to any two meetings in one calendar month.

<u>Section 5.</u> The Authority shall commence paying stipends for attendance at Community Advisory Committee meetings or, in the case of the Chair, Board of Directors meetings, retroactively to and including the March 21, 2018 Board of Directors Meeting.

ADOPTED AND APPROVED this \_\_\_\_\_ day of \_\_\_\_\_, 2018.

Scott Haggerty, Chair

ATTEST:

Stephanie Cabrera, Clerk of the Board