

#### Financial, Administrative and Procurement Subcommittee Meeting

Wednesday, November 8, 2023 1:00 pm

#### In Person:

Conference Room 5 Ava Community Energy 1999 Harrison Street, Suite 2300 Oakland, CA 94612

Or from the following location: 1755 Harvest Landing Lane, Tracy, CA 95376

Via Zoom:

https://ebce-org.zoom.us/j/83599993289

#### Or join by phone:

Dial(for higher quality, dial a number based on your current location): US: +1 669 900 6833 or +1 346 248 7799 or +1 253 215 8782 or +1 929 205 6099 or +1 301 715 8592 or 888 475 4499 (Toll Free) or 877 853 5257 (Toll Free)

Webinar ID: 835 9999 3289

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) 707-1764 or cob@ebce.org.

If you have anything that you wish to be distributed to the Finance, Administration and Procurement Subcommittee, please email it to the clerk by 5:00 pm the day prior to the meeting.

#### 1. Welcome & Roll Call

#### 2. Public Comment

This item is reserved for persons wishing to address the FAP Subcommittee 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. The FAP Chair may increase or decrease the time allotted to each speaker.

- 3. Approval of Minutes from September 5, 2023
- 4. Workforce Guidelines and Policy (Informational Item)
  Discussion of workforce related priorities and criteria in project/PPA selection
- 5. Fiscal Year 2022-2023 Financial Audit (Informational Item)
  Present and review the results of the Fiscal Year Audit
- 6. Budget Surplus and Reserve Fund Contribution (Informational Item)
  Discuss the budget surplus waterfall and contributions to reserve funds from FY22-23
- 7. Ava Energy Risk Management Program Overview (Informational Item)
  Introduction of Ava Community Energy Risk Management Policy and Regulations
- 8. Committee Member and Staff Announcements including requests to place items on future Board Agendas
- 9. Adjourn

The next Financial, Administrative and Procurement Subcommittee meeting will be held on January 10, 2024 at 1pm.



## Finance, Administration and Procurement Subcommittee Meeting

#### **Draft Minutes**

Tuesday, September 5, 2023 12:00 pm

#### In Person:

The Montclair Room
Cal State East Bay, The Oakland Center
In the Transpacific Center
1000 Broadway, Suite 109
Oakland, CA 94607

#### Or from the following location:

- 1755 Harvest Landing Lane, Tracy, CA 95376
  - 1333 Park Avenue Emeryville, CA 94608

#### Via Zoom:

#### https://ebce-org.zoom.us/j/83599993289

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If you have anything that you wish to be distributed to the Finance, Administration and Procurement Subcommittee, please email it to the clerk by 5:00 pm the day prior to the meeting.

#### 1. Welcome & Roll Call

**Present: Directors** Andersen (Piedmont), Gonzalez (San Leandro), Bedolla (Tracy), Vice-Chair Cox (Fremont) and Chair Bauters (Emeryville). Vice-Chair Cox (Fremont) joined at 12:19pm.

#### 2. Public Comment

This item is reserved for persons wishing to address the FAP Subcommittee 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. The FAP Chair may increase or decrease the time allotted to each speaker.

#### There were no speakers for public comment.

3. Approval of Minutes from July 12, 2023

<u>Oirector Andersen (Piedmont) motioned to approve the minutes. Director Bedolla (Tracy) seconded the motion, which passed 3/5. Excused: Vice-Chair Cox (Fremont).</u>
Abstain: Director Gonzalez (San Leandro).

4. Audit Update (Informational Item)

Update on GASB 62 item as it relates to audit and waterfall

#### The Committee Discussed:

- (8:33) Member Gonzalez sought clarification regarding limits and how long the revenue can be deferred.
- (16:25) Member Andersen extended her thanks to COO Chang for leading the conversation on the waterfall presentation.
- (17:26) Member Gonzalez suggested that transparency with the budget should be simple and clear. He also expressed his anticipation for what staff is going to bring before the board for direction and guidance.
- (20:19) Member Bedolla sympathized with Member Gonzalez's comments and raised the question whether there is a tax benefit to pursuing what was just recommended (e.g. possibly recognizing all revenues and then putting them into a reserve).

#### There were no speakers for public comment.

5. Treasury Manager Update (Informational Item)

Update on the status of recruiting treasury managers

#### The Committee Discussed:

• (28:26) Member Andersen inquired about the approximate compensation model for treasury Management Services and whether there is a rule of thumb for fees payment.

#### There were no speakers for public comment.

6. Prepay #3 Summary (Informational Item)

Review of Energy Prepay #3 recent transaction closing

#### The Committee Discussed:

- (35:16) Member Andersen echoed COO Chang and encouraged staff to share the presentation with the entire board to monitor the outcomes of the action.
- (35:30) Member Gonzalez sought clarification regarding the extra \$37 million above a billion in bonds.

#### There were no speakers for public comment.

- 7. Committee Member and Staff Announcements including requests to place items on future Board Agendas
  - (38:29) Member Gonzalez recommended that the incoming FAP chair reevaluate the current structure of FAP meetings in order for the quarterly update to be timely presented before a committee meeting prior to the board.
  - (41:47) Member Cox requested an update on small and minority businesses and a conduction with East Bay Community Energy contracts and procurement.
- 8. Meeting adjourned at 12:46pm.

The next meeting will take place on November 8, 2023 at 1pm.

Minutes written by Raïssa Ngoma.

#### Ava Community Energy Workforce and Environmental Justice Project Selection Criteria

Ava Community Energy (Ava) evaluates proposed Energy Offtake Agreements by conducting thorough analysis of economic value, viability of projects to meet their stated online dates, project fit into Ava's Integrated Resource Plan and role of the project in supporting Ava's 100% clean energy by 2030 goal. Ava is committed to enhancing its workforce and economic priorities by incorporating this Energy Workforce and Environmental Justice Project Selection Criteria into the overall evaluation of Energy Offtake Agreements.

#### I. DEFINITIONS

- 1. **Energy Offtake Agreement:** Power Purchase Agreements, Energy Storage Agreements, Resource Adequacy Only Agreements for new build electricity generation or storage resources where Ava does not own, develop, or construct the generation or storage facility. Instead, Ava's participation in the Project is limited to receiving energy and any applicable attributes at a set price and term.
- 2. **Journeyperson:** Is a worker who either:
  - a. Graduated from a California state-approved apprenticeship program for the applicable occupation or, when located outside California, approved for federal purposes pursuant to apprenticeship regulations adopted by the Secretary of Labor, or
  - b. Has at least as many hours of on-the-job experience in an applicable occupation as would be required to graduate from an apprenticeship program for the applicable occupation that is approved by the California Division of Apprenticeship Standards.
- 3. **Local Hire:** A stated preference for project employment opportunities for qualified workers in descending priority:
  - a. A resident within the nearest communities in proximity to the project, by radius as reasonably determined on a project-by-project basis;
    - Additional preference shall be given, where the radius includes a city, town, or census-designated location within Ava's service territory, to the workers within those portions of the service territory.
  - b. A resident within the county where the project is being constructed;
  - c. A resident within Ava's service territory.
- 4. **Targeted Hire Program**: A pipeline program which:
  - a. Partners with a Multi-Craft Core Curriculum (MC3) pre-apprenticeship program or programs, or equivalent industry and state-recognized certificated career training and placement program that recruits, supports, and places Equity Priority Workers in skilled construction trades; and

- Creates opportunities for an Equity Priority Worker to enter Registered Apprenticeship Programs and/or obtain work hours needed to successfully complete their apprenticeship; or
- c. Recruits and places income-qualified Journeypersons.
- 5. **Equity Priority Worker:** A jobseeker who, at the time of hiring or within the last twelve months, satisfies at least one of the following categories:
  - a. Currently unhoused or at risk of homelessness
  - b. Being a custodial single parent
  - c. Currently receiving public assistance
  - d. Lacking a GED or high school diploma
  - e. Having been continuously unemployed or underemployed for the past 6 months
  - f. Having been emancipated from the foster care system
  - g. Being a veteran of the United States Military
  - h. Being a member of a tribal community
  - i. Having a previous incarcerated or justice involvement history
  - j. At-Risk Youth: a person 18-24 years old who is disconnected from school and/or work
  - k. Low income (household income is below the current HUD threshold for Low Income Households in their county of residence)

#### 6. Small, Local, and Emerging Business

A local business that is certified small or emerging under the following requirements:

- a. Local Business A business having a fixed office with a street address in Ava's service territory, and having a valid business license issued by a jurisdiction within Ava's service territory for at least 6 months.
- b. Small Business A business which has been certified to meet the U.S. Small Business Administration (SBA) size standards for its classification.
- c. Emerging Business A business which has been certified to meet less than one half the U.S. SBA size standards for its classification and has been in business less than 5 years.

#### II. Workforce and Environmental Justice and Project Selection Criteria

Ava is committed to enhancing workforce and environmental justice priorities by formalizing the incorporation of this Project Selection Criteria into its evaluation of Energy Offtake Agreements.

#### A. Workforce and Local Workforce Development

Ava is committed to stimulating our local economy through, among other measures, supporting projects committed to applying prevailing wage rates, supporting participants and/or graduates of apprenticeship and pre-apprenticeship programs, supporting a local skilled workforce, and to achieve Ava's local and targeted hiring objectives.

- 1. Ava will prioritize Energy Offtake Agreements where the developer is committed to:
  - a. Highest priority projects will commit to:
    - i. A multi-trade project labor agreement that incorporates EBCE's Local and Targeted Hire objectives as follows:
      - 1. A goal of 30% of all project labor hours performed by Local Hires, and;
      - Participation in a Targeted Hire Program with a goal of 10% of all project hours performed by Equity Priority Workers.
      - 3. Demonstrated commitment to subcontracting with Small, Local, and Emerging Businesses.
  - b. Medium-priority projects will commit to:
    - Utilization of prevailing hourly wage and benefit rates as determined by the California Department of Industrial Relations.
    - Utilization of apprentices at the same ratio of apprentice hours to journeyperson hours as required for public works projects.
       Generally this is one apprentice hour per every 5 hours of journeywork per craft.
    - iii. Demonstrated commitment to Local and Targeted Hire, including utilization of a multi-craft core curriculum (MC3) preapprenticeship program, or equivalent industry and state-recognized pre-apprenticeship certification, for outreach, preparation, support and referral of Targeted Hires.
    - iv. Demonstrated commitment to subcontracting with Small, Local, and Emerging Businesses.
  - c. Low-priority projects would fail to meet II.B.1.a or II.B.1.b above but may demonstrate other commitments to local workforce development.
- 2. When considering contractors or developers for Ava-owned energy generation or storage projects requiring a Large Generator Interconnection Agreement from the California Independent System Operator (currently 20MW and above, but subject to change from time to time), Ava shall commit to:
  - a. Negotiate a multi-trade project labor agreement that will incorporate Ava's local and targeted hire objectives as follows:
    - i. A goal of 30% of all project labor hours performed by Local Hires, and:
    - ii. Participation in a Targeted Hire Program with a goal of 10% of all project hours performed by Equity Priority Workers.
    - iii. Demonstrated effort to subcontract with Small, Local, and Emerging Businesses located in Ava's service area
- 3. When considering contractors or developers for Ava-owned energy generation or storage projects requiring a Small Generator Interconnection Agreement from the California Independent System Operator (currently applies to projects under 20MW, but subject to change from time to time), Ava will commit to:

- a. Utilization of prevailing hourly wage and benefit rates as determined by the California Department of Industrial Relations.
- b. Utilization of apprentices at the same ratio of apprentice hours to journeyperson hours as required for public works projects. Generally this is one apprentice hour per every 5 hours of journeywork per craft.
- c. Demonstrated commitment to Local and Targeted Hires.
  - i. A goal of 30% of all project labor hours performed by Local Hires while incenting, through a negotiated contract structure, the contractor or developer to achieve a minimum of 60% of all project labor hours performed by Local Hires, and;
  - ii. Participation in a Targeted Hire Program with a goal of 10% of all labor hours performed by Equity Priority Worker, while incenting, through a negotiated contract structure, the contractor or developer to achieve the 10% goal.
- d. Demonstrated effort to subcontract with Small, Local, and Emerging Businesses located in Ava's service area.

#### B. Innovation

Ava recognizes that reaching 100% Clean Energy by 2030 will require significant improvements and innovation in battery technologies, renewable baseload, dispatchable renewable resources, and renewable generation technologies, among other opportunities.

- 1. Ava will prioritize projects that accelerate decarbonization, provide local resiliency, provide Ava a competitive advantage, and/or reduce costs for Ava customers while remaining cost competitive with established market alternatives. Innovation will be recognized among projects that:
  - a. Include new or improved technologies or methodologies with a demonstrated potential feasibility;
  - b. Achieve scale for existing technologies to benefit Ava customers; or
  - c. Reduce or eliminate barriers to adoption of local, distributed, and scaled technologies.

#### C. Location

Ava prioritizes projects in the following order:

- 1. Projects located within Ava's service territory
- 2. Projects tied or pseudo-tied into the CAISO balancing area
- 3. Out-of-state projects

#### D. Environmental Stewardship

Ava is committed to leading by providing customers with energy that delivers benefits for air, water, and the natural environment while avoiding impacts to important lands, species, and waters. Without diminishing or interfering with permitting, planning land use, or development requirements of any authority having jurisdiction, including local, state, and federal governmental agencies, Ava prioritizes projects that:

- 1. Are proposed on urban or previously disturbed sites.
- 2. The developer and local land use authority have established an enforceable development agreement which, in part, sets forth measures to mitigate impacts to sensitive habitat or environmentally sensitive area; then
- 3. The developer commits to measurable offset efforts within the vicinity of the proposed project.

#### E. Benefits Accruing to Equity Priority Communities

EBCE, supported by the Local Development Business Plan, seeks to deliver economic, environmental, and social benefits to the communities that it serves by providing cleaner electricity at competitive rates, developing local resources that drive new investments, and creating increased demand for high-paying jobs. EBCE is committed to helping low-income and environmental justice communities overcome barriers to their access to public investments, resources, education, and information about energy service and policy.

#### EBCE will prioritize projects that:

- 1. Invest in low-income and environmental justice communities, with additional preference for communities within the EBCE service territory.
- Demonstrate contact and collaboration with the local community. organizations
  and stakeholder groups representing a broad diversity of demographics and
  interests, particularly low income and environmental justice communities, to
  identify and address benefits and impacts of projects and ensure project benefits
  are communicated and accessible to the local community.
- 3. Commit to meaningful engagement<sup>1</sup> with local communities throughout the entitlement and construction processes to identify and address benefits and impacts of projects and ensure project benefits are communicated and accessible to the local community.

#### III. EVALUATION, SELECTION AND REPORTING

Ava has historically evaluated and selected project proposals in accordance with this Energy Workforce and Environmental Justice Project Selection Criteria.

Ava will compile and report data and metrics regarding Workforce and Environmental Justice Project Selection Criteria upon completion of project construction.

### IV. RESERVATION OF AUTHORITY TO WAIVE PROJECT SELECTION METHODOLOGY

- 1. Ava's Board of Directors may, by majority vote, waive this Project Selection Criteria, or any portion thereof, to:
  - a. Address an emergency situation that jeopardizes the safety or feasibility of a project, or;
  - b. Comply with a California State or Federal executive or regulatory order.

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#### V. CA COMMUNITY POWER

Ava's representative to the CA Community Power Board shall advocate for project selection criteria consistent with the terms Ava's own procurement policies.

# Annual Audit for 2022-23 FY

Finance, Administrative, & Procurement Subcommittee

November 8, 2023





# Background & Discussion

- Each year, Ava hires and independent auditor to verify the annual financial statements
- This year's audit focused on financial activities from July 1, 2022 through June 30, 2023
- The auditors engaged with an ad-hoc committee of board members throughout the process and was assisted by Ava staff
- The final audited financial statements provide an independently verified, accurate portrait of Ava's financial position as of June 30, 2022 on activities related to:
  - Net Position
  - Revenues, Expenses, and Change in Net Position
  - Cash Flows
  - Accompanying notes and Subsequent Activities



# Financial Highlights

- Overall revenue was approximately \$824.6MM
- Overall expenses were approximately \$694.5MM
- Change in net position was approximately \$130.1MM
- Deferred revenue from the period is approx. \$37.2MM
- Total assets are approx. \$505.5MM
- Total liabilities are approx. \$89.8MM
- Total deferred revenue is approx. \$53.0MM
- Total Net Position is approx. \$362.7MM
- Ava has no outstanding debt
- Ava has \$1.0MM in restricted funds held for lockbox security, set to expire Dec, 2023



# Financial Findings and Audit Results

- The auditors have declared their opinion to be:
  - The financial statements are presented fairly in all material respects
  - The financial statements and all development processes are in accordance with all generally accepted accounting standards (GAAS) of the United States of America
- The responsibilities of the auditors have been to:
  - Exercise professional judgement and maintain professional skepticism throughout the audit
  - Identify and assess the risk of material misstatement of the financial statements
  - Understand the internal controls relevant to the financial statements
  - Evaluate the accounting policies for reasonability and consistency
  - Conclude on Ava's accounting abilities and accuracies
- Ava's Financial Reporting and Management Practices have passed the audit standards





#### THE EAST BAY'S PUBLIC POWER AGENCY

# Financial Statements

Years ended June 30, 2023 and 2022 with Independent Auditor's Report

#### Contact us

customer-support@ebce.org 1-833-699-EBCE (3223)

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At right: EBCE's Scott Haggerty Wind Energy Center in Livermore, CA



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#### **Independent Auditor's Report**

To the Board of Directors
East Bay Community Energy Authority
Oakland, California

#### **Report on the Audits of the Financial Statements**

#### **Opinion**

We have audited the accompanying financial statements of East Bay Community Energy Authority (EBCE), as of and for the years ended June 30, 2023 and 2022, and the related notes to the financial statements, which collectively comprise EBCE's basic financial statements as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of EBCE as of June 30, 2023 and 2022, and the changes in financial position and cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

#### **Basis for Opinion**

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audits of the Financial Statements section of our report. We are required to be independent of EBCE and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### **Responsibilities of Management for the Financial Statements**

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about EBCE's ability to continue as a going concern for 12 months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.



#### **Independent Auditor's Report** (continued)

#### Auditor's Responsibilities for the Audits of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audits.
- Identify and assess the risks of material misstatement of the financial statements, whether due to
  fraud or error, and design and perform audit procedures responsive to those risks. Such procedures
  include examining, on a test basis, evidence regarding the amounts and disclosures in the financial
  statements.
- Obtain an understanding of internal control relevant to the audits in order to design audit
  procedures that are appropriate in the circumstances, but not for the purpose of expressing an
  opinion on the effectiveness of EBCE's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about EBCE's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audits, significant audit findings, and certain internal control-related matters that we identified during the audits.

#### **Independent Auditor's Report** (continued)

#### **Required Supplementary Information**

Accounting principles generally accepted in the United States of America require that management's discussion and analysis be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Pisente a Brinku LLP

Santa Rosa, California October 30, 2023

The Management's Discussion and Analysis provides an overview of East Bay Community Energy Authority's (EBCE) financial activities as of and for the years ended June 30, 2023 and 2022. The information presented here should be considered in conjunction with the audited financial statements.

#### **BACKGROUND**

The formation of EBCE was made possible in 2002 by the passage of California Assembly Bill 117, enabling communities to purchase power on behalf of their residents and businesses and creating competition in power generation.

EBCE was created as a California Joint Powers Authority (JPA) effective December 1, 2016, and was established to provide electric power at competitive costs as well as provide other benefits within Alameda County, including reducing greenhouse gas emissions related to the use of power, procuring energy with a priority on the use and development of local renewable resources, stimulating local job creation through various programs and development, promoting personal and community ownership of renewable resources, as well as promoting long-term electric rate stability and energy reliability for residents and businesses. Governed by a board of directors (Board) consisting of elected representatives from each jurisdiction, EBCE has the rights and powers to set rates for the services it furnishes, incur indebtedness, and issue bonds or other obligations. EBCE is responsible for the acquisition of electric power for its service area.

In June 2018, EBCE began providing service to its first approximately 55,000 customer accounts as part of its initial enrollment phase. This initial phase included municipal and business accounts. The next major enrollment of residential accounts began in November 2018, which added approximately 500,000 accounts. In April 2021, EBCE expanded its service territory by adding approximately 80,000 accounts. As of June 30, 2023, EBCE had approximately 640,000 customers enrolled.

#### Financial reporting

EBCE presents its financial statements as an enterprise fund under the economic resources measurement focus and accrual basis of accounting, in accordance with Generally Accepted Accounting Principles (GAAP) for proprietary funds, as prescribed by the Governmental Accounting Standards Board (GASB).

#### **Contents of this report**

This report is divided into the following sections:

- Management's discussion and analysis, which provides an overview of the financial operations.
- The basic financial statements:
  - o The *Statements of Net Position* include all of EBCE's assets, liabilities, deferred inflows, and net position, and provides information about the nature and amount of resources and obligations at a specific point in time.
  - The Statements of Revenues, Expenses, and Changes in Net Position report all of EBCE's revenues and expenses for the years shown.
  - The Statements of Cash Flows report the cash provided and used by operating activities, as well as other sources and uses, such as capital asset acquisitions and non-capital financing activities.
  - o The notes to the Basic Financial Statements provide additional details and information related to the basic financial statements.

#### FINANCIAL HIGHLIGHTS

The following table is a summary of EBCE's assets, liabilities, and net position, and a discussion of significant changes for the years ended June 30:

500 ¢ 210 200 050
508 \$ 218,280,050
016 115,816
858 22,855,208
874 22,971,024
382 241,251,074
766 53,525,550
<u>-</u>
766 53,525,550
000 15,814,000
016 115,816
10,000,000
600 161,795,708
616 \$ 171,911,524

#### **Current Assets**

Current assets were approximately \$441,434,000 at the end of 2023 and are mostly comprised of cash of \$291,035,000, accounts receivable of \$84,199,000, accrued revenue of \$45,767,000, and prepaid expenses of \$18,388,000. The current asset accounts increased in 2023 as a result of operating surpluses generated from customer rate increases.

#### **Capital Assets**

Capital assets are reported net of depreciation. EBCE does not own assets used for electricity generation or distribution. In September 2021, EBCE purchased an office building at 251 8<sup>th</sup> Street in Oakland with the original intent to use it as its future headquarters. The cost of the building and land was approximately \$8,500,000. Presently, the cost of the building and land is classified on the Statements of Net Position as "land and construction-in-progress".

#### Other Noncurrent Assets

Other noncurrent assets include \$53,014,000 as of June 30, 2023, in its Rate Stabilization Fund to defer revenue for later years when financial results may not be as strong or are stressed. By postponing revenue recognition to future years, EBCE will be positioned to avoid sudden rate increases to address unanticipated spikes in energy costs and other unforeseen circumstances. EBCE contributed \$37,200,000 to this fund for the year ended June 30, 2023.

#### **Current Liabilities**

Current liabilities consist mostly of the cost of electricity delivered to customers that is not due to be paid by EBCE until after year-end. Other components include trade accounts payable, taxes and surcharges due to other governments, and various other accrued liabilities.

Current liabilities decreased from 2022 to 2023 primarily due to a decrease in security deposits. Accrued cost of electricity increased in 2023 due to rising prices fueled by volatility in the energy market. Current liabilities increased significantly from 2021 to 2022 due and increase in security deposits received and an increase in accrued cost of electricity. Changes in both these items were a result of the increased customer load and contracts required to serve that load.

#### **Deferred Inflows of Resources**

Included in deferred inflows of resources as of June 30, 2023, is \$53,014,000 in a Rate Stabilization Fund. The contribution to the Rate Stabilization Fund was \$37,200,000 during 2023, which accounts for the increase compared to 2022. No contribution was made for the year 2022.

#### **Revenues and expenses**

The following table is a summary of EBCE's results of operations and a discussion of significant changes for the years ended June 30:

	2023	2022	2021
Operating revenues	\$ 817,931,312	\$ 555,332,546	\$ 423,502,860
Nonoperating revenues	4,050,916	7,901,267	-
Investment income	2,609,002	221,757	636,395
Total income	824,591,230	563,455,570	424,139,255
Operating expenses	693,785,891	501,933,974	401,160,053
Nonoperating expenses	678,679	903,504	869,612
Total expenses	694,464,570	502,837,478	402,029,665
Change in net position	\$ 130,126,660	\$ 60,618,092	\$ 22,109,590

#### **Operating Revenues**

In April 2021, EBCE expanded its service territory to include an additional 80,000 customer accounts. The year ended June 30, 2022, is the first full year with the expanded customer accounts and is the main reason for the increase in operating revenues in that year. The customer base held fairly stable from 2022 to 2023. The increase in revenue during 2023 was the direct result of increases to customer rates.

#### **Nonoperating Revenues**

The nonoperating revenue increase is primarily the result of grant income from the California Arrearage Payment Plan (CAPP) that was received in 2023 and 2022. This grant first became available in 2022.

#### **Investment Income**

Investment income fluctuated each year due to changes in market interest rates as well as the amount available to be invested.

#### **Operating Expenses**

EBCE's largest expense each year was the purchase of electricity delivered to customers. EBCE procures energy from a variety of sources and focuses on maintaining a balanced renewable power portfolio at competitive costs to its customers. Expenses for staff compensation, contract services, and other general and administrative expenses increased each year as the organization continued to grow to support its business demands. EBCE had sufficient revenues each year to meet its operating expense obligations.

The cost of electricity increased each year as a result of service territory expansion and overall higher market prices.

#### **Nonoperating expenses**

Nonoperating expenses represent interest and fees related to letters of credit and the unused portion of the credit facility.

#### **ECONOMIC OUTLOOK**

California Independent System Operator (CAISO) system power prices experienced volatility through the year ended June 30, 2023. Intra-year variability was somewhat consistent with year-to-year historical variability that occurs due to seasonal and annual weather changes and was also characterized by carrying over a marked increase in energy prices above historical levels from the previous year. This was due to more extreme weather events, energy infrastructure capacity constraints in CAISO, and geopolitical considerations in the natural gas industry.

Russia's invasion of Ukraine continued to cause an increase in global energy prices. Although occurring in Europe, this conflict disrupts global natural gas distribution, supply, and demand, and as such influenced California markets, where high volatility and prices persisted in the second half of 2022 since the conflict began in February 2022. In 2023, we have seen natural gas prices revert to historical averages.

Infrastructure supply development remain somewhat constrained due to lingering supply chain disruptions and California interconnection bottlenecks. These constraints are driven by the increased demand for renewable resources as urban electrification processes compete with technology data center artificial intelligence processing needs.

Hedges EBCE has in place offset much of the immediate price spike impacts, but we are currently experiencing a rising energy price environment for the foreseeable future. As rates are currently set as a discount to PG&E, EBCE expects to continue to remain competitive, and is seeing a significant increase in revenues.

#### **ECONOMIC OUTLOOK (continued)**

While the COVID-19 pandemic is still considered ongoing, energy loads were in line with forecasts and budget and in general energy use activity has returned to pre-pandemic patterns. Customer account aging has stabilized and recovery efforts through State and Federal funding have reduced overall aging impacts from shelter-in-place policies.

We closely monitored the banking sector disruptions due to the collapse of Silicon Valley Bank. While EBCE's cash holdings were not at risk, we have diversified where we hold deposits and are actively evaluating our treasury management practices and investment policy in light of rising interest rates.

EBCE has in place a formal risk management policy that includes guidance on target hedge levels. Energy hedging is intended to reduce the financial risk of unexpected price surges by procuring a significant portion of future energy at fixed prices. The target hedge percentages depend on factors including time and the hedge pricing relative to historical energy costs. In general, EBCE targets hedging 60-100% of its exposure in energy products on a short-duration basis of under a year and aims to hedge greater than 80% of its exposure going into any particular month. EBCE has complied with its risk management policy and regulations.

Year-over-year, EBCE has retained a strong customer and revenue base with low opt-out levels. EBCE continues to be actively engaged on legislative and regulatory matters that can impact EBCE's energy procurement requirements and, therefore, energy-related expenditures. This provides some level of additional certainty on EBCE revenues.

#### REQUEST FOR INFORMATION

This financial report is designed to provide EBCE's customers and creditors with an overview of the organization's finances and to demonstrate EBCE's accountability for the funds under its stewardship.

Please address any questions about this report or requests for additional financial information to 1999 Harrison Street, Suite 2300, Oakland, CA 94612.

Respectfully submitted,

Nick Chaset, Chief Executive Officer



# EAST BAY COMMUNITY ENERGY AUTHORITY STATEMENTS OF NET POSITION AS OF JUNE 30, 2023 AND 2022

	2023	2022
ASSETS		
Current assets		
Cash and cash equivalents - unrestricted	\$ 291,035,233	\$ 152,215,061
Accounts receivable, net of allowance	84,198,659	79,814,399
Accrued revenue	45,767,329	47,590,010
Market settlements receivable	807,102	-
Other receivables	90,568	6,302,352
Prepaid expenses	18,388,084	8,728,326
Deposits	147,000	16,027,360
Restricted cash	1,000,000	9,000,000
Total current assets	441,433,975	319,677,508
Noncurrent assets		
Unrestricted cash and cash equivalents in Rate Stabilization Fund	53,014,000	15,814,000
Deposits	931,164	42,858
Loan receivable	491,021	500,000
Capital assets:		
Land and construction-in-progress	9,386,864	8,605,533
Capital assets, net of depreciation	213,167	154,483
Total capital assets	9,600,031	8,760,016
Total noncurrent assets	64,036,216	25,116,874
Total assets	505,470,191	344,794,382
LIABILITIES		
Current liabilities		
Accrued cost of electricity	65,136,135	60,283,371
Accounts payable	4,295,566	2,824,571
Other accrued liabilities	5,930,936	1,631,542
User taxes and energy surcharges due to other governments	7,404,678	5,846,282
Security deposits - energy suppliers	2,245,100	25,865,000
Total current liabilities	85,012,415	96,450,766
Noncurrent liabilities		
Supplier security deposits	4,787,500	-
Total liabilities	89,799,915	96,450,766
DEFERRED INFLOWS OF RESOURCES		
Rate Stabilization Fund	53,014,000	15,814,000
NET POSITION		
Investment in capital assets	9,600,031	8,760,016
Restricted for collateral	1,000,000	9,000,000
Unrestricted	352,056,245	214,769,600
Total net position	\$ 362,656,276	\$ 232,529,616

#### EAST BAY COMMUNITY ENERGY AUTHORITY STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION YEARS ENDED JUNE 30, 2023 AND 2022

	2023		2022	
OPERATING REVENUES				
Electricity sales, net	\$	847,306,890	\$	538,713,401
Revenue deferred to Rate Stabilization Fund		(37,200,000)		-
Liquidated damages		6,150,378		14,658,400
Grant revenue		1,498,666		1,614,597
Other operating revenues		175,378		346,148
Total operating revenues		817,931,312		555,332,546
OPERATING EXPENSES				
Cost of electricity		658,204,854		474,633,255
Contract services		18,104,240		16,611,808
Staff compensation		12,950,359		7,887,849
Other operating expenses		4,435,677		2,738,461
Depreciation		90,761		62,601
Total operating expenses		693,785,891		501,933,974
Operating income	124,145,421		,421 53,398,57	
NONOPERATING REVENUES (EXPENSES)				
Grant revenue		4,050,916		7,901,267
Interest income		2,609,002		221,757
Financing expense		(678,679)		(903,504)
Nonoperating revenues (expenses), net		5,981,239		7,219,520
CHANGE IN NET POSITION		130,126,660		60,618,092
Net position at beginning of year		232,529,616		171,911,524
Net position at end of year	\$	362,656,276	\$	232,529,616

#### EAST BAY COMMUNITY ENERGY AUTHORITY STATEMENTS OF CASH FLOWS YEARS ENDED JUNE 30, 2023 AND 2022

	2	2023	2022
CASH FLOWS FROM OPERATING ACTIVITIES		_	
Receipts from customers	\$ 87	8,374,195	\$ 503,810,291
Other operating receipts	1.	2,650,524	18,603,247
Receipts from supplier security deposit		8,602,600	26,123,000
Payments to suppliers for electricity	(61	8,685,214)	(451,271,876)
Payments for other goods and services	(2	1,223,125)	(21,925,338)
Deposits and collateral paid	(5	1,689,464)	(25,901,650)
Payments for staff compensation	(1)	2,694,993)	(7,748,575)
Tax and surcharge payments to other governments	(3	2,070,485)	 (18,648,636)
Net cash provided by operating activities	16	3,264,038	23,040,463
CASH FLOWS FROM NON-CAPITAL			
FINANCING ACTIVITIES			
Principal payments received on loan receivable		8,979	-
Grant revenue		4,050,916	7,901,267
Financing expense payments		(899,099)	(683,084)
Net cash provided by non-capital			
financing activities		3,160,796	 7,218,183
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES			
Payments to acquire capital assets	(	1,011,413)	(8,613,048)
CASH FLOWS FROM INVESTING ACTIVITIES			
Interest income received		2,606,751	221,757
Loan issued		_	(500,000)
Net cash provided (used) by investing activities		2,606,751	(278,243)
Net change in cash and cash equivalents	16	8,020,172	21,367,355
Cash and cash equivalents at beginning of year	17	7,029,061	155,661,706
Cash and cash equivalents at end of year	\$ 34	5,049,233	\$ 177,029,061
Reconciliation to the Statement of Net Position			
Unrestricted cash and cash equivalents (current)	\$ 29	1,035,233	\$ 152,215,061
Restricted cash and cash equivalents (current)		1,000,000	9,000,000
Unrestricted cash and cash equivalents (noncurrent)	5	3,014,000	 15,814,000
Cash and cash equivalents	\$ 34	5,049,233	\$ 177,029,061

# EAST BAY COMMUNITY ENERGY AUTHORITY STATEMENTS OF CASH FLOWS (CONTINUED) YEARS ENDED JUNE 30, 2023 AND 2022

## RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES

	2023		2022	
Operating income	\$	124,145,421	\$	53,398,572
Adjustments to reconcile operating income to net				
cash provided by operating activities				
Depreciation expense		90,761		62,601
(Increase) decrease in:				
Accounts receivable		(4,384,259)		(35,903,077)
Market settlements receivable		(807,102)		5,025,941
Other receivables		6,214,035		(5,594,164)
Accrued revenue		1,822,681		(19,637,803)
Prepaid expenses		(9,659,760)		(2,480,999)
Deposits		14,992,053		(14,441,650)
Increase (decrease) in:				
Accrued cost of electricity		4,852,765		21,468,127
Accounts payable		1,772,053		(754,456)
Other accrued liabilities		313,794		139,274
Deferred revenue		3,985,600		742,083
User taxes due to other governments		1,558,396		1,989,136
Security deposits from energy suppliers		(18,832,400)		19,026,878
Rate Stabilization Fund		37,200,000		-
Net cash provided by operating activities	\$	163,264,038	\$	23,040,463

#### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### REPORTING ENTITY

East Bay Community Energy Authority (EBCE) is a California joint powers authority created on December 1, 2016. As of June 30, 2023, parties to its Joint Powers Agreement consist of the following local governments, plus one representative (non-voting) from the Community Advisory Committee (CAC):

County	Cities		
Alameda	Albany	Oakland	
	Berkeley	Piedmont	
	Dublin	Pleasanton	
	Emeryville	San Leandro	
	Fremont	Stockton	
	Hayward	Tracy	
	Livermore	Union City	
	Newark		

EBCE is separate from, and derives no financial support from, its members. EBCE is governed by a Board of Directors whose membership is composed of elected officials representing the member governments.

A core function of EBCE is to provide electric service that includes the use of renewable sources under the Community Choice Aggregation Program under California Public Utilities Code Section 366.2.

EBCE began its energy delivery operations in June 2018. Electricity is acquired from electricity suppliers and delivered through existing physical infrastructure and equipment managed by Pacific Gas and Electric Company.

#### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

#### BASIS OF ACCOUNTING

EBCE's financial statements are prepared in accordance with generally accepted accounting principles (GAAP). The Governmental Accounting Standards Board (GASB) is responsible for establishing GAAP for state and local governments through its pronouncements.

EBCE's operations are accounted for as a governmental enterprise fund and are reported using the economic resources measurement focus and the accrual basis of accounting – similar to business enterprises. Accordingly, revenues are recognized when they are earned, and expenses are recognized at the time liabilities are incurred. Enterprise fund-type operating statements present increases (revenues) and decreases (expenses) in total net position. Reported net position is segregated into three categories – investment in capital assets, restricted and unrestricted.

When both restricted and unrestricted resources are available for use, it is EBCE's policy to use restricted resources first, and then unrestricted resources as they are needed.

#### **CASH AND CASH EQUIVALENTS**

For purposes of the Statements of Cash Flows, EBCE has defined cash and cash equivalents to include cash on hand, demand deposits, and short-term investments with an original maturity of three months or less. For the purpose of the Statements of Net Position, restricted cash balances are presented separately. Restricted cash reported on the Statements of Net Position includes collateral on a credit facility, as well as a required minimum balance to be maintained in one of its bank accounts.

#### MARKET SETTLEMENTS RECEIVABLE

EBCE receives generation scheduling and other services from a registered California Independent System Operator (CAISO) scheduling coordinator.

#### PREPAID ENERGY PURCHASES AND DEPOSITS

Various energy contracts entered into by EBCE require EBCE to provide the supplier with a security deposit. The deposits are generally held for the term of the contract. Deposits are classified as current or noncurrent assets depending on the length of the time the deposits will be held. While these energy contract-related deposits make up the majority of this item, other components include deposits for regulatory and other operating purposes.

#### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

#### CAPITAL ASSETS AND DEPRECIATION

EBCE's policy is to capitalize furniture and equipment valued over \$1,000 that is expected to be in service for over one year. Depreciation is computed according to the straight-line method over estimated useful lives of three years for electronic equipment, seven years for furniture and seven years for leasehold improvements, unless limited by the length of the original lease term. EBCE does not own any electric generation assets.

#### SECURITY DEPOSITS - LIABILITY

Various energy contracts entered into by EBCE require the supplier to provide EBCE with a security deposit. Often this security is held by EBCE for the duration of the contract or until certain milestones are met. Deposits are classified as current or noncurrent depending on the length of time the deposits will be held.

#### RATE STABILIZATION FUND

EBCE created a Rate Stabilization Fund to allow EBCE to defer revenue in years when financial results are strong to be used in future years when financial results are stressed. In accordance with GASB Statement No. 62 and GASB Statement No. 65, the amount recognized as an addition to the fund is shown as a reduction of operating revenues and reported on the statements of net position as a deferred inflow of resources.

EBCE directed revenue of \$37,200,000 and \$0 to the Rate Stabilization Fund for the years ended June 30, 2023 and 2022, respectively.

#### **NET POSITION**

Net position is presented in the following components:

*Investment in capital assets*: This component of net position consists of capital assets, net of accumulated depreciation and reduced by outstanding borrowings that are attributable to the acquisition, construction, or improvement of those assets. EBCE did not have any such borrowings outstanding as of June 30, 2023 and 2022.

*Restricted*: This component of net position consists of constraints placed on net asset use through external constraints imposed by creditors (such as through debt covenants), grantors, contributors, or laws or regulations of other governments or constraints imposed by law through constitutional provisions or enabling legislation.

*Unrestricted*: This component of net position consists of net position that does not meet the definition of "investment in capital assets" or "restricted."

#### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

#### **OPERATING AND NONOPERATING REVENUES**

Operating revenues include revenues derived from the provision of energy to end-use retail customers and grant revenue earned from the delivery of program activities. Operating revenues are affected by amounts directed to or from the Rate Stabilization Fund.

Investment income is considered "nonoperating revenue." Certain grant revenue, such as from the California Arrearage Payment Program (CAPP), is also considered "nonoperating revenue."

#### REVENUE RECOGNITION

EBCE recognizes revenue on an accrual basis. This includes invoices issued to customers during the reporting period and electricity estimated to have been delivered but not yet billed. Management estimates that a portion of the billed amounts will be uncollectible. Accordingly, an allowance for uncollectible accounts has been recorded.

#### **OPERATING AND NONOPERATING EXPENSES**

Operating expenses include the costs of sales and services, administrative expenses, and depreciation on capital assets. Expenses not meeting this definition are reported as nonoperating expenses.

#### **ELECTRICAL POWER PURCHASED**

During the normal course of business, EBCE purchases electrical power from numerous suppliers. Electricity costs include the cost of energy and capacity arising from bilateral contracts with energy suppliers as well as generation credits, and load and other charges arising from EBCE's participation in CAISO's centralized market. The cost to acquire electricity and capacity is recognized as "Cost of Electricity" in the Statements of Revenues, Expenses and Changes in Net Position.

To comply with the State of California's Renewable Portfolio Standards (RPS) and self-imposed benchmarks, EBCE acquires RPS eligible renewable energy evidenced by Renewable Energy Certificates (Certificates) recognized by the Western Renewable Energy Generation Information System. EBCE obtains Certificates with the intent to retire them and does not sell or build surpluses of Certificates with a profit motive. EBCE recognizes an expense on a monthly basis that corresponds to the volume sold to its customers for its various renewable and carbon-free products. This expense recognition increases accrued cost of electricity reported on the Statements of Net Position until the time the payment has been made to the supplier.

### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

### **ELECTRICAL POWER PURCHASED (continued)**

EBCE purchases capacity commitments from qualifying electricity generators to comply with the California's Resource Adequacy Program. The goals of the Resource Adequacy Program are to provide sufficient resources to CAISO to ensure the safe and reliable operation of the electrical grid in real-time and to provide appropriate incentives for the siting and construction of new resources needed for reliability in the future.

### STAFFING COSTS

EBCE pays employees semi-monthly and fully pays its obligation for health benefits and contributions to its defined contribution retirement plan monthly. EBCE is not obligated to provide post-employment healthcare or other fringe benefits, and accordingly, no related liability is recorded in these financial statements. EBCE provides compensated absences, and the related liability is recorded in these financial statements.

### **INCOME TAXES**

EBCE is a joint powers authority under the provision of the California Government Code and is not subject to federal or state income or franchise taxes.

### **ESTIMATES**

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

### RECLASSIFICATIONS

Certain amounts in the prior-year financial statements have been reclassified for comparative purposes to conform to the presentation of the current-year financial statements. These reclassifications did not result in any change in previously reported net position.

### 2. CASH AND CASH EQUIVALENTS

EBCE maintains its cash in both interest-bearing and non-interest-bearing accounts at River City Bank headquartered in Sacramento, California as well as U.S. Bank headquartered in Minneapolis, Minnesota. EBCE's deposits are subject to California Government Code Section 16521, which requires that banks collateralize public funds in excess of the Federal Deposit Insurance Corporation limit of \$250,000 by 110%. EBCE has no deposit or investment policy that addresses a specific type of risk that would impose restrictions beyond this code. Accordingly, the amount of risk is not disclosed. EBCE monitors its risk exposure to its banks on an ongoing basis.

### 3. ACCOUNTS RECEIVABLE

Accounts receivable were as follows as of June 30:

	2023	2022
Accounts receivable from customers	\$117,017,715	\$101,011,756
Allowance for uncollectible accounts	(32,819,056)	(21,197,357)
Net accounts receivable	\$ 84,198,659	\$ 79,814,399

The majority of account collections occur within the first few months following customer invoicing. EBCE estimates that a portion of the billed accounts will not be collected. EBCE continues collection efforts on accounts in excess of *de minimis* balances regardless of the age of the account. Although collection success generally decreases with the age of the receivable, EBCE continues to have success collecting older accounts. The allowance for uncollectible accounts at the end of a period includes amounts billed during the current and prior fiscal years. During the year ended June 30, 2023, EBCE received CAPP funds (see Note 6) that helped offset previously written off accounts receivable.

### 4. CAPITAL ASSETS

Capital asset activity for the years ended June 30, 2023 and 2022, was as follows:

			]	Land and			
	Fu	rniture &	Coı	nstruction-in-	Ac	cumulated	
	E	quipme nt		Progress	De	pre ciation	 Total
Balances at June 30, 2021	\$	231,105	\$	-	\$	(115,289)	\$ 115,816
Additions		101,268		8,605,533		(62,601)	 8,644,200
Balances at June 30, 2022		332,373		8,605,533		(177,890)	8,760,016
Additions		149,445		781,331		(90,761)	 840,015
Balances at June 30, 2023	\$	481,818	\$	9,386,864	\$	(268,651)	\$ 9,600,031

### **5. DEBT**

In January 2020, EBCE entered into an amended revolving credit agreement with Barclays Bank. The available credit line under this agreement is \$80,000,000. The credit agreement enhances EBCE's overall liquidity for potential working capital needs and collateral requirements.

In October 2022, EBCE closed its revolving credit agreement with Barclays Bank and entered into a new agreement with Union Bank. The available credit line under the new agreement is \$200,000,000. The credit agreement enhances EBCE's overall liquidity for potential working capital needs and collateral requirements. This agreement terminates in October 2025. The borrowing rate on the credit facility is 1.4%.

EBCE had no debt outstanding under either line of credit agreement at June 30, 2023 or 2022. However, EBCE did issue Standby Letters of Credit secured by the line of credit agreement. At June 30, 2023 and June 30, 2022, these Letters of Credit reduce the available portion of the line by approximately \$39,770,000 and \$13,147,000, respectively, but are not considered debt to EBCE.

In February of 2023, Union Bank was acquired by US Bank. Under the deal of the acquisition, all established promissory agreements would be upheld and unaltered through their maturity.

### 6. GRANTS

EBCE administers a grant from the California Arrearage Payment Program (CAPP) that offers financial assistance for California energy utility customers to help reduce past due energy bill balances that increased during the COVID-19 pandemic. In 2022 this program was funded through the federal American Rescue Plan Act (ARPA) with Coronavirus State and Local Fiscal Recovery Funds. The program was funded by the State of California in 2023.

EBCE also administers a grant from the California Public Utilities Commission (CPUC) for the Disadvantaged Communities Green Tariff (DAC-GT). This grant provides for bill discounts to eligible customers.

In addition to the two grants mentioned above, EBCE also administers several small grants generally aimed at energy efficiency measures.

The following is a summary grant revenue for the years ended June 30:

	2023	2022
CAPP	\$ 4,050,916	\$ 7,901,267
DAC-GT	1,228,613	1,614,597
Miscellaneous	270,053	
Total grant revenue	\$ 5,549,582	\$ 9,515,864

### 7. DEFINED CONTRIBUTION RETIREMENT PLAN

The East Bay Community Energy Authority 401(a) Plan (the Plan) is a defined contribution retirement plan administered by LT Trust. As of June 30, 2023, there were 88 plan members. EBCE is required to contribute a match up to 6% of annual covered payroll to the Plan and contributed \$1,456,000 and \$929,000 during the years ended June 30, 2023 and 2022, respectively. EBCE has elected out of the Social Security system for employees eligible for the Plan. As part of this election, EBCE makes required "replacement" contributions to the Plan. Plan provisions are established and may be amended by the Board of Directors.

### 8. RISK MANAGEMENT

EBCE is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; and errors and omissions. During the year, EBCE purchased insurance policies from investment-grade commercial carriers to mitigate risks that include those associated with earthquakes, theft, general liability, errors and omissions, and property damage. Deductible limits range from \$0 to \$1,000. Settled claims have not exceeded coverage in the last two years. There were no significant reductions in coverage compared to the prior year. From time to time, EBCE may be party to various pending claims and legal proceedings. Although the outcome of such matters cannot be forecasted with certainty, it is the opinion of management and EBCE's legal counsel that the likelihood is remote that any such claims or proceedings will have a material adverse effect on EBCE's financial position or results of operations.

EBCE maintains risk management policies, procedures and systems that help mitigate credit, liquidity, market, operating, regulatory and other risks that arise from participation in the California energy market. Credit guidelines include a preference for transacting with investment-grade counterparties, evaluating counterparties' financial condition and assigning credit limits as applicable. These credit limits are established based on risk and return considerations under terms customarily available in the industry. In addition, EBCE enters into netting arrangements whenever possible and where appropriate obtains collateral and other performance assurances from counterparties.

### 9. PURCHASE COMMITMENTS

In the ordinary course of business, EBCE enters into various power purchase agreements in order to acquire renewable and other energy and electric capacity. The price and volume of purchased power may be fixed or variable. Variable pricing is generally based on the market price of either natural gas or electricity at the date of delivery. Variable volume is generally associated with contracts to purchase energy from as-available resources such as solar, wind, and hydroelectric facilities.

The following table details the obligations on existing energy, renewable, and resource adequacy (RA) contracts as of June 30, 2023:

Year ending June 30,	
2024	\$ 724,800,000
2025	798,400,000
2026	897,100,000
2027	1,005,400,000
2028	1,031,500,000
2029-2043	18,392,900,000
Total	\$ 22,850,100,000

### 10. LEASE

In July 2023, EBCE entered into two lease agreements, one a sublease and one a main lease, for its office premises. Both agreements are for the same office space and each lease runs in succession over the period September 1, 2023 through October 31, 2032. The sublease will be in effect until April 2025 when the main lease becomes active. Rental expense for EBCE's office space was \$519,000 and \$442,000 for the years ended June 30, 2023, and 2022, respectively.

### 11. FUTURE GASB PRONOUNCEMENTS

The requirements of the following GASB Statements are effective for years ending after June 30, 2023:

GASB has approved GASB Statement No. 100, Accounting Changes and Error Corrections – An Amendment of GASB Statement No. 62, and GASB Statement No. 101, Compensated Absences. When they become effective, application of these standards may restate portions of these financial statements.

### 12. SUBSEQUENT EVENTS

### **NEW MEMBER**

In September 2023, EBCE approved the City of Lathrop as a member. EBCE anticipates electric deliveries in this new territory will begin in 2025.

### NAME CHANGE

In October 2023, EBCE changed its name to Ava Community Energy (Ava).

# Budget Surplus & Reserve Allocation from 2022-23 FY

Finance, Administrative, & Procurement Subcommittee

November 8, 2023





# Background & Discussion

- June 15, 2022, the BOD approved the FY 2022-23 Budget by resolution R-2022-19
- The Budget proposed a waterfall allocation for surplus revenues:
  - The first \$50 million is to be retained for working capital needs
  - The next \$75 million is to go to the Reserve Fund
  - The remaining amount is to be split 50/50 to:
    - One-time on-bill credits to customers
    - Incremental long-term renewable energy/clean storage investments
- This presentation presents the budget performance, discusses the waterfall allocations, and confirms the amounts



# Budget Performance Comparison

- Revenue from Operations was \$87.7MM above budget from rising rate environment and other income from contractual recovery of damages
- Cost of Energy was \$134.2MM above budget from rising cost environment
- Overhead was \$6.8MM below budget from delays in staffing, reduced contracting, and delayed marketing costs
- Investment income was \$2.3MM above budget from rising interest rates
- \$6.1MM in budgeted capital costs were unrealized as related to new building rehab
- \$18.9MM in Local Development costs are yet unrealized
- Net change was \$10.2MM below budget



BUDGET COMPARISON	FY 2022-23	FY 2022-23	FY 2022-23
	Budget	Actual	Variance
Operating Revenue			
Electricity Sales	785,779,000	868,650,009	82,871,009
Uncollectible	(15,841,000)	(17,292,003)	(1,451,003)
Other Income	15,000	6,325,756	6,310,756
Total Revenue	769,953,000	857,683,762	87,730,762
Operating Expenses			
Energy Operations			
Cost of Energy	523,996,000	658,204,854	134,208,854
Data Manager/Customer Service	7,834,000	7,879,828	45,828
Metering/Billing Service	2,715,000	2,718,799	3,799
Scheduling Coordinator	696,000	695,066	(934)
Total Energy Operations	535,241,000	669,498,547	134,257,547
Overhead Operations			
Personnel	15,712,000	12,950,359	(2,761,641)
Marketing & Communications	2,876,000	1,447,641	(1,428,359)
Legal, Policy, & Regulatory Affairs	2,488,000	1,511,987	(976,013)
Other Professional Services	2,292,000	1,229,215	(1,062,785)
General & Administrative	3,884,000	3,395,126	(488,874)
Depreciation	180,000	90,761	(89,239)
Total Overhead Operations	27,432,000	20,625,089	(6,806,911)
Net Operating Revenue	207,280,000	167,560,126	(39,719,874)
Non-Operating Activity			
Investment Income	262,000	2,609,002	2,347,002
Grants	-	1,498,666	1,498,666
Interest & Financing Costs	(1,440,000)	(678,679)	761,321
Capital Expenditures	(7,000,000)	(930,775)	6,069,225
Local Development	(22,550,000)	(3,662,255)	18,887,745
Total Non-Operating Activity	(30,728,000)	(1,164,041)	29,563,959
Net Increase	176,552,000	166,396,085	(10,155,915)
Waterfall			
Allocation to Local Development Fund	-	20,386,411	20,386,411
Working Capital	50,000,000	50,000,000	-
Reserves	75,000,000	75,000,000	-
Available for 50/50 Split	51,552,000	21,009,674	(10,155,915)
On-bill Credits	25,776,000	10,504,837	(15,271,163)
Investment in LT Renewables	25,776,000	10,504,837	(15,271,163)

# Budget Surplus & Reserve Allocation

- June 15, 2022, the BOD established an allocation methodology with a waterfall treatment of the budget surplus, which is net of an allocation to Local Development Funding
  - \$50 million contribution to working capital to manage variable cash flow throughout the year and energy markets volatility
  - \$75 million contribution to Reserves, which requires Board action to access and utilize
  - \$10.5 million to customer on-bill credits, anticipated to be released in Dec/Jan timeframe
  - ~\$10.5 million to incremental long-term renewable energy/clean storage investments. Staff will present and seek Board approval on utilization of these funds in the future.

BUDGET COMPARISON	FY 2022-23	FY 2022-23	FY 2022-23
	Budget	Actual	Variance
Waterfall			
Allocation to Local Development Fund	-	20,386,411	20,386,411
Working Capital	50,000,000	50,000,000	-
Reserves	75,000,000	75,000,000	-
Available for 50/50 Split	51,552,000	21,009,674	(10,155,915)
On-bill Credits	25,776,000	10,504,837	(15,271,163)
Investment in LT Renewables	25,776,000	10,504,837	(15,271,163)



### Reserve Fund Discussion

- June 20, 2018, the BOD approved by resolution R-2018-26 to adopt a financial reserve policy
  - Established targets as well as minimum and maximum contribution limits based on revenues
- January 20, 2021, the BOD approved by resolution R-2021-2 to amend the reserve policy to a single sum reserve
  - Simplified methodology, aligned with industry standards, and set target ranges of 25-75% of annual operating costs
  - Use of reserves funds requires BOD approval
- June 15, 2022, the BOD pre-established a contribution of \$75 million in the surplus waterfall towards Reserves



### **Annual Contributions**

- With this year's contribution, the balance of the reserve fund will be \$230,873,400, which is 31.5% of this year's operating costs
- No contribution was made in 2020-2021 due to insufficient net position

Fiscal Year	Contribution	Withdraws	Balance	<b>OpEx to Cover</b>	<b>PctOps</b>
2018-2019	40,513,687	-	40,513,687	410,686,000	9.9%
2019-2020	49,704,640	-	90,218,327	383,045,000	23.6%
2020-2021	-	-	90,218,327	471,897,000	19.1%
2021-2022	65,655,073	-	155,873,400	562,667,000	27.7%
2022-2023	75,000,000	-	230,873,400	732,885,000	31.5%
2023-2024*	100,000,000	-	330,873,400	912,066,000	36.3%

<sup>\*</sup>Approved contribution with projected operating expenses to cover as of 10/1/2023



# Thank you!



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### Staff Report Item 7

**TO:** Ava Community Energy Authority

FROM: Marie Fontenot

SUBJECT: Ava Community Energy Risk Management Policy and Regulations

**DATE:** November 8, 2023

\_\_\_\_\_

### Recommendation

Staff recommend that the Finance, Administration and Procurement Committee receive this introduction of Ava Community Energy Risk Management Policy and Regulations.

### **Background and Discussion**

Ava Community Energy adopted its Energy Risk Management Policy and Regulations since its formation on February 7, 2018. In 2022, with the hire of a full-time Risk Manager, Ava fully launched its risk management program. Ava's risk management program and practices are more sophisticated than most community choice aggregators (CCAs), as a result Ava performs a leadership role among CCA and stewards best industry practices of energy risk management.

Staff would like to provide an introduction of these two risk management documents focusing on roles and responsibilities of different functions, authorities and controls, as well as products and limits. These are the key elements of electric utility risk management associated with wholesale energy markets and transactions.

### Fiscal Impact

While there is no direct fiscal and budgetary impact, implementing Ava Energy Risk Management Policy and Regulations supports the realization of Ava's strategic goals of affordability and compliance in providing clean energy supply to its service jurisdictions.

### **Attachments**

- A. Presentation: Introduction of Ava Community Energy Risk Management Policy and Regulations
- B. Ava Community Energy Risk Management Policy
- C. Ava Community Energy Risk Management Regulations



# Energy Risk Management (ERM) Policy

- Original Energy Risk Policies developed and approved on 2/7/2018
  - Energy Risk Management Policy (ERMP) outlines the philosophies (principles) and objectives of Ava Energy Board of Directors (Board) in building and managing a portfolio to serve the load of the participating jurisdictions
  - Ava Board delegated authority to CEO & ROC



# ERM Policy: Philosophy & Objectives

- Ava Board approves ERM Policy and delegates ROC to approve ERM Regulations
- Policy focuses on principles while Regulation focuses on procedures
  - For example, the policy says no speculation, but doesn't specify what represents a speculative transaction
  - The policy only allows transaction of approved products without listing those products
  - The policy requires approved personnel with approved authorities in transactions without specifying an actual authority matrix
  - The policy talks about segregation of duties, but doesn't specify who does what, i.e. roles and responsibilities of different offices



# Energy Risk Management (ERM) Regulations

- ERM Regulations expand on the roles, strategies, controls and authorities in the policy to form a comprehensive energy risk management program
- They are implementable procedures
- Original ERM Regulations developed in 2018 with the assistance of NCPA
- Risk Oversight Committee (ROC) oversees compliance with Energy Risk Management Policy and Regulations
- Program fully launched in 2022, hired a market & credit risk manager
- Most sophisticated among CCAs, stewarding CCAs toward best industry practice of ERM program



# **ERM** Regulations

Part I: Ener	gy Risk Management 2
1.	Scope of Regulations and Procedures2
2.	Definitions of Risk
3.	Risk Management Strategies6
4.	Roles and Responsibility for Energy Risk Management8
5.	Authorities, Limits and Prohibitions
6.	Systems, Tools and Training
7.	Compliance Exceptions and Reporting
8.	Risk Management Methodologies
9.	Risk Limit Structure
10.	Risk Control Structure
11.	Conflict of Interest
12.	Policy Review



# Risk Oversight Organizational Structure

- Ava Board
- ROC Risk Oversight Committee (members plus staff)
- •CEO
  - President/COO
  - Head of Power Resources
  - A member from participating city/county
  - Legal Counsel
  - Advisors (E3, NCPA, schedule coordinator)



# Roles & Responsibilities: ROC

- Establishing overall risk tolerances related to Approved Product transactions and counterparty credit risk;
- Reviewing and approving Exception Reports to the ERMP and these Regulations;
- Assessing the adequacy and functioning of the system of controls over volumetric, price and counterparty credit risks;
- Reviewing and recommending changes to Approved Product, transactions and controls (e.g., limits, risk/performance methodology, etc.);
- Reviewing and assessing the adequacy of the risk reports generated by the risk management function;
- Reviewing and recommending appropriate transaction authority levels and delegation of authority to EBCE personnel, related to Approved Product transactions; and
- Reviewing, recommending and approving changes to these Regulations, as needed.

# Roles & Responsibilities: Front Office

- Purchasing and/or selling Approved Products and services based on the load forecast, optimizing the value of EBCE assets, and satisfying regulatory and/or compliance requirements;
- Developing transaction strategies (hedge plan) that are consistent with EBCE's ERMP and established risk tolerances;
- Ensuring infrastructure (hardware/software) is in place to support accurate and timely measurement and reporting of risk;
- Ensuring that procedures and systems can effectively and efficiently support the Front Office activities;
- Ensuring training is completed by Front Office staff, as required by CAISO, to comply with minimum participation requirements for participation in CAISO markets;
- Conducting needs analysis for meeting load forecasts, optimizing the value of resources, and satisfying regulatory and/or compliance requirements;
- Recommending transactions for authorization and approval;



# Roles & Responsibilities: Front Office

- Ensure transactions are recorded timely and accurately, and that valuation and risk measurement are performed according to approved methodologies;
- Working with the Middle Office to develop and implement risk measurement methodologies and quantitative applications, where appropriate;
- Identifying new products and markets that may add value to EBCE;
- Prepare reports as outlined in Appendix 7 of these Regulation;
- Initiate requests for new counterparty reviews; and
- Prepare and maintain written Front Office procedures.



# Roles & Responsibilities: Middle Office

- Managing and overseeing risk, including reviewing controls and reviewing valuation and risk management methodologies;
- Developing and implementing counterparty credit risk policies, procedures and limits as approved by the ROC;
- Reviewing and approving changes and provisions to enabling agreements (including all credit terms);
- Monitoring EBCE's current and potential risk exposures and ensuring compliance with the ERMP and these Regulations;
- Verifying that Approved Product transactions are authorized and executed based on the requirements of the ERMP and these Regulations, and are properly recorded in the deal capture systems;
- Monitoring the effectiveness of the internal control structure, including the segregation of duties and independence of oversight;
- Maintaining a list of individuals who are authorized to approve and execute Approved Product transactions;
- Ensuring timely and accurate collection of market data for risk measurement and reporting;
- Preparing, reviewing and distributing risk management reports;

# Roles & Responsibilities: Middle Office

- Processing and verifying market data provided by the Front Office;
- Maintaining independent market forward price data;
- Evaluating performance of Approved Product procurement and hedging transactions relative to market indices and approved budget;
- Notifying the ROC of credit limit exceptions;
- Working with the Front Office to develop and implement risk measurement methodologies and quantitative applications;
- Serving as secretary of the ROC, developing ROC agendas, taking and compiling meeting minutes, and distributing meeting materials;
- Maintaining archives of risk management program documents;
- Monitoring and ensuring compliance with the Commercial Compliance Policy;
- Coordinating risk management education and training;
- Various credit management duties as outlined in these Regulations; and
- Prepare and maintain written Middle Office procedures.



# **ERM Regulations**

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19.	Approval Authorities 3	2
20.	Wholesale Credit / Counterparty Management	3
21.	Segregation of Duties3	5



# Counterparty Credit Risk Management: Standard, Attachment Staff Report Item 7A Method, and Platform

- Standardized and timely credit evaluation
  - Subscribed Moody's RiskCalc tool
- Credit limit approval for CP enabling (collateral threshold)
- Counterparty event monitoring
  - Monitor potential CP credit exposure via Moody's Analytics Platform.
- Counterparty credit risk exposures assessment
  - Mark to market position of contracts
- Counterparty credit risk exposures mitigation
  - Margin Call Credit enhancement



# **ERM Regulations**

APPENDIX 1 (Definitions)	1
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APPENDIX 6 (Management Reports)	1
APPENDIX 7 (Risk Assessment Methodologies)	1
APPENDIX 8 (Recommended Coverage)	1



# Approved Transaction Authority: Appendix 3 Attachment Staff Report Item 7A

	CEO	coo	Head of Power Resources	PR Manager	Scheduler / Planner
Energy	Transactions for a term up to 60 cumulative months, within the next 60 consecutive months.	Transactions for a term up to 36 cumulative months, within the next 60 consecutive months.	Transactions for a term up to 12 cumulative months, within the next 60 consecutive months.	Up to 3 months within the next 6 consecutive months.	Balance of month and prompt month, which begins 10 days prior to the conclusion of the current month.
RA Product	Transactions for a term up to 120 cu mulative months, within the next 120 consecutive months.	Transactions for a term up to 36 cumulative months, within the next 60 consecutive months.	Transactions for a term up to 24 cumulative months, within the next 60 consecutive months.	Up to 3 months within the next 6 consecutive months.	Substitution RA (i.e. within the compliance month) and prompt month.



# Approved Transaction Authority: Appendix 3 Attachment Staff Report Item 7A

	CEO	COO	Head of Power Resources	PR Manager	Scheduler/ Planner
Environmenta l Attributes	Transactions for a term up to 60 cumulative months, within the next 60 consecutive months.	Transactions for a term up to 36 cumulative months, within the next 60 consecutive months.	Transactions for a term up to 24 cumulative months, within the next 60 consecutive months.	Up to 3 months within the next 6 consecutive months	n/a



# Approved Products: Appendix 5

Approved	Pre-Approved	Authorization
Products	Examples	
Long Term Transactions     for Energy	<ul> <li>Purchases of Energy to cover the forecasted supply shortage of the Participating Members</li> <li>Sales of Energy amounts that are forecasted to be surplus to a Participating Member's need</li> <li>Liquidating "in the money" and "out of the money" transactions for optimization in accordance to a dual volume-VAR framework.</li> </ul>	Authorized in accordance with the limits as set forth in these Regulations.
2. Balance-of-Month Transaction for Energy	<ul> <li>Energy purchases/sales within defined term and volume limits</li> <li>Loss of generation</li> <li>Loss of transmission</li> <li>Forecasting errors</li> </ul>	<ul> <li>Authorized in accordance with the limits as set forth in these Regulations.</li> </ul>
3. Day-Ahead and Real-Time Power Transactions Through a BAA (e.g., CAISO)	<ul> <li>Purchasing Energy from the CAISO day-ahead and/or real-time market to serve load</li> <li>Selling Energy into the CAISO day-ahead and/or real-time market from generation resources</li> </ul>	<ul> <li>Authorized in accordance with the limits as set forth in these Regulations.</li> </ul>
4. Purchase/Sale of Capacity	<ul> <li>Short-term or forward purchases of capacity products (e.g., Ancillary Services and Resource Adequacy products)</li> <li>Short-term or forward sales of capacity products (e.g., Ancillary Services and Resource Adequacy products)</li> </ul>	Authorized in accordance with the limits as set forth in these Regulations.



# Approved Products: Appendix 5

5. Purchase/Sale of Physical Call Options	<ul> <li>To cover potential supply deficiency due to unpredictable weather conditions (e.g., hydrological forecast error)</li> <li>To balance load and resources in an illiquid market</li> </ul>	<ul> <li>Authorized in accordance with the limits as set forth in these Regulations.</li> </ul>
	<ul> <li>To provide a hedge against a Participating Member's net open position</li> <li>Sale of a hedged (with physical plant) call option</li> </ul>	
6. Purchase/Sale of Physical Put Options	<ul> <li>To hedge a surplus resource position</li> <li>Sale of an option for the sole purpose of unwinding a purchase if economically advantageous</li> </ul>	<ul> <li>Authorized in accordance with the limits as set forth in these Regulations.</li> </ul>
7. Transmission	Purchases/sales of firm and non-firm transmission capacity required for the delivery Energy	<ul> <li>Authorized in accordance with the limits as set forth in these Regulations.</li> </ul>
8. GHG Compliance Instruments	Purchases of Emission Allowances from bilateral trades, and from the CARB administered Cap and Trade Program auctions and reserve auctions to satisfy actual and/or forecasted GHG emissions compliance obligations attributed to EBCE generation and scheduling activities (e.g. imports)	Authorized in accordance with the limits as set forth in these Regulations.



# Approved Products: Appendix 5

### Renewable Energy Products

Purchases of Renewable
Energy Products to satisfy any
requirement for such products under
applicable law; Bilateral purchases
are to be consummated under
approved contract forms, follow
approved credit risk limit procedures,
and all other applicable risk
management practices defined in this
regulation

Sales of Renewable Energy

 Authorized in accordance with the limits as set forth in these Regulations.

### Congestion Revenue Rights

 Participation in the CRR Allocation and CRR Auction processes through the submission of nominations and/or bids in the Annual and/or Monthly Congestion Revenue Right Allocation and Auction processes administered by the CAISO

Products for the sole purpose of

eliminating a surplus

- Authorized in accordance with the limits as set forth in these Regulations.
- See Appendix 3 to these Regulations





Attachment Staff Report Item 7B Policy 2018-5 Energy Risk Management Agenda: February 7, 2018 Item No.: 10

Resolution: No Resolution associated with policy



### **Energy Risk Management Policy Version 1.0**

**Approved** 2.7.18

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# 1. Philosophy, Objectives and Scope

This Energy Risk Management Policy (ERMP) outlines the philosophies and objectives of East Bay Community Energy (EBCE) Board of Directors (Board). The Energy Risk Management Regulations (ERMR) also adopted by EBCE expand on the roles, strategies, controls and authorities authorized in this policy to form a comprehensive energy risk management program. The ERMR shall be read in conjunction with this ERMP.

## 1.1. Risk Philosophy

The overall goal of this ERMP is to:

- Serve the participating jurisdictions' needs subject to Board approved risk tolerance limits;
- Provide as much energy supply (generation and capacity) cost certainty for EBCE's customers as possible while maintaining a least cost supply portfolio; and
- Enhance the value of EBCE's assets to meet the financial goals and requirements of the participating jurisdictions.

As a joint powers authority, EBCE is in the business of generation, transmission and procurement of energy for the benefit of its participating jurisdictions. EBCE's objective is to develop the least cost supply portfolio to meet load requirements of its customers, while maximizing revenues from sales of surplus energy, capacity and other wholesale energy and transmission services (e.g. resource optimization). However, unlike a private-sector entity, EBCE's primary purpose in the power supply business is to serve its customers. EBCE's goal is to be a cost hedger for its participating jurisdictions' load and, is therefore, precluded by this policy from engaging in speculative activities typical to many organizations orientated toward profit maximization.

EBCE management recognizes that certain risks are incidental to normal power supply operations and hedging activities. EBCE's goal is to avoid unnecessary risk and to limit, to the extent practicable, any risks associated with normal cost-hedging activities. This document serves as a vehicle to describe and define the limits for activities considered as appropriate for EBCE in a normal course of business.

### 1.2. Business Activities

A primary part of EBCE's main business is to procure or produce power supplies, capacity, and reserves to meet its customer load requirements. The resource (capacity/energy) supply portfolio may consists of physical assets, such as power plants and distributed energy resources, fixed and variable priced supply contracts of varying lengths, and agreements for other related supplies and services needed to ensure reliable delivery of electricity to EBCE's customers.

### 1.3. Transacting Objectives

EBCE's overall transacting objective is to meet the load requirements of its customers with an optimized resource supply portfolio. EBCE's objectives when transacting on behalf of its customers for the procurement of energy and energy related supplies and services are as follows:

- Meet customer load requirements including energy, capacity and reserves;
- Provide stable rates for the participating jurisdictions;
- Obtain the best available price for power supply while complying with the requirements of this policy and other objectives established by the Board (e.g. renewable energy policy goals);
- Manage EBCE's assets to optimize value;
- Act to limit exposure to extreme market system changes;
- Follow effective wholesale counterparty credit management procedures; and
- Develop and maintain EBCE's investment grade credit rating.

### 1.4. Scope of Policy

This ERMP addresses risks arising from EBCE's participation in the wholesale energy markets, and applies to all energy and energy related transactions made by EBCE. This ERMP does not address the following types of general property and casualty business risk: fire, accident and casualty; health, safety, and workers' compensation; general liability; and other such typically insurable perils. The term "risk management," as used herein, is therefore understood to refer solely to risks related to participation in wholesale energy markets as herein defined.

EBCE is exposed to three quantifiable risks: load and resource variability (volumetric), cost variability (price), and counterparty credit risk. From the perspective of risk mitigation, EBCE's primary objective is to cover load and optimize the value of assets. Taking risks in order to arbitrage market opportunities, or risks unrelated to EBCE's normal power supply business activities, is not permitted.

EBCE is also exposed to regulatory and operational risks. However, these exposures are not quantifiable as they affect structural change. As a result, these risk categories are managed as separate enterprise risk exposures and are not directly governed by this ERMP.

This ERMP prescribes the management organization, authority and processes to monitor, measure and control the risks to which EBCE is exposed in the normal course of business. Specific methodologies used to measure, monitor and control these risks shall be established by the Executive Director's Risk Oversight Committee (ROC), in accordance with sound utility practices and included in the ERMR.

### 1.5. Applicability

This ERMP is effective immediately upon its adoption by the Board. It applies to EBCE's wholesale supply operations, long-term contracting for energy/capacity and services, acquisition of generation resources, credit risk management and other related ancillary activities undertaken by EBCE.

### 1.6. Policy Review and Amendments

Prudence is required in implementing any and all policies and procedures. Market and industry norms, technology and risk tolerances tend to change over time. Therefore, this policy should be reviewed as needed, in order to make adjustments in response to changes in business objectives and/or industry norms. Amendments to this ERMP shall be done only by approved Resolution of the Board.

# 2. Risk Strategy & Parameters

An important aspect of implementing an overall energy risk management policy is the development of related strategies to mitigate all of the related risks associated with energy transacting activities. The key strategies of EBCE are outlined below.

# 2.1. Counterparty Risk Management

Counterparty risk is defined as the exposure to economic loss resulting from default by a party to a contract (e.g., a *counterparty*). Counterparty risk affects both contracts requiring physical settlement and those specifying monetary settlement. For all fixed price energy transactions, the counterparty must possess at least a BBB- (or equivalent investment grade rating) by a nationally recognized statistical rating organization (NRSRO). EBCE staff may consider counterparties with a rating below investment grade, or a counterparty without a NRSRO rating on a case-by-case basis, with the approval of the ROC.

Effective wholesale counterparty management and credit analysis is essential to mitigate the counterparty risks associated with commodity transactions in the energy markets. The objective is to preserve EBCE's capital, liquidity, and supply reliability by limiting counterparty credit risk and supplier concentration to acceptable levels. Methodologies to achieve this objective are set forth in the ERMR.

### 2.2. Balanced Load

EBCE shall maintain an integrated and balanced portfolio of resources to cover its customer load within a dual volume and cost-at-risk framework.

# 2.3. Minimum Coverage Requirements

EBCE shall establish minimum coverage requirements, combined with defined cost-at-risk metrics, for capacity and energy as determined by the ROC and outlined in the ERMR.

### 2.4. Diversification of Portfolio

EBCE shall strive to develop a resource portfolio that includes diversification in fuel type, contract duration, geographic location, counterparty, pricing terms, cash reserves and types of products.

### 2.5. Purchase to Cover Load Serving Obligations - No Speculation

As discussed in Section 1.3, EBCE's overall objective for energy procurement activities is to cover the load serving obligations of its customers. In the course of performing these activities, EBCE shall not engage in activities that expose its participating jurisdictions to speculative transactional risks, and shall only utilize approved transaction parameters as determined by the ROC and outlined in the ERMR.

### 2.6. Use of Derivatives and Financial Transactions

Use of financial derivatives or transactions (as opposed to physical or "embedded" options) is allowed in limited circumstances by EBCE. These include transactions used to set price caps and floors, or hedge against load/price volatility. Examples include:

- Exchange traded Puts and Calls;
- Electric Futures;
- Electric Options; and
- Weather Derivatives.

Use of certain types of financial derivatives is necessary in order to mitigate various risks outlined in this policy while optimizing the resource portfolio. Such types of allowable financial derivatives or transactions (but not individual transactions) must be approved by the ROC as outlined in the ERMR as developed by the ROC in accordance with this policy.

### 3. Risk Controls

### 3.1. Control Principles

EBCE will strive to conduct its energy risk management activities in accordance with best practices of the energy industry, but implementing such practices must be cost justified and balanced between costs and benefits. Processes and control systems must be in place that allow EBCE to identify, measure, monitor, control and track its risk exposures. These processes and control systems shall include the following risk management control principles:

- Appropriate segregation of duties and internal controls will be used;
- Appropriate systems to ensure accurate and effective management reporting;
- Necessary resources in place to achieve management objectives;
- Attract and retain skilled and trained personnel;
- Cross-train and provide cross coverage;
- Employees conducting energy transactions are free of conflicts of interest;
- Authority and approval delegation is commensurate with accountability and capability;
- Performance measurement and reporting incorporate risk and return measures;
   and
- Ongoing monitoring of control effectiveness.

### 3.2. Internal Controls

Internal controls shall be based on proven principles that meet the stringent requirements of generally accepted auditing standards (GAAS), financial institutions and credit rating agencies. The required controls shall include all customary and usual business practices designed to 1) prevent errors and improprieties, 2) ensure accurate and timely reporting of results of operations and other information pertinent to management, and 3) facilitate attainment of business objectives.

### 3.3. Segregation of Duties

Responsibilities related to energy transacting shall be segregated in a manner consistent with the control principles listed above by means of clearly defined roles and responsibilities for the Front Office, Middle Office and Back Office operations. Such roles and responsibilities can also be provided by a qualified third party services provider. Specific roles, responsibilities and organizational structure of these functions are outlined in Section 4 of the ERMP.

These controls shall be fully integrated into all business activities of EBCE, and there shall be active participation by senior management in risk management processes.

### 3.4. Conflicts of Interest

All EBCE employees who are engaged in energy supply resource transactions, counterparty credit evaluation, or oversight of the foregoing and are employed in any job classification listed in the EBCE Conflict of Interest Code are required to complete annual conflict of interest filings on FPPC Form 700 and disclose investments as required by that code.

In addition to the foregoing disclosure requirement, EBCE employees engaged in energy supply resource transactions, counterparty credit evaluation or oversight of the foregoing, are barred from investing in any company with whom EBCE has consummated energy or related purchases or sales within the last two years.

Such employees must divest existing direct holdings in energy counterparties prior to engaging in any negotiating, evaluating, transacting or oversight functions. The ban on investment and requirement for divestment applies regardless of whether or not the investment would be of sufficient size (\$2,000) to require disclosure on FPPC Form 700.

EBCE employees supervising staff who are subject to this policy are responsible for routinely reviewing Form 700 of each such staff member for the purpose of identifying potential financial conflicts of interest. General Counsel will assist in reviewing these forms and providing legal advice in connection with such reviews upon request.

# 4. Roles, Responsibilities, & Organization

This section of the ERMP defines the overall roles and responsibilities for implementation of this ERMP. The coordinated efforts of personnel across several divisions are required to successfully implement EBCE's risk management program. Section 4 of the ERMP outlines the basic roles and responsibilities of each organizational function. Specific details and the specific roles and responsibilities of the oversight and operational divisions within the energy risk management program structure at EBCE are outlined in the ERMR, as developed by the ROC and revised from time to time.

### 4.1. EBCE Board of Directors

The Board has the ultimate oversight over EBCE operations and is responsible for establishing an organizational-wide framework for risk management and ensuring that risk management results are achieved as planned. The Board shall approve and establish organizational policies for risk management and delegate to the Executive Director the responsibility for implementing the ERMP. With responsibility for the ultimate oversight over EBCE operations, the Board shall be responsible to insure the risk management results are achieved in accordance with the ERMP.

### 4.2. Executive Director

The Executive Director has overall responsibility for implementing the ERMP and for communicating risk management issues to the Board. The Executive Director shall be responsible for delegating specific duties for carrying out the policy and insuring compliance with it by all affected EBCE employees or contractors. The Board acknowledges that the Executive Director shall established the ROC as a member/staff function and may delegated certain functions to the ROC, which delegation is ratified by this ERMP.

### 4.3. Risk Oversight Committee

The Risk Oversight Committee (ROC) is responsible for overseeing compliance with risk management policies within EBCE. The ROC serves as the highest level of organizational risk management reporting to the Executive Director. The ROC shall consist of EBCE Management,

participating jurisdictional representatives and EBCE's legal counsel, as designated by the Executive Director from time to time. A quorum for the ROC to do business shall be not less than three Committee members (including not less than one participating jurisdictional representative) or their designees.

The two participating jurisdictional representatives shall be appointed to the ROC by the Executive Director. These participating jurisdictional representatives shall reflect the diversity of EBCE's customers (including larger and smaller jurisdictions). The participating jurisdictions may nominate potential ROC members. The Executive Director shall select ROC representatives based on those recommendations.

Each ROC member shall have one vote, and may appoint a voting alternate with the approval of the Executive Director. Participating jurisdictions not represented on the ROC may send representatives to attend ROC meetings and participate in ROC discussions; however, these non-ROC participants will have no voting rights.

The ROC will meet at least quarterly, to act on the responsibilities mentioned above. Individual participating jurisdictions may request the ROC to convene in a timely fashion if ROC approval is required for any transaction affecting EBCE. Minutes to each meeting will be maintained according to EBCE policy.

The ROC shall make regular reports to the Board regarding business transacted by the ROC at such intervals as the Board shall direct.

The ROC shall have the responsibility for ensuring that business is conducted in accordance with the ERMP. The ROC shall adopt and keep current "Energy Risk Management Regulations," which shall define in detail the internal controls, strategies and processes for managing risks covered under the ERMP. Specific ROC responsibilities are outlined in detail in the ERMR.

### 4.4. Front Office (Planning and Procurement)

The Front Office is responsible for resource planning and procuring resources to meet the physical, financial and contractual requirements of EBCE, with load/resource balancing provisions and such other arrangements as may be approved by the Board in the future. The function includes contract administration, managing the risk assumptions for electricity transactions, including physical and financial needs analyses, energy purchases and sales, procurements of capacity, ancillary services and coordinating energy delivery scheduling. The Front Office is responsible to ensure that the procedures and processes needed to transact business within the ERMP are in place and they perform all duties related to actual transacting in the wholesale energy markets. The Front Office is the primary interface with potential wholesale transacting counterparties. The Executive Director and Director of Power Resources are responsible for managing the Front Office, and can be supported by qualified third party suppliers. Front Office activities and detailed responsibilities are outlined in the ERMR.

### 4.5. Middle Office Controls and Reporting

The duties of the Middle Office will be conducted by the Finance and Administrative Services Department, and/or are supported by a qualified third party supplier. Its primary purpose is to manage risk oversight and controls. The Middle Office provides independent oversight of the risks assumed by the Front Office in the course of transacting energy products and services. The Middle Office must be independent from the Front Office functions. The Director of Finance and Administrative Services is responsible for managing the Middle Office. Detailed responsibilities of the Middle Office are described in the ERMR.

# 4.6. Back Office (Settlements and Recording)

The Back Office is primarily responsible for settlement of bills, recording transactions, bookkeeping and accounting, and contract compliance. It is responsible for providing assurance of accurate transaction records and settlements. Back Office functions are conducted by personnel in the Finance and Administrative Services Department, and/or are supported by a qualified third party supplier. Detailed responsibilities of the Back Office are described in the ERMR.

## 4.7. Auxiliary Functions

Additional issues impacting the overall power supply and risk management program include establishment of financial reserve requirements, which are generated by auxiliary support functions in the Finance and Administrative Services Department.

The Finance and Administrative Services Department is responsible for preparation of the budget and the calculation of rates used to bill customers for their related power supply usage. In addition, the Finance and Administrative Department is responsible for establishment of necessary reserve levels for the various projects owned by EBCE, if any, and for the EBCE in general. The Finance and Administrative Services Department is also responsible for establishment of reserves necessary for credit risks related to counterparty credit as mentioned in the ERMP, but as more clearly defined in the ERMR.

### 4.8. Authorities, Delegations, Limits and Prohibitions

All executed transactions shall conform to the policies set forth herein. It shall be the responsibility of the ROC, with approval of the Executive Director, to establish appropriate individual transacting authority limits for the various personnel involved in the Front Office function. All staff with designated responsibility for Middle Office or Back Office functions are strictly prohibited from executing any wholesale transactions. The Middle Office shall be responsible for informing counterparties of such approved authorizations, including transacting authority and restrictions, along with product types and/or term and dollar limits.

# 5. Policy Compliance

### 5.1. Compliance Exceptions

Compliance exceptions are actions which violate the authority limits or directives set forth herein or in the ERMR as developed and adopted pursuant hereto by the ROC.

### 5.2. Reporting of Exceptions

The Executive Director shall notify the ROC of exceptions to mandated policies, procedures and regulations within 48 hours after they are identified, and ensure Front Office prepare a full report for review and discussion at the next ROC meeting.

### 5.3. Audit

Compliance with this ERMP and with the specific ERMR requirements instituted pursuant to this ERMP, shall be subject to examination by EBCE's independent auditors or by such other reviewers that EBCE or ROC may appoint to evaluate the effectiveness of mandated controls.

#### 5.4. Reserves

The ROC and the Executive Director, or his/her designee, are responsible for ensuring adequate reserves for energy price exposure and credit losses are maintained by EBCE. The reserve estimate methodology, as established by the Finance and Administrative Services Department, shall be reviewed and approved as needed to ensure appropriate reserve levels are maintained and funded.

### 5.5. Systems, Tools and Training

EBCE employees who are authorized to perform energy risk management functions on behalf of EBCE shall be provided with the necessary systems and tools to support all risk management processes.

Provision shall be made in the budgets submitted for each division which performs market risk management functions on behalf of EBCE for the acquisition and maintenance of computer systems, software, communications equipment, data services and other analytical, measurement and reporting tools.

Provision shall also be made in the budgets submitted for each EBCE division/department which performs market risk management functions on behalf of EBCE for managers and staff to attend seminars and courses in risk management on a regular basis.



# **ENERGY RISK MANAGEMENT REGULATIONS Version 3.0**

Effective: 08.01.2023

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# **Objective of the Energy Risk Management Regulations**

East Bay Community Energy (EBCE) provides a variety of wholesale and retail energy services to customers within the service areas of its participating jurisdictions (Participating Members). EBCE's goals regarding the provision of such services include, but are not limited to: (i) optimizing the value of EBCE's generation assets, (ii) providing its Participating Members with the lowest cost supply portfolio based on certain policies that may be adopted by the Board from time to time (e.g., renewable energy policy goals), and (iii) maintaining reliable electric service to its Participating Members' customers. Inherent in these goals is the need to manage risks related to transacting in various Energy markets, and providing other wholesale Energy and transmission services on behalf of the Participating Members (e.g., resource optimization).

The purpose of these Energy Risk Management Regulations (Regulations) is to utilize the philosophies and objectives specified in the Energy Risk Management Policy, and document and describe the roles, strategies, controls and authorities that will govern EBCE's comprehensive energy risk management program.

# Part I: Energy Risk Management

# 1. Scope of Regulations and Procedures

### 1.1. Overview

The EBCE Board will adopt an Energy Risk Management Policy (ERMP) which addresses risks faced by EBCE arising from EBCE's procurement activities on behalf of Participating Members in Energy and related markets. EBCE will develop two-pronged set of metrics that guide procurement decisions that include a rigorous analysis of net open position limits by month (discussed further in Appendix 9) and a cost-at-risk which may include but not limited to total portfolio cost at risk, rate at risk, and cost per wholesale MWh at risk. The ERMP provides for oversight by the Risk Oversight Committee (ROC) and mandates adoption of these Regulations by the ROC to address specific risk management issues. Controls, strategies and processes for managing risks outlined in the ERMP are documented in these Regulations.

# 1.2. Applicability, Amendments and Updates

These Regulations are initially made effective upon the Board's adoption of the ERMP, and shall subsequently be amended and/or restated from time to time by action of the ROC, when deemed necessary, by the ROC.

# 2. Definitions of Risk

The term "risks," as used herein, refers specifically to those categories of risk which relate to EBCE's participation in wholesale Energy markets for the purchase and sale of Approved Products, as further described in these Regulations. These risks include, but are not limited to, volumetric, price, counterparty, regulatory and political, and operational risks.

### 2.1. Volumetric Risk

Volumetric risk is the risk that fluctuations in supply or demand will adversely affect net revenues. Thus, if actual load demands are higher than anticipated, and market prices have increased beyond expectations, the costs to serve such load will be greater than expected. Alternately, if load demands are less than expected, then surplus supply may be sold back into the market. If market prices have declined since the Energy was originally purchased, the ability to serve load at least cost may be impacted. For ECBE, demand variability is largely attributable to three factors: (1) changes in demand related to the weather, (2) changes in demand related to economic activity, and (3) changes in demand related to customers joining and exiting ECBE service. This third portion of demand uncertainty is unique to CCA's and the risks associated with it need to be carefully considered. If supply availability is uncertain, such as when hydroelectric generation capacity is impacted by uncertain rainfall patterns, a resulting shortfall in generation may necessitate the purchase of alternative supply through the wholesale market when prices may be rising, which may also result in increased costs. Volumetric risk

also covers the possibility of the unplanned loss of generation resources, transmission curtailments, and extreme weather events that can result in insufficient resources to meet load demands.

Volumetric risk is managed by maintaining financial reserves, diversifying the resource portfolio and developing a regular update of load and resource forecasts.

### 2.2. Price Risk

Price risk is the risk associated with changes in the market prices of Energy and Energy related products. Price risk is the possibility that the absolute price of a given Energy related product will fluctuate in an unfavorable manner, thereby exposing EBCE to potential cost increases or loss in value to its Participating Members. ECBE will be exposed to price risk any time its fixed-price supply does not perfectly match demand. There are a number of ways that supply and demand may be mismatched. In its simplest form, demand may exceed supply, and any unhedged demand is exposed to changes in prices. With renewable supply, it is common that the production profile of the supply resource does not match the consumption profile of customers. Since hourly prices for electricity vary greatly within the day, this creates risk. This is referred to as "shape" risk. Another mismatch results from locational differences — an entity with generation in one region serving load in another region is exposed to price differences between the two regions. This is referred to as "basis" risk. These risks can manifest themselves over different time periods ranging from sub-hourly mismatches to long term mismatches.

Price risk is managed by closely monitoring and measuring the supply portfolio against estimated demand. The supply portfolio should be constructed to match resources against load obligations taking into account the various risks. Supply portfolios can benefit from resource and fuel source diversification, start dates, duration, pricing terms, types of products, geographic location, and by actively managing portfolios and assets.

### **Example of Price Risk**

ECBE will focus on the price risk of its entire portfolio which is comprised of many individual transactions. When managing risk, ECBE will care about the impact of all of the transactions in the portfolio rather than a single transaction. That said, the portfolio is comprised of a series of individual transactions, and the examples below illustrate how the value of an individual transaction can be impacted by changes in prices.

For example, assume EBCE needs to buy 10,000 MWh of electric power for the last quarter of the coming year (October through December). On January 15<sup>th</sup>, the market price for that power was \$28.90/MWh, for a total cost of \$289,000. On March 15<sup>th</sup>, the market value was \$39.00/MWh, or \$390,000. If the budget was set as of the January 15<sup>th</sup> market price, but the product was not purchased until March 15<sup>th</sup>, then the cost would be \$101,000 more than budgeted.

Price risk can be viewed as the possibility of a change in the MTM value of a transaction. To illustrate this definition, assume as above that the 10,000 MWh for October –

December was purchased on March 15 for \$390,000. If the price for that product drops to \$25/MWh or \$250,000 on September 15<sup>th</sup>, the MTM of the transaction is negative \$140,000 as of September 15<sup>th</sup>.

# 2.3. Counterparty Credit Risk

Counterparty credit risk means risks which EBCE incurs as the result of transacting Approved Products with other entities. It must be understood that in the context of wholesale electric utility operations, both buyers and sellers may be exposed to counterparty credit risks. These risks are of five general types:

- Transacting counterparties may fail to render payment for Energy related products delivered, or otherwise default under the terms of the transaction;
- Transacting counterparties may fail to deliver Energy related products;
- Transacting counterparties may fail to take delivery of Energy related products sold to them, necessitating a resale elsewhere (potentially at a loss) of the Energy related products;
- Counterparties may refuse to extend credit to EBCE; and
- A counterparty or its guarantor may seek bankruptcy protection.

Counterparty credit risk can be mitigated through counterparty diversification, credit risk premium, covenants, credit derivatives (credit default swaps) and insurance.

### 2.4. Regulatory and Political Risk

Regulatory and political risks are the risks that regulatory agencies, courts and legislatures may take actions or adopt measures which:

- Result in fines, assessments or other unrecoverable costs;
- Make a transaction unlawful or adversely change the its economic benefit;
- Adversely affect market prices or liquidity, leading to trading losses and stranded asset costs;
- Impair the capability or willingness of EBCE's trading counterparties and wholesale suppliers to perform;
- Prevent EBCE from performing to its own contractual obligations;
- Interfere with operation of EBCE's generation or related assets; or
- Negatively impact EBCE's ability to finance capital projects.

Regulatory and political risks are difficult to measure and manage. EBCE has an active legislative and regulatory strategy which monitors and influences the outcome of legislative and regulatory actions for the benefit of EBCE and its Participating Members.

# 2.5. Operational Risk

Operational risk consists of the potential failure to act effectively to plan, execute and control business activities. Operational risk includes the potential for:

- An organizational structure that is ineffective in addressing risk (i.e., the lack of sufficient authority to make and execute decisions, inadequate supervision, no internal controls, incomplete and untimely reporting, failure to separate incompatible functions, etc.);
- Absence, shortage or loss of key personnel;
- Lack or failure of facilities, equipment, systems and tools such as computers, software, communications links and data services;
- Inability to finance capital projects or meet financial obligations incurred in the course of wholesale operations;
- Exposure to litigation or sanctions as a result of violating laws and regulations, not meeting contractual obligations, failure to address legal issues and/or receive competent legal advice, not drafting and analyzing contracts effectively, etc.; and
- Errors or omissions in the conduct of business, including failure to execute transactions, violation of guidelines and directives, etc.

Operational risk can be managed by adequate oversight and the existence of and adherence to contracts, policies, regulations, and procedures. Operational risk is reduced by streamlined and well defined simple processes managed by skilled and competent staff with appropriate supporting physical and technological resources and appropriate oversight.

### 2.6. Market Risk

Market risk is manifested by the interdependencies of a market where the failure of a single entity or cluster of entities that may or may not be counterparties can cause a cascading failure which could affect an entire market.

## 2.7. Legal Risk

Legal risk arises when a counterparty or a Participating Member is not capable of entering into, or has procedurally failed to obtain appropriate approvals to enter into, a contract. Legal risk is managed externally by ensuring counterparty representatives are authorized by the counterparty. Regarding long-term contracts, EBCE will manage legal risk by rigorously vetting and reviewing wholesale electricity contracts with appropriate legal and market experts.

### 2.8. Concentration Risk

Concentration risk denotes the overall spread of exposures over the number or variety of counterparties. Concentration risk is calculated using the percentage of outstanding exposures each counterparty represents. Concentration risks may result from an uneven distribution of exposures to an individual counterparty, or an uneven distribution of exposures to particular sectors or regions.

Concentration Risk is managed pursuant to Section 18.3 of Part II of these Regulations which requires staff to document the business reasons for awarding Energy contracts to counterparties to whom EBCE has high concentrations of credit exposure.

# 2.9. Liquidity Risk

Liquidity risk is financial risk due to uncertain liquidity. Liquidity risk may include the risk of insufficient net cash flows on a short term basis, lack of access to credit facilities, the inability to liquidate an asset or position on short notice, and the risk of maintaining explicit liquidity reserves.

EBCE mitigates counterparty liquidity risk with regular, up-to-date credit evaluations; mitigates internal liquidity risks with adequate deposits from Participating Members (if required); and mitigates asset liquidity risk by utilizing contractual instruments (e.g., approved enabling agreements).

### 2.10. Custodial Credit Risk

Custodial credit risk is the risk that, in the event of the failure of a custodial asset holder, an entity would not be able to recover the value of its deposits, investments or collateral securities that are in the possession of the custodian.

Custodial credit risk is mitigated by keeping deposits at FDIC insured institutions below insurance thresholds and actively monitoring the creditworthiness of the custodian.

### 2.11. Business Risk

Business risks are the risks inherent in EBCE's operations and environment that may impair its financial sustainability. These risks include the risks listed in this Section 2, in addition to the risks of creating and maintaining production and administrative facilities.

Business risks are mitigated by adequate planning and budgeting, training of staff and maintaining appropriate insurance coverage.

# 3. Risk Management Strategies

An important aspect of implementing an overall energy risk management program is the development of related strategies to mitigate all of the related risks associated with Energy product trading activities. The key strategies used by EBCE are outlined below.

### 3.1. Balanced Portfolio

EBCE shall strive to maintain an integrated and balanced portfolio of resources to cover its Participating Members' load serving obligations, and maintain the value of EBCE's assets, and manage resources within EBCE's financial requirements and within a dual volume and cost-at-risk framework, integral to EBCE's risk management strategy. The "cost at risk" will be designed to capture all of the volume

mismatches, basis risk, shape risk, and other balancing risks associated with a given wholesale electricity contract.

# 3.2. Minimum Coverage Requirements

### 3.2.1. Minimum Coverage Requirements for Energy

EBCE shall strive to manage price and volatility risk by implementing a diversified procurement strategy that involves purchasing energy products to hedge costs for serving load. EBCE shall strive to purchase amounts of energy based on defined minimum coverage thresholds as set forth in the Time-Price Coverage Matrix combined with a cost-at-risk metric contained in Appendix 9 (Recommended Coverages) of these Regulations. The Time-Price Coverage Matrix, along with the cost-at-risk metric will be used as a guide for EBCE's short term and long-term procurement strategies. The objective of the dual framework is to develop a procurement strategy focused on hedging against the risk of open load positions, as measured over time, and to mitigate EBCE's exposure to market price volatility and other pricing risk. The actual covered positions taken by EBCE, reflected as a percentage of forecasted load, may deviate from the recommended coverages contained in the dual framework based upon EBCE's staff evaluation of current market conditions and other applicable requirements (e.g., regulatory requirements).

### 3.2.2. Minimum Coverage Requirements for Capacity

EBCE is required to acquire certain types and amounts of Resource Adequacy capacity, as further set forth in applicable requirements. Such rules, including the CPUC Decisions, establish minimum Resource Adequacy requirements in accordance with policies adopted by EBCE's respective Local Regulatory Authority. EBCE shall acquire the types and amounts of capacity required to comply with the Resource Adequacy requirements established by its respective Local Regulatory Authority.

### 3.3. Diversification of Portfolio

EBCE shall strive to develop an integrated resource portfolio that includes a minimum level of diversification in fuel type, contract duration, geographic location, counterparties, pricing terms, cash reserves and types of products.

### 3.4. Purchases to Cover Load Serving Obligations (No Speculation)

EBCE's primary objective for energy product procurement activities is to cover the load serving obligations of its Participating Members. In the course of performing these activities, EBCE shall not engage in activities that expose EBCE to speculative trading risks, and shall only utilize approved products and transaction parameters as approved by the ROC, and defined in these Regulations.

### 3.5. Authority to Transact Approved Products

The type of Energy related products EBCE may transact will have a direct impact on the amount of risk EBCE assumes as a result of such activities. The types of Energy related products that EBCE is authorized to transact (herein after referred to as "Approved Products") are specifically identified in Appendix 6 of these Regulations.

# 4. Roles and Responsibility for Energy Risk Management

### 4.1. Board of Directors

The Board has the ultimate responsibility for oversight of EBCE's operations, and is responsible for establishing an organizational framework for risk management and for ensuring that risk management results are achieved as planned. The Board has approved and established organizational policies for risk management, and has delegated to the Executive Director the responsibility for implementing the ERMP. The Board is responsible for ensuring appropriate results are achieved in accordance with the ERMP. The Board shall perform an annual review of the ERMP and modify the policies, as needed.

### 4.2. Executive Director

The Executive Director has day-to-day responsibility for executing and ensuring compliance with the ERMP, and for communicating risk management issues to the Board. The Executive Director shall ensure clear lines of authority and responsibility for assessing, measuring, and managing the risks of EBCE, and for monitoring the functionality of all components of the risk management system. The Executive Director may delegate specific duties for carrying out the policy and insuring compliance by all affected EBCE employees or contractors.

### 4.3. Risk Oversight Committee

The ROC is responsible for overseeing EBCE's compliance with the ERMP. The ROC serves as the highest level of organizational risk management reporting to the Executive Director. The members of the ROC consist of the Executive Director, Director of Finance and Administrative Services, Director of Power Resources, and one (1) Participating Member representatives. EBCE's legal counsel shall serve as legal advisor to the ROC. The ROC may seek the advice of other advisors at its discretion, including EBCE's Wholesale Energy Services Provider. All ROC members, including advisors, are voting members. A quorum of the ROC consists of not less than three ROC members, or their designees, including at least one Participating Member representative. A quorum of the ROC shall be required for the ROC to conduct business.

The two (2) Participating Member representatives shall be appointed to the ROC by the Executive Director. These Participating Member representatives shall reflect the diversity of EBCE's participating jurisdictions (e.g., both larger and smaller Participating Member representation). EBCE's Participating Members may also nominate potential ROC members. The Executive Director shall select Participating Member representatives based on these recommendations. Participating Member representatives shall be appointed for a term of two (2) years.

Each ROC member shall have the right to cast one (1) vote per issue, and may appoint a voting alternate with the approval of the Executive Director. Participating Members that are not represented on the ROC may attend ROC meetings and participate in ROC discussions; provided, however, non-ROC Participating Members will have no voting rights.

The ROC will meet at least quarterly, or as needed, to carry out the responsibilities described in these Regulations. Individual Participating Members may request the ROC to convene at any time, in a timely fashion. Minutes of each meeting will be maintained by EBCE staff.

The ROC shall provide a report to the Board at least annually, regarding the business activities of the ROC, or at such other interval as directed by the Board.

The ROC is responsible for ensuring that EBCE's risk management practices are conducted in accordance with the ERMP and these Regulations. The ROC shall adopt and keep current these Regulations, which shall define in detail the internal controls, strategies and processes for managing risks covered under the ERMP.

ROC responsibilities and delegated authorities are:

- Establishing overall risk tolerances related to Approved Product transactions and counterparty credit risk;
- Reviewing and approving Exception Reports to the ERMP and these Regulations;
- Setting, changing and approving the design of all internal control processes related to energy risk management and Approved Product transactions;
- Assessing the adequacy and functioning of the system of controls over volumetric, price and counterparty credit risks;
- Reviewing all statistical modeling parameters, risk tolerances, risk factors and/or risk weights associated with all Approved Product transaction strategies;
- Reviewing and recommending changes to ERMP policies, the types of Approved Product transactions and controls (e.g., limits, risk/performance methodology, etc.), including the addition of new products and instruments as described in these Regulations;
- Recommending appropriate cash reserve levels to support EBCE's Approved Product transaction activities;
- Reviewing the ERMP, and recommending any amendments to the Board;
- Reviewing and assessing the adequacy of the risk reports generated by the risk management function;
- Ensuring that the results of risk management activities are reported to the Board, and all risk management reports are provided to the Board in accordance with Appendix 7 of these Regulations, or as necessary;
- Reviewing and recommending appropriate transaction authority levels and delegation of authority to EBCE personnel, related to Approved Product transactions; and
- Reviewing, recommending and approving changes to these Regulations, as needed.

Specific responsibilities of the ROC members and advisors are described in Appendix 2 of these Regulations.

### 4.4. Front Office

The Front Office staff is responsible for the provision of wholesale energy services, which include, but are not limited to, planning and portfolio management, Approved Product transacting, contract origination, schedule coordination and real-time dispatch operations. The Front Office provides recommendations for load and resource balances, and portfolio optimization. These activities are conducted in order to meet the physical, financial and contractual requirements of EBCE. As part of these functions, the Front Office is responsible for transacting Approved Products on behalf of EBCE, in accordance with certain transactional limits, as further defined in these Regulations. All Approved Products that the Front Office is authorized to transact are identified in Appendix 6 of these Regulations. The Front Office is responsible for ensuring that the procedures and processes needed to transact business within the requirements and guidelines of the ERMP and these Regulations are fully implemented, and shall perform all duties related to actual transacting in the wholesale Energy markets. The Front Office is the primary interface with potential wholesale transacting counterparties. The Director of Power Resources is responsible for managing the Front Office. The Front Office may also utilize support from EBCE's Wholesale Energy Services Provider to carry out the duties described herein.

The Front Office is primarily responsible for:

- Day-to-day purchases and sales of Approved Products for EBCE;
- Developing transaction strategies that are consistent with EBCE's ERMP and established risk tolerances;
- Ensuring infrastructure (hardware/software) is in place to support accurate and timely measurement and reporting of risk;
- Ensuring that procedures and systems can effectively and efficiently support the Front Office activities;
- Ensuring training is completed by Front Office staff, as required by CAISO, to comply with minimum participation requirements for participation in CAISO markets;
- Conducting needs analysis for meeting load forecasts, optimizing the value of resources, and satisfying regulatory and/or compliance requirements;
- Recommending transactions for authorization and approval;
- Proposing modifications to commercial provisions of Board approved contracts to the Executive Director for consideration and approval;
- Purchasing and/or selling Approved Products and services based on meeting the load forecast, optimizing the value of EBCE assets, and satisfying regulatory and/or compliance requirements;
- Conducting sales transactions for surplus resources;
- Nominating and managing CRRs in the annual and monthly allocation processes;
- Preparing and submitting bids in the CRR annual and monthly auction processes;

- Transacting Approved Products to satisfy applicable regulatory and compliance requirements (e.g., renewable Energy requirements, emission compliance obligations, etc.);
- Development and maintenance of Renewable Energy Products tracking and allocation;
- Competitively shopping and negotiating transactions in accordance with the ERMP;
- Generating trade confirmations (as needed);
- Ensuring transactions are recorded timely and accurately, and that valuation and risk measurement are performed according to approved methodologies;
- Working with the Middle Office to develop and implement risk measurement methodologies and quantitative applications, where appropriate;
- Identifying new products and markets that may add value to EBCE;
- Preparing reports as outlined in Appendix 7 of these Regulation;
- Initiating requests for new counterparty reviews; and
- Preparing and maintaining written Front Office procedures.

### 4.5. Middle Office

The duties of the Middle Office staff are conducted by the Finance and Administrative Services Department and the Power Resources Market and Credit Risk Manager. Its primary purpose is to manage risk oversight and controls. The Middle Office provides independent oversight of the risks assumed by the Front Office in the course of transacting Approved Products and services. The Middle Office must be independent from the Front Office functions. The Middle Office may also utilize support from EBCE's Wholesale Energy Services Provider to carry out the duties described herein.

The Middle Office is responsible for oversight, reporting and training; including:

- Managing and overseeing risk, including reviewing controls and reviewing valuation and risk management methodologies;
- Developing and implementing counterparty credit risk policies, procedures and limits as approved by the ROC;
- Reviewing and approving changes and provisions to enabling agreements (including all credit terms);
- Monitoring EBCE's current and potential risk exposures and ensuring compliance with the ERMP and these Regulations;
- Ensuring Middle Office training is completed;
- Verifying that Approved Product transactions are authorized and executed based on the requirements of the ERMP and these Regulations, and are properly recorded in the deal capture systems;
- Monitoring the effectiveness of the internal control structure, including the segregation of duties and independence of oversight;
- Maintaining a list of individuals who are authorized to approve and execute Approved Product transactions;
- Ensuring timely and accurate collection of market data for risk measurement and reporting;
- Conducting necessary stress test on portfolio exposure and CVaR models;

- Preparing, reviewing and distributing all risk management reports;
- Processing and verifying market data provided by the Front Office;
- Maintaining independent market forward price data;
- Evaluating performance of Approved Product procurement and hedging transactions relative to market indices and approved budget;
- Notifying the ROC of credit limit exceptions;
- Working with the Front Office to develop and implement risk measurement methodologies and quantitative applications;
- Serving as secretary of the ROC, developing ROC agendas, taking and compiling meeting minutes, and distributing meeting materials;
- Maintaining archives of risk management program documents;
- Monitoring and ensuring compliance with the Commercial Compliance Policy;
- Coordinating risk management education and training;
- Various credit management duties as outlined in these Regulations; and
- Preparing and maintaining written Middle Office procedures.

# 4.6. Back Office

The Back Office staff is primarily responsible for settlement of invoices, verifying transactions, bookkeeping and accounting, and ensuring Approved Product transactional activities are consistent with contract authorities and requirements. The Back Office is responsible for providing assurance of accurate transaction records and settlements. The Director of Finance and Administrative Services is responsible for managing the Back Office. The Back Office may also utilize support from EBCE's Wholesale Energy Services Provider to carry out the duties described herein.

The Back Office is responsible for the following duties:

- Crosschecking counterparties confirmation documents for individual trade transactions to EBCE's own records of those transactions, and investigating and resolving exceptions;
- Ensuring settlements are made timely and in accordance with contract terms;
- Verifying and reporting compliance with procedures as reflected in the transaction tracking documentation;
- Ensuring that operations and systems can effectively and efficiently support the processing of approved transactions;
- Performing and supporting transaction allocations, invoicing and settlements;
- Development and maintenance of GHG Compliance Instrument tracking and allocation;
- Monitoring accounts receivable and payable;
- Verification of transaction data entry; and
- Preparing and maintaining written Back Office procedures.
- Disputing any charges from the ISO.

### 4.7. Auxiliary Functions

Other functions in support of and relevant to risk management are conducted by EBCE staff who are not directly including within the Front Office, Middle Office and Back Office functions. These include some contract administration functions, load forecasting and managing financial reserves.

Long term planning and forecasting of Energy supply requirements (long term supply plans) are developed by EBCE analytical support personnel who are not part of the Front Office transacting function.

The Finance and Administrative Services Department is responsible for preparation of the budget, and amounts billed for Approved Product transactions. Finance and Administrative Services Department staff also establish necessary financial reserve levels related to counterparty credit requirements for EBCE in general. These auxiliary functions may also be supplied to EBCE by EBCE's Wholesale Energy Services Provider.

# 5. Authorities, Limits and Prohibitions

# 5.1. Individual Trading Authority and Transaction Limits

All executed transactions shall conform to the policies set forth in the ERMP and these Regulations. It shall be the responsibility of the ROC, with approval of the Executive Director, to establish appropriate individual trading authority limits for the various staff involved in the Front Office function. All Middle Office and Back Office staff are strictly prohibited from executing any Approved Product transactions. The Middle Office shall confirm that the Front Office has informed EBCE's counterparties of changes in Front Office staff authorized to trade within seven (7) business days. Unless or except as recommended by the ROC from time to time, and approved by the Executive Director, trading authority limits for individual transactions shall be as outlined in Appendix 4 of these Regulations.

### 5.2. Permitted Transactions and Approved Products

The ROC is responsible for authorizing and approving all Approved Products that may be transacted by EBCE. Transacting Energy related products that are not authorized as Approved Products by the ROC is strictly prohibited, unless the ROC grants an exception in advance.

All transactions shall conform to the following general principles:

- Be for an Approved Product;
- Be duly authorized and within risk limits, and shall not cause either aggregate or individual counterparty credit limits to be exceeded;
- Be executed with a counterparty with an approved credit limit;
- Shall utilize contract terms intended to minimize the risk of loss if a counterparty fails to deliver, take delivery or pay for transactions provided;
- Be executed and documented following standardized procedures; and
- Be in compliance with applicable laws, regulations and court orders.

Approved Products that have been authorized by the ROC are listed in Appendix 6 of these Regulations. Appendix 6 also contains certain limitations for each authorized Approved Product.

# 5.3. Unauthorized Transactions

Any member of staff who enters into an unauthorized transaction may be subject to disciplinary action up to and including termination of employment.

The following provides the minimum procedures for managing unauthorized transactions:

- If a transaction is unauthorized, the Chief Executive Officer shall determine the course of action. If the transaction involves market risk, the Chief Executive Officer may elect to either enter into a risk neutralizing transaction, or attempt to unwind the transaction with the original counterparty. However, the first alternative (offsetting transaction) only offsets market price; operational and credit risk may still exist. Unwinding the transaction would likely remove all risk from the trade.
- Once the corrective steps have been taken, the Chief Executive Officer shall review the transaction to ensure all risks have been offset and report the results in the Exception Report.

# 5.4. Process for Adding New Approved Products

All requests to add a new Approved Product to Appendix 6 must be analyzed by the Front Office, Middle Office, Back Office staff, and EBCE's legal counsel to determine what risks such product may create for EBCE, and what business needs exist that provide the basis for adding the new product to the Approved Products list. All requests to add a new Approved Product to these Regulations must be presented to the ROC for consideration, and if approved by the ROC shall be added to Appendix 6 as an Approved Product. Any product not listed as an Approved Product in Appendix 6 of these Regulations is considered to be a new product.

A report to the ROC recommending approval of a new Approved Product shall address the issues described in the New Product Approval Checklist contained in Appendix 5 of these Regulations. The New Product Approval Checklist is a guideline for activities that should be performed in evaluating and mitigating the market and credit risks associated with use and deployment of new products.

Front Office staff have primary responsibility for developing the report to identify the business needs for the new Approved Product being requested, and an assessment of risks that EBCE may be exposed to by transacting the new Approved Product. Front Office staff are responsible for presenting the report to the ROC for consideration and approval. Primary responsibility may be delegated by Front Office staff to those individuals having special knowledge or expertise of the activity or new product type.

# 6. Systems, Tools and Training

EBCE employees (or supporting suppliers) who are authorized to perform energy risk management functions on behalf of EBCE shall be provided the necessary systems and tools to support all risk management processes, including:

- Access in real time to market activity, prices and other data;
- Systematically evaluating the financial condition, credit standing and ability to perform of other entities with whom EBCE does business;
- Analyze the trends of supply, demand, market prices and costs of service;
- Record transactions accurately and completely;
- Measure key indicators and risk parameters; and
- Generate complete and accurate management and financial reports.

Provision of funding shall be requested and made in the budgets submitted for each division that performs market risk management functions on behalf of EBCE, for the acquisition and maintenance of computer systems, software, communications equipment, data services and other analytical, measurement and reporting tools. Provision of funding shall also be requested and made in the budgets submitted for each EBCE division, which performs market risk management functions on behalf of EBCE for managers and staff to attend seminars and courses in risk management as required to comply with the ERMP and these Regulations.

# 7. Compliance Exceptions and Reporting

# 7.1. Compliance Exceptions

Compliance exceptions are actions which violate the provisions and/or requirements as set forth in the ERMP and these Regulations, and/or the procedures developed and approved by the ROC.

The following types of occurrences shall not be considered compliance exceptions:

- Losses incurred on wholesale transactions which were undertaken in compliance with the ERMP and these Regulations;
- Adverse changes in credit standing, financial condition or ability to perform of a wholesale trading counterparty which occur subsequent to the execution of a transaction or contract;
- Adverse changes in capital asset valuations, MTM exposures, or CVaR resulting from fluctuations in prices subsequent to the execution of a transaction or contract; and
- Actions compelled by order of regulatory authorities or by legislation, which are otherwise in violation of the ERMP, these Regulations, and/or related Procedures.

# 7.2. Exception Reporting

In the event a compliance exception occurs, the Executive Director is responsible for notifying the ROC within 48 hours after it is identified and ensure that the Front Office prepare a report (Exception Report) for the ROC at its next meeting. The Report shall identify the issue or violation, and discuss the alternative remedial actions, document the action taken in response, and describe the steps that will be taken to prevent a reoccurrence of the event. A summary of all exceptions shall be reported at least annually to the Board by the Executive Director.

# 8. Risk Management Methodologies

### 8.1. Measurement of Risks

EBCE measures risk by estimating how high or low future supply costs and revenues could be, given a particular portfolio position and specific confidence level of market price movements. These estimates apprise management as to the risks inherent in a particular position and are used to make decisions to accept that risk or to reduce the risk by changing the position or the portfolio management strategy going forward.

Volumetric variability is estimated as part of the load and resource forecasting process. Normal, High and Low scenarios are provided as part of the annual budget process. An updated load and resource forecasted balance is provided each month. Volumetric uncertainty shall be incorporated in the quantitative risk measures that EBCE tracks and reports on a regular basis. The financial consequences of volumetric risk depend upon both how actual loads and supplies compare to forecasts, and on market price variations.

Market price risk is measured by calculating forward price volatility (either using recent historical data for forward prices or market prices for options), and applying that volatility to the future to see how costs and revenues could change if there were an adverse market price movement.

Counterparty credit risk measures are captured in reporting of counterparty exposure and transaction limits.

Appendix 8 of these Regulations provides a more detailed description of EBCE's risk measurement methodology. Risk management reports that are presented to management and the ROC are described in Appendix 7 of these Regulations.

# 9. Risk Limit Structure

EBCE sets risk limits in order to mitigate risk exposure within the broad objectives of optimizing the value of EBCE's assets, and serving Participating Member loads at cost effective and stable prices. Transaction limits authorized in Appendix 4 shall comply with the requirements described in this Section 9.

Portfolio risk limits are expressed based on volume, duration, dollar value, and CVaR. EBCE will develop a path towards setting (1) volume limits and (2) VAR limits. Risk limits include: (1) qualification criteria for counterparties, including creditworthiness and required contractual provisions, (2) counterparty credit limits, and (3) preferred contractual terms. Counterparty credit risk limits are intended to monitor and contain potential losses due to counterparty default. This Section 9 also includes a brief discussion of risk monitoring and reporting requirements.

Risk limits may be employed to indicate either:

- An exception, which requires an Exception Report to the ROC;
- A warning, which indicates that a risk measure is outside of an acceptable tolerance band, and should be reported to the ROC promptly; or
- A standard, such as minimum qualifications or contract provisions.

Risk limits are subject to regular review and adjustment by the ROC as market conditions change. Risk limit metric methodologies and limits are further explained in Part II of these Regulations.

# 9.1. Basic Principles for Setting Risk Limits

The following set of basic principles shall guide the general approach to setting risk limits (including but not limited to credit exposure limits, contract duration, volume, and transaction limits):

- Enable staff to conduct required business effectively
  - Volume and dollar limits adequate to reliably meet physical and financial requirements at prevailing prices
- Reflect the risk-reward tradeoffs consistent with EBCE's risk tolerance
  - Duration, volume, dollar and exposure limits appropriate for associated risks
- Favor strong counterparty attributes
  - Creditworthiness and financial strength
  - Favorable contractual terms
  - Demonstrated performance
- Promote fair and competitive transacting process
  - Should not narrow field to a single supplier or unduly favor any supplier
- Promote diversification
  - Avoid too great a concentration of supply or exposure with any single supplier
- Facilitate operational flexibility
  - Allow for load uncertainty, resource uncertainty, and other contingencies
- Facilitate conformance to the ERMP and Regulations
  - Clear, measurable, consistent and enforceable
- Balance burden of monitoring and enforcing limits with value
  - Not so complex and cumbersome that it takes too many resources to manage

### 9.2. Portfolio Risk Limit Guidelines

Portfolio limits facilitate: (1) adhering to policies and procedures, (2) quantifying risk tolerance levels for risk monitoring, reporting and control, and (3) reducing operational risks.

Portfolio limits must take into account:

- Load and resource balance variability monthly and seasonal variation;
- Load and resource balance uncertainty confidence intervals around expected values;
- Minimum feasible wholesale transaction size Approved Products are traded in large discrete package sizes; and
- Operational flexibility and constraints customer responsiveness, system reliability.

Risk limits shall be reviewed and updated by the Middle Office and Front Office in conjunction with development of the long-term power supply forecast, as part of the annual budget process, or more frequently as deemed necessary.

### 9.3. Net Position Guidelines

**Purpose**: Net position guidelines specify the physical load and resource balance tolerance levels within which EBCE staff shall recommend transactions to comply with these Regulations, and to ensure that Approved Products are transacted to meet physical and financial load and resource balance requirements.

**Applicability:** Net position guidelines apply to Approved Product transactions that are one month in duration or longer. These transactions include all must-take, fixed-priced contracts, index-priced contracts, fixed-priced Call Options, supply from generating resources, and the long-term contracts.

### For all other transactions:

- Option transactions shall be excluded from the Net Position guidelines until exercised, but shall be included in transaction reporting to the ROC. Options to transact Approved Products that have been exercised, or any other transaction that commits EBCE to take delivery or commit resources, shall be included in the Net Position guidelines.
- 2. Put options that have not been exercised are not included in the Net Position guidelines as they reflect a potential short position and would understate the Net Position. Put option transactions shall be included in transaction reporting to the ROC.
- 3. Within-the-month Approved Product transactions are operational in nature, and require flexibility to balance hourly, daily, and weekly, and balance-of-month load variations.

<sup>&</sup>lt;sup>1</sup> A transaction priced based on an index rate that is directly offset with a matching transaction priced at the same index rate (e.g., a sales transaction that is directly offset with a like purchase transaction) shall be excluded from the calculation of net position.

Net Position Limits guidelines do not apply to within-the-month transactions, but they are included in transaction reporting and total deliveries reported to the ROC.

- 4. Resource Adequacy capacity, GHG Compliance Instruments, transmission, transportation, ancillary services, basis, and storage requirements are set by reliability based technical standards, regulatory requirements, or maximum potential usage in order to reliably meet real-time and peak demand. Net Position guidelines do not apply to these Approved Products, but staff shall inform the ROC of the criteria used for estimating EBCE's needs.
- 5. Transactions of surplus or excess Approved Products made available through existing physical assets or contracts (e.g. due to hydro conditions) shall not constitute Speculation, but shall be reported to the ROC.

The net changes in physical position due to buy-sell transactions executed to offset positions with a counterparty, effect transportation or transmission transactions, or other approved purpose shall be included in the Net Position guidelines.

### 10. Risk Control Structure

### **10.1.** Control Principles

EBCE will strive to conduct its energy risk management activities in accordance with best practices of the wholesale electric industry, but implementing such practices must be justified and balanced as to their costs and benefits. Processes and control systems must be in place that allow EBCE to identify, measure, monitor, control and track its risk exposures. These processes and control systems shall be consistent with the following risk management control principles:

- Appropriate segregation of duties and internal controls;
- Appropriate systems to ensure accurate and effective management reporting;
- Necessary resources in place to achieve management objectives;
- Attract and retain skilled and trained personnel;
- Cross-train and provide cross-coverage;
- Employees conducting Energy transactions who are free of conflicts of interest;
- Authority and approval delegation that is commensurate with accountability and capability;
- Performance measurement and reporting incorporate risk and return measures; and
- Ongoing monitoring of control effectiveness.

### 10.2. Functional Responsibilities

EBCE has integrated but segregated responsibilities to control risks in a manner consistent with the above control principles by means of clearly defined roles and responsibilities for the Front Office, Middle Office, and Back Office. Oversight functions are performed at an operational level by these

offices, and managed at an executive level by the Board, Executive Director, and ROC. These functional responsibilities are described in detail in Section 4 of these Regulations. EBCE may utilize the services of its Wholesale Energy Services Provider for performing such functions.

### 10.3. Transaction Capture Process

All transactions<sup>2</sup> of Approved Products must be formally and officially documented by EBCE. Transaction capture procedures shall address all of the following elements:

- Authorization/Approval (e.g., participant authorization form as used in the market purchase program agreement);
- Competitive bidding;
- Commitment to the transaction;
- Recording the transaction;
- Confirming the validity of the transaction with the counterparty;
- Inputting the transaction into the deal capture system;
- Actual product delivery; and
- Billing and settlement.

# 10.3.1. Authorization/Approval

The appropriate authorizations and approvals must be obtained by Front Office staff prior to transacting Approved Products. Such authorizations may be in the form of predefined contractual authorizations, or as defined in the ERMP or these Regulations. EBCE shall develop protocols to address when the volume and/or VAR limits are not in compliance. If the limits are violated by a certain to-be-determined amount EBCE shall assemble the ROC for an emergency meeting. The ROC can choose to be flexible on the limits (within certain parameters) or require action. If it exceeds a certain amount it goes higher in the organization and to EBCE's board. Front Office staff shall obtain approval from duly authorized personnel (supervisor or higher) with specified *dollar and volume* limits as specified in Appendices 3, 4 and 5 before consummating any transactions for Approved Products.

# 10.3.2. Competitive Bidding

For Approved Product transactions scheduled for delivery further than one (1) week in advance, quotes for forward commitments, with the exception of exchange traded transactions, must be obtained competitively from available and approved counterparties, consistent with the size and type of transaction and counterparty. Alternatives are to be evaluated on an equivalent basis (similar quality, volume, duration and options), adjusted for such factors as transmission, losses, etc. Front Office staff must obtain quotes from at least two (2) qualified suppliers, if two (2) approved counterparties are available. Alternatives are to be evaluated on an equivalent basis (similar quality, volume, duration and options), adjusted for such factors as transmission, losses, etc.

<sup>&</sup>lt;sup>2</sup> Transaction for a term of balance-of-month or shorter are not subject to certain elements of the transaction capture process, as further described in the respective transaction procedures.

Transactions occurring for delivery of product within one week or less, or exchange traded (e.g. NYMEX, ISO, ICE, etc.) transactions, do not require formal written documentation that two (2) quotes were obtained beyond what is entered in the deal capture system.

### 10.3.3. Commitment to the Transaction

A commitment is a legally binding contract between EBCE and a counterparty. The Front Office must be the point of commitment for all Approved Product transactions. Final price commitments may only be made by authorized EBCE transacting personnel. Commitments shall be made verbally or electronically in the case of an electronic exchange. Transacting personnel shall only transact with counterparties who are listed on the Approved Counterparties List.

### 10.3.4. Recording the Transaction

All transactions must be recorded.<sup>3</sup> Verbal commitments must be executed on a recorded telephone line when available, and shall be stored and maintained in accordance with EBCE's records retention policy. Electronic commitments must have an electronic audit trail. All transactions must be evidenced by a deal control system entry prepared in a timely manner. All transaction information shall be time and date stamped at the time of commitment.

### 10.3.5. Confirmation

A confirmation is a written document evidencing a verbal or electronic commitment made by EBCE transaction personnel. All confirmations must agree with the transacting person's commitments, as evidenced by phone records, deal capture system entries or other supporting documentation. All confirmations must be reviewed and confirmed by Back Office personnel for accuracy. The Front Office shall generate a written confirmation, when required, in any case where the counterparty does not provide or require a written confirmation. Transactions for Energy that is not confirmed by the counterparty and approved by authorized personnel within five (5) business days after the transaction has been executed will be subjected to review and identification by the Middle Office. Using the confirmation, the Back Office staff shall review and confirm the consistency and accuracy of the deal capture system entry made by the Front Office staff. All written transaction confirmation shall be stored by EBCE consistent with EBCE's records retention policies. Written confirmations are not required for any transaction with a duration of less than seven (7) calendar days.

### 10.3.6. System Input

All transactions must be entered into the deal capture system, and the transaction information shall be maintained in accordance with EBCE's record retention policy. All transactions shall be entered into the

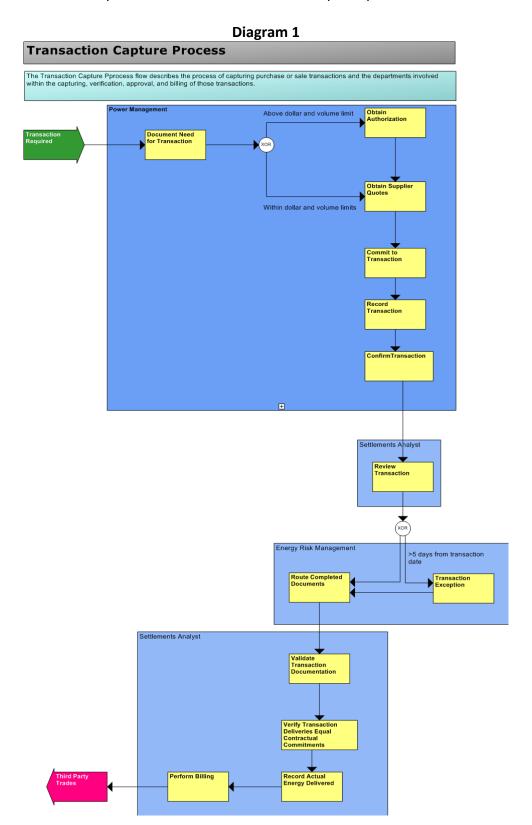
<sup>&</sup>lt;sup>3</sup> Real-time verbal and electronic commitment dates and times are recorded in the dispatch log. GHG Compliance Instruments are recorded in the CITTS system maintained by the California Air Resources Board.

deal capture system by Front Office personnel. Deal capture system input shall be performed no later than the first business day after the deal was confirmed. Once a transaction is entered into the deal capture system, Back Office staff shall review the deal entry to confirm that the information entered into the deal capture system is consistent with the transaction confirmation, if required. If the data entry is found to be correct by Back Office staff, the deal shall be approved for accuracy. If the data entry is found to be inconsistent with the deal confirmation, Back Office staff shall notify Front Office staff to make the necessary corrections to the data entry stored in the deal capture system.

# 10.3.7. Billing and Settlement

Back Office staff ensures that bills are issued to counterparties with outstanding accounts receivable, and reviews bills for transactions to verify that the bills match the terms of the contract and the amount of product actually delivered (this process is generally referred to as the "checkout process").

Diagram 1 below is a representation of the transaction capture process:



### 10.4. Management Reporting Framework

The key to energy risk management is monitoring of risks. Accurate and timely information must be provided to all parties involved in any aspect of energy risk management, to allow them to perform their functions appropriately. Reports can be categorized into three main areas:

- 1. Risk Monitoring illustrate risks that are faced ahead;
- 2. Oversight show compliance with policies, authorities or risk limits; and
- 3. Performance compares actual past and present performance of the portfolios to appropriate budget and market benchmarks.

A complete list of management reports for each level of oversight is provided in Appendix 7 of these Regulations. These reports shall be prepared on a frequency as indicated in Appendix 7. New reports, or changes to existing report formats, may be recommended and approved by the ROC.

### 10.5. Internal Controls

Internal controls shall be based on proven principles that meet the stringent requirements of generally accepted auditing standards (GAAS), financial institutions and credit rating agencies. The required controls shall include all customary and usual business practices designed to prevent errors and improprieties, ensure accurate and timely reporting of results of operations, provide information pertinent to management and facilitate attainment of business objectives.

The required controls shall include the following:

- Segregation of duties between initiation, confirmation, monitoring and settlement transactions;
- Delegation of authority that is commensurate with responsibility and capability;
- Complete and precise capture of transaction and other data, with standardization of electronic and hard copy documentation;
- Meaningful summarization and accurate reporting of transactions and other activity at regular intervals;
- Regular independent compliance review to ensure that the ERMP and these Regulations are adhered to; and
- Active participation of senior management in the risk management process.

# 11.Conflict of Interest

All EBCE employees who are execute transactions for Approved Product, counterparty credit evaluation, or oversight of the foregoing and are employed in any job classification listed in the EBCE Conflict of Interest Code are required to complete annual conflict of interest filings on FPPC Form 700, and disclose investments as required by that Code. They are required by that Code to abstain from participating in or attempting to influence any decisions that foreseeably would have a material

financial effect on any such investment.

In addition to the foregoing disclosure requirement, EBCE employees engaged in Approved Product transactions, counterparty credit evaluation, or oversight of the foregoing are barred from direct investment in any company with whom EBCE has consummated any Approved Product transaction within the last two (2) years. Further, such employees must divest existing direct investments in Approved Product counterparties prior to engaging in any negotiating, evaluating, transacting or oversight functions. The ban on investment and requirement for divestment applies regardless of whether or not the investment would be of sufficient size (\$2,000) to require disclosure on FPPC Form 700. As used in this section, a "direct" investment means an investment which, if of sufficient size, is of a nature that would constitute an "investment" pursuant to the California Political Reform Act.

EBCE employees supervising staff who are subject to this policy are responsible for routinely reviewing the most recent Form 700 of each such staff member for the purpose of identifying potential financial conflicts of interest. Updated copies of Form 700 shall be given to the supervisor/manager by the EBCE Conflict of Interest Filing Officer designated in the EBCE Conflict of Interest Code. The EBCE legal counsel will assist in reviewing these forms and providing legal advice in connection with such reviews on request.<sup>4</sup>

## 12. Policy Review

Prudence is required in implementing any and all policies and procedures. Market and industry conditions, technology and risk tolerances tend to change over time. Therefore, the ERMP and these Regulations should be reviewed annually, or as necessary, in order to make adjustments in response to changes in business objectives and/or industry conditions. All recommended amendments to the ERMP are to be reviewed by the ROC and presented to the Board for final review and approval. Changes to these Regulations shall be reviewed and approved by the ROC.

<sup>&</sup>lt;sup>4</sup> Non-staff ROC members shall not be subject to the requirements of Section 11 since their oversight functions are generally not transactional and company specific. Non-staff ROC members may be subject to conflict of interest compliance requirements at each of their own organizations.

# Part II: Counterparty Risk Management

## 13. Organizational Philosophy Toward Counterparty Risk

## 13.1. Objective and General Risk Policy

EBCE's wholesale energy market activities are directed toward the goal of providing Energy, capacity, transmission and related services to its Participating Members at the lowest possible cost consistent with an acceptable level of risk. EBCE fulfills its supply obligations by using generating assets, or by contracting with counterparties for the purchase or sale of such assets on a long-term or short-term basis. Effective wholesale counterparty management and credit analysis is essential to mitigate the counterparty risks associated with Approved Product transactions in the Energy wholesale markets. The objective of the wholesale counterparty risk policy is to preserve EBCE's capital, liquidity and supply reliability by limiting counterparty credit risk and counterparty concentration to acceptable levels.

### 13.2. Expectations of the EBCE Board

Analytical procedures for granting open lines of credit and managing counterparty exposures are required. However, EBCE recognizes that the models used in managing credit risk are not predictive; they are explanatory. Credit risk management models cannot predict individual credit events or collective credit events. The Finance and Administrative Services Department is expected to manage counterparty risks to acceptable levels established by the ROC and approved by the Board. The Board recognizes that EBCE is generally a net buyer of Energy. Exposure to wholesale counterparty credit risk will normally be greater in periods of rising market prices due to higher replacement costs in a rising market. On the other hand, in high hydrological conditions, where excess generation may be available for sale on the wholesale market, EBCE is exposed to greater counterparty credit risk if counterparties fail to take delivery, or if they fail to pay for power delivered.

# 14. Counterparty Risk Definitions

## 14.1. Counterparty Risk

Counterparty risk is defined as the exposure to economic loss resulting from default by another party to a contract. Such risk exists in all financial and commodity markets and can be distinguished from other financial risks such as market risk, operational risk and regulatory risk.

Counterparty risk affects both contracts requiring physical settlement and those specifying monetary settlement. Contractual payments can result from purchases or sales. Under a sale, the counterparty owes cash and a receivable is created. The holder of the receivable is at risk of financial loss if the receivable is ultimately uncollectible. Under a purchase, the counterparty is obligated to deliver a

product. However, the counterparty may also be required to reimburse the purchasing party for financial loss in the event of delivery failure. Therefore, the purchasing party is at risk of financial loss if the counterparty is unwilling or unable to reimburse for financial losses.

The ERMP states that for all fixed price Approved Product transactions, the counterparty must possess a public credit rating of at least a BBB- (or equivalent investment grade rating) by a nationally recognized statistical rating organization (NRSRO). EBCE staff may consider counterparties with a rating below investment grade or counterparties with no NRSRO rating on a case-by-case basis with the approval of the ROC. If ratings differ between NRSRO's, the lowest available rating will be used for underwriting purposes.

#### 14.2. Credit Risk

For the purchaser of an Energy related product, credit risk is defined as the difference between the contracted price and current market price of a contracted product. If the current market price is greater than the contracted price, a positive MTM exists, thus exposing the purchaser to credit risk in the event of supplier default.

If the current market price is less than the contracted price, a negative MTM exists. The purchaser has credit exposure with a negative MTM if the deal is subject to termination or MTM damages. There is no credit exposure with negative MTM if the deal is subject to one-way liquidating damages and the purchaser is not the defaulting party.

If the seller has a positive MTM position in a transaction, the seller is exposed to profit risk in the event the counterparty defaults, where the seller would lose its opportunity to above market revenue. In contrast, if the seller has a negative MTM position in a transaction, the seller is exposed to liquidity risk and may be subject to margin calls if the MTM exceeds established credit limits.

## 15. Underwriting Standards

All transacting counterparties shall be reviewed for creditworthiness. This review shall include:

- A search of public debt and implied unsecured credit ratings as published by a NRSRO such as Standard & Poor's, Moody's Investor Services and Fitch;
- Review of at least the two (2) most recent years audited financial statements; and
- Other information, as available, from news services, trade publications, financial websites, etc.

Transacting for all counterparties shall require an "investment grade" rating of BBB- or its equivalent, at a minimum. EBCE credit staff may consider counterparties with a rating below BBB- or its equivalent on a case-by-case basis. All sub-investment grade rated counterparties require ROC approval before transacting and may require credit assurances or other consideration.

## 16.Credit Risk Measurement

Credit risk exposure should be measured as: (1) current exposure, and (2) potential exposure. Current credit risk exposure to a single counterparty is defined as the sum of: (1) the dollar value of all amounts invoiced and unpaid, and (2) the dollar amount of all uninvoiced deliveries. Potential credit exposure is the MTM value of all forward contracts from today forward, as reported by the business unit.

Total credit risk exposure is the sum of the variables shown in the formula below, less all offsetting amounts that are supported by legally binding netting agreements or available collateral. EBCE's credit exposure measurement is defined by the following formula:

Credit Exposure = Current and Prior Month Sales (Net Sales<sup>5</sup>) + MTM – Credit Enhancements

In addition, potential credit risk exposure is captured by the CVaR statistic. The CVaR statistic represents the maximum dollar loss at a 95% confidence level within a certain time, due to volatility in market prices if the counterparty defaults. CVaR is a dollar estimate of the risk that potential changes in market price would result in increased credit exposure for all forward contracts. CVaR shall be presented as supplementary information for credit benchmarking. EBCE's CVaR calculation methodologies are documented in Appendix 8 of these Regulations.

## **17.Credit Enhancements**

Customers or counterparties that do not meet the minimum requirements for an extension of an open line of credit, as set forth in Section 15 of these Regulations, must post at least one (1) of the following types of security prior to the execution of transactions:

## 17.1. Guarantees and Surety Bonds

Counterparties may provide a guarantee from a third party, or parties, which meets the creditworthiness requirements set forth in Section 15 of these Regulations. If a counterparty provides a guarantee, the amount of any open line of credit will be determined through an analysis of the financial strength of the guarantor. The guarantor will be considered secondarily liable for the obligations of the counterparty. In the event a surety bond is provided, EBCE will consider the surety bond as primarily liable for the obligations of the counterparty. All guarantees must be approved as to content and form by EBCE's legal counsel.

Preferred terms for guarantees include, but are not limited to:

- A statement that the guarantee is one of payment and not of collection;
- A statement that the guarantor agrees to pay the guaranteed obligations on the date due;
- A statement that the guarantor's obligations under the guarantee rank pari passu with its senior unsecured debt obligations;

<sup>&</sup>lt;sup>5</sup> Provided there is a netting agreement with the counterparty. Otherwise, it will be the receivable portion only.

- A statement restricting the guarantor's right to terminate the guarantee, and any termination must still guarantee existing exposures as they may exist;
- A statement that the guaranteed obligations are unconditional, irrespective of value, genuineness, validity, waiver, release, alteration, amendment, and enforceability of the guaranteed obligations, and a statement that the guarantor waives the right of set-off, counterclaim, etc;
- A statement that the guarantee reinstates if any guaranteed payment made by the primary obligor is recaptured as a result of the primary obligor's bankruptcy or insolvency;
- A statement that the guarantor waives its right to subrogation until the guaranteed obligations are paid in full;
- A statement that the guarantee is binding on successors of the guarantor and a statement that EBCE is a beneficiary of the guarantee;
- A statement that the guarantee will be interpreted under either New York or California law; and
- A statement that the guarantor has subjected itself to jurisdiction and service of process in the jurisdiction in which the guarantee is to be performed (i.e., State of California).

Exceptions to the above concepts and/or acceptance of guarantees from entities domiciled outside the U.S. or Canada require ROC approval.

#### 17.2. Letter of Credit

Counterparties may provide an irrevocable Letter of Credit in an amount sufficient to cover the amount in excess of the credit limit approved by EBCE at the date the transactions are entered into (e.g., MTM in excess of credit limit). Letters of Credit must have a term of at least 45 days past the term of the transactions. Letters of Credit must be issued by a domestic bank (or domestic branch of a foreign bank) that has a senior debt rating of at least "A" or its equivalent from a NRSRO. Approved Banks should be monitored for any potential Letter of Credit concentration between EBCE and various counterparties.

## 17.3. Prepayments

Counterparties may provide a prepayment or cash margin deposit in an amount that is sufficient to cover the related transactions. Discounts for prepayment, consistent with industry standards, may be applied to the sum owed as authorized by the Executive Director.

# **18.Quality Assessment**

## 18.1. Counterparty and Credit Analysis

Middle Office staff are responsible for ensuring a standardized credit screening process for all counterparties. All counterparties must be reviewed for financial creditworthiness according to these

guidelines.

Middle Office staff will submit a credit review report to the appropriate approval authority, depending on the level of credit requested, for consideration and action. For agency-rated counterparties, Middle Office staff may elect a rating similar to one derived by a NRSRO, and waive initial review requirements, if the counterparty is recognized and established in the industry. As a result, a more stringent review process should be followed for those entities that do not possess a NRSRO rating and/or have marginal financial capacity.

**18.2.** All counterparty credit lines and credit reviews will be submitted to the appropriate authority level as authorized in Section 19 of these Regulations. ROC actions can result in the approval or rejection of a proposed counterparty, or in an amendment to credit limits approved under delegated approval authorities. Credit Limits

Once a counterparty has been determined to be creditworthy, a credit limit will be proposed. An open line of credit may be extended up to the lesser of 5% of the counterparty's adjusted tangible net worth<sup>6</sup> or EBCE's maximum counterparty credit limits. In the case of municipal or public organizations, an open line of credit may be extended up to 10% of average free cash flow<sup>7</sup> for the prior two (2) years not to exceed EBCE's maximum counterparty credit limits.

NRSRO Rating	Maximum Counterparty
	<u>Credit Limits</u>
A and above	Ć FO million
A- and above	\$ 50 million
BBB+	\$40 million
BBB	\$ 30 million
BBB-	\$ 20 million
BB+ and below (or unrated)	\$1,000,000 per Section 19.3

Although a counterparty may qualify for a certain maximum credit limit, anticipated transaction volumes and other business factors may prompt the selection of a lower limit that is considered more appropriate. As a result, the credit limit methodology provides limit ceilings while allowing flexibility in response to normal business activities.

#### 18.3. Concentration Limits

In addition to maintaining credit limits, EBCE staff shall strive to diversify transactions among

 $<sup>^6</sup>$  Tangible Net Worth (TNW) = shareholder equity – goodwill – intangible assets – receivables from officers – investments in other trading companies – off-balance sheet liabilities, etc.

<sup>&</sup>lt;sup>7</sup> Free Cash Flow = net income + non-cash charges such as depreciation + or - changes in accounts receivable, inventory, prepaid expenses, accounts payable, and accrued liabilities - cash dividends (general fund transfer) + net borrowing – capital expenditure.

counterparties. EBCE staff shall document the business reasons (e.g. differences in bid price, lack of other qualified suppliers, etc.) for awarding contracts to counterparties with high concentrations of credit exposure.

# 19. Approval Authorities

#### 19.1. Credit Authorization

Approval authorities are based on the level of business experienced by EBCE on a historical and current basis within limits allowed under the Regulations. Authority to establish credit limits is segregated as follows:

Director of Procurement, Finance or

Administrative Services:

CEO/COO

ROC:

Up to \$ 20Million

Up to \$ 50 Million

Up to \$ 100 Million

Board:

\$ 100 Million +

The maximum amount of any open line of credit to be extended to any customer or counterparty shall not exceed \$50 million unless authorized by the ROC. If credit lines exceeding \$100 million are anticipated, approval by the Board is required.

## 19.2. Increases to Wholesale Counterparty Limits

Any increase to an existing open line of credit must have the written approval of the CEO/COO, the Executive Director or the ROC, within the authorized limits stated in Section 19.1. A sign off sheet shall be used to ensure written approval according to the limits authorized by this Regulations.

## 19.3. Credit Review Exceptions

If a counterparty or guarantor does not maintain any NRSRO rating, a policy limit of \$10,000,000 in aggregate net receivables per counterparty may be authorized, with the approval of the Executive Director, until a formal review can be completed and ROC approval obtained. These individual non-rated counterparty limits are subject to a total net receivable portfolio limit not to exceed \$50,000,000, in aggregate.

Wholesale counterparties not subject to the above credit review criteria include those associated with day-ahead and current day purchases where risk associated with market movements is minimal, and renewable energy credit and resource adequacy, in which cases liquid markets do not exist. Long-term off-take agreements, including renewable power purchase and energy storage agreements are also not subject to this restriction as they have unique credit provisions in the contracts and are approved by the EBCE Board.

## 20. Wholesale Credit / Counterparty Management

## 20.1. Monitoring and Reporting Exposures

Middle Office staff are responsible for monitoring and reporting on the risk management program. A list of reports, which document trade positions, risk exposure, authorization and policy compliance, may be found in Appendix 7 of these Regulations. The credit exposure for each customer or counterparty described in these Regulations may be monitored according to concentration in the following areas: credit rating, counterparty, region, contract type, contract term and MTM exposure.

Middle Office staff are also responsible for communicating this information to management under the timelines outlined in Appendix 7 of these Regulations, and for establishing a violation reporting process to document exceptions to the ERMP or these Regulations. Exception Reports will document the nature of exception, and the actions taken to correct exceptions.

The credit risk reporting system should be integrated with the transaction processing system. This is generally an extension of the concept that credit risk assessment and reporting should be supported by the normal transaction processing system. The credit system, should be integrated with the deal capture system and should not be a stand-alone system, or an add-on with manual interface.

## 20.2. Master Enabling Agreements

The use of master enabling agreements<sup>8</sup> to document trading relationships with counterparties is considered to be the preferred practice and should be followed whenever reasonably possible. The general form of such master enabling agreements shall be approved by the Board upon recommendation of the ROC before any such master enabling agreement is used for any individual counterparty transaction. Transactions entered into under such contracts and agreements are subject to the requirements of these Regulations, and limited to Approved Products. The department managers are responsible for ensuring that master enabling agreements are developed in conjunction with legal counsel review, approved by the Board and used for the following transactions:

- The Western Systems Power Pool ("WSPP") Agreement may be used as the master agreement for transacting Approved Products with WSPP members. The WSPP Agreement applies to all transactions between WSPP members unless the parties to a transaction expressly opt out of the WSPP Agreement.
- The Edison Electric Institute ("EEI") Agreement, or its equivalent, as modified by a set of Board approved special provisions, may be used as the master agreement for transacting Approved Products. The EEI Agreement provides for an array of reciprocal credit and collateral requirements for each party, and includes negotiated provisions as specified on a "Cover Sheet". The EEI Agreement can also be supplemented with specific annexes (e.g., Credit Annex, Collateral Annex, REC Annex).

<sup>&</sup>lt;sup>8</sup> The form and content of each master agreement must be approved by the Board.

- Transmission transactions shall be consummated under an Open Access Transmission Tariff or Board approved bilateral agreement.
- Master The International Swap Dealers Association ("ISDA") Agreement, or its equivalent, may be used as the master agreement for transacting financial based Approved Products.

A master enabling agreement executed by EBCE and a counterparty provides the general terms and conditions for all transactions entered into with that counterparty. All master enabling agreements are to be executed and entered into in accordance with the ERMP and these Regulations, and with applicable EBCE policy and procedures.

Netting agreements should be incorporated into all counterparty agreements and transactions.

## 20.3. Premium Surcharge on Counterparties Without Master Enabling Agreement

Master enabling agreements require credit and performance assurances from a counterparty that provide protection against counterparty credit risk. In the event EBCE desires to transact with a counterparty without such assurances, a premium surcharge shall be imposed on the counterparty's bid to compensate for its increased credit risk and allow for comparison of the relative prices, taking into account the varying credit risks which might be incurred. The following formula shall be used in calculating the surcharge:

Where: (i) Edf is the expected default frequency of the counterparty, (ii) Fwd is the current forward price, (iii)  $\circ$  is the market implied volatility (or standard deviation) of the commodity price, and (iv) 1.645 represents the number standard deviations where the price falls at a 95% confidence level.

## **Example of Premium Surcharge Calculation**

A counterparty with a master enabling agreement where EBCE has accepted changes to its preferred terms, is bidding on EBCE's RFP for a NP-15 peak Energy product for the 3<sup>rd</sup> quarter. The current market forward price for the product is \$50/MWh, market implied volatility is 40%, and the expected default frequency for this counterparty is 0.55%. Therefore, a premium of \$0.18/MWh (0.0055\*50\*1.645\*0.4) should be added to the counterparty's bid price for comparison with other bids.

## 20.4. Margin Calls

If a counterparty has exceeded a credit limit, the Middle Office is responsible for initiating a margin call if such action is authorized under the applicable master enabling agreement. Calling margin may include a request for cash collateral or other credit enhancement (i.e., letter of credit, etc.). A margin call is necessary when counterparty credit exposure exceeds an established credit limit. The appropriate timing of a margin call is not dictated by these Regulations. However, factors such as counterparty financial capacity, volume of business, overall portfolio concentration and market conditions should be considered. A margin call should be considered necessary if credit exposure

exceeds the counterparty's limit by more than one ratings notch<sup>9</sup>. The same would apply if the counterparty suffers a ratings downgrade.

EBCE as a buyer or seller may be exposed to margin calls from counterparties. Middle Office staff must be aware of collateral thresholds assigned to EBCE by counterparties, and monitor these limits no less than monthly, and shall keep the Executive Director informed in the event of market volatility. EBCE may be exposed to margin calls if a significant level of purchases or sales is reached.

## 20.5. Transaction Authority

No new transactions are to be entered into with counterparties that have exceeded their credit limits unless: (1) the new transactions are used to mitigate (offset) existing exposure, and (2) if those transactions have prior approval of the Executive Director, or ROC within authorized limits as established in this Regulations.

## 21. Segregation of Duties

Controls over counterparty inputs and systems operations are of particular importance in ensuring the integrity of data used in counterparty risk control and management. In all cases the Middle Office will be responsible for managing the counterparty review and ratings process and all counterparty reporting. Front Office staff is responsible for recommending new counterparties to the Middle Office for review and approval.

<sup>&</sup>lt;sup>9</sup> Notch as referenced by Nationally Recognized Statistical Rating Organization (e.g., from BBB to BBB+ represents one notch).

# APPENDIX 1 DEFINITIONS

## 1. Definitions

Whenever used in these Regulations, the following terms shall have the following respective meanings, provided, capitalized terms used in these Regulations that are not defined in this Appendix 1 shall have the meaning indicated in Appendix A Master Definition Supplement of the CAISO Tariff:

- 1.1. "Approved Counterparty List" is a list of the active trading counterparties that have been authorized for trading, and that have been assigned an approved credit limit by the Middle Office or ROC.
- 1.2. "Approved Product" means transactions types or products that are authorized pursuant to these Regulations, as specifically identified in Appendix 6.
- 1.3. "Balance-of-Month Transaction" means a purchase or sale of electric Energy, capacity and/or other related attributes for a term not greater than one month to be performed or delivered within the current or next succeeding calendar month.
- 1.4. "California Independent System Operator Corporation" or "CAISO" means the non-profit public benefit corporation responsible for the provision of fair and open transmission access, and maintaining reliable and efficient operation of that portion of the electric grid contained within its defined balancing authority area, pursuant to the California Public Utilities Code, or its successor entity.
- 1.5. "CAISO Tariff" means the CAISO FERC Electric Tariff.
- 1.6. "Call Option" means an option that gives the buyer (holder) the right, but not the obligation, to buy a futures contract (enter into a long futures position) for a specified price within a specified period of time in exchange for a one-time premium payment. It obligates the seller (writer) of an option to sell the underlying futures contract (enter into a short futures position) at the designated price, should the option be exercised at that price.
- 1.7. "Cap and Trade Program" means CARB's Regulation for the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms as set forth in title 17, California Code of Regulations, chapter 1, subchapter 10, article 5 (commencing with section 95800), as such may be amended from time to time, or (ii) other GHG compliance obligations, including but not limited to, federal, regional, state, or local jurisdictions.
- 1.8. "CARB" means the California Air Resources Board, or its regulatory successor.

- 1.9. "CARB Offset Credit" means a tradable compliance instrument issued by CARB that represents a GHG reduction of GHG removal enhancement of one metric ton of carbon dioxide equivalent.
- 1.10. "Commercial Compliance Policy" means the Commercial Compliance Policy adopted by the Board, as such may be amended from time to time.
- 1.11. "Congestion Revenue Right" or "CRR" means a financial instruments made available through the CAISO's CRR Allocations and Auctions. CRRs are acquired primarily for the purpose of offsetting integrated forward market transmission congestion costs that are incurred in the day-ahead market on CAISO managed transmission paths.
- 1.12. "Cost of Value at Risk" or "Cost VaR" means a calculation that summarizes the expected maximum "cost" exposure over a target horizon within a given confidence level.
- 1.13. "Counterparty" means a party on either side of a transaction (i.e., purchasing counterparty as opposed to a selling counterparty).
- 1.14. "CPUC Decisions" means, to the extent still applicable, CPUC Decisions 04-01-050, 04-10-035, 05-10-042, 06-06-064, 06-07-031, 07-06-029, 08-06-031, 09-06-028, 10-06-036, 11-06-022, 12-06-025, 13-06-024, 14-06-050 and subsequent decisions related to resource adequacy, as may be amended from time to time by the CPUC.
- 1.15. "CRR Allocation" means the process of allocating CRR source-to-sink combinations, both annually and monthly, based on nominations by registered Candidate CRR Holders.
- 1.16. "CRR Auction" means the awarding of bids for CRR source-to-sink combinations, by the CAISO, made by Candidate CRR Holders based on criteria established by the CAISO.
- 1.17. "CVaR" means credit value at risk.
- 1.18. "Board of Directors" of "Board" means the EBCE Board of Directors, which is made up of an elected official from each of the participating jurisdictions and one representative from the EBCE Community Advisory Committee.
- 1.19. "EBCE" means East Bay Community Energy.
- 1.20. "Emission Allowance" means a limited tradable authorization to emit up to one metric ton of carbon dioxide equivalent.

- 1.21. "Energy" means an electric charge that lets work be accomplished.
- 1.22. "ERMP" means the Energy Risk Management Policy.
- 1.23. "FERC" means the Federal Energy Regulatory Board, or its regulatory successor.
- 1.24. "Forward Power Transaction" means an Energy transaction that starts beyond the Balance-of-Month.
- 1.25. "Executive Director" means the Executive Director of EBCE.
- 1.26. "Greenhouse Gas" or "GHG" includes, but is not limited to, carbon dioxide ("CO<sub>2</sub>"), methane ("CH<sub>4</sub>"), nitrous oxide ("N<sub>2</sub>O"), sulfur hexafluoride ("SF<sub>6</sub>"), hydro fluorocarbons ("HFCs"), perfluorocarbons ("PFCs"), and other fluorinated gasses.
- 1.27. "GHG Compliance Instrument" means any instrument, including but not limited to, Emission Allowance, CARB Offset Credit, or Sector-Based Offset Credit that can be used to fulfill a GHG emissions compliance obligation.
- 1.28. "Letter of Credit" means a document, typically from a bank, assuring that a seller will receive payment up to the amount of the letter of credit, as long as certain documentary delivery conditions have been met.
- 1.29. "Long Term Transaction" means a purchase or sale of natural gas, electric power, capacity, transmission and/or other related attributes to be performed or delivered for a duration longer than a Balance of Month Transaction.
- 1.30. "MTM" means Mark-to-Market. MTM is a measure of the fair value of accounts that can change over time, such as assets and liabilities. MTM aims to provide a realistic appraisal of an institution's or company's current financial situation. The accounting act of recording the price or value of a security, portfolio or account to reflect its current market value rather than its book value.
- 1.31. "Natural Gas" means a flammable gas, consisting largely of methane and other hydrocarbons, occurring naturally underground (often in association with petroleum) and used as fuel.
- 1.32. "NRSRO" means nationally recognized statistical rating organization.
- 1.33. "Participating Member" means a participating jurisdiction within the East Bay Community Energy program, and which receives certain wholesale and retail services from EBCE.

- 1.34. "Prompt month" means the next full calendar month beyond the current month.
- 1.35. "Put Option" means an option that gives the buyer, or holder, the right, but not the obligation, to sell a futures contract at a specific price within a specific period of time in exchange for a one-time premium payment. It obligates the seller, or writer, of the option to buy the underlying futures contract at the designated price, should an option be exercised at that price.
- 1.36. "Regulations" means these Energy and Counterparty Risk Management Regulations.
- 1.37. "Renewable Energy Credit" or "REC" is the (i) right to the environmental benefits from generating electricity from renewable Energy sources that can be sold and traded and the owner of the REC can legally claim to have purchased renewable Energy, or (ii) as set forth in California Public Utilities Code §399.12, as such can be amended from time to time.
- 1.38. "Renewable Energy Products" means any combination of Energy, capacity, RECs, or other environmental attributes produced by a generation facility or resource that is eligible to satisfy applicable renewable Energy mandates as defined by federal, state, or local jurisdictions.
- 1.39. "Resource Adequacy" means the resource adequacy requirements established for load serving entities by the respective governing body having jurisdiction.
- 1.40. "ROC" mean the Risk Oversight Committee.
- 1.41. "Sector-Based Offset Credit" means a credit issued from a sector-based crediting program once the crediting baseline for a sector has been reached.
- 1.42. "Speculation" means the practice of engaging in risky financial transactions in an attempt to profit from fluctuations in the market value of a tradable good such as a financial instrument. Speculation can in principle involve any tradable good or financial instrument.
- 1.43. "Transmission" means the bulk transfer of electrical Energy, from generating power plants to electrical substations located near demand centers. This is distinct from the local wiring between high-voltage substations and customers, which is typically referred to as electric power distribution.
- 1.44. "Wholesale Energy Services Provider" means the Northern California Power Agency ("NCPA").

# APPENDIX 2 AUTHORIZED CRR TRANSACTING GUIDELINES

## 1. Congestion Revenue Rights Transacting Guidelines

Congestion Revenue Rights are used by CAISO market participants to hedge against the cost of congestion associated with delivering resources to serve load obligations within a locational marginal price (LMP) market.

### 1.1. CRR Allocation Process

EBCE staff will participate in the CRR Allocation and Auction markets as follows:

EBCE staff nominates its CRRs during the allocation process in general conformance with the following methodology:

- CRR nominations are limited by the seasonal/monthly eligible quantities.
- CRR valuation of source/sink combinations are based upon the historical congestion component of the LMP. If access to an Integrated Forward Market (IFM) pricing model becomes available, simulated prices may be used in the CRR valuation process.

CRRs that have EBCE generation or scheduling points as sources, and the DLAP\_PGAE-APND pricing node as the sink, are nominated first when the expected average congestion is statistically greater than zero, and no one historical period exhibited large negative congestion. Nominated amounts are equal to or less than expected generation in order to create a perfect or partial hedge. When expected congestion is low, nominated amounts are low and increase as expected congestion increases.

- After exhausting possible EBCE source/sink pairs, then nominations may be made from non-EBCE source/sink combinations that statistically have positive average congestion across historical periods with, no substantial negative congestion, as follows:
  - Rank the CRRs by congestion value.
  - Nominate the highest valued CRRs first, working down the possible Source-Sink combinations until the seasonal/month eligible quantities are exhausted.
  - Avoid large positions at any one non-EBCE sourced CRR.
  - Avoid clustered CRRs (e.g., source CRRs in the same geographic area that would expect to have the same or similar congestion component price).
- Avoid nominating both EBCE and non-EBCE sourced CRRs when data and experience shows that the CRR will not clear the allocation feasibility test.
- Once the above selection criteria results in a nomination portfolio, and prior to final submission, EBCE stress tests the portfolio on historical data for any large negative single period positions and if found removes that position prior to submission.

#### 1.2. CRR Auction Process

EBCE staff bids into the CRR Auction in general conformance with the following methodology:

- Bids are made only to unwind CRRs obtained in the allocation process that are non-hedged, or are expected to have a negative value due to operational changes.
- Prices on the bid curves start at zero and go negative.
- Bids that clear in the auction result in revenue to EBCE and reduce overall risk by unwinding existing un-hedged allocation portfolio positions.
- Auction revenue is left in the EBCE CRR collateral account until the monthly/seasonal period is over.

# APPENDIX3 AUTHORIZED APPROVED PRODUCT TRANSACTION LIMITS

# **Approved Product Transaction Limits Summary**

	CEO	coo	Head of Power Resources	PR Manager	Scheduler / Planner
Energy	Transactions for a term up to 60 cumulative months, within the next 60 consecutive months.	Transactions for a term up to 36 cumulative months, within the next 60 consecutive months.	Transactions for a term up to 12 cumulative months, within the next 60 consecutive months.	Up to 3 months within the next 6 consecutive months.	Balance of month and prompt month, which begins 10 days prior to the conclusion of the current month.
RA Product	Transactions for a term up to 120 cumulative months, within the next 120 consecutive months.	Transactions for a term up to 36 cumulative months, within the next 60 consecutive months.	Transactions for a term up to 24 cumulative months, within the next 60 consecutive months.	Up to 3 months within the next 6 consecutive months.	Substitution RA (i.e. within the compliance month) and prompt month.

	CEO	C00	Head of Power Resources	PR Manager	Scheduler / Planner
Environmental Attributes	Transactions for a term up to 60 cumulative months, within the next 60 consecutive months.	Transactions for a term up to 36 cumulative months, within the next 60 consecutive months.	Transactions for a term up to 24 cumulative months, within the next 60 consecutive months.	Up to 3 months within the next 6 consecutive months	n/a

# APPENDIX 4 NEW PRODUCT DEVELOPMENT PROCEDURES

## 1. New Product Development

When the Front Office staff request to transact a new product type, instrument or strategy, several control processes must take place to ensure EBCE can identify, manage, control and report on the risks from the new transaction.

The process for submitting a request for a new Approved Product type is as follows:

- The Front Office staff notifies Middle Office staff of his/her desire to enter into a new type of transaction. The Front Office staff are responsible for reviewing the transaction details, including all the key risk, pricing and operational elements of the transactions with Middle Office staff. Middle Office staff assume responsibility for undertaking all the risk and processing implications of the proposed transaction.
- 2. The Front Office staff is responsible for preparing a new product report for review and consideration by Middle Office staff. This report requires the Front Office staff to document all of the risk attributes of the transaction, and how they will be controlled (primarily focusing on market and credit risk).
- 3. Middle Office staff will review the new product report and begin the process of determining EBCE's ability to record, process and manage the transaction.
- 4. Middle Office staff first ascertains if the Front Office staff has the ability to accurately price the transaction. Secondly, Middle Office staff determines whether the risk of the transaction can be accurately measured. In either case, if the Front Office staff does not have the capability to price or measure the risk of the transaction, the Front Office staff is notified, and the Front Office staff must discuss the model development or purchase options with the Middle Office staff before the transaction can be authorized.
- 5. If the Front Office staff can price and model the risk of the new product, then the Middle Office staff will evaluate the Front Office's operational readiness to execute the transaction. The Middle Office staff will also evaluate the Middle Office's and Back Office's readiness to transact the new product. If any outstanding issues or concerns are identified by the Middle Office staff as part of the review, the issues or concerns identified must be resolved prior to transacting the new product.
- 6. The Middle Office staff then gathers all of the new product report summaries, and prepares a written recommendation to the ROC for consideration and approval. This written recommendation will consider whether or not the risks and potential control considerations, if any, warrant entering into the new product type.

# **New Product Approval Checklist**

Risk/Task to be Completed During the Analysis	Primary Accountability
Business Strategy	
Sponsor new strategy	Front Office
Understand and document the economics of the new strategy	Front Office
Define the resource requirements for the new product	Front Office
Regulatory and Legal Risks	
Identify applicable California and local regulatory restrictions for product or	1 10 1
business	Legal Counsel
Verify counterparty power and authority to enter into activity	Legal Counsel
Determine what legal documentation is required	Legal Counsel
Propose monitoring and review procedures to ensure legal/regulatory compliance	Legal Counsel
Designate the supervisor responsible to ensure that the product is sold only to	O.W.
counterparties for which it is suitable	Front Office
Determine if sufficient resources are available to support regulatory and legal	Frank Office
requirements	Front Office
Market Risks	
Identify and analyze market risk	Front Office/Middle Office
Specify management's intention (Hold positions, actively trade or hedge)	Front Office
Propose fair market value and risk measurement methodology	Middle Office
Determine hedging approach	Front Office
Establish product trading limits	Middle Office
Determine impact on total position limits	Middle Office
Establish special interim limits on control the new product expansion in a	M: J-II - Off:
measured, granular manner	Middle Office
Define and recommend management reporting requirements	Middle Office
Present report format for communication of positions on a timely basis	Front Office
Check if the new product involves commitments, guarantees, contingencies or any	Middle Office
other off-balance sheet items	Middle Office
Credit Risks	
Identify and analyze credit risk of product	Middle Office
Develop methodology for capturing facilities and counterparties in the credit	Middle Office
reporting system and measuring credit risk and concentration exposures	Middle Office
Define procedure for monitoring credit exposure	Middle Office
Identify target counterparties, determine suitability and request credit facilities	Middle Office
Determine proper procedure for perfecting collateral, netting agreements	Middle Office
Recommend maximum credit exposure limits for counterparties	Middle Office
Develop capability to report daily/weekly credit limit compliance	Middle Office
Check if the new product involves commitments, guarantees, contingencies or any	Middle Office
other off-balance sheet items	Middle Office
Operational Risks	
Verify consistency with ERMP	Front Office/Middle Office
Define transaction tracking plan and procedures	Middle Office
Develop required deal sheet modifications	Front Office
Settlement procedures – how will transaction payment/billing be handled?	Back Office
Authorizations/approvals – what approval levels or delegation of authority is required?	Front Office/Middle Office
Develop procedure for transacting from start to finish	Front Office/Middle
Develop procedure for transacting from Start to IIIIsii	Front Office/Milable

# Attachment Staff Report Item 7C

Office/Back Office

Note: Advice services in areas such as valuation, market/credit risk management, legal review, accounting/tax may also be sought and presented as part of this process.

# APPENDIX 5 APPROVED PRODUCTS

# 1. Approved Products

The Energy and Energy related products that EBCE is authorized to transact are as follows:

Approved	Pre-Approved	Authorization
Products	Examples	
1. Long Term Transactions	Purchases of Energy to cover the	Authorized in accordance with the
for Energy	forecasted supply shortage of the	limits as set forth in these Regulations.
	Participating Members	
	Sales of Energy amounts that are	
	forecasted to be surplus to a	
	Participating Member's need	
	Liquidating "in the money" and "out	
	of the money" transactions for	
	optimization in accordance to a dual	
	volume-VAR framework.	
2. Balance-of-Month	Energy purchases/sales within	Authorized in accordance with the
Transaction for Energy	defined term and volume limits	limits as set forth in these Regulations.
	Loss of generation	
	Loss of transmission	
	Forecasting errors	
3. Day-Ahead and Real-Time	Purchasing Energy from the CAISO	Authorized in accordance with the
Power Transactions	day-ahead and/or real-time market to	limits as set forth in these Regulations.
Through a BAA (e.g.,	serve load	
CAISO)	Selling Energy into the CAISO day-	
	ahead and/or real-time market from	
	generation resources	
4. Purchase/Sale of Capacity	Short-term or forward purchases of	Authorized in accordance with the
	capacity products (e.g., Ancillary	limits as set forth in these Regulations.
	Services and Resource Adequacy	
	products)	
	Short-term or forward sales of	
	capacity products (e.g., Ancillary	
	Services and Resource Adequacy	
	products)	
5. Purchase/Sale of Physical	To cover potential supply deficiency	Authorized in accordance with the
Call Options	due to unpredictable weather	limits as set forth in these Regulations.
	conditions (e.g., hydrological forecast	
	error)	
	To balance load and resources in an	
	illiquid market	

6. Purchase/Sale of Physical Put Options	<ul> <li>To provide a hedge against a Participating Member's net open position</li> <li>Sale of a hedged (with physical plant) call option</li> <li>To hedge a surplus resource position</li> <li>Sale of an option for the sole purpose of unwinding a purchase if economically advantageous</li> </ul>	Authorized in accordance with the limits as set forth in these Regulations.
7. Transmission	Purchases/sales of firm and non-firm transmission capacity required for the delivery Energy	Authorized in accordance with the limits as set forth in these Regulations.
8. GHG Compliance Instruments	Purchases of Emission Allowances from bilateral trades, and from the CARB administered Cap and Trade Program auctions and reserve auctions to satisfy actual and/or forecasted GHG emissions compliance obligations attributed to EBCE generation and scheduling activities (e.g. imports)	Authorized in accordance with the limits as set forth in these Regulations.
9. Renewable Energy Products	<ul> <li>Purchases of Renewable Energy Products to satisfy any requirement for such products under applicable law; Bilateral purchases are to be consummated under approved contract forms, follow approved credit risk limit procedures, and all other applicable risk management practices defined in this regulation</li> <li>Sales of Renewable Energy Products for the sole purpose of eliminating a surplus</li> </ul>	Authorized in accordance with the limits as set forth in these Regulations.

10. Congestion Revenue Rights	Participation in the CRR Allocation and CRR Auction processes through the submission of nominations and/or bids in the Annual and/or Monthly Congestion Revenue Right Allocation and Auction processes administered by the CAISO	<ul> <li>Authorized in accordance with the limits as set forth in these Regulations.</li> <li>See Appendix 3 to these Regulations</li> </ul>
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# APPENDIX 6 MANAGEMENT REPORTS

## 1. Management Reports

The following energy risk management reports shall be developed and presented as further described in the following table:

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Management Report	Front	Middle	Back	Weekly	Monthly	Quarterly	Annual
Load and Resource Balance	Х					Χ	
Portfolio Performance		Х				Χ	
Portfolio Risk Exposure (Open Position Cost VaR)		Х				Χ	
Exceptions Report		Х				Χ	
Master Agreements	Х						Χ
Policies Update		Χ					Χ
Transaction Position Detail		Х			Χ		
MTM		Х		Χ			
Credit Limit Status by Counterparty		Χ		Χ			
Trading Strategy	Х				Χ		
Scenario Planning	Х						Χ
Pending Agreements	Х					Χ	
Energy Transaction Summary	Х				Χ		
Non-Energy Transaction Summary	Х				Χ		
Market Forecast	Х				Χ		
Performance to Budget	X			Χ			
Procedure Exceptions			Χ		Χ		

## 1.1. Description of Management Reports

- <u>Load and Resource Balance:</u> Front Office report detailing total resources by source as compared to total load. Report shows supply surpluses and shortages. The Load Resource Balance report is developed weekly and presented to the ROC quarterly.
- <u>Portfolio Performance:</u> Middle Office report comparing the cost of the portfolio of contracts, to the market value of the portfolio (tracking what we paid for it to what it's worth now). This is the counterpart to the risk exposure report. The Portfolio Performance report is developed weekly and presented to the ROC quarterly.

- Portfolio Risk Exposure (Open Position Cost VaR): Middle Office report showing portfolio
  exposures by month due to price volatility. The Portfolio Risk Exposure report is developed
  weekly and presented to the ROC.
- <u>Exception Report:</u> Middle Office report summarizing current exception and violation reports. The Exception Report is developed quarterly presented to the ROC.
- <u>Master Agreements:</u> Front Office report summarizing the current set of approved master agreements by approved counterparty. The Master Agreements report is developed quarterly presented to the ROC.
- <u>Policies Update:</u> Middle Office report providing annual review of risk management policies and procedures and recommendations for updates. The Policies Update report is presented to the ROC.
- <u>Transaction Position Detail:</u> Middle Office report showing detail of Portfolio Performance report. Individual deal details showing MWh under contract and total dollars sorted by counterparty in support of the Portfolio Performance report are included in this report. The Transaction Position Detail report is presented to the ROC.
- <u>MTM:</u> Middle Office report showing MTM for life of deals by counterparty. The MTM report is developed weekly presented to Front Office and Back Office staff quarterly
- <u>Credit Limit Status by Counterparty:</u> Middle Office report showing counterparty credit limits, credit used and credit remaining. Special flagging of counterparties nearing their credit limits should also be shown. The Credit Limit Status by Counterparty report is presented to Front Office and Back Office staff weekly.
- <u>Trading Strategy:</u> Front Office report detailing trading strategies for various periods (e.g., daily, monthly, quarterly, future years). The Trading Strategy report is presented to the ROC quarterly.
- <u>Scenario Planning:</u> Front Office report detailing potential scenarios, expected result and probabilities. The Scenario Planning report is presented to the ROC quarterly.
- <u>Pending Agreements:</u> Front Office report detailing status of negotiations with potential counterparties on enabling agreements. The Pending Agreements report is developed weekly and presented to the ROC quarterly
- <u>Energy Transaction Summary:</u> Front Office report summarizing, by counterparty, Energy related transactions, both completed and contracted, involving Energy delivery. The Energy Transaction Summary report is developed weekly and presented to the ROC quarterly

- Non-Energy Transaction Summary: Front Office report summarizing, by counterparty, non-CAISO market Energy related transactions (puts, calls, options, RECs, GHG Compliance Instruments and etc.) which do not involve (or are not specifically reliant on) Energy delivery. The Non-Energy Transaction Summary report is developed monthly presented to the ROC quarterly
- <u>Market Forecast:</u> Front Office report detailing forecast of market for periods (e.g. monthly, quarterly, future years). The Market Forecast report is presented to the ROC.
- <u>Performance to Budget:</u> Back Office report comparing incurred Energy costs to budgeted costs and existing contracts and uncovered exposure at market prices to remainder of budget. The Performance to Budget report is developed for EBCE staff weekly and presented to the ROC quarterly
- <u>Procedures Exceptions:</u> Back Office report noting any procedure exceptions. The Procedures Exceptions report is presented to the ROC quarterly

# APPENDIX 7 RISK ASSESSMENT METHODOLOGIES

# 1. Risk Assessment Methodologies

#### 1.1. CRR Valuation and Risk Assessment

CRR valuation is based upon historical data. EBCE values its CRR holdings individually and as a portfolio. Along with the average valuation, EBCE calculates the fifth (5<sup>th</sup>) percentile and 95<sup>th</sup> percentile position of each CRR Source/Sink combination.

EBCE performs a stress test on its CRR nominations. The stress test identifies the minimum, maximum and expected revenue for each available seasonal/monthly historical period.

The highest risk to EBCE's CRR allocation and auction portfolios is a collateral call. The CAISO does not net the portfolios, so the risk is a result of the separate collateral requirements for each portfolio. The expected value of EBCE's allocated CRR portfolio is positive. EBCE's auction portfolio consists only of unwound allocated CRR; as such, the expected value is negative. A collateral call could occur if an event increased the expected negative value of the auction portfolio even though the actual day-ahead market position would be offset by an increase in the expected value of the allocation portfolio.

EBCE mitigates this risk by leaving all its auction revenue in the CRR collateral account at the CAISO. EBCE's initial deposits of \$500,000 for the annual auction, and \$100,000 for the monthly also remain in the collateral account.

EBCE will only request a return of its auction revenue after the end of each monthly/ seasonal period, thereby maintaining usable secured available credit well in excess of its required collateral.

## 1.2. Mark-to-Market Methodology

The MTM calculation is a method to value future or forward open trading or hedge positions on an ongoing basis to track market price changes. Once a position is taken in the market for some future delivery period, the value of that position must be monitored and managed on a routine basis. The volatility and volume of activity for a particular traded product will dictate how often it is necessary to update the MTM valuation of such product. EBCE will "mark" all open positions on no less than a MONTHLY basis, or as necessary, given market dynamics.

Long Term Transactions for future delivery or receipt of Energy. Several trading hubs host the majority of physically traded contracts such as Palo Verde (PV), California Oregon Border (COB), Mid-Columbia (Mid-C), California South (SP15), and California North (NP15). There are also several emerging hubs in the desert southwest and rocky-mountain areas. Publications such as *Megawatt Daily* and *Energy* 

Market Report list the daily prices traded at more heavily traded hubs. Information sources such as McGraw Hill publishing report broker trades for forward contracts at the most active trading points. For illiquid products or trading points, the MTM may be applied less frequently than daily. In these circumstances a weekly or monthly mark may be appropriate. However, periodic market inquiries, as appropriate, should be made to capture any market movement.

The following information sources, or their equivalents as approved by the Middle Office and Front Office, are to be used to mark open positions for the traded products and hubs listed below:

- WSPP Contracts for Liquid Products and Trading Hubs: The standard forward traded electricity products as reported in the Energy Market Report, published by Insight Research, Inc., or other relevant broker/trade reporting system. This source may be replaced at such time that EBCE has available an information service such as the Intercontinental Exchange ("ICE"), Reuters North America Power or other reliable source.
- WSPP Illiquid Products and Trading Points: these products are likely to change value less
  often than the more standard products. Periodic (weekly or bimonthly) probing of the
  market may be necessary to obtain current valuation. It may be possible to identify basis
  relationships between the liquid and illiquid trading points resulting in an approximate
  valuation.

## 1.3. Cost Value at Risk Calculation Methodology

In its most literal sense, Value at Risk (VaR) refers to a particular *amount of money*, the maximum amount likely to be spent or lost over some period, at some specific confidence level. EBCE has defined its supply management activity as a cost hedging activity. Therefore, for purposes of power resources management, Cost VaR is defined as a single, summary statistical measure of possible costs that are in excess of, expected costs.<sup>10</sup>

Traditional VaR methodology (as practiced in the financial sector) has two important characteristics. The first is that it provides a common consistent measure of risk across different positions and risk factors. The other characteristic of VaR is that it takes account of the correlations between different risk factors. If two risks offset each other, the VaR allows for this offset and tells us that the overall risk is fairly low. If the same two risks don't offset each other, the VaR takes this into account as well and gives us a higher risk estimate.

Since Cost VaR tells us about EBCE's maximum cost exposure, management can use it to determine

<sup>&</sup>lt;sup>10</sup> Specifically, standard, or traditional, VaR is a measure of cash flow exposure due to "normal" market movements; traditional VaR would be used when monitoring hedge positions initiated with financial derivatives. Costs or losses greater than VaR estimates are suffered only with a specified small probability (e.g., 5% of the time, etc.). However, VaR is not a stress test – it will not indicate what a maximum loss may be 5% of the time.

internal capital allocation. Cost VaR can be used to determine capital requirements at the senior management level of the organization, and also down the line to the level of the individual transaction decision. The higher the risk associated with the transaction, the higher the VaR and the greater the capital requirement. Cost VaR can also be used to assess the risks associated with different transaction opportunities and the implications of various risk tolerance thresholds. Cost VaR can also be used to evaluate the performance of divisions.

## 1. Methodology

The two (2) principal components of the traditional VaR calculation are the:

- Market
- Portfolio

The "Market" involves understanding and estimating how the particular market parameters behave over a specified holding period. This is captured by performing market parameter modeling. The "Portfolio" involves understanding and quantifying how the portfolio's value varies according to estimated changes in market parameters. This is captured by revaluation. The standards applied to market parameter modeling and revaluations are described below. These two components are illustrated as follows:

## Market > <u>Market Parameter Modeling</u> >

- Distribution assumptions
- Correlation assumptions
- Parameter assumptions

## **VaR Calculation**

## Portfolio > Revaluation >

- Historical Simulation
- Monte Carlo Simulation
- Full revaluation
- Analytic (Covariance/Variance Method)
- Sensitivities or any reasonable
- Sensitivity Analysis combination of these

### 2. Market Parameter Modeling

During market parameter modeling, various assumptions are made in relation to the distributions and

correlations between assets, or products in the case of electricity, within the same risk category, or hub jurisdiction (i.e., SP15 vs. COB, etc.). In addition, various estimations are made with respect to the level of commodity prices and their implied volatilities.

Market parameters should be modeled on the basis of the following:

- Distribution assumptions for the market parameters are normal (this is a primary assumption for Cost VaR);
- Parameters are usually estimated on the following:
  - a one (1) month holding period, which is consistent with the frequency of revaluation of all financial trading positions.
  - the historic time period of one (1) calendar year or 252 days, unweighted, should be used to calculate historic volatilities and correlations.

Although distribution assumptions are assumed normal, management recognizes that actual power price distributions have displayed a skewed distribution. Traditional VaR methodology is not currently appropriate for the electric power industry. However, it may be appropriate for measuring positions in natural gas, whether physical or financial. Cost VaR, in the context of electricity portfolios, is not concerned with duration or term parameters (such as holding periods, etc.) since electricity products currently have predefined terms (e.g., hourly product, month product, quarterly product, etc.)

For modeling purposes, the Cost VaR is taken from the 95.0% quartile of the distribution of changes in the hourly chronological simulation of loads and resources (1.645 standard deviations).

## 3. Portfolio Revaluation

Revaluation is the calculation of the changes in portfolio costs resulting from a change in specific model assumptions (i.e., price, risk tolerance, volatility, etc.).

Two revaluation techniques are permitted:

- <u>Full revaluation</u>: Full revaluation occurs where the transactions in the portfolio, or positions, are all individually marked to market value for each market rate scenario generated. This is also true for Cost VaR applications.
- <u>Delta approximation</u>: Delta refers to the change in one variable given a change in another variable. A sensitivity analysis is an *approximation* of the change in net present value for various sensitivities of the portfolio. Sensitivity analysis may be used only for linear approximation. For linear approximation the sensitivity of the rate of change of the price of the transaction to a small change in the market rate is calculated. This is more applicable to traditional VaR where linear relationships and correlations may exist between financial instruments. On a more simplified level, Cost VaR considers delta approximation when adjustments are made to parameters such as risk tolerance, price, and volatility.

For purposes of traditional VaR, the range should cover at least 1.645 standard deviations in either full revaluation or delta approximation. Any reasonable combination of the above is also permitted. For example, a combination of the above might be used for large portfolios which contain both complex and simple instruments and for which different revaluation techniques are appropriate.

The risk measurement methodology must take the current mark-to-market value supplied and apply revaluation techniques to calculate the potential loss or VaR, which may arise from the future changes in market.

**Note**: Sensitivity analysis is appropriate for individually measuring risks which may not otherwise be measured on a full portfolio basis such as location or spread risks. Sensitivity analysis is not appropriate for products with non-linear price behavior. In particular, option portfolios contain a high degree of non-linearity. This means that the change in the portfolio value has a non-linear relationship with changes in the underlying asset price. In this case, a sensitivity analysis is no longer valid.

#### 4. VaR Calculation

Monte Carlo simulation is the preferred approach to VaR calculation for all portfolios. This is also true for Cost VaR when simulating loads and resources. However, the Analytic Method (Variance/Covariance) will be used if EBCE does not have the computing power necessary to generate a Monte Carlo simulation. EBCE recognizes that the Analytic Method is inappropriate for portfolios with non-linear characteristics (i.e., optionality) and will make the necessary adjustments when portfolio non-linearity becomes significant.

### Monte Carlo Simulation Method:

Monte Carlo simulation estimates Cost VaR from a simulated distribution that is derived by assuming particular theoretical market processes and simulating large numbers of random paths that prices, or other parameters, could follow. The method proposes that if we take a sufficiently large number of simulations, they will produce a simulated distribution that will converge to the unknown true distribution of portfolio values. VaR and Cost VaR can be inferred from the simulated distribution. The steps required in a Monte Carlo simulation are as follows:

- Perform market parameter modeling by estimating the parameters of the distribution (e.g., volatilities and correlations) using a historical time series of market parameters;
- Generate an appropriate distribution of random variables;
- Perform the simulation by applying the covariance to the random numbers to generate a set of correlated market parameter scenarios; and
- Apply market parameter scenarios to the portfolio and, using revaluation method set, generate a distribution of portfolio values.

## Analytic Method (Variance/Covariance):

The Analytic Method is based on the same distribution assumptions for market parameter modeling as the Monte Carlo method but restricts the portfolio to linear risk components only. This allows the analyst to assume that the portfolio changes are normally distributed.

The steps required in the analytic VaR calculation are:

- Perform market parameter modeling by estimating the parameters of the distribution (e.g., volatilities and correlations) using a historical time series of market parameters;
- Calculate the vector of sensitivities with respect to the underlying spot rates;
- A first order approximation is used to calculate changes in portfolio value. Given the normality assumption, the distribution parameters can then be calculated analytically using the sensitivities determined in step 2 above.

The VaR is defined as 1.645 the standard deviation of the change in portfolio value which equals – under the assumption of zero mean – a confidence level of 95%.

## 1.4. Cost VaR Stress Testing Methodologies and Procedures

In broad terms, there are two (2) main approaches to Cost VaR stress testing. The first of these focuses on the impact of particular specified scenarios – typically a fairly limited number of such scenarios – that are fed into an analytical process. This approach to stress testing is usually known as scenario analysis. The term "stress testing" is used here to apply to any procedures that attempt to evaluate the impact of hypothetical future events on EBCE's hedging and/or transacting portfolios.

The term "scenario analysis" is used to apply to that type of stress testing that focuses on particular specified *scenarios*, as distinct from the second type of stress testing that specifies classes of mathematical or *statistical possibilities* and then works through these possibilities in a mechanical way. Note that scenario analysis only indicates what EBCE stands to "spend" in a particular circumstance, and does not indicate (and is not designed to indicate) how likely any particular circumstance is to occur. Scenario analysis is therefore a natural complement to Cost VaR approaches that indicate something about the probability of a clearly defined event, but do not as such identify what EBCE would spend if the event actually occurred.

The Cost VaR stress testing methods approved for use by the ROC include 1) worst-case scenario analysis, and 2) extreme value analysis.

## Worst-Case Scenario Analysis (WCSA):

WCSA allows an examination of the worst case that is *expected to occur* (Boudoukh, Richardson and Whitelaw, 1995). This approach is useful when there is concern about maximum possible costs over a particular horizon period (e.g., one month, one year, etc.) and an expectation of some savings or cost over each sub-period (e.g., each day or month). The worst-case scenario is the cost associated with the most adverse daily outcome. If each outcome is a random variable Zi, and there are n sub-periods in our horizon, then the worst-case scenario is:

## Min[Z1, Z2,...Zn]

The actual worst-case scenario can now be estimated by running simulations of the random Z variables.

## Extreme Value Analysis (EVA):

This approach starts from the premise that the extreme values of the cost distribution are what we are mostly concerned about, and then uses the statistical theory of extreme values to determine maximum extreme costs with a determined degree of confidence.

In practice the distribution of extreme values is not known, but the key insight of EVA theory is that this distribution converges in large samples to a limiting distribution of a particular known form. An analytic solution for the Cost VaR can then be found from this distribution once a desired confidence level is specified. The important parameter is the tail index, which gives the thickness of the tails (e.g., for a *t*-distribution, this is the number of degrees of freedom).

The Extreme Value Analysis approach has various attractions: (1) It deals directly with the extreme values typical of the electric Energy market. (2) It provides a firm methodological basis for the estimation of Cost VaR. (3) It does not impose any particular form on the underlying price distribution, but instead allows this distribution to take any well-behaved form, including an asymmetric (i.e., skewed) one. (4) It produces a simple analytical formula for Cost VaR. (5) The approach is robust, flexible and easy to use.

**Note**: Standard VaR methodology will be used to evaluate exposures resulting from activity in financial instruments. Currently, the electric power industry has not developed a highly liquid market in financial instruments. However, the natural gas market is relatively mature and offers opportunities in the use of financial instruments for the purpose of cost hedging. Standard VaR methods can be utilized more appropriately with natural gas as market performance generally follows a normal distribution.

## **Backtesting**:

The purpose of a backtest is to compare the expected cost (at the then forward price) with actual cost (at the spot price), and implied volatility with actual volatilities, to determine if EBCE's cost VaR is adequate (conservative enough) to capture the potential market exposure.

To serve such purpose, staff may use the same open position number forecast 12 months ago and apply the DA spot market price in the past 12 months. This number would be the "actual cost" of the open position had it stayed unchanged and filled in the DA market. Comparing the difference between the two numbers will provide guidance as to whether the variance falls within the 95% cost VaR boundary and identify whether EBCE would have been better off leaving the position open or covering it 12 months ago.

EBCE has performed backtesting of the Cost VaR measures during the in-house model development

and validation phase. The backtesting results revealed adequacies in the Cost VaR measures (given the statistical confidence intervals used or various parameters.

## **APPENDIX 8**

# **Recommended Coverage**

The following Time-Price Coverage Matrix will be used as a guide for EBCE's short term and long term procurement strategies. The objective of the Time-Price Coverage Matrix is to develop a procurement strategy focused on hedging against the risk of open load positions, as measured over time, and to mitigate EBCE's exposure to market price volatility and other pricing risk. EBCE will strive to further develop this matrix based on (1) EBCE's wholesale price risk and (2) appropriate limits for these risks. The actual covered positions taken by EBCE, reflected as a percentage of forecasted load, may deviate from the following Time-Price Coverage Matrix based upon EBCE's staff evaluation of current market conditions and other applicable requirements (e.g., regulatory requirements).

		Price Matrix Percentile						
Months to Delivery		>60%	60%	50%	40%	25%	10%	<10%
		Covered Position as a % of Forecasted Load						
0+	3	80%	80% 80% 85% 85% 90% 9					
3+	6	70%	70%	75%	80%	80%	90%	100%
6+	9	70%	70%	75%	80%	80%	80%	90%
9+	12	60%	60%	70%	80%	80%	80%	90%
12+		60%	60%	70%	80%	80%	80%	90%

**Cost-at-Risk Metrics** 

RESERVED / TO BE DEVELOPED



















































































November 7, 2023

Chair Bauters and Honorable Directors
Finance, Administration, and Procurement Subcommittee
Ava Community Energy
1999 Harrison Street, Suite 2300
Oakland, CA 94612

Re: Item 4 Workforce Guidelines and Policy (Informational Item)

Chair Bauters and Honorable Directors,

Regarding Item 4 on your agenda for November 8, we are writing to reaffirm our strong support for the inclusion of the CCA Workforce & Environmental Justice Standards Alliance's policy framework within Ava Clean Energy. Ava's investments in clean energy represent a significant opportunity to promote community-benefitting projects and grow a much needed skilled workforce through middle-class careers that contribute to the progress of equity priority workers and their communities.

The CCA Workforce & Environmental Justice Alliance is a coalition of over 40 organizations that jointly represent the interests of labor, climate, and environmental justice. This letter extends our ongoing dialogue, underscoring our continued commitment to advancing industry-leading standards with CCAs throughout California. We point to Clean Power SF, Peninsula Clean Energy, Central Coast Community Energy, and Clean Power Alliance as model CCAs, supporting workers and the diverse communities that host their clean energy projects.

We recommend a comprehensive subcommittee review and discussion of the language introduced by staff and the language presented by the Alliance. For this purpose, we have included below a policy comparison table that outlines identified issues, staff's proposed language, and the Alliance's suggested adjustments to address the issues.

We appreciate the cooperation and effort from your staff in preparing the proposed Workforce and Environmental Justice policy and look forward to the opportunity to continue our collaborative efforts with Ava Clean Energy adopting a project selection policy that aligns with your agency's workforce and environmental justice values.

Sincerely,

Endorsement list of alliance organizations follows:

Susan Penner, Co-Chair, Legislative Working Group, 1000 Grandmothers for Future Generations

Alan Weiner, Coordinator, 350 Conejo / San Fernando Valley

Transition Team, California Alliance for Community Energy

Lucas Zucker, Co-Executive Director, Central Coast Alliance United for a Sustainable Economy

Ana Rosa Rizo-Centino, Network Manager, Central Coast Climate Justice Network

Lynda Marin, Chapter Lead, Citizens' Climate Lobby, Santa Cruz Chapter

Michael Chiacos, Policy Director, Community Environmental Council

Jordan Ackerman, Sr. Policy and Public Affairs Manager, Construction Trades Workforce Initiative

Ratha Lai, CEO, Critical Impact Consulting

Rita Casaverde, Executive Director, Diversity Coalition, San Luis Obispo County

John Foran, Founding Editor, Eco-Vista

Andy Carman, Director, Environteers

Leah Redwood, Action Coordinator, Extinction Rebellion San Francisco Bay Area

Tim Frank, Representative, Building and Construction Trades Council of Alameda

Bart Pantoja, Building and Construction Trades Council of San Mateo County

John Doherty, Business Manager, IBEW Local 6

Paul Guiterrez, Business Manager, IBEW Local 234

Bill Baker, Business Manager, IBEW Local 413

Greg Bonato, Business Manager, IBEW Local 595

Scott Wein, Business Manager, IBEW Local 617

Mark Simonin, Business Manager, IBEW Local 639

Hector Huezo, California Director, Jobs to Move America

Veronica Wilson, CA Organizer, Labor Network for Sustainability

Leslie Austin, Director, Let's Green CA!

Jessica Tovar, Steering Committee Member, Local Clean Energy Alliance

Gopal Shanker, President, Récolte Energy

Nancy Faulstich, Executive Director, Regeneración Pajaro Valley

Sara Nelson, Executive Director, Romero Institute

Alex Lansberg, Director, Research & Advocacy, San Francisco Electrical Contractors Assoc.

Jill ZamEk, Board Member, San Luis Obispo Mothers for Peace

Robert M. Gould, MD, President, San Francisco Bay Physicians for Social Responsibility

Joni Eisen, Representative, San Francisco Climate Emergency Coalition

Ken Hough, Executive Director, Santa Barbara County Action Network

Pauline Seales, Educator Organizer, Santa Cruz Climate Action Network

Eric Veium, Chair and Co-Executive Director, SLO Climate Coalition

Melissa Yu, Senior Energy Campaigns Representative, Sierra Club

Timothy Duda, Directory, Terra Advocati

Woody Hastings, Fossil Fuel Phaseout Manager, The Climate Center

Kristin Kusanovich, Founder, tUrn Climate Crisis Awareness & Action

Bijan Ashtiani-Eisemann, Organizer, UC Green New Deal Coalition

Louise Auerhahn, Director of Economic & Workforce Policy, Working Partnerships USA

## Attachments:

CCA Workforce and Environmental Justice Standards Alliance Policy Resolution

#	Section	Issue	Staff Proposed Language	Alliance Suggested Language	Notes
1	General Introduction	This policy should apply to both energy offtake and Ava-owned energy projects.	'overall evaluation of Energy Offtake Agreements'	'overall evaluation of Energy Offtake Agreements and Ava-owned generation and storage projects	
2	Definitions	This project selection criteria should be applied as broadly as possible to all non-program energy projects including energy offtake agreements and Ava-owned energy projects	'Power Purchase Agreements, Energy Storage Agreements, Resource Adequacy Only Agreements for new build'	'Power Purchase Agreements, Energy Storage Agreements, Resource Adequacy Only Agreements, and other energy related products for new build'	
3	Contributions to Ava's 100% Renewable Energy by 2030 Goal (section needs to be re-added)	All future procurement should discourage Category 3 RECs and non-RPS carbon-free attributes.	None	'Avoids unbundled Category 3 RECs and non-RPS carbon-free attributes'	
4	Workforce and Local Workforce Development	Standards should apply to construction, operations, and maintenance scopes.	'Ava is committed to stimulating our local economy through, among other measures, supporting projects committed to applying prevailing wage rates, supporting participants and/or graduates of apprenticeship and pre-apprenticeship programs, supporting a local skilled workforce, and to achieve Ava's local and targeted hire objectives	'Ava is committed to stimulating our local economy through, among other measures, supporting projects committed to applying prevailing wage rates, supporting participants and/or graduates of apprenticeship and pre-apprenticeship programs, supporting a local skilled workforce, and to achieve Ava's local and targeted hire objectives for construction, operations and maintenance.	

#	Section	Issue	Staff Proposed Language	Alliance Suggested Language	Notes
5	Workforce and Local Workforce Development	Small, local, and emerging business performance should have a goal and be measurable.	'Demonstrated commitment / effort to subcontract with Small, Local, and Emerging Businesses.'	'A goal that 20% of project value be subcontracted with certified Small, Local, and Emerging Businesses.'	Specific goal number subject to discussion.
6	Environmental Stewardship	Environmental project risks should be evaluated for both energy offtake and Ava-owned projects in a two stage approach.  Stage 1 starts with internal due diligence that informs project selection and followed by Stage 2 whereby CEQA is conducted by the lead AHJ during the local project entitlement process.	Ava will prioritize projects that:  1. Are proposed on urban or previously disturbed sites.  2. The developer and local land use authority have established an enforceable development agreement which, in part, sets forth measures to mitigate impacts to sensitive habitat or environmentally sensitive area; then  3. The developer commits to measurable offset efforts within the vicinity of the proposed project.	Avoid or mitigate impacts to sensitive habitats for any endangered plant or animal species or other environmentally sensitive areas and comply with conservation plans such as the Desert Renewable Energy Conservation Plan (DRECP) <sup>1</sup> ;	Policy should acknowledge that:  CCA / Developers are responsible for identifying environmental project risks in Stage I as part of project evaluation and selection.  In Stage 2, Authorities having jurisdiction / Developer are responsible for permitting, CEQA, and any mitigation agreements.

<sup>&</sup>lt;sup>1</sup> Refer to <u>Desert Renewable Energy Conservation Plan (2016)</u>.

#	Section	Issue	Staff Proposed Language	Alliance Suggested Language	Notes
7	Evaluation, Selection, and Reporting	Current project evaluation standards and practices have been found to be inconsistently applied or incomplete. Add language that requires all associated projects to be evaluated and selected in accordance with the proposed project selection methodology	Ava has historically evaluated and selected project proposals in accordance with this Energy Workforce and Environmental Justice Project Selection Criteria	Ava will assess and select project proposals in accordance with this Project Selection  Methodology and report detailed results of such assessment at the time of the project approval.	
8	Evaluation, Selection, and Reporting	Project selection methodology is intended to influence projects that are proposed and projects that are selected.  Proposed and selected project performance against these standards should be transparently communicated during project approval by the Board.	None	Ava will assess and select project proposals in accordance with this Project Selection Methodology and report detailed results of such assessment at the time of the project approval.	
9	Benefits Accruing to Equity Priority Communities	Include reference to report from leading Environmental Justice stakeholders providing guidance on operationalizing 'meaningful community engagement'.	None	Add Footnote: Meaningful engagement means implementing five recommendations for best practices from Building a Just Energy Future - A framework for community choice aggregators to power equity and democracy in California. 2020 report by the California Environmental Justice Alliance	Included in CCA Workforce & EJ Alliance Proposed Policy language

#	Section	Issue	Staff Proposed Language	Alliance Suggested Language	Notes
10	CA Community Power	CA Community Power should create a public advisory committee to ensure transparency and key stakeholder engagement.	None	Ava's representative to the CA Community Power Board shall advocate to form a public advisory committee, including labor, environmental and equity representatives, to ensure transparency and public engagement in CA Community Power's operations and procurement practices.	Included in CCA Workforce & EJ Alliance Proposed Policy language

# Proposed by CCA Workforce and EJ Standards Alliance

https://action.greencal.org/action/wei

October 25, 2023

# DRAFT: Ava Workforce, Environmental, and Environmental Justice Standards for Clean Energy Project Selection Policy

## **PREAMBLE**

**WHEREAS,** Ava, as a Community Choice Aggregation, is a mission-driven public agency, collectively financed by constituent customers, with an obligation and opportunity to support and protect workers and the communities hosting Ava's clean energy projects;

**WHEREAS**, Ava committed in its mission to diversity, equity, and inclusion, has the opportunity to align with and support the values and mission of high-road union construction trade labor and environmental justice organizations striving to create sustainable and equitable communities;

**WHEREAS,** Central Coast Community Energy (3CE), a peer CCA to Ava, adopted similar standards to the recommended standards below in June 2023 after extensive deliberation by its Board of Directors and Citizens Advisory Committee;

**WHEREAS**, 3CE'S procurement standards serve as a foundation for best practices and build on similar standards adopted earlier by Peninsula Clean Energy and the San Francisco Public Utilities Commission (CleanPowerSF);

**WHEREAS**, x% of customers in existing service territory are CARE, FERA, or Medi-Cal baseline customers, and x% in San Joaquin Counties (staff support requested to advise on these values);

**WHEREAS**, reinvestment of customer dollars can create local benefits through the creation of jobs and supporting small or emerging local businesses in our service territory by keeping dollars in circulation; and

**WHEREAS**, Ava's Joint Powers Agency Agreement, dated effective November 1, 2016, as amended by Resolution No. 2018-23 dated June 20, 2018, declares the agency's purpose as follows:

- Provide electricity rates that are lower or competitive with those offered by PG&E for similar products;
- Develop an electric supply portfolio with a lower greenhouse gas (GHG) intensity than PG&E, and one that supports the achievement of the parties' greenhouse gas reduction goals and the comparable goals of all participating jurisdictions;
- Establish an energy portfolio that prioritizes the use and development of local renewable resources and minimizes the use of unbundled renewable energy credits;
- Promote an energy portfolio that incorporates energy efficiency and demand response programs and has aggressive reduced consumption goals;
- 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);
- Recognize the value of workers in existing jobs that support the energy
  infrastructure of Alameda County and Northern California. The Authority, as a leader
  in the shift to a clean energy, commits to ensuring it will take steps to minimize any
  adverse impacts to these workers to ensure a "just transition" to the new clean
  energy economy;
- Deliver clean energy programs and projects using a stable, skilled workforce through such mechanisms as project labor agreements or other workforce programs that are cost effective, designed to avoid work stoppages, and ensure quality;
- Promote personal and community ownership of renewable resources, spurring equitable economic development and increased resilience, especially in low income communities;
- 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; and
- Create an administering agency that is financially sustainable, responsive to regional priorities, well managed, and a leader in fair and equitable treatment of employees through adopting appropriate best practices employment policies, including, but not limited to, promoting efficient consideration of petitions to unionize and providing appropriate wages and benefits.

## THEREFORE, BE IT RESOLVED THAT,

In support of competitive, clean, and renewable power supply, as well as the development of a local and diverse workforce, the Governing Board of Ava Community Energy shall adopt the following Workforce, Environmental, and Environmental Justice Standards for Clean Energy Project Selection Policy asserting a preference for enhanced workforce, environmental, and environmental justice standards for all Ava's clean energy programs and projects.

#### I. DEFINITIONS

- Regulatory Value: The project's anticipated ability to satisfy Ava's regulatory compliance requirements, such as Resource Adequacy, Renewable Portfolio Standard, integrated resource planning, and other binding orders or directives received from regulatory bodies.
- Market Value: The project's projected revenues across all relevant day-ahead, real-time and ancillary markets. Market Value shall also assess a project's ability to manage, shift, or arbitrage existing Ava generation to maximize revenue and renewable energy generation on behalf of Ava and its customers.
- Counterparty Risk: The risk that a counterparty will fail to perform, or adequately remedy, its obligations. Counterparty Risk is inclusive of Development Risk.
- 4. **Development Risk:** The risk that the project is unable to obtain interconnection, deliverability, site control, entitlements, financing, or other necessary development milestones required to deliver the project on or ahead of the anticipated online date.
- 5. Energy Offtake Agreement: Includes Power Purchase Agreements, Energy Storage Agreements, Resource Adequacy Only Agreements, or other energy-related products where Ava does not own, develop, or construct the generation or storage facility. Instead, Ava's participation in the Project is limited to receiving energy and any applicable attributes at a set price and term.
- 6. **Journeyperson:** Is a worker who either:
  - Graduated from a California state-approved apprenticeship program for the applicable occupation or, when located outside California, approved for federal purposes pursuant to apprenticeship regulations adopted by the Secretary of Labor, or
  - 2. Has at least as many hours of on-the-job experience in an applicable occupation as would be required to graduate from an apprenticeship program for the applicable occupation that is approved by the California Division of Apprenticeship Standards.
- 7. **Local Hire:** A stated preference for project employment opportunities for qualified workers in descending priority:
  - 1. A resident within the nearest communities in proximity to the project, by radius as reasonably determined on a project-by-project basis;
    - Additional preference shall be given, where the radius includes a city, town, or census-designated location within Ava's service territory, to the workers within those portions of the service territory.

- 2. A resident within the county where the project is being constructed;
- 3. A resident within Ava's service territory.
- 8. **Targeted Hire Program**: A pipeline program which:
  - Partners with a Multi-Craft Core Curriculum (MC3) pre-apprenticeship program or programs, or equivalent industry and state-recognized certificated career training and placement program that recruits, supports, and places Equity Priority Workers in skilled construction trades; and
  - 2. Creates opportunities for an Equity Priority Worker to enter Registered Apprenticeship Programs and/or obtain work hours needed to successfully complete their apprenticeship; or
  - 3. Recruits and places income-qualified Journeypersons.
- 9. **Equity Priority Worker:** A jobseeker who, at the time of hiring or within the last twelve months, satisfies at least one of the following categories:
  - 1. Currently unhoused or at risk of homelessness
  - 2. Being a custodial single parent
  - 3. Currently receiving public assistance
  - 4. Lacking a GED or high school diploma
  - Having been continuously unemployed or underemployed for the past 6 months
  - 6. Having been emancipated from the foster care system
  - 7. Being a veteran of the United States Military
  - 8. Being a member of a tribal community
  - 9. Having a previous incarcerated or justice involvement history
  - 10. At-Risk Youth: a person 18-24 years old who is disconnected from school and/or work
  - 11. Low income (household income is below the current HUD threshold for Low Income Households in their county of residence)

## 10. Small or Emerging Local Business

A local business that is certified small or emerging under the following requirements:

- 1. Local Business A business having a fixed office with a street address in Ava's service territory, and having a valid business license issued by a jurisdiction within Ava's service territory for at least 6 months.
- 2. Small Business A business which has been certified to meet the U.S. Small Business Administration (SBA) size standards for its classification.
- 3. Emerging Business A business which has been certified to meet less than one half the U.S. SBA size standards for its classification and has been in business less than 5 years.

#### II. PROJECT SELECTION METHODOLOGY

Projects will be prioritized for selection based on Ava's evaluation of the criteria set forth below.

## A. Contributions to Ava's 100% Renewable Energy by 2030 Goal

- Assessment and evaluation of proposed projects' operational performance and market economics to ensure selected projects maximize regulatory and market value to Ava and its customers.
- 2. Assessment and evaluation of Counterparty and Development Risk.
- 3. Avoids unbundled or Category 3 RECs and non-RPS carbon-free attributes

## B. Workforce and Local Workforce Development

Ava is committed to stimulating our local economy through, among other measures, supporting projects—including construction, operations, and maintenance—committing to apply prevailing wage rates, supporting participants and/or graduates of apprenticeship and pre-apprenticeship programs, supporting a local skilled workforce, and to achieve Ava's local and targeted hire objectives.

- 1. Ava will prioritize Energy Offtake Agreements where the developer is committed to:
  - a. Highest priority projects will commit to:
    - i. A multi-trade project labor agreement that incorporates Ava's Local and Targeted Hire objectives as follows:
      - 1. A goal of 30% of all project labor hours performed by Local Hires, and;
      - Participation in a Targeted Hire Program with a goal of 10% of all project hours performed by Equity Priority Workers.
    - ii. A goal that 20% of project value be subcontracted with certified Small or Emerging Local Businesses.
  - b. Medium-priority projects will commit to:
    - i. Utilization of prevailing hourly wage and benefit rates as determined by the California Department of Industrial Relations.
    - Utilization of apprentices at the same ratio of apprentice hours to journeyperson hours as required for public works projects.
       Generally this is one apprentice hour per every 5 hours of journeywork per craft.
    - iii. Demonstrated commitment to Local and Targeted Hire, including utilization of a multi-craft core curriculum (MC3) pre-apprenticeship program, or equivalent industry and state-recognized pre-apprenticeship certification, for outreach, preparation, support and referral of Targeted Hires.

- iv. Demonstrated commitment to subcontracting with Small, Local, and Emerging Businesses.
- c. Low-priority projects would fail to meet II.B.1.a or II.B.1.b above but may demonstrate other commitments to local workforce development.
- 2. When considering contractors or developers for Ava-owned energy generation or storage projects requiring a Large Generator Interconnection Agreement from the California Independent System Operator (currently 20MW and above, but subject to change from time to time), Ava shall commit to:
  - a. Negotiate a multi-trade project labor agreement that will incorporate Ava's local and targeted hire objectives as follows:
    - A goal of 30% of all project labor hours performed by Local Hires, and:
    - ii. Participation in a Targeted Hire Program with a goal of 10% of all project hours performed by Equity Priority Workers.
  - b. A goal that 20% of project value be subcontracted with certified Small or Emerging Local Businesses.
- 3. When considering contractors or developers for Ava-owned energy generation or storage projects requiring a Small Generator Interconnection Agreement from the California Independent System Operator (currently applies to projects under 20MW, but subject to change from time to time), Ava will commit to:
  - a. Utilization of prevailing hourly wage and benefit rates as determined by the California Department of Industrial Relations.
  - Utilization of apprentices at the same ratio of apprentice hours to journeyperson hours as required for public works projects. Generally this is one apprentice hour per every 5 hours of journeywork per craft.
  - c. Demonstrated commitment to Local and Targeted Hires.
    - i. A goal of 30% of all project labor hours performed by Local Hires while incenting, through a negotiated contract structure, the contractor or developer to achieve a minimum of 60% of all project labor hours performed by Local Hires, and;
    - ii. Participation in a Targeted Hire Program with a goal of 10% of all labor hours performed by Equity Priority Worker, while incenting, through a negotiated contract structure, the contractor or developer to achieve the 10% goal.
  - d. Demonstrated commitment to subcontracting 20% of project value with Small or Emerging Local Businesses.

## C. Innovation

Ava recognizes that reaching 100% Renewable Energy by 2030 will require significant improvements and innovation in battery technologies, renewable baseload, dispatchable renewable resources, and renewable generation technologies, among other opportunities.

1. Ava will prioritize projects that accelerate decarbonization, provide local resiliency, provide Ava a competitive advantage, and/or reduce costs for Ava customers while remaining cost competitive with established market alternatives. Innovation will be recognized among projects that:

- a. Include new or improved technologies or methodologies with a demonstrated potential feasibility;
- Achieve scale for existing technologies to benefit Ava customers;
   or
- c. Reduce or eliminate barriers to adoption of local, distributed, and scaled technologies.

## D. Location

Ava prioritizes projects in the following order:

- 1. Projects located within Ava's service territory
- 2. Projects located within California.
- 3. Out-of-state projects

## E. Environmental Stewardship

Ava is committed to leading by providing customers with energy that delivers benefits for air, water, and the natural environment while avoiding impacts to important lands, species, and waters.

- 1. Ava will prioritize projects that:
  - a. Are proposed on urban or previously disturbed sites.
  - Avoid sensitive habitats for any endangered plant or animal species or other environmentally sensitive areas<sup>1</sup> and comply with conservation plans such as the Desert Renewable Energy Conservation Plan (DRECP)<sup>2</sup>;
  - c. The developer and local land use authority have established an enforceable development agreement which, in part, sets forth measures to mitigate impacts to sensitive habitat or environmentally sensitive area; then
  - d. The developer commits to measurable offset efforts within the vicinity of the proposed project.

## F. Benefits Accruing to Equity Priority Communities

Ava, supported by the Local Development Business Plan, seeks to deliver economic, environmental, and social benefits to the communities that it serves by providing cleaner electricity at competitive rates, developing local resources that drive new investments, and creating increased demand for high-paying jobs. Ava is committed to helping low-income and environmental justice communities overcome barriers to their access to public investments, resources, education, and information about energy service and policy.

Ava will prioritize projects that:

1. Invest in low-income and environmental justice communities, with additional preference for communities within the Ava service territory.

<sup>&</sup>lt;sup>1</sup> Refer to Nature Conservancy's <u>Power of Place West</u> Report (2022).

<sup>&</sup>lt;sup>2</sup> Refer to Desert Renewable Energy Conservation Plan (2016).

- Demonstrate contact and collaboration with the local community.
   organizations and stakeholder groups representing a broad diversity of
   demographics and interests, particularly low income and environmental
   justice communities, to identify and address benefits and impacts of
   projects and ensure project benefits are communicated and accessible to
   the local community.
- 3. Commit to meaningful engagement<sup>3</sup> with local communities throughout the entitlement and construction processes to identify and address benefits and impacts of projects and ensure project benefits are communicated and accessible to the local community.

## **III. EVALUATION, SELECTION AND REPORTING**

- A. Ava will assess and select project proposals in accordance with this Project Selection Methodology and report detailed results of such assessment at the time of the project approval.
- B. Ava's annual report will compile and report information regarding the impact of the Project Selection Methodology.

#### IV. CA COMMUNITY POWER

- A. Ava's representative to the CA Community Power Board shall advocate for adoption of a CA Community Power Workforce, Environmental, and Environmental Justice Standards for Clean Energy Project Selection Policy consistent with the terms of this resolution.
- B. Ava's representative to the CA Community Power Board shall advocate to form a public advisory committee, including labor, environmental and equity representatives, to ensure transparency and public engagement in CA Community Power's operations and procurement practices.

<sup>&</sup>lt;sup>3</sup> Meaningful engagement means implementing five recommendations for best practices from <u>Building a Just Energy Future</u> - A framework for community choice aggregators to power equity and democracy in <u>California</u>, 2020 report by the <u>California Environmental Justice Alliance</u>



## Raissa Arielle Kasa Ngoma <rngoma@avaenergy.org>

# 11/8 - FPAC Subcommittee Meeting Agenda Item 4 - Comments

1 message

'Teresa Cox' via Clerk of the Board <cob@avaenergy.org>

Wed, Nov 8, 2023 at 12:31 PM

Reply-To: Teresa Cox <tcox@fremont.gov>

To: Adrian Bankhead <abankhead@avaenergy.org>, "COB@ebce.org" <COB@ebce.org>

Chair Bauters and Honorable Directors,

While I am not available to attend today's discussion of Item 4, I did want to share my thoughts with the subcommittee.

First let me express my gratitude to the staff for preparing this item for our consideration. The staff's draft guidelines and policy builds nicely off the recommendations from the CCA Workforce & Environmental Justice Standards Alliance.

The handful of revisions proposed by the W&EJ Allliance in the table attached to their letter of November 7 strike me as thoughtful additions that will strengthen the staff's draft.

I would recommend that we forward the staff proposal to the Board of Directors and direct the staff to prepare an option to incorporate these revisions.

Thank you!

Sincerely,

Teresa Cox Ava Community Energy Director City of Fremont Representative

#### **Teresa Cox**

CITY COUNCIL MEMBER, DISTRICT 6

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