



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Lori Mitchell

**SUBJECT: PROCUREMENT AUTHORITY
FOR COMMUNITY ENERGY**

DATE: February 6, 2023

Approved

Date

2/10/23

RECOMMENDATION

Adopt a resolution increasing the authority of the Director of the Community Energy Department or designee to negotiate and execute short- and medium-term agreements for the procurement of power products from \$352,900,000 to \$412,900,000 in calendar year 2023 and from \$337,300,000 to \$427,300,000 in calendar year 2024 to be paid solely from the San José Clean Energy Operating Fund.

SUMMARY AND OUTCOME

On October 18, 2022, the City Council increased the authority of the Director of the Community Energy Department (Director) to procure power supply products. Since this time prices have significantly increased; therefore, staff recommends an increase of the Director's authority for calendar years (CY) 2023 and 2024 for the procurement of power products, including energy, resource adequacy, renewables, renewable energy credits, and low carbon power and attributes.

Approving the recommendation allows the Director to procure power supplies for San José Clean Energy (SJCE) to meet recommended risk management coverage thresholds and regulatory requirements and increases the procurement total from \$352,900,000 and \$337,300,000 to \$412,900,000 and \$427,300,000 for CY 2023 and 2024, respectively. Long-term agreements for renewable power and battery storage approved by the City Council are not included in these limits. The recommendation is consistent with the City Council Policy 1-23 Energy Risk Management Policy and SJCE's Energy Risk Management Regulations (Attachment A). The authority will permit the Department to buy power products needed to meet SJCE's load and achieve the City's renewable power content goals for SJCE.

BACKGROUND

On March 19, 2019, the City Council authorized the Director or designee to negotiate and execute power supply contracts for energy, renewable energy, renewable energy credits, resource

adequacy, and low carbon power and attributes using the Edison Electric Institute Master Agreement, which is an industry standard form master agreement utilized for the purchase and sale of wholesale electricity. On June 4, 2019, the City Council authorized the Director or designee to negotiate and execute medium- to long-term contracts using the Edison Electric Institute Master Agreement for a term of up to twenty years to procure resource adequacy.

On October 18, 2022, the City Council increased the Director's or designee's procurement authority for CY 2023 through 2027 to: \$352,900,000 in CY 2023, \$337,300,000 in CY 2024, \$321,600,000 in CY 2025, \$280,700,000 in CY 2026, and \$269,800,000 in CY 2027. City Council also approved long-term agreements for renewable power and battery storage that are not included in these limits. SJCE will continue to bring forward for City Council consideration all new long-term power supply agreements.

On February 3, 2023, the City Manager's Risk Oversight Committee (consisting of seven voting members: the City Manager or their designee, the Director of Community Energy, the Director of Finance, the City's Risk Manager, the Budget Director, the Community Energy Department's Deputy Director of Power Resources, and the Community Energy Department's Division Manager of Risk Management, Contracts and Administrative Services) approved a coverage ratio of 125% for CY 2023 and 2024 and making a recommendation to the City Council to increase the authority granted to the Director or designee to negotiate and execute short- and medium-term agreements, subject to the Energy Risk Management Policy and the appropriation of funds, for the procurement of power supply products as described in this memorandum.

ANALYSIS

Staff recommends increasing the Director's authority by \$60,000,000 in CY 2023 and by \$90,000,000 in CY 2024 to procure short- and medium-term energy products in an amount not to exceed \$412,900,000 in CY 2023 and \$427,300,000 in CY 2024. Staff recommends this additional delegation of authority to the Director or designee to:

- Procure power to meet maximum coverage ratios (125%) authorized by the Risk Oversight Committee for 2023 and 2024, pursuant to the Energy Risk Management Regulations. Staff recommends targeting high coverage ratios due to high market prices. This will limit the amount of power SJCE purchases in the day-ahead and real-time markets which can be more expensive.
- Procure required resource adequacy products. Resource adequacy continues to increase in price due to scarcity in the market.
- Procure renewable power and renewable energy credits. These products have increased in price due to scarcity and project delays in 2022.

The Department plans to reduce exposure to increasing power prices and other market risks by procuring more energy in the forward market. The coverage ratio is the amount of power relative to the expected load that the Department purchases in the forward market. The Department recommends purchasing in the forward market sufficient energy to approach the

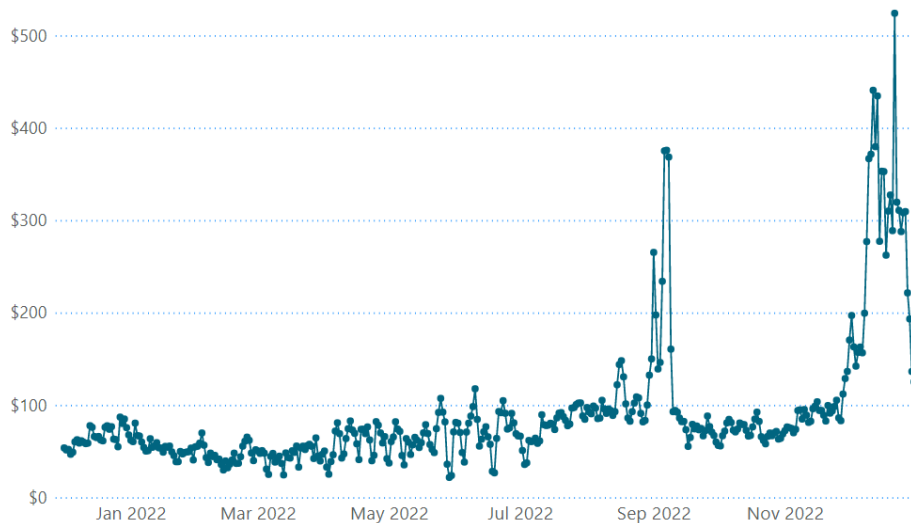
upper limit of the coverage ratio range approved by the Risk Oversight Committee pursuant to SJCE’s Energy Risk Management Regulations.

Electricity Prices

Load-serving entities, such as Community Choice Aggregators like SJCE, are required to purchase power to meet the load of its customers during each hour of each day, either by purchasing in the forward market, or by paying the California Independent System Operator for power in the day-ahead and real-time markets. When prices are high, it is recommended to purchase more energy in the forward market to ensure customers are not exposed to short-term market disruptions and higher prices in the day-ahead and real-time markets. Buying at the higher range of the coverage ratio range will result in having bought supply that exceeds expected load in some hours to ensure that most hours are covered. Revenues from the sale of any excess supply will reduce net power costs. It is important to note that extreme weather events typically result in higher-than-expected load and higher power prices.

Energy prices have continued to increase since October of 2022. For example, over the final quarter of 2022, the cost to purchase power for 2023 rose by 45 percent due to multiple factors including extreme weather, low natural gas storage in the Pacific region of the United States, and the war between Russia and Ukraine limiting European gas supply and increasing demand on North American gas exports. In addition, while California received substantial rain in late December 2022 and early January 2023, for the past several years there has been low hydroelectric availability in California, and severe drought conditions have existed across the western United States limiting the supply of hydroelectric power. Chart 1 depicts California Independent System Operator average day-ahead prices of 2022 and reflects the increase in power prices in September and December.

Chart 1. California Independent System Operator Average Day-Ahead Prices 2022



Resource Adequacy

Resource adequacy is a power product required by existing federal and state regulations. A load-serving entity, such as SJCE, pays generators or demand response providers to make their power available during high demand hours to ensure there is adequate power supply. The resource adequacy product is the capacity to provide energy or load reductions during peak load conditions. The California Public Utilities Commission and the California Independent System Operator require all utilities, including Community Choice Aggregators, to procure resource adequacy to meet their obligations. California is currently experiencing a shortage of resource adequacy in the market due to new projects being delayed or failing to come online, natural gas and nuclear power plant retirements, and regulatory uncertainty. Resource adequacy prices have risen to historic highs. The increase in procurement authority will allow the Department to procure resource adequacy as it becomes available.

Renewable Energy Credits

Renewable energy credits are credits for generating renewable power. SJCE needs to buy more renewable energy credits in 2023 and 2024 than it had planned to meet its renewable power content goals. Two projects that were scheduled to come online by the end of CY 2022 were delayed and replaced by projects with later online dates, due to supply chain disruptions and permitting issues. Prices have increased due to project delays throughout California related to supply chain disruptions and uncertainty related to the United States Commerce Department's months-long investigation into whether imports of solar panels from Cambodia, Malaysia, Thailand and Vietnam are circumventing tariffs.¹

Procurement Authority

Table 1 shows the Department's existing procurement authority, the additional short-and medium-term procurement authority requested, and the resulting total authority. Long-term agreements for renewable power and battery storage approved by the City Council are not included in these numbers. Table 1 also shows the Department's expected net power costs. The Net Expected Cost is the sum of the short-, medium- and long-term power costs in each year minus the estimated revenues from the sale of supply not needed to meet load in particular hours. Additional detail is available in Attachment B.

It is important to note that the Department does not recommend increasing rates at this time. SJCE revenues are sufficient to cover the increased costs of power; however, SJCE will likely build reserves slightly slower than anticipated. SJCE will continue to monitor market conditions and bring forward recommendations as needed.

¹ <https://www.commerce.gov/news/press-releases/2022/12/department-commerce-issues-preliminary-determination-circumvention>

Table 1. Recommended Short- and Medium-Term Authority Increase

Calendar Year	Existing Authority	Requested Additional Short- and Medium-Term Authority	Authority with Request	Net Expected Cost	Target Coverage Ratio
2023	\$352,900,000	\$60,000,000	\$412,900,000	\$392,000,000	125%
2024	\$337,300,000	\$90,000,000	\$427,300,000	\$404,000,000	125%

Climate Smart San José Analysis

The recommendation in this memorandum aligns with one or more Climate Smart San José energy, water, or mobility goals. Procurement of power products is needed for SJCE to meet its financial and regulatory requirements, and to meet the City’s renewable power content goals.

EVALUATION AND FOLLOW-UP

No further evaluation and follow-up required at this time.

COST SUMMARY/IMPLICATIONS

The recommended actions will impact SJCE Operating Fund’s revenue and expenditure estimates for FY 2022-2023. The Department is recommending adjustments to the Energy Sales revenue estimate (increase of \$94.0 million, for a total modified budgeted estimate of \$505.9 million) and the Cost of Energy expenditure allocation (increase of \$71.7 million, for a total modified budget of \$365.0 million) as part of the 2022-2023 Mid-Year Budget Review scheduled for City Council consideration on February 14, 2023. The Department will continue to refine revenue and expenditure projections during the year and will recommend additional budget actions, if needed, as part of future budget processes.

COORDINATION

This memorandum has been coordinated with the City Attorney’s Office, the City Manager’s Budget Office, and the Finance Department.

PUBLIC OUTREACH

This memorandum will be posted on the City’s Council Agenda website for the February 28, 2023 Council meeting.

COMMISSION RECOMMENDATION AND INPUT

No commission recommendation or input is associated with this action.

CEQA

Not a Project, File No. PP17-003, Agreements/Contracts (New or Amended) resulting in no physical changes to the environment.

PUBLIC SUBSIDY REPORTING

This item does not include a public subsidy.

/s/
LORI MITCHELL
Director, Community Energy

For questions, please contact Lori Mitchell, Director of Community Energy Department, at (408) 535-4880.

ATTACHMENT

Attachment A – Risk Management Regulations
Attachment B – Procurement Authority Request for CY 2023-2024 and FY 2023/2024-2024/2025



ENERGY RISK MANAGEMENT REGULATIONS

Version 1.0

Effective: February 28, 2022

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Objective of the Energy Risk Management Regulations

San José Clean Energy (SJCE) provides a variety of wholesale and retail energy services to customers within the service area. SJCE's goals regarding the provision of such services include, but are not limited to: (i) providing its customers with the lowest cost supply portfolio based on certain policies that may be adopted by the City Council from time to time (e.g., clean energy policy goals); and (ii) maintaining reliable electric service to its 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 its customers (e.g., resource optimization).

The purpose of these Energy Risk Management 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 SJCE's comprehensive energy risk management program.

Part I: Energy Risk Management

1. Scope of Regulations and Procedures

1.1. Overview

The City Council adopted an Energy Risk Management Policy (ERMP) which addresses risks faced by SJCE arising from SJCE's procurement activities on behalf of its customers in Energy and related markets. SJCE will develop metrics that guide procurement decisions which include analysis of net open position (discussed further in Appendix 9), and mark-to-market position. SJCE staff and Wholesale Market Consultant provide scenarios of portfolio costs under low and high market costs for the open position. The ERMP provides 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 shall 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 SJCE'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 SJCE, 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 SJCE service. This third portion of demand uncertainty is unique to CCAs and the risks associated with it need to be carefully considered. Though the CCA is the default service provider, the ability of the customers to opt out and choose the investor owned utility or other method of sourcing energy creates a certain level of uncertainty in SJCE's revenue stream. Monitoring opt out activity of other CCAs with longer histories may indicate possible trends in opt out rates, which poses some challenge in the ability to effectively plan for long-term resources (customer opt-out risk).

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, accounting for volumetric uncertainty related to long-term resource commitments, and developing a regular update of load and resource forecasts. Customer opt-out risk is managed by maintaining a strong relationships with the local community and stakeholders, developing products and services that align with customer's values and drivers, and actively engaging and advocating the interests of SJCE and its customers in regulatory, legislative, and policy proceedings.

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 SJCE to potential cost increases or loss in value to its customers. SJCE 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

SJCE will focus on the price risk of its entire portfolio which is comprised of many individual transactions. When managing risk, SJCE will focus on 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 SJCE needs to buy 10,000 MWh of electric power for the last quarter of the coming year (October through December). On January 15th, the market price for that power was \$28.90/MWh, for a total cost of \$289,000. On March 15th, the market value was \$39.00/MWh, or \$390,000. If the budget was set as of the January 15th market price, but the product was not purchased until March 15th, then the cost would be \$101,000 more than budgeted.

Price risk can be viewed as the possibility of a change in the Mark- to-Market (MTM) value of a transaction. To illustrate this definition, assume as above that the 10,000 MWh for October – December was purchased on March 15th for \$390,000. If the price for that product drops to \$25/MWh or \$250,000 on September 15th the MTM of the transaction is negative \$140,000 as of September 15th.

2.3. Counterparty Credit Risk

Counterparty credit risk means risks which SJCE incurs as the result of transacting 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 six general types:

- a. Transacting counterparties may fail to render payment for Energy related products delivered, or otherwise default under the terms of the transaction;
- b. Transacting counterparties may fail to deliver Energy related products;
- c. 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;
- d. Counterparties may refuse to extend credit to SJCE;
- e. A counterparty or its guarantor may seek bankruptcy protection; and
- f. A counterparty may go out of business.

Counterparty credit risk can be mitigated through counterparty diversification, credit risk premiums, covenants, and requiring posting of collateral. Credit derivatives (credit default swaps) are not permitted.

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:

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

- h. Regulatory uncertainty can interfere with SJCE’s ability to conduct long-term planning and cost projections.

Regulatory and political risks are difficult to measure and manage. State regulatory agencies, including the California Public Utilities Commission (CPUC), the California Energy Commission (CEC), and the California Independent System Operator (CAISO), define California energy markets through regulatory requirements and tariff designs. For instance, the CPUC regulates investor owned utility (IOU) cost recovery mechanisms and authorizes IOUs to impose “exit fees” on customers leaving IOU service to take CCA service. These exit fees or Power Charge Indifference Adjustment (PCIA) fees are intended to ensure past IOU investment costs are borne by all electric customers, on whose behalf the IOU made initial generation investments. The CPUC has introduced some market uncertainty by approving changes to the underlying methodology used to determine PCIA levels and thereby increasing CCA customer costs.

SJCE has an active legislative and regulatory group which monitors and influences the outcome of legislative and regulatory actions for the benefit of SJCE and its customers. The City of San José seeks a robust and active legislative advocacy function. A team of key City Department staff developed, reviewed, and updated legislative priorities which are consolidated under the City’s Legislative Guiding Principles. This document provides a framework for directing the City’s support, opposition, or sponsoring, or co-sponsoring of State and Federal legislation. SJCE’s team is also focused on a number of CPUC proceedings that could impact operations and actively submitting comments to influence the outcome.

2.5. Operational and Business Risk

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

- a. An organizational structure that is ineffective in addressing risk (i.e., the lack of sufficient authority to make and execute decisions, inadequate supervision, inadequate internal controls, incomplete and untimely reporting, failure to separate incompatible functions, etc.);
- b. Absence, shortage or loss of key personnel;
- c. Lack or failure of facilities, equipment, systems and tools such as computers, software, communications links and data services;
- d. Inability to meet financial obligations incurred in the course of wholesale operations;
- e. 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.;
- f. Exposure to customer defection in favor of competing products offered by IOUs;
- g. Inability to collect on customer accounts due to changes in economic conditions;

- h. Errors or omissions in the conduct of business, including failure to execute transactions, violation of guidelines and directives, etc.; and
- i. Relying on third parties for key function, for example the regulatory requirement that CCAs rely on the IOU for distribution and billing, and changes in SJCE's relationships with key suppliers, service providers, or interruptions in the supply chain.

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. Business risks are mitigated by adequate planning budgeting, training of staff, maintaining the appropriate insurance coverage, funding an operating reserve, and ensuring the department has a credit facility to support cash flow needs.

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. Market risks are mitigated by adequate planning and following key market activities, funding an operating reserve, and ensuring the department has a credit facility to support cash flow needs.

2.7. Legal Risk

Legal risk arises when a counterparty is not capable of entering into, or has procedurally failed to obtain appropriate approvals to enter into, a contract or fails to meet legal obligations. Legal risk is managed externally by ensuring counterparty representatives are authorized by the counterparty. Regarding long-term contracts, SJCE 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 15.3 of Part II of these Regulations which requires staff to document the business reasons for awarding Energy contracts to counterparties to whom SJCE has concentrations above the recommended limits and developing an integrated resource plan which includes appropriate diversification.

Every two years, consistent with the schedule promulgated by the CPUC, SJCE shall develop an integrated resource plan that includes an adequate level of diversification

in fuel type, contract duration, geographic location, counterparties, pricing terms, cash reserves and types of products.

The Middle Office maintains a report with the respective procurement by counterparty. The Front Office reviews this report prior to undertaking procurement to ensure that concentration limits are maintained.

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.

Counterparty liquidity risk is mitigated by regular, up-to-date credit evaluations, credit enhancements (if required), counterparty diversification. Asset liquidity risk is mitigated by utilizing contractual instruments (e.g., approved enabling agreements). The City has created a deposit account that shall at all times be maintained and segregated from all other funds and accounts of the City. SJCE will continue to fund an operating reserve account until reaching and maintaining 180 days of cash in reserves.

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, or maintaining minimum 100% collateral, and actively monitoring the creditworthiness of the custodian.

3. Risk Management, Energy Trading 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 SJCE are outlined below.

3.1. Balanced Portfolio

SJCE shall strive to maintain an integrated and balanced portfolio of resources to cover its customers' load serving obligations, maintain the value of SJCE's assets, and manage resources within SJCE's financial requirements. SJCE will utilize the portfolio optimization tools that provide the insights necessary to make procurement decisions and include an analysis of the net open position limits (discussed further in Appendix 9). SJCE's Wholesale Market Consultant also provides scenarios of portfolio costs under low and high market costs for the open position.

3.2. Minimum Coverage Requirements

3.2.1. Minimum Coverage Requirements for Energy

SJCE shall strive to manage price and volatility risk by implementing a diversified procurement strategy purchasing energy products to hedge costs for serving load. SJCE shall strive to purchase amounts of energy based on defined minimum coverage thresholds as set forth in the Appendix 9 (Recommended Coverages) of these Regulations. SJCE shall develop a procurement strategy focused on hedging against the risk of open load positions, as measured over time, and to mitigate SJCE's exposure to market price volatility and other pricing risk. The actual covered positions taken by SJCE, reflected as a percentage of forecasted load, may deviate from the recommended coverages based upon SJCE's staff evaluation of current market conditions and other applicable requirements (e.g., regulatory requirements, anticipated regulatory and legislative changes such as: Direct Access expansion, increased exit fees, reduced autonomy on procurement decisions, etc., quantity/ production uncertainty of long-term power purchase agreements)

3.2.2. Minimum Coverage Requirements for Capacity

SJCE is required to acquire certain types and amounts of Resource Adequacy capacity, as further set forth in applicable regulatory requirements, including, but not limited to the CPUC Resource Adequacy Filing Guide. In the event that SJCE is not able to acquire adequate amounts of Resource Adequacy capacity, SJCE will engage in regulatory and legislative proceedings in order to address supplier and compliance issues.

3.3. Purchases to Cover Load Serving Obligations (No Speculation)

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

3.4. Authority to Transact Approved Products

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

3.5. Measurement of Risks

SJCE 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.

Risk management reports that are presented to management and the ROC are described in Appendix 7 of these Regulations. Each member of the ROC is responsible for raising significant issues that could impact SJCE or the City of San José more broadly. Each member of the ROC can call a special meeting to discuss significant issues.

3.6. Risk Mitigation

SJCE will mitigate risk exposure within the broad objectives of optimizing the value of SJCE's assets, and serving customer loads at cost effective and stable prices. SJCE will utilize the portfolio optimization tools to track the various industry standard metrics and guide the procurement decisions. Transaction limits authorized in Appendix 4 shall comply with the requirements described in Section 3.7 and 3.8. Current 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.

Risk limits may be employed to indicate either:

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

3.7. 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.

- a. Enable staff to conduct required business effectively
 1. Volume and dollar limits are adequate to reliably meet physical and financial requirements at prevailing prices
- b. Reflect the risk-reward tradeoffs consistent with SJCE's risk tolerance
 1. Duration, volume, dollar and exposure limits are appropriate for associated risks
- c. Favor strong counterparty attributes
 1. Creditworthiness and financial strength
 2. Favorable contractual terms
 3. Demonstrated performance
- d. Promote fair and competitive transacting process
 1. Should not narrow field to a single supplier or unduly favor any supplier

- e. Promote diversification
 - 1. Avoid too great a concentration or exposure with any single supplier
- f. Facilitate operational flexibility
 - 1. Allow for load uncertainty, resource uncertainty, and other contingencies
- g. Facilitate conformance to the ERMP and Regulations
 - 1. Clear, measurable, consistent, and enforceable
- h. Balance burden of monitoring and enforcing limits with value
 - 1. Limits shall not be so complex and cumbersome that it takes too many resources to manage

3.8. Portfolio Risk Guidelines

In developing a Portfolio, SJCE must take into account:

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

Risk limits may be developed and 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.

3.9. Transaction Capture Process

All transactions¹ of Approved Products must be formally and officially documented by SJCE. Transaction capture procedures shall address all the following elements:

- a. Authorization/Approval (e.g., participant authorization form as used in the market purchase program agreement);
- b. Competitive bidding;
- c. Written commitment to the transaction;
- d. Confirming the transaction with the counterparty with a written and executed Confirmation;
- e. Actual product delivery; and
- f. Billing and settlement.

4. Roles and Responsibilities for Energy Risk Management

4.1. City Council

The Council has the ultimate oversight over SJCE operations and is responsible for

¹ 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.

establishing an organizational-wide framework for risk management and ensuring that risk management results are achieved as planned. The Council shall approve and establish organizational policies for risk management and delegate to the City Manager the responsibility for implementing the ERMP.

4.2. City Manager

The City Manager serves as the chief administrative officer of the City. The City Manager is responsible for administering City operations and staff, advising the City Council, managing the day-to-day delivery of public services, and implementing Council policies. The Council approved the establishment of the ROC and the City Manager may delegate certain functions to the ROC.

4.3. Director of Community Energy

The Director of Community Energy (“Director”) has overall responsibility for implementing the ERMP and for communicating risk management issues to the City Manager and Council. The Director shall be responsible for delegating specific duties for carrying out the policy and insuring compliance with it by all affected SJCE employees or consultants.

4.4. Risk Oversight Committee

The Risk Oversight Committee (ROC) is responsible for overseeing compliance with risk management policies within SJCE. The ROC serves as the highest level of organizational risk management. The ROC shall consist of seven voting members: the City Manager or his or her designee, the Director of Community Energy, the Director of Finance, the City’s Risk Manager, the Budget Director, the Community Energy Department’s Deputy Director of Power Resources, and the Community Energy Department’s Division Manager of Risk Management, Contracts and Administrative Services. The City Attorney will provide legal advice to the ROC. A quorum for the ROC to do business shall be not less than five, including 3 non-SJCE members, ROC Committee members, or their designees.

Each ROC member shall have one vote, and shall appoint a voting alternate. All correspondence shall be provided to the ROC members and alternates. The ROC will meet regularly, to act on the responsibilities mentioned above. Minutes to each meeting will be maintained per SJCE policy.

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.

ROC responsibilities and delegated authorities are:

- a. Reviewing overall risk tolerance thresholds related to Volumetric Risk, Price Risk, Counterparty Credit Risk, Regulatory and Political Risk, Operational

Risk, Market Risk, Legal Risk, Concentration Risk, Liquidity Risk, Custodial Credit Risk, Business Risk;

- b. Reviewing Management Reports as outlined in Appendix 7;
- c. Reviewing and approving variance requests to the ERMP and these Regulations, and Exception Reports to these Regulations;
- d. Reviewing and recommending changes to ERMP policies prior to Council approval;
- e. Recommending appropriate cash reserve levels to support SJCE's Approved Product transaction activities;
- f. Reviewing and assessing the adequacy of the risk reports generated by the risk management function;
- g. Reviewing and recommending appropriate transaction authority levels and delegation of authority to SJCE personnel, 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;
- h. Reviewing, recommending, and approving other changes to these Regulations, as needed.

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

4.5. 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 SJCE. As part of these functions, the Front Office is responsible for transacting Approved Products on behalf of SJCE, in accordance with certain transactional limits, as further defined in these Regulations.

All Approved Products 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 Deputy Director of Power Resources is responsible for managing the Front Office. The Front Office may also utilize support from SJCE's Wholesale Energy Services Provider and consultants to carry out the duties described herein.

The Front Office is primarily responsible for:

- a. Day-to-day purchases and sales of Approved Products for SJCE;
- b. Developing transaction strategies that are consistent with SJCE's ERMP and established risk tolerances;
- c. Ensuring infrastructure (hardware/software) is in place to support accurate

- and timely measurement and reporting of risk;
- d. Ensuring that procedures and systems can effectively and efficiently support the Front Office activities;
 - e. Ensuring training is completed by Front Office staff, as required by CAISO, to comply with minimum participation requirements for participation in CAISO markets;
 - f. Conducting needs analysis for meeting load forecasts, optimizing the value of resources, and satisfying regulatory and/or compliance requirements;
 - g. Recommending transactions for authorization and approval;
 - h. Proposing modifications to commercial provisions of City Council approved contracts to the Director of Community Energy for consideration and approval, consistent with the applicable City Council resolutions and in consultation with City Attorney's Office;
 - i. Purchasing and/or selling Approved Products and services based on meeting the load forecast, optimizing the value of SJCE assets, and satisfying regulatory and/or compliance requirements;
 - j. Conducting sales transactions for surplus resources;
 - k. Nominating and managing Congestion Revenue Rights in the annual and monthly allocation processes;
 - l. Preparing and submitting bids in the Congestion Revenue Rights annual and monthly auction processes;
 - m. Transacting Approved Products to satisfy applicable regulatory and compliance requirements (e.g., renewable energy requirements, emission compliance obligations, etc.);
 - n. Development and maintenance of Renewable Energy Products compliance tracking procedures and management of the WREGIS account;
 - o. Development and maintenance of GHG reduction compliance tracking procedures;
 - p. Competitively shopping and negotiating transactions in accordance with the ERMP;
 - q. Generating trade confirmations (as needed);
 - r. Ensure transactions are recorded timely and accurately;
 - s. Identifying new products and markets that may add value to SJCE;
 - t. Prepare reports as outlined in Appendix 7 of these Regulation;
 - u. Develop long-term planning and forecasting of Energy supply requirements;
 - v. Initiate requests for new counterparty reviews; and
 - w. Prepare and maintain written Front Office procedures.

4.6. Middle Office

The duties of the Middle Office staff are conducted by SJCE's Risk Management, Contracts and Administrative Services Division. 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 Division Manager of Risk Management, Contracts and Administrative Services is responsible for managing the Middle Office. The Middle Office may also utilize

support from the Division Manager of Budget and Financial Planning, SJCE's Wholesale Energy Services Provider and other consultants to carry out the duties described herein.

Community Energy Department – Middle Office

- a. Managing and overseeing risk, including reviewing controls, and valuation and risk management methodologies;
- b. Monitoring SJCE's current and potential risk exposures and ensuring compliance with the ERMP and these Regulations;
- c. Ensuring Middle Office staff is fully trained on their responsibilities;
- d. Verifying that Approved Product transactions are authorized and executed based on the requirements of the ERMP and these Regulations, and are properly recorded.
- e. Reviewing and approving changes and provisions relating to credit terms in enabling agreements in consultation with City Attorney;
- f. Monitoring the effectiveness of the internal control structure, including the segregation of duties and independence of oversight;
- g. Maintaining a list of individuals who are authorized to approve and execute Approved Product transactions;
- h. Maintain forward price data;
- i. Preparing, reviewing, and distributing all risk management reports;
- j. Processing and verifying market data (where market data is available) provided by the Front Office;
- k. Evaluating the performance of Approved Product procurement and hedging transactions relative to market indices and approved budget;
- l. Notifying the ROC of credit limit exceptions;
- m. Serving as secretary of the ROC, developing ROC agendas, taking and compiling meeting minutes, and distributing meeting materials;
- n. Maintaining archives of risk management policy and regulation documents;
- o. Coordinating risk management education and training;
- p. Ensuring settlements are made timely in accordance with contract terms;
- q. Verifying and reporting compliance with procedures as reflected in the transaction tracking documentation;
- r. Crosschecking counterparties confirmation documents for individual trade transactions to SJCE's own records of those transactions, and investigating and resolving exceptions; Disputing any charges from the ISO in coordination with SJCE's Wholesale Market Consultant;
- s. Various credit management duties including Mark-to-Market analysis in coordination with Finance (Middle Office Support); and
- t. Prepare and maintain written Middle Office procedures.

Finance Department – Middle Office Support

- a. Finance Department- Developing and implementing counterparty credit risk policies, procedures and limits as approved by the ROC;
- b. Prepare and maintain written Middle Office Finance Department procedures.

- c. Prepare Risk Management Reports (Concentration Balance, Portfolio Performance, Credit Limit Status by Counterparty and Master Agreements).

4.7. Back Office

The Back Office staff is primarily responsible for settlement of invoices, verifying transactions, bookkeeping and accounting. The Back Office is responsible for providing assurance of accurate payment records including CAISO settlement payments. The Division Manager of Budget and Financial Planning is primarily responsible for managing the Back Office. The Back Office may also utilize support from SJCE's Wholesale Energy Services Provider and consultants to carry out the duties described herein.

The Back Office is responsible for the following duties:

- a. Preparing, monitoring and recommending adjustments to the budget in collaboration with the City Manager's Budget Office;
- b. Confirming amounts billed for Approved Product transactions;
- c. Processing accounts receivable and payable and ensuring timely payments;
- d. Maintaining accounting records and preparing quarterly financial statements and reports:
 - 1. Statement of Fund Net Position
 - 2. Statement of Revenue, Expenses, and Changes in Fund Net Position
 - 3. Statement of Cash Flow;
- e. Performing and monitoring invoicing and settlements with the California ISO;
- f. Verification of transaction data entry; and
- g. Preparing and maintaining written Back Office procedures.

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 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 SJCE'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 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 SJCE. Transacting Energy related products that are not authorized as Approved Products by the ROC is strictly prohibited, unless the ROC grants a variance

authorization in advance.

All transactions shall conform to the following general principles:

- a. Transactions are for an Approved Product;
- b. Transactions are duly authorized and within risk limits, and shall not cause either aggregate or individual counterparty credit limits to be exceeded;
- c. Transactions are executed with a counterparty with an approved credit limit;
- d. Transactions shall utilize contract terms intended to minimize the risk of loss if a counterparty fails to deliver, take delivery or pay for transactions provided;
- e. Transactions are executed and documented following standardized procedures; and
- f. Transactions are 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.

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

5.3. Compliance Exceptions and Reporting

5.3.1. 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:

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

5.3.2. Exception Reporting

In the event a compliance exception occurs, the Director is responsible for notifying the ROC within 48 hours after it is identified and ensuring that the Front Office prepare a report (Exception Report) to submit to the ROC at its next meeting. The Report shall identify the issue or violation, and discuss any alternative remedial actions, document the action taken in response, and describe the steps that should be taken to prevent a reoccurrence of the event. A summary of all exceptions shall be reported annually to the City Council by the Director, unless the City Manager decides they should be reported more frequently.

5.4. Unauthorized Transactions

The following provides the minimum procedures for managing unauthorized transactions:

- a. If a transaction is unauthorized, the Director of Community Energy shall determine the course of action. If the transaction involves market risk, the Director of Community Energy may enter into a risk neutralizing transaction, or attempt to unwind the transaction with the original counterparty. The offsetting transaction only offsets market price; operational and credit risk may still exist. Unwinding the transaction would likely remove all risk from the trade. These options may not be possible, which is why it is important to ensure compliance with the ERMP and Regulations and to maintain an adequate operating reserve.
- b. Once available corrective steps have been taken, the Director of Community Energy shall review the transaction to understand if the risks have been reduced or fully offset and report the results in the Exception Report to the ROC. The Director of Community Energy is also responsible for working with staff and Human Resources to ensure appropriate steps are taken to ensure unauthorized transactions are minimized. These steps may include additional training and potential disciplinary action, including up to termination of employment.

5.5. 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 SJCE's legal counsel to determine what risks a product may create for SJCE, 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. The Middle Office staff have primary responsibility for presenting risks that SJCE may be exposed to by transacting the new Approved Product. Middle Office staff are responsible for presenting the report to the ROC for consideration and approval. Primary Front Office responsibilities may be delegated by staff to individuals that have special knowledge or expertise of the activity or new product type.

6. Systems, Tools and Training

SJCE employees (or supporting consultants) who are authorized to perform energy risk management functions on behalf of SJCE may request to be provided with the systems and tools to support risk management processes, including:

- a. Accessing in real time to market activity, prices and other data;
- b. Systematically evaluating the financial condition, credit standing and ability to perform of other entities with whom SJCE does business;
- c. Analyzing the trends of supply, demand, market prices and costs of service;
- d. Measuring key indicators and risk parameters; and
- e. Generating complete and accurate management and financial reports.

Funding for systems, tools, and training shall be included in the Department's budget. Subject to appropriation, funding may be related to market risk management functions performed on behalf of SJCE, for the acquisition and maintenance of computer systems, software, communications equipment, data services, and other analytical, measurement, and reporting tools. The Department budget shall also include funding for managers and staff to attend seminars and courses related to risk management, as required to comply with the ERMP and these Regulations.

7. Risk Control Procurement Processes

7.1. Control Principles

SJCE will strive to conduct its energy risk management activities in accordance with best practices of the wholesale electric industry; implementing such practices must be justified and balanced as to their costs and benefits. Processes and control systems must be in place that allow SJCE 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:

- a. Appropriate segregation of duties and internal controls;
- b. Appropriate systems to ensure accurate and effective management reporting;
- c. Necessary resources in place to achieve management objectives;
- d. Attract and retain skilled and trained personnel;

- e. Cross-train and provide cross-coverage;
- f. Employees conducting Energy transactions who are free of conflicts of interest;
- g. Authority and approval delegation that is commensurate with accountability and capability;
- h. Performance measurement and reporting incorporate risk and return measures; and
- i. Ongoing monitoring of control effectiveness.

7.2. Functional Responsibilities

SJCE has integrated, but segregated, responsibilities to control risks in a manner that is 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 City Manager, Director of Community Energy, and ROC. These functional responsibilities are described in detail in Section 4 of these Regulations. SJCE may utilize the services of its Wholesale Energy Services Provider and consultants for performing such functions.

7.3. 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 City Council approval, predefined contractual authorizations, or as defined in the ERMP or these Regulations. SJCE shall develop protocols to address when the volume, and/or budget are not in compliance with approved limits. If the Director of Community Energy identifies violations of the limits defined in Appendices 3, 4 and 6 that materially affect the financial condition of SJCE, SJCE shall assemble the ROC for an emergency meeting. The ROC can choose to be flexible on the limits (within certain parameters) or require action. Front Office staff shall obtain approval from duly authorized personnel with specified *dollar and volume* limits as specified in Appendices 3, and 4 before consummating any transactions for Approved Products.

7.4. Procurement Procedures

Chapter 26.50 of the City of San José Municipal Code (Municipal Code) establishes power procurement processes to allow SJCE to procure energy, capacity, and related services. Under Section 26.50.020 of the Municipal Code, the City, on behalf of SJCE, may enter into contracts to procure Approved Products for a term up to 25 years, under bilateral agreements, net energy metering, Feed-in-Tariffs or through a competitive bidding process. SJCE shall follow the Procurement Procedures described below to ensure that all transactions comply with the procurement requirements set forth in Chapter 25.50 of the Municipal Code.

SJCE's Procurement Procedures shall also be consistent with the City's Procurement and Contract Process Integrity and Conflict of Interest policy, as this policy may be

amended from time to time.

7.4.1. Competitive Bidding

The Front Office shall competitively procure Approved Products scheduled for delivery further than one (1) week in advance. The Front Office must notify known suppliers, as well as suppliers who have asked to be notified, when posting a solicitation in the appropriate section of the San José Clean Energy website. Transactions shall be awarded to the supplier who has submitted the most advantageous quote. The quotes are to be evaluated on an equivalent basis (similar quality, volume, duration and options), adjusted for such factors as transmission, losses, etc. The most advantageous quote shall be determined based on the best value to SJCE. Relevant factors to evaluate value include but may not be limited to: life cycle costs; cash-flow considerations; concentration risk; maintenance costs; operating efficiency; quality; financial strength, capabilities and/or expertise of the bidder; contract terms including collateral terms; adherence to applicable City Council policies.

Front Office staff may also enter into transactions for Approved Products by participating in adequately robust competitive solicitations of others. The Front Office shall submit bids that are in line with market prices for Approved Products, as shown by bids received by the Front Office in its competitive solicitations, broker quotes and/or reputable industry indexes and reports.

Transactions may be undertaken without a competitive solicitation for delivery of an Approved Product within one week or less, or exchange traded (e.g. NYMEX, ISO, ICE, etc.) transactions. This is because such transactions will be limited and time sensitive, or subject to competition through the trading exchange. However, even in the case of transactions for delivery of an Approved Product within one week or less, the Front Office shall seek to obtain bids as competitively as possible from potential counterparties, consistent with the size and type of transaction and counterparty. Front Office staff shall seek to obtain quotes from at least three (3) qualified suppliers, if three (3) qualified suppliers are available. The Front Office shall report to the ROC all purchases entered into without a competitive solicitation since the prior meeting.

7.4.2. Procurement where competitive bidding is not practicable

As a load serving entity, SJCE must procure some particular types of Approved Products such as Resource Adequacy, Renewable Portfolio Standard credits, and low carbon energy to comply with annual and monthly regulatory requirements or, otherwise, face substantial penalties. From time to time, the market for these products may experience extremely limited supply or other disruptions.

The Front Office may identify that certain products have limited supply or are subject to other market disruptions subsequent to competitive solicitations, and/or obtaining additional market data. In these events, the Front Office should make a

recommendation to the ROC that certain products are in limited supply or subject to other market disruptions that make the application of the requirements for competitive procurement contrary to the public interest. The Director may approve proceeding with bilateral procurement if the ROC has concluded that it is consistent with the Risk Management Policy.

The Front Office may undertake purchases of Approved Products pursuant to bilateral discussions during the time period approved by the ROC, provided that such purchases shall be (1) for products required to meet upcoming compliance requirements, due within the next three years; (2) in line with market prices, as shown by bids received by the Front Office in its competitive solicitations, broker quotes and/or reputable industry indexes and reports; and (3) within the budget for the Approved Product approved by City Council. If adverse conditions persist, the Front Office may request the ROC to extend the duration for undertaking procurement pursuant to bilateral discussions.

Any special procurement under this section shall be made with such competition as is practicable under the circumstance. The Front Office shall seek to obtain bids as competitively as possible from potential counterparties, consistent with the size and type of transaction and counterparty. Front Office staff shall seek to obtain quotes from at least three (3) qualified suppliers, if three (3) qualified suppliers are available. The Front Office shall report to the ROC all purchases entered into pursuant to bilateral discussions since the prior meeting.

7.4.3. Joint Solicitations and Public Agency Procurement

SJCE may, without observing the competitive procurement requirements prescribed by this section:

- a. Purchase or acquire Approved Products from another governmental body or agency, or
- b. Contract with any "public agency" (as said term is defined in subsection (b) of Section 800 of the City Charter) for the purchase or acquisition of any Approved Products by such public agency for or on behalf of SJCE under the following circumstances:
 1. Purchase of Approved Products directly from another public agency; or
 2. Joint purchasing of products by two or more public agencies wherein SJCE is included as a purchaser and the public agency used a competitive procurement process, either directly or through a consultant; or
 3. Direct purchases from vendors on terms obtained pursuant to competitive procurement processes undertaken by another public agency which substantially comply with the competitive bidding procedures described in this section and name the City of San José/SJCE either specifically or categorically as a third-party beneficiary of the competitive procurement process.

Pursuant to section 7.4.3.(b), above, SJCE may join other CCAs to procure Approved Products in a coordinated manner using a single consultant. Under direction of Front Office staff and subject to the required authorized approvals; the consultant may provisionally accept offers for Approved Products on behalf of SJCE through a combination of competitive solicitations and bilateral discussions provided that any procurement undertaken through bilateral discussions complies with the written determination requirement set forth in Section 7.4.2. All procurement for Approved Products is subject to approval and execution of a written Confirmation by SJCE.

7.4.4. Commitment to the Transaction

A commitment is a legally binding contract between SJCE 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 SJCE transacting personnel. Commitments may be made electronically in the case of an electronic exchange but must be confirmed with a fully executed confirmation. Transacting personnel shall only transact with counterparties who are listed on the Approved Counterparties List including variances that have been approved by the ROC.

7.4.5. Confirmation

A confirmation is a written document evidencing an electronic commitment made by SJCE transaction personnel and approved as to form by the City Attorney. All confirmations must agree with the transacting person's commitments, as evidenced by an email exchange, or other supporting documentation. All confirmations must be reviewed and confirmed by Middle 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. Any transaction 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. Middle Office staff shall review and confirm the consistency and accuracy of the confirmation using the electronic commitments made by the Front Office staff as needed. All written transaction confirmations shall be stored by SJCE and adhere to City's records retention policies.

7.4.6. Protest

Interested parties may not file protests to procurement decisions authorized under this section unless SJCE has expressly provided a protest procedure in the solicitation.

If a protest procedure is provided, the unsuccessful proposer must submit a protest in accordance with the instructions contained in the solicitation that is the subject of the protest no later than ten (10) calendar days after notice that the proposer

was unsuccessful. The protest must detail the grounds and factual basis, and must include all supporting information. Protests will not be considered for disputes on the grounds that material provision in the solicitation is ambiguous. Failure to submit a timely written protest to the contact will bar consideration of the protest.

The Director shall issue a written decision on the protest. The Director may base the decision on the written protest alone or may informally gather evidence from the person filing the protest or any other person having relevant information.

An appeal of the Director's decision may be filed with the City Council. All such appeals must be in writing, and shall be filed with the City Clerk within ten (10) calendar days of the sending of the Director's decision.

7.4.7. Billing and Settlement

Middle Office staff reviews bills for transactions to verify that the bills match the terms of the contract and the amount of product actually delivered.

Back Office staff ensures issuance of bills to counterparties with outstanding accounts receivable, collection of energy invoices receivable to SJCE and payment of energy invoices payable by SJCE.(this process is generally referred to as the "checkout process").

7.5. 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. Risk Management reports can be categorized into three main areas:

- a. Risk Monitoring – illustrate risks that are faced ahead;
- b. Oversight – show compliance with policies, authorities or risk limits; and
- c. Performance – compares actual past and present performance of the portfolio 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.

7.6. 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:

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

8. Conflict of Interest

In accordance with the California Political Reform Act, consultants shall require each person performing services for SJCE to complete annual conflict of interest filings and disclose investments as required by the FPPC and this Section.

All SJCE employees who are engaged in Approved Product transactions, counterparty credit evaluation, or oversight of the foregoing and are employed in any job classification listed in the SJCE 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, SJCE employees engaged in Approved Product transactions, counterparty credit evaluation, or oversight of the foregoing are barred from direct investment in any company with whom SJCE 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.

SJCE 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 SJCE Conflict of Interest Filing Officer designated in the SJCE Conflict of Interest Code. The SJCE legal counsel will assist in reviewing these forms and

providing legal advice in connection with such reviews on request.² In accordance with the California Political Reform Act, consultants shall cause each person performing services for the SJCE to complete annual conflict of interest filings and disclose investments as required by the FPPC and this Section.

9. 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 City Council for final review and approval. Changes to these Regulations shall be reviewed and approved by the ROC.

Part II: Counterparty Risk Management

10. Organizational Philosophy Toward Counterparty Risk

10.1. Objective and General Risk Policy

SJCE's wholesale energy market activities are directed toward the goal of providing Energy, capacity, transmission, and related services to its customers at the lowest possible cost consistent with an acceptable level of risk. SJCE fulfills its supply obligations 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 SJCE's capital, liquidity and supply reliability by limiting counterparty credit risk and counterparty concentration to acceptable levels.

10.2. Expectations of the ROC

Analytical procedures are required for granting open lines of credit and managing counterparty exposures. However, SJCE 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 Risk Management, Contracts and Administrative Services Division is expected to manage counterparty risks to acceptable levels established by the ROC and approved by the City Council.

The City Council recognizes that SJCE is generally a net buyer of Energy. Exposure to wholesale counterparty credit risk will normally be greater in periods of rising market

² Non-staff ROC members, if any, shall not be subject to the requirements of Section 8 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.

prices due to higher replacement costs in a rising market.

11. Counterparty Risk Definitions

11.1. 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 energy transactions, the counterparty must possess a public credit rating of at least BBB+ (or equivalent investment grade rating) by a nationally recognized statistical rating organization (NRSRO). SJCE staff may consider counterparties for Approved Products, including fixed price energy transactions, with a rating below BBB+ or counterparties with no NRSRO rating on a case-by-case basis with the approval of the ROC. Credit limits for Approved Products shall be determined in accordance with Sections 12, 15 and Appendix 10. If ratings differ between NRSRO's, the lowest available rating will be used for underwriting purposes. All counterparties with a rating below BBB+ (or equivalent investment grade rating) require ROC approval before transacting beyond a minimal transaction amount of \$100,000, and may require credit assurances or other consideration.

11.2. Relaxation of credit limits

As a load serving entity, SJCE must procure some particular types of Approved Products such as Resource Adequacy, Renewable Portfolio Standard credits, and low carbon energy to comply with annual and monthly regulatory requirements or, otherwise, face substantial penalties. From time to time, the market for these products may experience extremely limited supply or other disruptions.

The Front Office may determine that certain products have limited supply or are subject to other market disruptions subsequent to competitive solicitations, and/or obtaining additional market data. If this occurs, the Front Office may make a recommendation to the ROC that certain products are in limited supply, or subject to other market disruptions, which may make the application of the requirements for imposing credit limits contrary to the public's interest. Upon review, the ROC may approve or disapprove the recommendation from the Front Office for a limited time period.

If the ROC approves, the Front Office may undertake purchases of the relevant Approved Products without applying the credit limits, or with such less stringent credit limits as the ROC may deem appropriate during the time period approved by the ROC, provided that such purchases shall be (1) for products required to meet upcoming compliance requirements, due within the next three years; and (2) within the budget for the Approved Product approved by City Council. If adverse conditions persist, the Front Office may request the ROC to extend the duration for undertaking procurement pursuant to bilateral discussions.

11.3. 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.

12. Underwriting Standards

All transacting counterparties, as specified in Section 15, shall be reviewed for creditworthiness. This review shall include:

- a. 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;
- b. Review of at least the two (2) most recent years audited financial statements receiving an unqualified opinion from a certified public accounting firm; and
- c. Other information, as available, from news services, trade publications, financial websites, etc.

For transacting counterparties without NRSRO ratings, Finance (Middle Office Support) shall determine an implied rating according to SJCE's internally-developed methodology and rating scale. Counterparties shall require an implied "investment grade" rating of BBB+ or its equivalent for all Approved Products. SJCE Front Office staff may consider counterparties

for Approved Products, including fixed price energy transactions, with an implied rating below BBB+ on a case-by-case basis with the approval of the ROC. Credit limits for Approved Products based on an implied rating shall be determined in accordance with Section 15 and Appendix 10. All sub-investment grade implied rated counterparties require ROC approval before transacting beyond a minimal transaction amount of \$100,000, and may require credit assurances or other consideration.

13. 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. SJCE's credit exposure measurement is defined by the following formula:

$$\textit{Credit Exposure} = \textit{Current and Prior Month Sales (Net)} + \textit{MTM} - \textit{Credit Enhancements}$$

14. 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 these Regulations, must post at least one (1) of the following types of security prior to the execution of transactions:

14.1. Guarantees and Surety Bonds

Counterparties may provide a guarantee from a third party, or parties, which meets the creditworthiness requirements set forth in 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, SJCE 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 SJCE's legal counsel.

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

- a. A statement that the guarantee is one of payment and not of collection;
- b. A statement that the guarantor agrees to pay the guaranteed obligations on the date due;
- c. At a minimum, a statement that the guarantor has an Investment Grade Credit Rating, and has a tangible net worth of at least One Hundred Million Dollars (\$100,000,000) and, if it can be obtained through negotiation, a statement that

the guarantor's obligations under the guarantee rank pari passu with its senior unsecured debt obligations;

- d. A statement restricting the guarantor's right to terminate the guarantee before either 1) guarantor has paid all amounts it guaranteed or 2) guarantor has provided acceptable replacement security;
- e. A statement that the guaranteed obligations are unconditional, irrespective of genuineness, validity, waiver, release, alteration, amendment, and enforceability of the guaranteed obligations, and a statement that the guarantor may assert for itself no greater defenses, setoffs or counterclaims than the PPA Seller has or may be entitled to assert against SJCE;
- f. 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;
- g. A statement that the guarantor waives its right to subrogation until the guaranteed obligations are paid in full;
- h. A statement that the guarantee is binding on successors of the guarantor and a statement that SJCE is a beneficiary of the guarantee;
- i. A statement that the guarantee will be interpreted under either New York or California law; and
- j. 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.

14.2. 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 SJCE 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 date of the transaction. Letters of Credit must be issued by a domestic bank (or domestic branch of a foreign bank) with a senior debt rating of at least "A-" by S&P, "A3" by Moody's₂ or its equivalent by a NRSRO. All Letters of Credit must be approved as to content and form by SJCE's legal counsel.

Approved letters of credit shall be monitored in aggregation for credit quality and credit exposure by bank throughout the terms. If a letter of credit is terminated for contractual reasons or an issuing bank experiences a rating downgrade below the aforementioned minimum requirements, the counterparty shall provide a replacement letter of credit meeting the requirements, or make cash deposits with SJCE.

14.3. 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 Director of

15. Quality Assessment

15.1. Counterparty Credit Analysis

Finance (Middle Office Support) is responsible for ensuring a standardized credit screening process for all counterparties. All counterparties, as specified in Table 1, must be reviewed for financial creditworthiness according to these guidelines. Finance (Middle Office Support) will calculate a credit limit and submit a credit review report to the appropriate approval authority for consideration and action. All counterparty credit lines and credit reviews will be submitted to the appropriate authority level as authorized in Section 16 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. Approved counterparties will be grouped as active, inactive and long-term PPA counterparties depending on product type and total amount of forward contracts. Credit review and monitoring will be based on the credit evaluation matrix found in Table 1. More frequent monitoring may be required if a counterparty is subject to the possibility of a credit event (e.g., if their credit rating falls one full letter grade or greater, or if their credit rating falls below investment grade), or if industry factors dictate. Inactive counterparties with no past transactions are reviewed on bi-annual basis (once every two years) and are subject to a transaction limit of \$10 million. Such counterparties will be considered as active and be subject to on-going review post first transaction.

Table 1: Credit Evaluation Matrix					
Type of counterparties	Product	Forward Contracts	Credit Review	Credit Limits	Scope of Credit Review
Active counterparties: counterparties with contracts	Energy	not applicable	√	√	F+R+N
	RA/ RPS/ Carbon Free	≥\$1 million	√	X	F+R+N
		<\$1 million	X	X	X
Inactive counterparties: counterparties with no past contracts	not applicable	\$0	√	√	F: bi-annual, R+N
Long-term PPA counterparties	Energy/RA /RPS	≥\$1m	√	X	F+R+N
√: Required X: Not Required					
F: Financial statements review, R: Ratings check, N: News; Ongoing unless specified otherwise					
If product and amount of potential transaction is not known in advance, new counterparties will be classified as inactive until transaction is executed. If product and amount are known, guidance under active will be followed.					

15.2. 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 tangible net worth³ or SJCE's maximum counterparty credit limits. Credit limits for counterparties for fixed energy transactions must comply with the requirements of Sections 11.1 and 12.

In the case of community choice aggregations and municipal or other governmental organizations, an open line of credit may be extended up to the greater of three (3) million dollars or a credit limit established by Finance (Middle Office Support), if applied. .

For example, if a municipal counterparty qualifies for a credit limit of \$20,000,000 based on the net assets test, but only qualifies for an investment grade rating for BBB+, then the maximum policy limit allowed would be \$15,000,000.

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.

15.3. Concentration Limits

In addition to complying with credit limits, SJCE staff shall strive to diversify transactions among counterparties. Two maximum concentration limits are recommended as follows:

- a. For energy, no more than 15% of the expected load requirement for the next 20 calendar years and no more than 30% of the expected load requirement for any calendar year by any one counterparty (calculated as quantity MWh of the outstanding commitments to a counterparty divided by the expected wholesale load requirement MWh of the applicable period).
- b. Concentration limits are not applied to RA and RPS products. Procurement of RA and RPS will be monitored for best effort in diversification.

These concentration limits shall be applied at the time a contract is entered into. SJCE staff shall document the business reasons (e.g. differences in bid price, lack of other qualified suppliers, etc.) for awarding contracts to counterparties in excess of the recommended concentration limit. In addition, SJCE shall develop an integrated resource plan that includes an adequate level of diversification in fuel type, contract duration, geographic location, counterparties, pricing terms, cash reserves and types of products.

³ Tangible Net Worth (TNW) = Total assets – Restricted assets and affiliate assets (net of any matching liabilities, assuming the result is positive value) – Total liabilities – intangible assets – derivative assets (net of any matching liabilities, assuming the result is positive value)

16. Approval Authorities

16.1. Credit Authorization

Authority to establish credit limits is segregated as follows:

Table 2: Credit Limit Authorities	
Director of Community Energy or designee: (designee cannot be staff in the Power Resources group)	Up to \$ 15 Million
Director of Finance or designee:	Up to \$ 20 Million
ROC:	Up to \$ 50 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, subject to approval by the City Council. In addition, City Council may authorize the Director of Community Energy to enter into medium- and long-term contracts that extend beyond five years and/or exceed a counterparty's credit limit. If such approval is conditioned upon approval by the ROC, the Director of Community Energy shall obtain ROC approval prior to entering into a particular medium- or long-term contract.

16.2. Increases to Wholesale Counterparty Limits

Any increase to an existing open line of credit must have the written approval of the Director of Community Energy, the Director of Finance, or the ROC, within the authorized limits stated in Section 16.1, Table 2. Any changes to the credit limits are approved by Director of Finance in a written memo and approved by ROC vote, if needed.

16.3. Credit Review Exceptions

Wholesale counterparties not subject to the above credit review criteria include those with forward contracts of less than \$1 million for Resource Adequacy, Renewable Portfolio Standard credits and Carbon free products, and those associated with day-ahead and current day purchases where risk associated with market movements is minimal. Sales transactions within the day-ahead and current day can be consummated with a counterparty that has not been assigned a pre-approved credit limit if the counterparty maintains a credit rating of at least BBB+ from an NRSRO. Such transactions may not exceed \$250,000 per counterparty.

If a counterparty or guarantor does not maintain any NRSRO rating, and if a counterparty credit review has not been performed in the past 24 months, a credit limit of \$100,000 in aggregate net receivables per counterparty is allowed until a formal review can be completed. These individual non-rated counterparty limits are subject to a total net receivable portfolio limit not to exceed \$1,000,000, in aggregate.

17. Wholesale Credit / Counterparty Management

17.1. 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 shall be monitored according to concentration in the following areas: credit rating, counterparty, 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.

17.2. Master Enabling Agreements

The use of master enabling agreements 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 City Council 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. SJCE staff are responsible for ensuring that master enabling agreements are developed in conjunction with legal counsel review, approved by the City Council and used for the following transactions:

- a. The Western Systems Power Pool (“WSPP”) Agreement may be used as the master agreement for transacting Approved Products with WSPP members.
- b. The Edison Electric Institute (“EEI”) Agreement, or its equivalent, as modified by a set of City Council 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).
- c. Transmission transactions shall be consummated under an Open Access Transmission Tariff or City Council approved bilateral agreement.

A master enabling agreement executed by SJCE 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 in accordance with applicable SJCE policy and procedures.

17.3. 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. The same would apply if the counterparty suffers a ratings downgrade. SJCE as a buyer or seller may be exposed to margin calls from counterparties. Middle Office staff must be aware of collateral thresholds assigned to SJCE by counterparties, and monitor these limits weekly, and shall keep the Director informed in the event of market volatility. SJCE may be exposed to margin calls if a significant level of purchases or sales is reached.

17.4. 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 Director, or ROC within authorized limits as established in this Regulations.

18. 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 Finance (Middle Office Support) will be responsible for managing the counterparty review and ratings. Front Office staff is responsible for recommending new counterparties to the Middle Office for review and approval.

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 Finance (Middle Office Support) or the 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. “BAA” means Balancing Authority Area, which is the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area. CAISO is one of the balancing authorities in California.
- 1.4. “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.
- 1.5. “CAISO Tariff” means the CAISO FERC Electric Tariff.
- 1.6. “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.
- 1.7. “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. “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.

- 1.9. “City Council” means the City of San José City Council.
- 1.10. “Commercial Compliance Policy” means the Commercial Compliance Policy adopted by the City Council, 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. “Counterparty” means a party on either side of a transaction (i.e., purchasing counterparty as opposed to a selling counterparty).
- 1.13. “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.
- 1.14. “CRR Allocation” means the process of allocating CRR source-to-sink combinations, both annually and monthly, based on nominations by registered Candidate CRR Holders.
- 1.15. “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.
- 1.16. “Deputy Director of Power Resources” means the Department of Community Energy’s Deputy Director.
- 1.17. “Director of Community Energy” means the Director of Department of Community Energy, City of San José.
- 1.18. “Director of Finance” means the Director of Department of Finance, City of San José.
- 1.19. “Division Manager of Budget and Financial Planning” means the Department of Community Energy’s Division Manager responsible for Back Office.
- 1.20. “Division Manager of Risk Management, Contracts and Administrative Services” means the Department of Community Energy’s Division Manager responsible for the Middle Office as described in Appendix 2 Section 1.9.
- 1.21. “Emission Allowance” means a limited tradable authorization to emit up to one metric ton of carbon dioxide equivalent.

- 1.22. “Energy” means an electric charge that lets work be accomplished.
- 1.23. “ERMP” means the Energy Risk Management Policy.
- 1.24. “FERC” means the Federal Energy Regulatory Commission, or its regulatory successor.
- 1.25. Fixed Price Energy procured pursuant to a contract that sets forth a fixed price or a formula for a price for the energy.
- 1.26. “Forward Power Transaction” means an Energy transaction that starts beyond the Balance- of-Month.
- 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. “Greenhouse Gas” or “GHG” includes, but is not limited to, carbon dioxide (“CO₂”), methane (“CH₄”), nitrous oxide (“N₂O”), sulfur hexafluoride (“SF₆”), hydro fluorocarbons (“HFCs”), perfluorocarbons (“PFCs”), and other fluorinated gasses
- 1.29. “Letter of Credit” means a document, typically from a bank, guaranteeing that a buyer’s payment to a seller will be received on time and for the correct amount. In the event that the buyer is unable to make a payment on the purchase, the bank will be required to cover the full or remaining amount of the purchase.
- 1.30. “Long-term Transaction” means a purchase or sale of, electric power, capacity, transmission and/or other related attributes to be performed or delivered for a duration of ten years or longer.
- 1.31. “Medium-term transaction” means a purchase or sale of electric power, capacity, transmission and/or other related attributes to be performed or delivered for a duration less than ten years and more than one year.
- 1.32. “MTM” means Mark-to-Market. MTM is a measure of the fair value. 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.
- 1.33. “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.
- 1.34. “NRSRO” means nationally recognized statistical rating organization.

- 1.35. “Prompt month” means the next full calendar month beyond the current month.
- 1.36. “Prompt quarter” means the next full calendar quarter beyond the current quarter.
- 1.37. “Prompt 1-4 quarters” means the next four calendar quarters beyond the current quarter.
- 1.38. “Prompt year” means the next full calendar year beyond the current year.
- 1.39. “Regulations” means these Energy and Counterparty Risk Management Regulations.
- 1.40. “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.
- 1.41. “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.
- 1.42. “Resource Adequacy” means the resource adequacy requirements established for load serving entities by their respective governing body having jurisdiction.
- 1.43. “ROC” means the Risk Oversight Committee.
- 1.44. “Sector-Based Offset Credit” means a credit issued from a sector-based crediting program once the crediting baseline for a sector has been reached.
- 1.45. “SJCE” means San José Clean Energy.
- 1.46. “Short-term transaction” means a purchase or sale of electric power, capacity, transmission and/or other related attributes to be performed or delivered for a duration less than one year.
- 1.47. “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.
- 1.48. “Title 26” Established Community Choice Aggregation in the City to be called “San José Clean Energy” and to give its residents and businesses local control over electricity prices, resources and quality of service.

- 1.49. “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.
- 1.50. “Wholesale Energy Provider” means the service provider for scheduling coordinator, portfolio management, and optimization services.

APPENDIX 2

RISK OVERSIGHT COMMITTEE

1. Roles and Responsibilities

ROC members' and all advisors' roles and responsibilities are detailed below:

1.1. ROC Members

All members of the ROC have the following responsibilities:

- a. Oversee implementation of risk strategy of SJCE as such pertains to transaction activities.
- b. Advise on educational needs on risk management at all levels within SJCE.
- c. Review proposed changes to the ERMP and these Regulations by other ROC members.
- d. Attend all ROC meetings or ensure that fully-briefed alternates attend, including meetings requested by a member requiring ROC approval in a timely fashion.
- e. Monitor key activities of the Front Office, Middle Office and Back Office.
- f. Review proposed changes to ERMP by other ROC members.

1.2. ROC Advisors

SJCE's legal counsel has the following responsibilities:

- a. Reviewing and approving all forms of contracts used by SJCE to consummate transactions of Approved Products.
- b. Determining what legal documentation is required, and proposing, monitoring and reviewing procedures to ensure legal and regulatory compliance with the ERMP and these Regulations.
- c. Reviewing processes and procedures associated with transaction activities to ensure legal compliance with all local, state and federal laws and regulations.

1.3. City Manager Representative

- a. Review proposed changes to ERMP by other ROC members.
- b. Oversee implementation of SJCE's risk strategy.
- c. Propose changes to Front, Middle, and Back Office procedures as needed.

1.4. Director of Community Energy

- a. Serve as Chairperson for ROC.
- b. Serve as official spokesperson for the ROC reports to the City Council.
- c. Ensure that the ERMP is reviewed by the ROC and updated on an annual basis.
- d. Ensure to the ROC that the operational performance of the Front, Middle and Back Offices are in conformance with approved policies and procedures.
- e. Ensure that the ROC is provided with reporting that is consistent with the

ERMP and these Regulations.

- f. Present ROC-approved recommendations for changes to ERMP for consideration by the City Council.
- g. Propose changes to Front, Middle, and Back Office procedures as needed.

1.5. Director of Finance

- a. Provide ROC with “market view” of financial market conditions and implications on an as needed basis.
- b. Present ROC-approved recommendations for changes to ERMP for consideration by the City Council.
- c. Propose changes to Middle and Back Office procedures as needed.
- d. Provide management oversight to Finance Investment staff charged with staffing Middle Office Support, which includes the responsibility of reviewing counterparties and determining credit limits.
- e. Advise on operating reserve limits.

1.6. City Manager’s Budget Office Director

- a. Provide ROC with budget implications regarding proposed actions on an as needed basis.
- b. Propose changes to Middle and Back Office procedures as needed.
- c. Advise on operating reserve amounts and budget issues.

1.7. Risk Manager

- a. Provide guidance regarding Risk Policies to minimize SJCE’s risk exposure.
- b. Advise on insurance provisions for SJCE’s contracts in order to minimize SCJE’s risk exposure.
- c. Propose changes to Middle and Back Office procedures as needed.

1.8. SJCE Deputy Director of Power Resources (Front Office)

- a. Verify to the Director of Community Energy that operational performance of the Front Office are in conformance with the ERMP and these Regulations.
- b. Verify that the ROC is provided with an accurate report on Front Office operations.
- c. Ensure that the ROC is provided with reporting that is consistent with the ERMP and these Regulations.
- d. Provide accurate reports on the risk management program to the City Council.
- e. Provide a quarterly report of all transactions under 5 years carried out since the last quarterly report.
- f. Advise ROC on analysis of potential enabling agreements with regard to Front and Back Office operations.
- g. Advise ROC on consideration of pending enabling agreements and large contracts with regard to market and credit risk.
- h. Advise ROC on proposed portfolio and trader limits.
- i. Provide ROC with “energy market view” of future market conditions and results of market models.
- j. Monitor key activities of Front Office.

- k. Brief the ROC on transaction operations with special regard to transacting.
- l. Propose changes to Front Office Procedures.

1.9. SJCE Division Manager of Risk Management, Contracts and Administrative Services (Middle Office)

- a. Verify to ROC that rules related to transacting authority and speculations are complied with by Front Office.
- b. Verify that Front Office staff are in compliance with all policies and regulations.
- c. Verify that the ROC is provided the most accurate forecast possible of market trends.
- d. Ensure to the ROC that operational performance of the Middle and Back Offices are in conformance with policies approved by the City Council.
- e. Verify to the Director of Community Energy that operational performance of the Middle and Back Offices are in conformance with the ERMP and these Regulations.
- f. Verify that the ROC is provided an accurate reporting of all transactions.
- g. Ensure that the ROC is provided with an accurate report on all Middle Office operations, especially with regard to market and credit exposure.
- h. Ensure that the ROC is provided with accurate reports on any transactions which exceeded limits, and proposed actions on strengthening compliance procedures and recommendations for corrective action.
- i. Ensure that the ROC is provided with reporting that is consistent with the ERMP and these Regulations.
- j. Advise ROC on consideration of pending enabling agreements and large contracts with regard to market and credit risk.
- k. Monitor key activities of Front, Middle and Back Offices.
- l. Ensure Middle Offices, and Legal Counsel participate on new product or transaction type development team.
- m. Advise ROC on education needs on risk management at all levels within SJCE.
- n. Propose change to Middle and Back Office Procedures.
- o. In collaboration with Division Manager of Budget and Financial Planning, ensure bills are issued to counterparties with outstanding accounts.
- p. In collaboration with Division Manager of Budget and Financial Planning, verify that Back Office staff are in compliance with all policies and regulations.
- q. In collaboration with Division Manager of Budget and Financial Planning, verify 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”.)

1.10. City Attorney

- a. Verify to the ROC that all adopted Regulations are consistent with applicable law.
- b. Verify to the ROC that all approved contracts and enabling agreements have

- followed a process that is consistent with applicable law.
- c. Provide timely support and legal advice to the Front, Middle and Back Office operations and to the ROC.
 - d. Determine documentation and legal review requirements to all processes are consistent with applicable law.
 - e. Ensure Front and Middle Offices, and Legal Counsel participate on new product or transaction type development team.
 - f. Propose change to Front and Back Office Regulations.

APPENDIX 3

AUTHORIZED CRR TRANSACTING GUIDELINES

1. Congestion Revenue Rights Transacting Guidelines

Congestion Revenue Rights (CRR) 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

SJCE staff or SJCE's Wholesale Energy Provider shall participate in the CRR Allocation and Auction markets as follows:

SJCE or SJCE's Wholesale Energy Provider staff nominates its CRRs during the allocation process in general conformance with the following methodology:

- a. Prioritize SJCE scheduling points as sources and the DLAP_PGAE_APND pricing nodes as the sink, such that downside risk is minimized when:
 1. Average expected congestion is statistically greater than zero.
 2. No historical period exhibited large negative congestion.
 3. Nomination amounts are relative to expected congestion (i.e. increase nominations as expected congestion increases).
- b. CRR nominations are limited by the seasonal/monthly eligible quantities.
- c. 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.
- d. SJCE or SJCE's Wholesale Energy Provider will nominate source/sink combinations that statistically have positive average congestion across historical periods with, no substantial negative congestion, as follows:
 1. Rank the CRRs by congestion value.
 2. Nominate the highest valued CRRs first, working down the possible Source-Sink combinations until the seasonal/month eligible quantities are exhausted.
 3. Avoid large positions at any one non-SJCE sourced CRR.
 4. Avoid clustered CRRs (e.g., source CRRs in the same geographic area that would expect to have the same or similar congestion component price).
- e. Avoid nominating both SJCE and non-SJCE sourced CRRs when data and experience shows that the CRR will not clear the allocation feasibility test.
- f. Once the above selection criteria results in a nomination portfolio, and prior to final submission; SJCE or SJCE's Wholesale Energy Provider will stress test the portfolio on historical data for any large negative single period

positions. If SJCE or SJCE's Wholesale Energy Provider finds large negative single period positions, SJCE or SJCE Wholesale Energy Provider will remove that position prior to submission.

1.2. CRR Auction Process

SJCE staff or SJCE's Wholesale Energy Provider bids into the CRR Auction in general conformance with the following methodology:

- a. 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.
- b. Prices on the bid curves start at zero and go negative.
- c. Bids that result in revenue to SJCE and reduce overall risk by unwinding existing un-hedged allocation portfolio positions.
- d. Auction revenue is left in the SJCE CRR collateral account until the monthly/seasonal period is over.

APPENDIX 4

AUTHORIZED APPROVED PRODUCT TRANSACTION LIMITS

Approved Product Transaction Limits

1.1. City Council

- a. Approving all long-term supply strategies in Integrated Resource Plans.
- b. Approving all long-term Approved Product Transactions.
- c. Approving SJCE's budget and overall Procurement Authority.

1.2. Director of Community Energy

The Director is assigned the following primary responsibilities and product transactions limits pursuant to Title 26 and approved by City Council resolutions:

- a. Approval of financial authority limits associated with Approved Product transactions as recommended by the ROC.
- b. Authority for individual product transactions, as authorized under City Council approved agreements or resolutions.
- c. Approval authority for Approved Product transactions up to, but not greater than, 115% of a SJCE's annual load forecast, including executed fuel product transactions that have been made to support generation operations up to 115% of load. These product transactions are limited to short-term product transactions that do not to exceed \$500,000 per day and have a duration of one year or less. The Director should seek Council approval for all product transactions over 6 months and \$1,000,000 unless there is a time constraint. The approval shall be a delegated Authority to enter into an approved enabling agreement with a specific not to exceed value.
- d. All optimization strategies, including statistical/procedural risk management methods (including risk tolerances), and resulting exposures.

1.3. Deputy Director of Power Resources

The Deputy Director of Power Resources is delegated the following primary responsibilities and product transaction limits:

- a. Authority to enter individual product transactions with a term not to exceed 1 year, except in the case of Local Resource Adequacy in which case the term may be 3 years, and in either case not to exceed \$1 Million dollars. When possible, the Deputy Director of Power Resources should seek written approval from the Director of Community Energy for all product transactions over \$500,000.
- b. Developing long-term supply strategies.

1.4. Principal Power Resources Specialist

The Principal Power Resources Specialist is delegated the following primary responsibilities and product transaction limits:

- a. Planning functions to determine the appropriate product transactions necessary to maintain load/resource balance from day-ahead to Balance-of-Month in duration, and prompt month beginning 10 days prior to the conclusion of the current month.
- b. Authority to enter into individual transactions with a term not to exceed 1 year except in the case of Local Resource Adequacy in which case the term may be 3 years, and in either case not to exceed \$250,000 dollars.

Approved Product Transaction Limits Summary

	Director of Community Energy	Deputy Director of Power Resources	Principal Power Resources Specialist
Transaction Term Limits:	As authorized under City Council approved resolutions, programs or project agreements. Without Council Approval, not to exceed \$500,000/day or 1 year in length. Director should seek Council approval for all contracts over 6 months and over \$1 Million dollars.	After Council Approval, transactions of one year or less except in the case of Local Resource Adequacy in which case the term may be 3 years, and \$1 Million dollars or less	After Council Approval, transactions for a term of one years or less, except in the case of Local Resource Adequacy in which case the term may be 3 years, and \$250,000 dollars or less.
Transaction Volume Limits:	Approved Product volume limits up to 115% of annual load forecast.	Approved Product volume limits up to 115% of annual load forecast.	Approved Product volume limits up to 115% of annual load forecast.

APPENDIX 5

NEW PRODUCT DEVELOPMENT PROCEDURES

1. New Product Development

When the Front Office staff requests to transact a new product type, several control processes must take place to ensure SJCE 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:

1. The Front Office staff notifies the Middle Office staff of the desire to enter into a new type of transaction. The Front Office staff is responsible for reviewing the transaction details, including all the business needs and strategy, pricing, and operational elements of the transactions with the Middle Office staff. The Middle Office staff assumes responsibility for undertaking all of the risk and processing implications of the proposed transaction.
2. Legal Counsel identifies applicable California and local regulatory restrictions for product or business, verifies counterparty power and authority to enter into activity, determines what legal documentation is required, proposes monitoring and review procedures to ensure legal and regulatory compliance, and determines if sufficient resources are available to support regulatory and legal requirements.
3. The Middle Office staff first ascertains if the Front Office staff has the ability to accurately price the transaction. Secondly, the Middle Office staff determines whether the risk of the transaction can be accurately measured. The Middle Office staff is responsible for preparing a new product report for review and consideration. This report requires the Middle 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). The Middle Office staff shall review the new product report and begin the process of determining SJCE's ability to record, process, and manage the transaction.
4. The Front, Back, and Middle Offices are responsible for Operational Risks. This includes verifying consistency with ERMP, defining a transaction tracking plan and procedures, settlement procedures, ensuring appropriate authorization/approvals are obtained, and developing procedures for transactions.
5. 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.

6. The ROC is responsible for approving all new products.

New Product Approval Checklist Risk/Task to be Completed During the Analysis	Primary Accountability
Business Strategy	
Identify business needs and benefits	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 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
Determine if sufficient resources are available to support regulatory and legal requirements	Front Office
Market Risks	
Identify and analyze market risk	Middle Office
Specify management's intention (hold positions, actively trade or hedge)	Front Office
Propose fair market value and risk measurement methodology	Middle Office
Establish product trading limits	Middle Office
Determine impact on total position limits	Middle Office
Define and recommend management reporting requirements	Middle Office
Present report format for communication of positions on a timely basis	Middle Office
Check if the new product involves commitments, guarantees, contingencies off-balance sheet items	Middle Office
Credit Risks	
Identify and analyze credit risk of counterparty	Finance - Middle Office Support
Develop methodology for 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	Finance - Middle Office Support
Develop capability to report credit limit compliance	Middle Office
Operational Risks	
Verify consistency with ERMP	Front Office/Middle Office
Define transaction tracking plan and procedures	Middle Office
Settlement procedures – how will transaction payment/billing be handled	Back Office
Authorizations/approvals – propose approval levels or delegation of authority is required	Front Office/Middle Office
Develop procedure for transacting from start to finish	Front Office/Middle Office/BackOffice
ROC Approval	
Approve all new products	ROC

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 6 APPROVED PRODUCTS

1. Approved Products

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

Approved Products	Pre-Approved Examples	Authorization
1. Long-term Transactions for Energy (Ten Years and Beyond)	<ul style="list-style-type: none"> • Purchases of Energy to cover the forecasted supply shortage of SJCE including long-term power purchase agreements entered pursuant to statutory requirements (e.g. SB350 requires at least 65% of RPS procurement from long-term contracts of 10 or more years) or pursuant to Integrated Resource Plan or other Council-approved strategies. • Sales of Energy amounts that are forecasted to be surplus to SJCE’s need • Liquidating “in the money” and “out of the money” transactions for optimization. 	<ul style="list-style-type: none"> • Authorized in accordance with the limits as set forth in these Regulations.
2. Short and Medium Term Transactions for Energy (Beyond the Month to under Ten Years)	<ul style="list-style-type: none"> • Purchases of Energy to cover the forecasted supply shortage of SJCE • Sales of Energy amounts that are forecasted to be surplus to SJCE’s need • Liquidating “in the money” and “out of the money” transactions for optimization. 	<ul style="list-style-type: none"> • Authorized in accordance with the limits as set forth in these Regulations.
3. Balance-of-Month Transaction for Energy	<ul style="list-style-type: none"> • Energy purchases/sales within defined term and volume limits • Forecasting errors 	<ul style="list-style-type: none"> • Authorized in accordance with the limits as set forth in these Regulations.
4. Day-Ahead and Real-Time Power Transactions Through a BAA (e.g., CAISO)	<ul style="list-style-type: none"> • Purchasing Energy from the CAISO day-ahead and/or real-time market to serve load • Selling Energy into the CAISO day-ahead and/or real-time market from generation resources 	<ul style="list-style-type: none"> • Authorized in accordance with the limits as set forth in these Regulations.

Approved Products	Pre-Approved Examples	Authorization
5. Purchase/Sale of Capacity	<ul style="list-style-type: none"> • Short-term, Medium-term or Long-term forward purchases of capacity products (e.g., Ancillary Services and Resource Adequacy products) • Short-term, Medium-term or Long-term forward sales of capacity products (e.g., Ancillary Services and Resource Adequacy products) 	<ul style="list-style-type: none"> • Authorized in accordance with the limits as set forth in these Regulations.
6. Transmission	<ul style="list-style-type: none"> • Purchases/sales of firm and non- firm transmission capacity required for the delivery Energy 	<ul style="list-style-type: none"> • Authorized in accordance with the limits as set forth in these Regulations.
7. GHG Compliance Instrument	<ul style="list-style-type: none"> • 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 SJCE generation and scheduling activities (e.g. imports) 	<ul style="list-style-type: none"> • Authorized in accordance with the limits as set forth in these Regulations.
8. Renewable Energy Products	<ul style="list-style-type: none"> • 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 Products for the sole purpose of eliminating a surplus 	<ul style="list-style-type: none"> • Authorized in accordance with the limits as set forth in these Regulations.
9. Congestion Revenue Rights	<ul style="list-style-type: none"> • 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 style="list-style-type: none"> • Authorized in accordance with the limits as set forth in these Regulations. • See Appendix 3 to these Regulations

APPENDIX 7 MANAGEMENT REPORTS

1. Management Reports

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

Management Report		Primary Responsibility			Report Frequency					Approval	
		Front	Middle	Back	Weekly	Monthly	Quarterly	Annual	Bi- Annual		As Needed
a.	Concentration Balance		X			X					CED Division Manager of Risk Management, Contracts and Administration
b.	Portfolio Performance (MTM)		X			X					CED Division Manager of Risk Management, Contracts and Administration
c.	Exceptions Report		X							X	CED Division Manager of Risk Management, Contracts and Administration
d.	Annual Regulations Update		X					X			CED Division Manager of Risk Management, Contracts and Administration
e.	Credit Limit Status by Counterparty and Master Agreements		X			X					CED Division Manager of Risk Management, Contracts and Administration
f.	Coverage Ratio – Procurement Report	X				X					CED Deputy Director of Power Resources
g.	Integrated Resource Plan	X	X	X						X	CED Deputy Director of Power Resources
h.	Credit Exposure to LOC Issuers		X			X					CED Division Manager of Risk Management, Contracts and Administration
i.	Power Transactions	X					X				CED Deputy Director of Power Resources

1.1. Description of Management Reports

- a. Concentration Balance: The Middle Office reports concentration by counterparty in terms of total covered portfolio, budget and load concentration. The Concentration Reports are updated monthly and is included on ROC meeting agendas as a standing consent item.
- b. Portfolio Performance (MTM): A Middle Office report comparing the cost of the portfolio of contracts to the current market value of the portfolio (tracking what SJCE paid for the contract to what it is worth now). This is also known as MTM and is used to monitor collateral needs. The Portfolio Performance report is updated weekly and reviewed with SJCE management. It is also included on ROC meeting agendas as a standing consent item.
- c. Exceptions Report: A Middle Office report summarizing current exception and violation reports. The Exception Report is developed and presented to the ROC as needed.
- d. Annual Regulations Update: A Middle Office report providing an annual review of policies and procedures of the Risk Management Regulations and recommendations for needed updates. The Annual Regulations Update report is developed annually. It is included on ROC meeting agendas as a consent item on an annual basis.
- e. Credit Limit Status by Counterparty and Master Agreements: A Middle Office report showing counterparty credit limits, credit used, credit remaining, as well as current set of approved master agreements. Special flagging of counterparties nearing their credit limits should also be included. The Credit Limit Status by Counterparty report is presented to the Front Office and Back Office staff, as well as to SJCE's management on a monthly basis. It is also included on ROC meeting agendas as a standing consent item.
- f. Coverage Ratio – Procurement Report: A Front Office report detailing the coverage ratio for periods as outlined in Appendix 9. The Procurement report is developed monthly. It is included on ROC meeting agendas as a standing consent item.
- g. Integrated Resource Plan: This is a plan prepared every few years that shows long-term supply and resources plan.
- h. Credit Exposure and Credit Quality to LOC Issuers: A Middle Office report tracking credit exposure and credit quality to LOC issuers at the portfolio level. The LOC Issuers report is prepared monthly. It is included on ROC meeting agendas as a standing consent item.
- i. Power Transactions: Quarterly report submitted to the Council of all transactions under five years carried out since the last submitted quarterly report. It is included on ROC meeting agendas as a standing consent item.

APPENDIX 8

MARK-TO-MARKET METHODOLOGY

Mark-to-Market Methodology

The MTM calculation is a method to value future, or forward open trading, or hedge positions on an on-going 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. SJCE will “mark” all open positions on no less than a weekly basis, or as necessary, given market dynamics.

The following is the calculation used to calculate MTM:

$$\text{MTM} = (\text{Forward Price} - \text{Contract Price}) * \text{volume of energy purchased.}$$

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 weekly. In these circumstances a 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 listed below:

- a. **Energy and related products:** The standard forward traded electricity products as reported in the broker/trade reporting system.
- b. **Resource Adequacy, Renewable and Low Carbon Products:** These products are likely to change value less often than Energy and related products. Periodic (quarterly) probing of the market may be necessary to obtain current valuation.

APPENDIX 9 RECOMMENDED COVERAGE

SJCE will manage risks associated with its Load Obligation through procurement of energy up to four years ahead consistent with Table 1 below, and through medium and long-term contracts up to 25 years in length that are consistent with SJCE’s Integrated Resource Plan (IRP). To access the market at different times, SJCE will hedge its load obligation by soliciting energy supply offers at regular intervals during favorable buying periods during the year (focusing on Spring and Fall). The Director of Community Energy, or designee, will review each solicitation; solicitation reviews shall cover pre-solicitation portfolio positions, expected coverage, procurement limits and market analysis. Supply offers will be selected with respect to the risks outlined in this document (i.e. price risk, counter party credit worthiness, concentration risk, etc.).

SJCE will seek to achieve coverage ratios for energy contracts consistent with Table 1 Coverage Thresholds. SJCE will apply coverage ratios within the ranges set forth in Table 1 taking into account market and system conditions during particular time periods, such as higher risks of price spikes during the Summer and early Fall, uncertainty as to online date and expected volatility of output of long term power purchase agreements, opportunities to take advantage of low prices from favorable hydro conditions during the Spring, and schedules for natural gas storage reports.

Table 1 Coverage Thresholds

Time Period	Minimum Coverage	Maximum Coverage
Prompt quarter	85%	125%
Prompt 1-4 quarters	75%	115%
Balance of the prompt year not covered by Prompt 1-4 quarters	70%	115%
Current Calendar Year (CY) + 2	50%	95%
CY + 3	40%	90%
CY + 4	40%	90%
CY + 5 to CY + 10*	30%	85%
Beyond CY + 10*	0%	70%

**thresholds applicable for each calendar year*

From time to time, the Front Office staff may recommend procurement strategies outside of these Coverage Thresholds for ROC review and approval. The Front, Middle and Back Office shall prepare an IRP every few years in accordance with State law requirements and City policy. The IRP shall be presented to City Council for approval and filed with the California Public Utilities Commission. The Front Office shall propose long-term transactions for approval by City Council and the ROC as appropriate and consistent with the requirements of the approved IRP.

APPENDIX 10
COUNTERPARTY CREDIT LIMITS

Credit Rating	Maximum Credit Limit (\$m)	Percentage of Tangible Net Worth or Net Assets
AAA	35.000	5.0%
AA+	30.000	5.0%
AA	28.250	5.0%
AA-	26.500	5.0%
A+	25.000	5.0%
A	21.750	5.0%
A-	18.500	5.0%
BBB+	15.000	5.0%

APPENDIX 11

SUPPLEMENT HISTORY TABLE

The table below allows users of this Risk Management Regulations to quickly and accurately determine what sections have been omitted. In addition, by adding to this table with each supplement, users of this document will be able to gain a more complete picture of the historical evolution.

Date Adopted	Area	Track Changes
10/3/2019	Division Naming Change	Changed Administration and Finance Division to Risk Management, Contracts and Administrative Services Division
10/3/2019	Section 2.3 Counterparty Credit Risk	Added 'f'
10/3/2019	Section 2.5 Operational and Business Risk	Added 'g'
10/3/2019	Section 2.11 Business Risk	Omitted section
10/3/2019	Section 3	Title changed from Risk Management Strategies to Risk Management, Energy Trading Strategies
10/3/2019	Section 3.3: Diversification of Portfolio	Omitted section
10/3/2019	Section 3.3: Purchases to Cover Load Serving Obligations (No Speculation)	Moved and edited section 3.4 to section 3.3
10/3/2019	Section 3.4: Authority to Transact Approved Products	Moved and edited section 3.5 to section 3.4
10/3/2019	Section 3.5: Measurement of Risks	Moved and edited section 8.1 to section 3.5
10/3/2019	Section 3.6: Risk Mitigation	Added section
10/3/2019	Section 3.7: Basic Principles for Setting Risk Limits	Moved and edited section 9.1 to section 3.7
10/3/2019	Section 3.8: Portfolio Risk Guidelines	Merged into section 9: Risk Limit Structure
10/3/2019	Section 3.9: Transaction Capture Process	Moved and edited section 10.3 to section 3.9
10/3/2019	Section 4.4: Risk Oversight Committee	Moved and edited section 4.3 to section 4.4
10/3/2019	Section 4.5: Front Office	Moved and edited section 4.4 to section 4.5
10/3/2019	Section 4.6: Middle Office	Moved and edited section 4.5 to section 4.6
10/3/2019	Section 4.7: Back Office	Moved and edited section 4.6 to section 4.7
10/3/2019	Section 4.7: Auxiliary Functions	Omitted section

Date Adopted	Area	Track Changes
10/3/2019	Section 5.3: Compliance Exceptions and Reporting	Moved and edited section 7 to section 5.3
10/3/2019	Section 5.3.1: Compliance Exceptions	Moved and edited section 7.1 to section 5.3.1
10/3/2019	Section 5.3.2: Exception Reporting	Moved and edited section 7.2 to section 5.3.2
10/3/2019	Section 5.4: Unauthorized Transactions	Moved and edited section 5.3 to section 5.4
10/3/2019	Section 5.5: Process for Adding New Approved Products	Moved and edited section 5.4 to section 5.5
10/3/2019	Section 7: Risk Control Procurement Processes	Added Section
10/3/2019	Section 7.1: Control Principles	Moved and edited section 10.1 to section 7.1
10/3/2019	Section 7.2: Functional Responsibilities	Moved and edited section 10.2 to section 7.2
10/3/2019	Section 7.3: Authorization/Approval	Moved and edited section 10.3.1 to section 7.3
10/3/2019	Section 7.4: Procurement Procedures	Added Section
10/3/2019	Section 7.4.1: Competitive Bidding	Moved and edited section 10.3.2 to section 7.4.1
10/3/2019	Section 7.4.2: Procurement where competitive bidding is not practicable	Added Section
10/3/2019	Section 7.4.3: Joint Solicitations and Public Agency Procurement	Added Section
10/3/2019	Section 7.4.4: Commitment to the Transaction	Moved and edited section 10.3.3 to section 7.4.4
10/3/2019	Section 7.4.5: Confirmation	Moved and edited section 10.3.5 to section 7.4.5
10/3/2019	Section 7.4.6: Protest	Added Section
10/3/2019	Section 7.4.7: Billing and Settlement	Moved and edited section 10.3.7 to section 7.4.7
10/3/2019	Section 7.5: Management Reporting Framework	Moved and edited section 10.4 to section 7.5
10/3/2019	Section 7.6: Internal Controls	Moved and edited section 10.5 to section 7.6
10/3/2019	Section 8: Risk Management Methodologies	Omitted section
10/3/2019	Section 8: Conflict of Interest	Moved and edited section 11 to section 8
10/3/2019	Section 9: Policy Review	Moved and edited section 12 to section 9
10/3/2019	Section 9: Risk Limit Structure	Omitted section

Date Adopted	Area	Track Changes
10/3/2019	Section 9.3: Net Position Guidelines	Merged and edited into Section 9: Risk Limit Structure
10/3/2019	Section 10: Risk Control Structure	Omitted section
10/3/2019	Section 10: Organizational Philosophy Toward Counterparty Risk	Moved and edited section 13 to section 10
10/3/2019	Section 10.1: Objective and General Risk Policy	Moved and edited section 13.1 to section 10.1
10/3/2019	Section 10.2: Expectations of the City Council	Added section
10/3/2019	Section 10.3.4: Recording the Transaction	Omitted section
10/3/2019	Section 10.3.6: System Input	Omitted section
10/3/2019	Section 11: Counterparty Risk Definitions	Moved and edited section 14 to section 11
10/3/2019	Section 11.1: Counterparty Risk	Moved and edited section 14.1 to section 11.1
10/3/2019	Section 11.2: Relaxation of Credit Limits	Added section
10/3/2019	Section 11.3: Credit Risk	Moved and edited section 14.2 to section 11.3
10/3/2019	Section 12: Underwriting Standards	Moved and edited section 15 to section 12
10/3/2019	Section 13: Credit Risk Measurement	Moved and edited section 16 to section 13
10/3/2019	Section 13.2: Expectations of the City Council	Omitted section
10/3/2019	Section 14: Credit Enhancements	Moved and edited section 17 to section 14
10/3/2019	Section 14.1: Guarantees and Surety Bonds	Moved and edited section 17.1 to section 14.1
10/3/2019	Section 14.2: Letter of Credit	Moved and edited section 17.2 to section 14.2
10/3/2019	Section 14.3: Prepayments	Moved and edited section 17.3 to section 14.3
10/3/2019	Section 15: Quality Assessment	Moved and edited section 18 to section 15
10/3/2019	Section 15.1: Counterparty and Credit Analysis	Moved and edited section 18.1 to section 15.1
10/3/2019	Section 15.2: Concentration Limits	Moved and edited section 18.3 to section 15.2
10/3/2019	Section 16: Approval Authorities	Moved and edited section 19 to section 16
10/3/2019	Section 16.1: Credit Authorization	Moved and edited section 19.1 to section 16.1
10/3/2019	Section 16.2: Increases to Wholesale Counterparty Limits	Moved and edited section 19.2 to section 16.2

Date Adopted	Area	Track Changes
10/3/2019	Section 16.3: Credit Review Exceptions	Moved and edited section 19.3 to section 16.3
10/3/2019	Section 17: Wholesale Credit / Counterparty Management	Moved and edited section 20 to section 17
10/3/2019	Section 17.1: Monitoring and Reporting Exposures	Moved and edited section 20.1 to section 17.1
10/3/2019	Section 17.2: Master Enabling Agreements	Moved and edited section 20.2 to section 17.2
10/3/2019	Section 17.3: Margin Calls	Moved and edited section 20.3 to section 17.3
10/3/2019	Section 17.4: Transaction Authority	Moved and edited section 20.5 to section 17.4
10/3/2019	Section 18: Segregation of Duties	Moved and edited section 21 to section 18
10/3/2019	Section 18.2: Credit Limits	Omitted section
10/3/2019	Section 20.3: Premium Surcharge on Counterparties Without Master Enabling Agreement	Omitted section
10/3/2019	Appendix 8: Mark to Market Methodology	Title changed from Risk Assessment Methodologies to Mark to Market Methodology
10/3/2019	Appendix 10: Counterparty Credit Limits	Added appendix 10
10/3/2019	Appendix 11: Supplement History Table	Added appendix 11
11/19/2020	Section 1.1: Overview	Changed “that” to “which”
11/19/2020	Section 2.2: Price Risk – Example of Price Risk	Changed: “Mart to Mark”
11/19/2020	Section 2.4: Regulatory and Political Risk	Added: “h. Regulatory uncertainty can interfere with our ability to conduct long-term planning and cost projections.”
11/19/2020	Section 2.5: Operational and Business Risk	Added: “f. Exposure to customer defection in favor of competing products offered by IOUs.” Added: “g. Inability to collect on customer accounts due to changes in economic conditions.” Deleted: “that” Changed: “maintains” to “maintaining”
11/19/2020	Section 2.8: Concentration Risk	Changed: “portfolio” to “plan” Added: “s” to “review”

Date Adopted	Area	Track Changes
11/19/2020	Section 2.9: Liquidity Risk	Changed: “mitigates” to “mitigated” Deleted: SJCE must reach and maintain an initial \$20 million reserve by December 2019.
11/19/2020	Section 3.3.1: Balanced Portfolio	Deleted: “and”
11/19/2020	Section 3.2.1: Minimum Coverage Requirements for Energy	Deleted: “that involves” Added: “)”
11/19/2020	Section 3.2.2: Minimum Coverage Requirements for Capacity	Deleted: “SJCE will also fund a reserve to cover the cost of anticipated penalties and fines.”
11/19/2020	Section 3.3: Purchases to Cover Load Serving Obligations (No Speculation)	Added” “Risk Oversight Committee (ROC)”
11/19/2020	Section 3.6: Risk Mitigation	Changed: “should” to “will” Deleted: “this”
11/19/2020	Section 4: Roles and Responsibility for Energy Risk Management	Changed heading: “Responsibility” to “Responsibilities”
11/19/2020	Section 4.4: Risk Oversight Committee	Changed: “monthly” to “regularly”
11/19/2020	Section 4.4.g: Risk Oversight Committee	Deleted: “and”
11/19/2020	Section 4.5: Front Office	Deleted: “that”
11/19/2020	Section 4.6: Middle Office	Changed: “training” to “staff” Added: “c. Prepare Risk Management Reports (Concentration Balance, Portfolio Performance, Credit Limit Status by Counterparty and Master Agreements).”
11/19/2020	Section 4.7: Back Office	Deleted: “e. Confirming the amounts billed for Approved Product transactions;”
11/19/2020	Section 6: Systems, Tools and Training	Deleted: “requests” Changed: “Budget requests” to “The Department budget”
11/19/2020	Section 7.3: Authorization/ Approval	Changed: “Approval” to “approval”
11/19/2020	Section 7.4.1: Competitive Bidding	Changed: “city council” to “City Council”
11/19/2020	Section 7.4.7: Billing and Settlement	Added: “Middle and”
11/19/2020	Section 7.4.7: Billing and Settlement	Deleted: Diagram 1 representing the transaction capture process

Date Adopted	Area	Track Changes
11/19/2020	Section 12: Underwriting Standards	Added: “, as specified in Section 15,”
11/19/2020	Section 14.1.c: Guarantees and Surety Bonds	Added: “At a minimum, a statement that the guarantor has an Investment Grade Credit Rating, and has a tangible net worth of at least One Hundred Million Dollars (\$100,000,000) and, if it can be obtained through negotiation, a”
11/19/2020	Section 14.1.d: Guarantees and Surety Bonds	Deleted: “, and any termination must still guarantee exiting exposures as they may exist;”
11/19/2020	Section 14.1.d: Guarantees and Surety Bonds	Added: “before either 1) guarantor has paid all amounts it guaranteed or 2) guarantor has provided acceptable replacement security.”
11/19/2020	Section 14.1.e: Guarantees and Surety Bonds	Deleted: “value” Deleted: “waives the right of set off, counterclaim, etc.” Added: “may assert for itself no greater defenses, setoffs or counterclaims than the PPA Seller has to may be entitled to assert against SJCE.”
11/19/2020	Section 14.2: Letter of Credit	Deleted: “that has” Added: “with” Added: “by S&P, A3 by Moody’s” Deleted: “from” Added: “by” Deleted: “Approved Banks should be monitored for any potential Letter” Added: “All Letters” Deleted: “concentration between SJCE” Added: “must be approved as ato content” Deleted: “various counterparties” Added: “form by SJCE’s legal counsel” Deleted: “Exposure to any single institution will be limited to 20% of SJCE’s total portfolio creit exposure. If credit risk exposure is derived over the entire portfolio of transactons, the 20% rule will apply. Any exposrues greater than 20% must be approved by the ROC. All Letters of Credit must be approved as to content and form by SJCE’s legal counsel.”

Date Adopted	Area	Track Changes
11/19/2020	Section 14.2: Letter of Credit	Added: “Approved letters of credit shall be monitored in aggregation for credit quality and credit exposure by bank throughout the terms. If a letter of credit is terminated for contractual reasons or an issuing bank experiences a rating downgrade below the aforementioned minimum requirements, the counterparty shall provide a replacement letter of credit meeting the requirements, or make cash deposits with SJCE.”
11/19/2020	Section 15.1: Counterparty Credit Analysis	Deleted: “and” in heading Added: “, as specified in Table 1,” Added: “calculate a credit limit and” Deleted: “depending on the level of credit requested” Deleted: “For agency rated counterparties, Middle Office staff may elect a rating similar to one derived by 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.” Deleted: “into three tiers” Added: “as active, inactive and long-term PPA counterparties depending on product and amount of contracts. Credit review and monitoring” Added: “Inactive counterparties with no past transactions are reviewed on bi-annual basis (once every two years) and are subject to a transaction limit of \$10 million. Such counterparties will be considered as active and be subject to on-going review post first transaction.” Added: “Table 1: Credit Evaluation Matrix” (approved by ROC) Deleted: “Table 1:Credit Evaluation Matrix”
11/19/2020	Section 15.2: Credit Limits	Added: “15.2 Credit Limits”

Date Adopted	Area	Track Changes
11/19/2020	Section 15.3: Concentration Limits	<p>Deleted: “No”</p> <p>Added: “For energy, no more than 15% of the expected load requirement for the next 20 calendar years and no”</p> <p>Deleted: “total covered portfolio”</p> <p>Added: expected load requirement for any calendar year”</p> <p>Added: “quantity MWh”</p> <p>Deleted: “total dollar value committed within the covered portfolio times one hundred”</p> <p>Deleted: “No more than 30%”</p> <p>Added: “expected wholesale load requirement MWh”</p> <p>Deleted: “total expected annual budget by any one counterparty in any one year (calculated as the dollar value of the outstanding commitments to a counterparty divided by the total expected dollar value of the portfolio for the year times one hundred”</p> <p>Added: “applicable period”</p> <p>Added: “Concentration limits are not applied to RA and RPS products. Procurement of RA and RPS will be monitored for best efforts in diversification.”</p> <p>Changed: “portfolio” to “plan”</p> <p>Added: “These concentration limits shall be applied at the time a contract is entered into.</p>
11/19/2020	Section 16.3: Credit Review Exceptions	<p>Deleted: “associated”</p> <p>Added: “forward contracts of less than \$1 million for Resource Adequacy, Renewable Portfolio Standard credits and Carbon free products, and those associated with”</p>
11/19/2020	Appendix 5- 1: New Product Development	Changed: “product” to “counterparty”
11/19/2020	Appendix 7: Management Reports	<p>Changed: “portfolio” to “plan”</p> <p>Added: “X” to chart</p>
11/19/2020	Appendix 7: Management Reports Section 1.1.a: Description of Management Reports	Changed: “manangement” to “management”
11/19/2020	Appendix 7: Management Reports Section 1.1.b: Description of Management Reports	<p>Changed: “A” to “The”</p> <p>Deleted: “report providing concentration for total covered portfolio and annual”</p> <p>Added: “reports”</p> <p>Deleted: “compared to annual”</p>

Date Adopted	Area	Track Changes
11/19/2020	Appendix 7: Management Reports Section 1.1.b: Description of Management Reports	Added: “in terms of total covered portfolio” Added: “and load concentration”
11/19/2020	Appendix 7: Management Reports Section 1.1.b: Description of Management Reports	Deleted: “Balance report is” Added: “Reports are”
11/19/2020	Appendix 7: Management Reports Section 1.1.c: Description of Management Reports	Changed: “manangement” to “management”
11/19/2020	Appendix 7: Management Reports Section 1.1.i: Description of Management Reports	Changed: “2” to “few” Deleted: “by the Front Office” Deleted: “It is sent to the ROC is included on ROC meeting agendas as a consent item bi annually”
11/19/2020	Appendix 7: Management Reports Section 1.1.j: Description of Management Reports	Added: “and Credit Quality” Changed: “Credit Exposrue” to “credit exposure and credit quality” Deleted: “Credit Exposure to”
11/19/2020	Appendix 8: Mark-to-Market Methodology	Deleted: “Long-term Transactions for future delivery or receipt of Energy” Changed: “weekly” to “daily”
11/19/2020	Appendix 9: Recommended Coverage	Added: “Middle and Back” Deleted: “Integrated Resource Plan” Changed: “two” to “few”
02/28/2022	Section 2.1: Volumetric Risk	Added: “Though the CCA is the default service provider, the ability of the customers to opt out and choose the investor owned utility or other method of sourcing energy creates a certain level of uncertainty in SJCE’s revenue stream. Monitoring opt out activity of other CCAs with longer histories may indicate possible trends in opt out rates, which and poses some challenge in the ability to effectively plan for long-term resources (customer opt-out risk).” Added: “accounting for volumetric uncertainty related to long-term resource commitments,” Added: “Customer opt-out risk is managed by maintaining a strong relationships with the local community and stakeholders, developing products and services that align with customer’s values and drivers, and actively engaging and advocating the interests

		of SJCE and its customers in regulatory, legislative, and policy proceedings.”
02/28/2022	Section 2.3: Counterparty Credit Risk	Added: “s” to premium Changed: “and posting collateral” to “and requiring posting of collateral”
02/28/2022	Section 2.8: Concentration Risk	Changed: Section “15.2” to “15.3” Changed: “SJCE has high concentrations of credit exposure by not awarding more than 30% of the portfolio to any one counterparty” to “SJCE has concentrations above the recommended limits” Changed: “spreadsheet” to “report”
02/28/2022	Section 2.9: Liquidity Risk	Changed: “internal liquidity risks are mitigated with adequate deposits from customers (if required)” to “credit enhancements (if required), counterparty diversification,”
02/28/2022	Section 3.1: Balanced Portfolio	Changed: “develop a set of metrics that guide” to “utilize the portfolio optimization tools that provide the insights necessary to make” Added: “also”
02/28/2022	Section 3.2.1: Minimum Coverage Requirements for Energy	Changed: “fess” to “fees” Added: “, quantity/production uncertainty of long-term power purchase agreements”
02/28/2022	Section 3.2.2: Minimum Coverage Requirements for Capacity	Added: “regulatory” Added: “, including, but not limited to the CPUC Resource Adequacy Filing Guide”
02/28/2022	Section 3.6: Risk Mitigation	Added: “SJCE will utilize the portfolio optimization tools to track the various industry standard metrics and guide the procurement decisions.” Changed: “Section 9” to “Section 3.7 and 3.8”
02/28/2022	Section 4.5: Front Office	Added: “of” to item o
02/28/2022	Section 4.6: Middle Office	Deleted: “and” from item p. Added: “(Middle Office Support)” to item s. Added: “Support” at the end of Finance Department – Middle Office”
02/28/2022	Section 7.4.2: Procurement where competitive bidding is not practicable	Deleted: “In addition, if the City procurement process is not practicable, the Director or her/his assignee will determine in writing that the limited supply of energy or capacity products or other market disruptions make the application of the requirements for competitive procurement contrary to the public interest. The Middle Office should

		maintain the Director or her/his assignee’s written determinations of the basis for the procurement and for the selection of the particular contractor within SJCE’s files. Once written determination has been issued by the Director,”
02/28/2022	Section 7.4.5: Confirmation	Changed: “SJCE’s” to “City’s”
02/28/2022	Section 7.4.7: Billing and Settlement	Deleted: “and Back” and “ensures that bills are issued to counterparties with outstanding accounts receivable, and” Added: “Back Office staff ensures issuance of bills to counterparties with outstanding accounts receivable, collection of energy invoices receivable to SJCE and payment of energy invoices payable by SJCE.”
02/28/2022	Section 8: Footnote 2	Changed “Section 11” to “Section 8”
02/28/2022	Section 11.1: Counterparty Risk	Deleted: “sub-investment grade rated” Added: “with a rating below BBB+ (or equivalent investment grade rating)”
02/28/2022	Section 11.2: Relaxation of credit limits	Deleted: “The Front Office shall report to the ROC all purchases entered into without applying the credit limits, or with such less stringent credit limits as the ROC deemed appropriate since the prior meeting.”
02/28/2022	Section 12: Underwriting Standards	Changed: “credit staff” to “(Middle Office Support)” Added: “Front Office”
02/28/2022	Section 14.2: Letter of Credit	Changed: “term” to “date” Deleted: “s”
02/28/2022	Section 15.1: Counterparty Credit Analysis	Added: “(Middle Office Support)” Added: “type” Added: “total” Added: “forward”
02/28/2022	Section 15.1.Table1: Credit Evaluation Matrix	Added: “√: Required X: Not Required”
02/28/2022	Section 15.2: Credit Limits	Changed: “5% of unassigned/unrestricted net assets not to exceed SJCE’s maximum counterparty credit limits. The detailed maximum credit limits by rating are illustrated in Appendix 10.” to “a credit limit established by Finance (Middle Office Support), if applied.”
02/28/2022	Section 15.3: Concentration Limits	Changed: “maintaining” to “complying with”

02/28/2022	Section 16.1: Credit Authorization	Added: “Table 2: Credit Limit Authorities” Added: “medium and” Added: “medium or”
02/28/2022	Section 16.2: Increases to Wholesale Counterparty Limits	Added: “Table 2” Changed: “A sign off sheet shall be used to ensure written approval according to the limits authorized by this Regulations.” to “Any changes to the credit limits are approved by Director of Finance in a written memo and approved by ROC vote, if needed.”
02/28/2022	Section 18: Segregation of Duties	Changed: “the Finance Department” to “Finance (Middle Office Support)”
02/28/2022	Appendix 1: Definitions	Changed: “the Finance Department or ROC” to “Finance (Middle Office Support) or the ROC” under 1.1 Added: “BAA” means Balancing Authority Area, which is the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area. CAISO is one of the balancing authorities in California.” under 1.3 Added: “Department of Community Energy, City of San José.” under 1.17 Changed: “City of San José’s Finance.” to “Director of Department of Finance, City of San José.” under 1.18 Added: “Prompt quarter” means the next full calendar quarter beyond the current quarter.” under 1.36 Added: “Prompt 1-4 quarters” means the next four calendar quarters beyond the current quarter.” under 1.37 Added: “Prompt year” means the next full calendar year beyond the current year.” under 1.38
02/28/2022	Appendix 2: Risk Oversight Committee	Deleted: “Middle Office Support” from 1.5, 1.6 and 1.7 Added: “staffing Middle Office Support, which includes” under 1.5.d Changed: “Provide accurate reports on trading operations and all transactions carried out since last ROC meeting and summary of current and future transaction strategies” to “Provide a quarterly report of all transactions

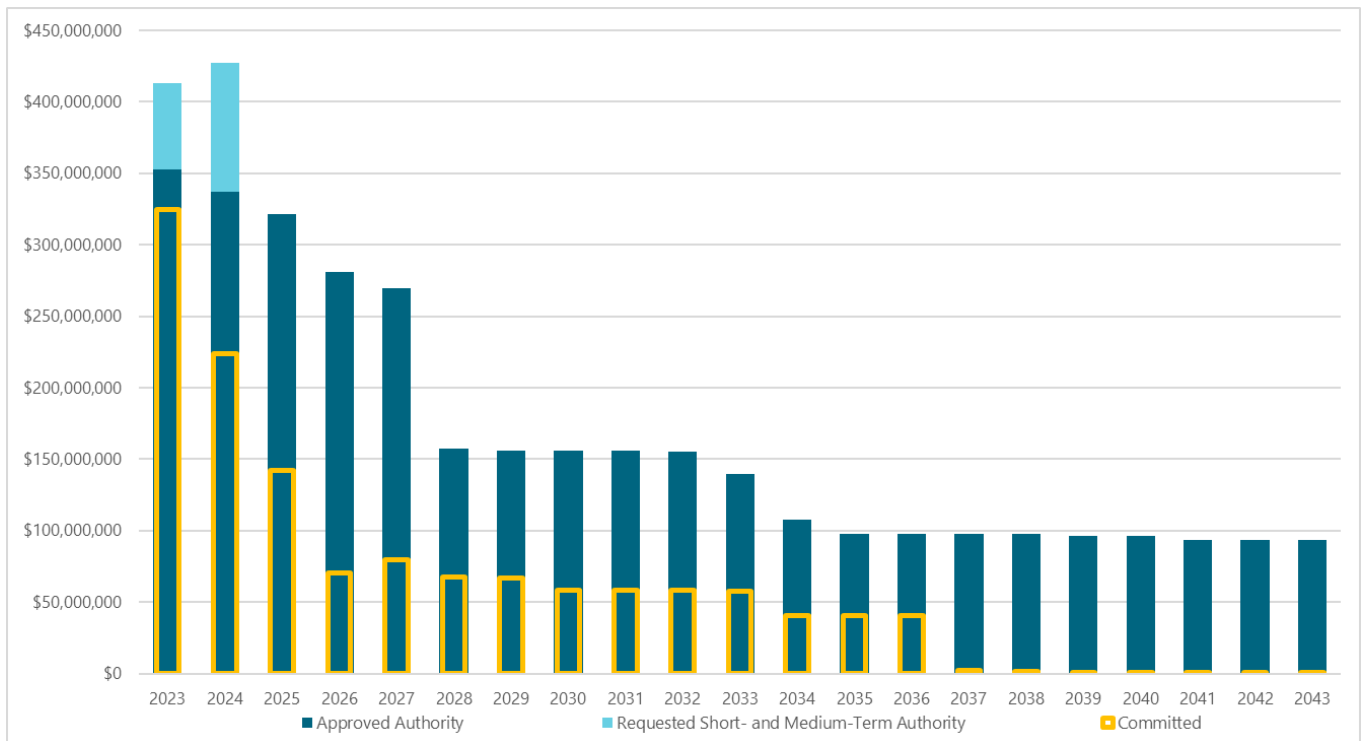
		under 5 years carried out since the last quarterly report” under 1.8.d Deleted: “Review proposed changes to EMRP by other ROC members.”
02/28/2022	Appendix 5: New Product Development Procedures	Changed: “Middle Office – Finance” to “Finance – Middle Office Support”
02/28/2022	Appendix 6: Approved Products	Added: “including long-term power purchase agreements entered pursuant to statutory requirements (e.g. SB350 requires atleast 65% of RPS procurement from long-term contracts of 10 or more years) or pursuant to Integrated Resource Plan or other Council-approved strategies.” under Approved Products #1
02/28/2022	Appendix 7: Management Reports	Deleted: “Report Audience: ROC” Deleted: “Load and Resource” report Added: “Power Transactions” report with approval by “CED Deputy Director of Power Resources” Deleted: “Report Audience: SJCE Management” and Management Report table Deleted: “Report Audience: Front & Back Office and Management Report table Deleted: “Load and Resource: The Front Office produces the Load and Resource Balance report detailing total resources by source as compared to total actual load. This report shows supply surpluses and shortages. The Load Resource report is updated weekly and reviewed with SJCE management. It is also included on ROC meeting agendas as a consent item on a quarterly basis.” Changed: “and trading strategies for the next 3 years” to “for periods as outlined in Appendix 9” Added: “Power Transactions: Quarterly report submitted to the Council of all transactions under five years carried out since the last submitted quarterly report. It is included on ROC meeting agendas as a standing consent item.”
02/28/2022	Appendix 9: Recommended Coverage	Added: “for energy contracts” Added: “uncertainty as to online date and expected volatility of output of long term power purchase agreements,” Deleted: “and”

		Changed: “Table 1 Coverage Thresholds” table to reflect new coverage thresholds and additional time periods
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ATTACHMENT B - Procurement Authority Request for CY 2023-2024

Calendar Year	Approved Authority	Requested Short- and Medium-Term Authority	Approved Authority + Request	Net Expected Cost (Pro-Forma)	Target Coverage Ratio
2023	\$352,900,000	\$60,000,000	\$412,900,000	\$392,000,000	125%
2024	\$337,300,000	\$90,000,000	\$427,300,000	\$404,000,000	125%
2025	\$321,600,000		\$321,600,000	\$416,000,000	
2026	\$280,700,000		\$280,700,000	\$425,000,000	
2027	\$269,800,000		\$269,800,000	\$425,000,000	
2028	\$157,300,000		\$157,300,000	\$425,000,000	
2029	\$156,300,000		\$156,300,000	\$425,000,000	
2030	\$156,300,000		\$156,300,000	\$425,000,000	
2031	\$155,800,000		\$155,800,000	\$425,000,000	
2032	\$155,300,000		\$155,300,000	\$425,000,000	
2033	\$139,600,000		\$139,600,000	\$425,000,000	
2034	\$107,500,000		\$107,500,000	\$425,000,000	
2035	\$97,500,000		\$97,500,000	\$425,000,000	
2036	\$97,500,000		\$97,500,000	\$425,000,000	
2037	\$97,500,000		\$97,500,000	\$425,000,000	
2038	\$97,500,000		\$97,500,000	\$425,000,000	
2039	\$96,500,000		\$96,500,000	\$425,000,000	
2040	\$96,500,000		\$96,500,000	\$425,000,000	
2041	\$93,200,000		\$93,200,000	\$425,000,000	
2042	\$93,200,000		\$93,200,000	\$425,000,000	
2043	\$93,200,000		\$93,200,000	\$425,000,000	

ATTACHMENT B - Procurement Authority Request for CY 2023-2024



ATTACHMENT B - Procurement Authority Request for CY 2023-2024

Procurement Authority Request for FY 2023-2024 and 2024-2025

Fiscal Year	Approved Authority	Requested Short- and Medium-Term Authority	Approved Authority + Request	Net Expected Cost (Pro-Forma)	Target Coverage Ratio
FY2023-2024	\$345,724,000	\$73,800,000	\$419,524,000	\$397,520,000	125%
FY2024-2025	\$330,078,000	\$48,600,000	\$378,678,000	\$409,520,000	125%
FY2025-2026	\$302,786,000		\$302,786,000	\$420,140,000	
FY2026-2027	\$275,686,000		\$275,686,000	\$425,000,000	
FY2027-2028	\$218,050,000		\$218,050,000	\$425,000,000	
FY2028-2029	\$156,840,000		\$156,840,000	\$425,000,000	
FY2029-2030	\$156,300,000		\$156,300,000	\$425,000,000	
FY2030-2031	\$156,070,000		\$156,070,000	\$425,000,000	
FY2031-2032	\$155,570,000		\$155,570,000	\$425,000,000	
FY2032-2033	\$148,078,000		\$148,078,000	\$425,000,000	
FY2033-2034	\$124,834,000		\$124,834,000	\$425,000,000	
FY2034-2035	\$102,900,000		\$102,900,000	\$425,000,000	
FY2035-2036	\$97,500,000		\$97,500,000	\$425,000,000	
FY2036-2037	\$97,500,000		\$97,500,000	\$425,000,000	
FY2037-2038	\$97,500,000		\$97,500,000	\$425,000,000	
FY2038-2039	\$97,040,000		\$97,040,000	\$425,000,000	
FY2039-2040	\$96,500,000		\$96,500,000	\$425,000,000	
FY2040-2041	\$94,982,000		\$94,982,000	\$425,000,000	
FY2041-2042	\$93,200,000		\$93,200,000	\$425,000,000	
FY2042-2043	\$93,200,000		\$93,200,000	\$425,000,000	

ATTACHMENT B - Procurement Authority Request for CY 2023-2024

