Central Coast Community Energy

CLEAN ENERGY. LOCAL CONTROL.

Energy Risk Management Policy

March 7, 2018 – Policy Board of Directors Approved

Revised: September 5, 2018 – Operations Board

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Section 1: POLICY OVERVIEW

1.1 Background and Purpose

Central Coast Community Energy ("3CE"), formerly Monterey Bay Community Power Authority, is a public joint powers agency located within the geographic boundaries of Monterey, Santa Cruz San Benito, San Luis Obispo, and Santa Barbara Counties. Member agencies of 3CE include the Counties of Monterey, Santa Cruz, San Benito, and Santa Barbara, as well as certain incorporated cities located within the member counties and San Luis Obispo County. Presently, 3CE's CCA Members include the following local government entities:

County of Santa Cruz	County of Monterey	County of San Benito	City of San Luis Obispo	County of Santa Barbara
City of Santa Cruz	City of Salinas	City Hollister	Morro Bay	Santa Maria
City of Watsonville	City of Monterey	City of San Juan Bautista	Paso Robles	Solvang
City of Capitola	City of Pacific Grove		Pismo Beach	Goleta
City of Scotts Valley	City of Carmel		Grover Beach	Carpinteria
	City of Seaside		Arroyo Grande	Guadalupe
	City of Marina			Buellton
	Sand City			
	Soledad			
	Greenfield			
	Gonzales			
	Del Rey Oaks			

3CE members desire to implement and administer a community choice aggregation ("CCA") program for members that elect to become participants. The CCA program will give its members an opportunity to procure electricity supplies and implement local programs that meet the goals of the local communities. Electricity procured to serve customers will continue to be delivered over the Investor-Owned Utility's transmission and distribution system.

Providing retail electric generation service to customers enrolled in the CCA program exposes 3CE to risks such as customer opt-out risk, market risk, regulatory risk, volumetric risk, model risk, operational risk, counterparty credit risk and reputation risk.

This Energy Risk Management Policy ("Policy") establishes 3CE's Energy Risk Management Program ("Program") including risk management functions and procedures to manage the risks associated with power procurement activities.

The ultimate purpose of this Policy is to help 3CE manage its risks by specifying management responsibilities, organizational structures, risk management standards, and operating controls and limits necessary to properly identify and manage 3CE's exposure to risk.

1.2 Scope

Unless otherwise explicitly stated in this Policy, or other policies approved by the Board, this Policy applies to all power procurement and related business activities that may impact the risk profile of 3CE. This Policy documents the framework by which management and staff will:

- Identify and quantify risk
- Develop and execute procurement strategies
- Create a framework of controls and oversight
- Monitor, measure and report on the effectiveness of the Program

1.3 Energy Risk Management Objective

The objective of the Energy Risk Management Policy is to provide a framework for conducting procurement activities that will manage risks to support 3CE meeting the goals listed in Section 2.1.

Pursuant to this Policy, 3CE will identify and measure the magnitude of the risks to which it is exposed and that contribute to the potential for not meeting identified goals.

1.4 Policy Administration

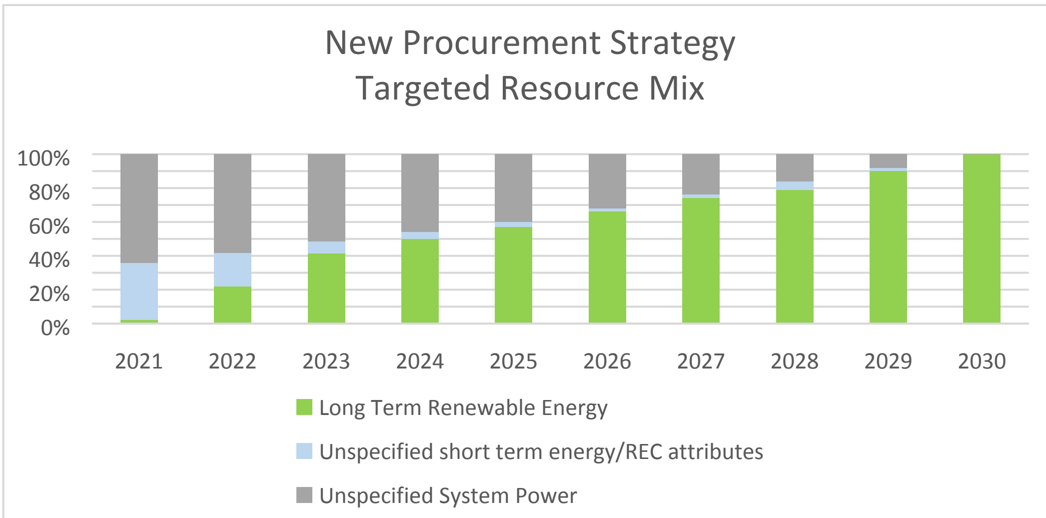
This Policy document shall be routinely reviewed and approved by the 3CE Operations Board of Directors ("Board"). The Risk Management Committee ("RMC") and Operations Board must approve amendments to this Policy, except for the appendices, which may be amended with approval of only the RMC. The RMC must give notice to the Board of any amendment it makes to an appendix or a reference policy or procedure document.

Section 2: STRATEGY/GOALS AND RISK EXPOSURES

2.1 Strategy/Policy Goals

a) Current Board-approved Procurement Strategy

As of September 2, 2020, the Board-approved Energy Procurement Strategy is to accelerate 3CE's acquisition of new clean and renewable resources to meet 60% of retail demand by 2025 and 100% by 2030, while working toward balancing its renewable supply and customer demand on a monthly basis ("3CE RPS Procurement Strategy").



b) Long-term Business Viability Goals

To help ensure 3CE's long term viability, this Program outlines the following business goals. 3CE will establish metrics for modeling and measuring risk exposures for tracking performance relative to these goals.

- 3CE will target to maintain competitive retail rates with the Investor-Owned Utility after adjusting for the PCIA and Franchise Fee.
- 3CE will fund financial reserves with the following objectives:
  - Establish long-term business sustainability
  - Build collateral for power procurement activities
  - Establish an investment grade credit rating
  - Develop a source of funds for investment in generation and other local programs
  - Stabilize rates and dampen year-to-year variability in procurement costs

The goals outlined above are incorporated into the financial models that are used in modeling and measuring risk exposures. It is important to note that the goals listed above are not intended to be a comprehensive list of goals for the CCA.

2.2 Risk Exposures

The Program faces a range of risks during ongoing operations.

a) Customer Opt-Out risk
b) Market risk
c) Regulatory risk
d) Volumetric risk
e) Model risk
f) Operational risk
g) Counterparty credit risk

2.3.1 Customer Opt-Out Risk

Customer opt-out risk is the primary risk the CCA faces. Customer opt-out risk includes any condition or event that creates the potential for significant reductions in the CCA's customer base, thereby increasing the potential for the CCA to not meet its Policy goals. A CCA faces other risks, but the ultimate concern is often how these other risks will affect customer opt-outs. This Policy addresses this paramount risk and secondary risk types listed below. These risks are not all inclusive but are identified as the risk factors driving the success of the CCA.

The most relevant measures of the success of this Policy include:

- Retail rate competitiveness with the Investor-Owned Utility
- Financial reserve level

2.3.2 Customer Opt-Out Risk

For this Policy, risk exposure is assessed on all the transactions (energy, environmental attributes, capacity, etc.) executed by 3CE, as well as the risk exposure of open positions and the impacts of these uncertainties on the CCA's load obligations. The following are components of 3CE's energy risk that will be monitored, assessed, and managed

Market risk is the uncertainty of 3CE's financial performance due to variable commodity market prices (market price risk) and uncertain price relationships (basis risk). Variability in market prices creates uncertainty in 3CE's procurement costs and can materially impact 3CE's financial position. Market risk is managed by regular measurement, an active hedging program, execution of approved procurement and Congestion Revenue Right strategies and the limit structure set forth in this Policy.

2.3.3 Regulatory Risk

CCAs remain a comparatively new legal entity in the state of California and are subject to an evolving legal and regulatory landscape. Additionally, CCA's are in direct competition with California's Investor Owned Utilities ("IOUs"), which face the risk of stranded investments in generating assets and power purchase agreements procured in the past to serve now departing CCA loads. The competitive and regulatory landscape results in retail rate competitiveness risks that are unique to CCAs. 3CE will manage regulatory risk by:

- Monitoring and analyzing legislative and regulatory proceedings impacting CCAs;
- Monitoring and reporting of actual and projected financial results including stressed financial results assuming a range of market and retail rate scenarios (both 3CE and the Investor-Owned Utility);
- Structuring procurement strategies with the objective function of maintaining a favorable retail rate savings relative to the Investor-Owned Utility;
- Actively participating in and representing CCA customer interests during regulatory and legislative proceedings.

2.3.4 Volumetric Risk

Volumetric risk is the uncertainty of 3CE's financial performance due to variability in the quantity of retail load served by 3CE. Load variability can be the result of customer opt-outs, temperature deviation from normal, unforeseen adoption of behind the meter generation by 3CE customers, as well as local, state and national economic conditions. Volumetric risk is managed by:

- Quantifying the variability of the Investor-Owned Utility generation and PCIA rates;
- Quantifying variability in procurement costs;
- Monitoring and adjusting for non-regulatory factors driving volumetric uncertainty (e.g. weather);
- Implement robust short- and long-term load and generation supply forecast methodologies, including regular monitoring of forecast accuracy through time and refining such forecasts, including by incorporating 3CE's actual load data into forecasts as such data becomes available;
- Adopting a formal procurement strategy;
- Implement a key accounts program and maintain strong relationships with local communities;
- Monitoring trends in customer onsite generation, economic shifts, and other factors that affect electric consumption;

2.3.5 Model Risk

Model risk is the uncertainty of 3CE's financial performance due to potentially inaccurate or incomplete characterization of a transaction or power supply portfolio elements due to fundamental deficiencies in models and/or information systems. Model risk is managed by:

- Developing industry standard financial risk assessment models;
- Reviewing model outputs as part of risk control framework;
- Conducting ongoing 3CE staff education and participation in CCA industry forums;
- Updating and improving models as additional information and expertise are acquired

2.3.6 Operational Risk

Operational risk is the uncertainty of 3CE's financial performance due to weaknesses in the quality, scope, content, or execution of human resources, technical resources, and/or operating procedures within 3CE. Operational risk can also be exacerbated by fraudulent actions by employees or third parties or inadequate or ineffective controls. Operational risk is managed through:

- Ensuring adequate controls set forth in this Policy;

- Conducting routine oversight by the RMC procurement activity;
- Perform timely and effective reporting by management;
- Training staff to reinforcing a culture of compliance to ERM policies
- Conducting Ongoing and timely internal and external audits
- Separate internal operations between Front, Middle and Back Office responsibilities as set forth herein
- Provide training to RMC and Operations Board members to enhance oversight

2.3.7 Counterparty Credit Risk

Counterparty credit risk is the potential that a Counterparty will fail to perform or meet its obligations in accordance with terms agreed to under contract. 3CE's exposure to counterparty credit risk is controlled by the limit controls set forth in the Credit Policy described in Section 6.

2.4 Risk Measurement Methodology

A vital element in 3CE's Energy Risk Management Policy is the regular identification, measurement, and communication of risk. 3CE will routinely evaluate industry accepted benchmarks of quantified risk measurements to determine the applicability of such benchmarks to 3CE operations and performance. To effectively communicate risk, all risk management activities must be monitored frequently using risk measurement methodologies that quantify the risks associated with 3CE's energy procurement and performance relative to goals.

Risk measurement is the comparison of 3CE's projected retail rates to those of the Investor-Owned Utility under expected and stressed scenarios. The rate comparison will be adjusted for actual and projected PCIA and Franchise Fee charges. Risk measurement methodologies shall be re-evaluated on a periodic basis to ensure 3CE adjusts its methods to reflect the evolving regulatory and competitive landscape. The implementation of these methods shall be overseen and ratified by the RMC.

Section 3: BUSINESS PRACTICES

3.1 General Conduct

It is the policy of 3CE that all personnel, including the Board, management, and agents, adhere to standards of integrity, ethics, conflicts of interest, compliance with statutory law and regulations and other applicable 3CE standards of personal conduct while employed by or affiliated with 3CE.

3.2 Trading for Personal Accounts

All 3CE Directors, management, employees and agents participating in any transaction or activity within the coverage of this Policy are obligated to give notice in writing to 3CE of any interest such person has in any counterparty that seeks to do business with 3CE, and to identify any real or potential conflict of interest such person has or may have regarding any contract or transaction with 3CE.

Conflicts of Interest shall be identified and defined as set forth in the 3CE Conflict of Interest Code, as amended from time to time by the Policy Board, which incorporates the Political Reform Act requirements for all employees advising 3CE.

If there is any doubt as to whether a prohibited condition exists, then it is the employee's responsibility to discuss the possible prohibited condition with her/his manager or supervisor.

3.3 Adherence to Statutory Requirements

Compliance is required with rules promulgated by the state of California, California Public Utilities Commission, California Energy Commission, Federal Energy Regulatory Commission (FERC), Commodity Futures Trading Commission (CFTC), and other regulatory agencies.

Congress, FERC and CFTC have enacted laws, regulations and rules that prohibit, among other things, any action or course of conduct that actually or potentially operates as a fraud or deceit upon any person in connection with the purchase or sale of electric energy or transmission services. These laws also prohibit any person or entity from making any untrue statement of fact or omitting to state a material fact where the omission would make a statement misleading. Violation of these laws can lead to both civil and criminal actions against the individual involved, as well as 3CE. This Policy is intended to comply with these laws, regulations, and rules and to avoid improper conduct on the part of anyone employed by 3CE. These procedures may be modified from time to time by legal requirements, auditor recommendations, RMC requests and other considerations.

In the event of an investigation or inquiry by a regulatory agency, 3CE may provide legal counsel to employees. However, 3CE, with the consent of the Operations Board, will not appoint legal counsel to an employee if 3CE's determine that the employee was not acting in good faith within the scope of employment.

3.4 Transaction Type, Regions and Markets

Authorized transaction types, regions and markets are listed in Appendix B to this Policy. These transaction types, regions and markets are and shall continue to be focused on supporting 3CE's financial policies, including approved procurement strategies. New or non-standard transaction types may provide 3CE with additional flexibility and opportunity but may also introduce new risks. Therefore, transaction types, regions and markets not included in Appendix B, or transactions within already approved transaction types that are substantially different from any prior transaction executed by 3CE, must be approved by the RMC prior to execution using the process defined below.

When seeking approval for a new or non-standard transaction type, region, and/or market, a New Transaction Approval Form, as shown in Appendix C, should be drafted describing all significant elements of the proposed transaction. The proposal write-up should, at a minimum, include:

- A description of the benefit to 3CE, including the purpose, function and expected cost impact (i.e.; decrease costs, manage volatility, control variances, etc.);
- Identification of the in-house or external expertise that will manage and support the new or non-standard transaction type;
- Assessment of the transaction's risks, including any material legal, tax or regulatory issues;
- How the exposures to the risks above will be managed;

- Proposed valuation methodology (including pricing model, where appropriate);
- Proposed reporting requirements, including any changes to existing procedures and system requirements necessary to support the new transaction type;
- Proposed accounting methodology.

It is the responsibility of 3CE's CEO or his designee to ensure that relevant departments have reviewed the proposed transaction and that material issues are resolved prior to submittal to the RMC for approval. If approved, Appendix B to the Policy will be updated to reflect the new transaction type.

3.5 Counterparty Suitability

3CE's counterparty credit limits and approval processes will govern counterparty suitability for all transactions executed by 3CE, consistent with the credit policies described in Section 6. Credit limits should be approved prior to execution of contracts.

3.6 System of Record

3CE will maintain a set of records for all transactions executed in association with 3CE procurement activities. The records will be maintained in US dollars and transactions will be separately recorded and categorized by type of transaction. This system of record shall be auditable.

3.7 Transaction Valuation

Transaction valuation and reporting of positions shall be based on objective, market-observed prices. Open positions should be valued (marked-to-market) daily, based on consistent valuation methods and data sources. Whenever possible, mark-to-market valuations should be based on independent, publicly available market information and data sources.

3.8 Stress Testing

Stress testing shall also be used to examine performance of the 3CE portfolio under adverse conditions. Stress testing is used to understand the potential variability in 3CE's projected procurement costs, and resulting retail rate impacts and competitive positioning, associated with low probability events.

3.9 Trading Practices

It is the expressed intent of this Policy to prohibit the acquisition of risk beyond that encountered in the efficient optimization of 3CE's generation portfolio and execution of procurement strategies. As such, speculative transactions are prohibited. During developing operating plans and conducting procurement activities, 3CE recognizes that expertise must be employed by staff, and it is not the intent of this Policy to restrain the legitimate application of analysis and market expertise in executing procurement strategies intended to minimize costs within the constraints of this Policy. If any questions arise as to whether a transaction constitutes speculation, the RMC shall review the transaction(s) to determine whether the transaction would constitute speculation and document its finding in the meeting minutes.

3.10 Policy Compliance

3CE's Director of Power Services will provide a monthly report monitoring compliance with the limits established by this Policy.

Section 4: ORGANIZATIONAL STRUCTURE AND RESPONSIBILITIES

4.1 Risk Management Organizational Structure

3CE's Energy Risk Management Policy ensures proper segregation of responsibility for policy approval, valuation and reporting, and trading.

4.2 Operations Board of Directors

The 3CE Operations Board of Directors has the responsibility to review and approve this Policy. With this approval, the Board assumes responsibility for understanding the risks 3CE is exposed to due to CCA Program activity and how the policies outlined in this document help 3CE manage the associated risks. The Board of Directors is also responsible to:

- Determine 3CE strategic direction
- Understand the procurement strategy employed
- Approve risk exposures beyond the RMC's authority

4.3 Risk Management Committee (RMC)

The RMC is formed by the 3CE CEO to implement, maintain and oversee compliance of 3CE with this Policy. The members of the RMC shall be selected by 3CE's CEO and should include Operations or Policy Board members.

The Chief Executive Officer will serve as the RMC Chairperson. The primary goal of the RMC is to ensure that the procurement activities of 3CE are executed within the guidelines of this Policy and are consistent with Board directives. The RMC is also responsible to consider and propose recommendations to this Policy when conditions dictate.

RMC and the Chief Executive Officer maintain full authority over all procurement activities for 3CE. This authority includes, but is not limited to, taking any or all actions necessary to ensure compliance with this Policy.

The RMC is responsible for overseeing implementation of this Policy, procurement strategies, and the adoption of new product types. The RMC is also responsible for ensuring procurement strategies are consistent with 3CE's strategic objectives and for reviewing financial results.

The RMC maintains the authority and responsibility to:

- Approve and ensure that all procurement strategies are consistent with this Policy;
- Determine if changes in procurement strategies are warranted;
- Approve new transaction types, regions, markets and delivery points;
- Understand financial and risk models;
- Understand counterparty credit review models and methods for setting and monitoring credit limits;
- Receive and review reports as described in this Policy;
- Meet to review actual and projected financial results and potential risks;

- Escalate to the Board of Directors with any risks beyond the RMC’s authority;
- Review summaries of limit violations;
- Review the effectiveness of 3CE's energy risk measurement methods;
- Maintain this Policy; and
- Monitor regulatory and legislative activities.

4.4 Segregation of Duties

3CE shall maintain a segregation of duties, also referred to as "separation of function", to the extent practicable to help manage and control the risks outlined in this Policy. Individuals responsible for legally binding the CCA to a transaction will not perform confirmation, clearing or settlement functions. 3CE staff roles and responsibilities are divided into front-middle-back office activities, as described below. In executing these functions, 3CE may rely on third-party to assist in performing various functions to preserve the intent of the separation of functions.

4.4.1 Front Office

The Front Office is the responsibility of the Manager of Energy Trading, with oversight by the Director of Power Services.

The Front Office has overall responsibility for (1) managing all commodity transactions(2) the analysis of fundamentals affecting 3CE net position, and (3) transacting within the limits of this Policy, and associated policies, to balance loads and resources, and maximize the value of CCA's assets through the exercise of approved optimization strategies. Other duties associated with these responsibilities include:

a. Develop and analyze hedging products and procurement strategies and bring recommendations to the RMC, utilizing the net forward power positions prepared by Middle Office.
b. Prepare each month a monthly operating plan for the prompt months that gives direction to the day-ahead and real-time trading and scheduling staff regarding the bidding and scheduling of 3CE's resource portfolio in the CAISO market.
c. Develop, price and negotiate purchase and/or sale transactions for energy, Resource Adequacy, renewable, green-house gas free energy
d. Keep accurate records of all transactions

4.4.2 Middle Office

The Middle Office is the responsibility of the Manager of Energy Risk & Analytics, with oversight by the Director of Power Services. The Middle Office provides independent market and credit risk oversight.

The Middle Office has primary responsibility for trading controls, including forward trading. Primary responsibilities include:

a. Calculating and maintaining the short-term load forecasts and disseminating to Front and Back Office.
b. Estimating and publishing forward monthly power price curves for a minimum of the balance of the current year through the next calendar year.
c. Ensuring that 3CE adheres to all risk policies and procedures in letter and intent

d. Calculating and maintaining the net forward power positions of 3CE.
e. Assist Back Office in calculating Counterparty Credit Exposure

4.4.3 Back Office

The Back Office is the responsibility of the Manager of Contracts and Compliance, with oversight by the Director of Power Services. The Back Office provides support with a wide range of administrative activities necessary to execute and settle transactions and to support the risk control efforts (e.g. transaction entry and/or checking, data collection, billing, etc.) consistent with this Policy.

The Back Office has primary responsibility for ensuring agreement with counterparties regarding the terms of all trades, including forward trading. Primary responsibilities include:

a. Handling confirmation of all transactions (physical and financial) and reconciling differences with the trading counterparties
b. Reviewing transaction confirmations for adherence to approved limits
c. Calculating a monthly Counterparty Credit Exposure report to include in the monthly Energy Risk Management report.
d. Ensuring all trades have been entered into the appropriate system of record
e. Carrying out month-end checkout of all physical and financial transactions each month
f. Implementing and enforcing credit policies and limits

Section 5: DELEGATION OF AUTHORITY

With the approval of the Policy, the 3CE Policy and Operations Boards are explicitly delegating approval of transactions to the CEO and RMC as outlined in the following table

Position	Maturity Limit	Term Limit	Value Limit ($)
Risk Management Committee	72 Months	60 Months	110,000,000
Chief Executive Officer	48 Months	36 Months	65,000,000

Additionally, to adapt to changing market conditions and to facilitate the daily operations of 3CE, the Boards are delegating authority to CEO (or designee) to execute administrative amendments to duly approved transactions where such amendment does not exceed the CEO's delegated authority as set forth above (for clarity, amendments exceeding Maturity, Term or Value limits shall require Operations Board approval) and further reduces 3CE's risk in furtherance of this Policy. Such administrative amendments must be reported at the next available RMC meeting and Operations Board meeting.

These authorities will be applied to wholesale power activity executed outside of the California Independent System Operator ("CAISO") markets. These limits provide 3CE needed authorities to manage risks as they arise. Transactions falling outside the delegations above require Board approval prior to execution. Activity with CAISO is excluded from this table due to the nature of the market, where prices for activity may not be known until after transactions are committed.

All procurement executed under the delegation above, must align with the 3CE's underlying risk exposure (locational, volume and temporal) that is being hedged consistent with the approved Procurement Strategy.

The point of delivery for all products must be at a location on the CAISO transmission grid.

5.1 Hedging Tolerances

The Front Office is responsible for managing portfolio risks within the limits of this Policy. To reduce market price risk and increase retail rate certainty Front Office will execute transactions based on the following hedge targets.

5.1.1 Energy Procurement Tolerances

Period	Minimum Tolerance	Maximum Tolerance	Target
Year 1 (Current Year)	90% of Load	110% of Demand	100% of Demand
Year 2	70% of Load	110% of Demand	85% of Demand
Year 3	50% of Load	90% of Demand	70% of Demand
Year 4	30% of Load	60% of Demand	50% of Demand
Year 5	20% of Load	50% of Demand	30% of Demand

5.1.2 Renewable Energy Procurement Tolerances

Period	Minimum Tolerance	Maximum Tolerance	Target
Year 1 (Current Year)	90% of 3CE RPS Procurement Strategy	100% of 3CE RPS Procurement Strategy	100% of 3CE RPS Procurement Strategy
Year 2	70% of 3CE RPS Procurement Strategy	100% of 3CE RPS Procurement Strategy	85% of 3CE RPS Procurement Strategy
Year 3	50% of 3CE RPS Procurement Strategy	90% of 3CE RPS Procurement Strategy	70% of 3CE RPS Procurement Strategy
Year 4	50% of 3CE RPS Procurement Strategy	75% of 3CE RPS Procurement Strategy	65% of 3CE RPS Procurement Strategy
Year 5	50% of 3CE RPS Procurement Strategy	75% of 3CE RPS Procurement Strategy	65% of 3CE RPS Procurement Strategy

5.1.3 Capacity Procurement Tolerances

Period	Minimum Tolerance	Maximum Tolerance	Target
Prompt Month	100% of required	100% of required	100% of required
Prompt Quarter	90% of required	100% of required	100% of required
Year 1 (Current Year)	90% of required	100% of required	100% of required
Year 2	80% of required	100% of required	90% of required
Year 3	50% of required	100% of required	70% of required
Year 4	20% of required	70% of required	50% of required
Year 5	0% of required	50% of required	40% of required

5.2 Monitoring, Reporting and Instances of Exceeding Risk Limits

The Middle Office is responsible for monitoring, and reporting compliance with, all limits within this Policy. If a limit or control is violated, the Middle Office will send notification to the Director of Power Services and the RMC. The RMC will discuss the cause and potential remediation of the exceedance to determine next steps for curing the exceedance.

Section 6: CREDIT POLICY

All Counterparties shall be evaluated for creditworthiness by the Middle Office prior to execution of any transaction and no less than annually thereafter. Additionally, Counterparties shall be reviewed if a change has occurred, or perceived to have occurred, in market conditions or in a company's management or financial condition. This evaluation, including any recommended increase or decrease to a credit limit, shall be documented, and inclusive of all information supporting such evaluation in a credit file for the counterparty. A credit limit for a Counterparty will not be recommended or approved without first confirming the Counterparty's senior unsecured or corporate credit rating from one of the nationally recognized rating agencies (S&P, Moody's, and/or Fitch) and/or performing a credit review or analysis of the Counterparty's or guarantor's financial statements. The credit analysis shall include, at a minimum, current audited financial statements or other supplementary data that indicates financial strength commensurate with an investment grade rating. Trade and banking references, and any other pertinent information, may also be used in the review process.

Once a counterparty is determined to be creditworthy, a credit limit will be proposed. Although a counterparty may qualify for a certain maximum credit limit, anticipated transaction volumes and other business factors may prompt 3CE to select a lower limit that is considered more appropriate.

Counterparties that do not qualify for an unsecured Credit Limit must post an acceptable form of credit support or Prepayment prior to the execution of any transaction, unless otherwise approved by the CEO. A Counterparty may choose to provide a guarantee from a third party, provided the third party satisfies the criteria for a Credit Limit as outlined herein.

6.1 Maximum Credit Exposure Limits

The maximum amount of any Counterparty Credit Exposure shall not exceed $50,000,000. In the event any counterparty exceeds this limit, 3CE staff shall document the business reasons for awarding additional contracts to those counterparties exceeding this limit. Counterparty Credit Exposure measures the known exposures and is represented by the sum of both (a)Realized exposure and (b) Forward exposure as those terms are defined below:

> Realized exposure: payable or receivable amount owed between counterparties, is a measurement of cash flow for billed and unbilled transactions.
>
> Forward exposure: measure of current unrealized exposure and includes the measure of a counterparty's incentive to fulfill contractual obligations. Forward exposure measures the risk associated with having a payment default or the need to replace a transaction in the event of delivery default.

6.2 Counterparty Concentration

In addition to maintaining credit exposure limits, 3CE staff shall strive to diversify transactions among counterparties. 3CE staff shall document the business reasons (e.g., differences in offer price, lack of qualified suppliers, etc.) for awarding additional contracts to counterparties with high concentrations of Credit Exposure.

6.3 Credit Review Exceptions

Counterparties not subject to the above credit review criteria include those associated with day-ahead and current day purchases or market index-based contracts where risks associated with market movements is minimal.

6.4 Credit Exposure and Monitoring

The Back Office will monitor the current credit exposure for each Counterparty with whom 3CE transacts and include such information in the monthly Risk Management Report. This report will be made available, reviewed and communicated to the RMC pursuant to the reporting requirements outlined in Section 7.

Section 7: POSITION TRACKING AND MANAGEMENT REPORTING

Minimum reporting requirements are shown below. The reports outlined below will be made available to RMC members:

- **Monthly Financial Model Forecast**

  Latest projected financial performance, marked to current market prices, and shown relative to financial goals.

- **Monthly Net Position Report**

  Prepare a forward net position report, not less frequently than monthly, and report the results to the RMC.

- **Monthly Counterparty Credit Exposure**

  This report will show credit exposures for transactions executed by 3CE.

- **Monthly Risk Analysis**

  This will include a stress test of financial forecast relative to financial goals.

- **Quarterly Board Report**

  Update on activities and projected financial performance to be presented quarterly at 3CE Board meetings.

Section 8: POLICY REVISION PROCESS

3CE's Energy Risk Management Policy will evolve over time as market and business factors change. At least on an annual basis, the RMC will review this Policy and associated procedures to determine if they should be amended, supplemented, or updated to account for changing business and/or regulatory requirements. If an amendment is warranted, the Policy amendment will be submitted to the 3CE Board for approval. Changes to appendices to this Policy may be approved and implemented by the RMC.

8.1 Acknowledgement of Policy

Any 3CE employee participating in any activity or transaction within the scope of this Policy shall sign, on an annual basis or upon any revision, a statement approved by the RMC that such employee has:

- Read 3CE's Energy Risk Management Policy
- Understands the terms and agreements of said Policy
- Will comply with said Policy
- Understands that any violation of said Policy shall be subject to employee discipline up to and including termination of employment.

8.2 Policy Interpretations

Questions about the interpretation of any matters of this Policy should be referred to the RMC.

All legal matters stemming from this Policy will be referred to General Counsel.

Appendix A: AUTHORIZED TRANSACTION TYPES, REGIONS AND MARKETS

All transaction types listed below must be executed within the limits set forth in this Policy. *(The following transaction types can be 'nonstandard' at 3CE subject to RMC approval)*

Over the Counter Products

- CAISO Market Products
  - Day-ahead and Real-time Energy
  - Congestion Revenue Rights
  - Convergence bids
  - Inter Scheduling Coordinator Transactions
  - Tagging into and out of CAISO
- Physical Power Products
  - Power
  - Physical Over-the-counter Options
  - Physical Resource Adequacy Capacity
- Financial Power Products
  - Power
  - Financial Over-the-counter Options
- Physical Transmission Products
  - Physical WECC transmission
- Physical Environmental Products
  - Renewable Energy Credits
  - Specified Source Power
  - Carbon Allowances and Obligations

Appendix B: NEW TRANSACTION APPROVAL FORM

New or Non-Standard Transaction Approval Form

Prepared By:

Date:

New or Non-Standard Transaction Name:

Business Rationale and Risk Assessment:

- Product description – including the purpose, function, expected impact on net revenues (i.e. increase, manage volatility, control variances, etc.) and/or benefit to 3CE
- Identification of the in-house or external expertise that will be relied upon to manage and support the new or non-standard transaction
- Assessment of the transaction's risks, including any material legal, tax or regulatory issues
- How the exposures to the risks above will be managed by the limit structure
- Proposed valuation methodology (including pricing model, where appropriate)
- Proposed reporting requirements, including any changes to existing procedures and system requirements necessary to support the new product
- Proposed accounting methodology
- Proposed Middle Office work flows/methodology, including systems
- Brief description of the responsibilities of various departments within 3CE who will have any manner of contact with the new or non-standard transaction

Reviewed by:

______________________________ ____________________

Director of Power Services **Date**

______________________________ ____________________

Chief Operating Officer/General Counsel **Date**

______________________________ ____________________

Chief Executive Officer **Date**

Appendix C: DEFINITIONS

Back Office: That part of a trading organization which handles transaction accounting, confirmations, management reporting, contract administration and working capital management.

Bilateral Transaction: Any physical or financial transaction between two counterparties, neither of whom is an Exchange or market entity such as CAISO.

Cash Flow at Risk: A measure of the potential shortfall in cash flow from a specified level during a specified period of time at a specified confidence level.

CAISO: California Independent System Operator. CAISO operates a California bulk power transmission grid, administers the State's wholesale electricity markets, and provides reliability planning and generation dispatch.

CCA: Community Choice Aggregator. CCAs allow local government agencies such as cities and/or counties to purchase and/or develop generation supplies on behalf of their residents, businesses and municipal accounts.

CFTC: Commodity Futures Trading Commission. The CFTC is a U.S. federal agency that is responsible for regulating commodity futures and swap markets. It goals include the promotion of competitive and efficient futures markets and the protection of investors against manipulation, abusive trade practices and fraud.

Clearing: Clearing is the process of reconciling purchases and sales of a commodity, as well as the direct transfer of funds from one financial institution to another. The process validates the availability of funds, records the transfer, and in the case of financial securities, ensure the delivery to the buyer.

Commodity: A basic good used in commerce that is interchangeable with other commodities of the same type. Commodities are most often used as inputs in the production of other goods or services. The quality of a given commodity may differ slightly, but it is essentially uniform across producers. When they are traded on an exchange, commodities must also meet specified minimum standards, also known as a basis grade.

Confirmation Letter: A letter agreement between two counterparties that details the specific commercial terms (e.g., price, quantity and point of delivery) of a transaction.

Congestion Revenue Right: A point-to-point financial instrument in the Day-Ahead Energy Market that entitles the holder to receive compensation for or requires the holder to pay certain congestion related transmission charges that arise when the transmission system is congested.

Counterparty Credit Risk: The risk of financial loss resulting from a counterparty to a transaction failing to fulfill its obligations.

Counterparty Credit Exposure: This measures the known exposures and is represented by the sum of both (a)Realized exposure and (b) Forward exposure, as those terms are defined below:

> **Realized exposure:** payable or receivable amount owed between counterparties, is a measurement of cash flow for billed and unbilled transactions.
>
> **Forward exposure:** measure of current unrealized exposure and includes the measure of a counterparty's incentive to fulfill contractual obligations. Forward exposure measures the risk associated with having a payment default or the need to replace a transaction in the event of delivery default.

Day-ahead Market: The short-term forward market for efficiently allocating transmission capacity and facilitating purchases and sales of energy and scheduled bilateral transactions; conducted by CAISO prior to the operating day.

Delivery point: the point at which a commodity will be delivered and received.

FERC: Federal Energy Regulatory Commission. FERC is a federal agency that regulates the interstate transmission of electricity, natural gas and oil. FERC also reviews proposals to build liquefied natural gas terminals, interstate natural gas pipelines, as well as licenses hydroelectric generation projects.

Front Office: That part of a trading organization which solicits customer business, services existing customers, executes trades and ensures the physical delivery of commodities.

Hedging products: Hedging products means capacity, energy, renewable energy credits or other products related to a specific transaction.

Hedging Transaction: A transaction designed to reduce the financial exposure of a specific outstanding position or portfolio; “fully hedged” equates to complete elimination of the targeted risk and “partially hedged” implies a risk reduction of less than 100%.

IOU: An Investor Owned Utility (IOU) is a business organization providing electrical and/or natural gas services to both retail and wholesale consumers and is management as a private enterprise.

Middle Office: That part of a trading organization that measures and reports on market risks, develops risk management policies and monitors compliance with those policies, manages credit, and keeps management and the Board informed on risk management issues.

Speculation: Speculation is the act of trading an asset with the expectation of realizing financial gain resulting from a change in price in the asset being transacted.