ITEM NO. 1

STAFF REPORT

DATE: JUNE 5, 2012

TO: HONORABLE MAYOR AND CITY COUNCIL MEMBERS

FROM: ROD FOSTER, CITY MANAGER

PREPARED BY: DAVID X. KOLK, ELECTRIC UTILITY DIRECTOR DXK

SUBJECT: OFFICER CERTIFICATION FOR FERC ORDER 741

RECOMMENDED ACTION

It is recommended that the City Council authorize the Electric Utility Director, David Kolk, to sign the attached 2012 Operator Certification Form and attest that the City of Colton's Electric Utility Department is in compliance with the California Independent System Operator's (CAISO) minimum participation requirements set forth in the CAISO Tariff and Business Practice Manual for Credit Management.

GOAL STATEMENT

The proposed action will support the City's goal to provide safe, reliable, affordable and environmentally sustainable electric service.

BACKGROUND

Federal Energy Regulatory Commission (FERC) Order 741 requires entities that have a financial relationship with independent system operators (in Colton's case, the California Independent System Operator or CAISO) to certify that it operates in accordance with the minimum participation requirements set forth in the CAISO Tariff and the Business Practice Manual ("BPM") for Credit Management. In this regard, CAISO requires that a City official execute the attached certification form.

While the attached form details the required certifications, the following is a brief summary:

1. Training. All employees or agents entering into CAISO market transactions on behalf of the City have received appropriate training, including CAISO training requirements, and are authorized to transact business and operations on behalf of the City.

2. Risk Management. The City has and maintains written risk management policies, procedures, and controls, applicable to transactions in the CAISO markets in which it participates and for which employees or agents are trained, that provide an appropriate, comprehensive risk management framework that, at a minimum, clearly identifies and documents the range of risks to which City is exposed through its participation in an organized wholesale electric market. Order 741 requires the City to certify that it applies procedures and controls to limit risk using industry standard practices, such as value-at-risk limitations or other controls.

3. Congestion Revenue Rights. The City has been allocated certain congestion revenue rights (CRRs) for San Juan transmission requirements that need to be actively managed and perhaps expanded. The City has given direction to its scheduling coordinator, Shell Energy, to reduce scheduled transmission of San Juan energy whenever congestion costs rise such that it is more economical to sell San Juan energy in Phoenix and purchase replacement energy from the CAISO real time market. Because congestion costs are not known in advance, the City is likely to pay congestion costs occasionally but makes efforts to avoid extended periods when it is making large congestion payments under this change in scheduling procedures.

4. Personnel. The City (or its Scheduling Coordinator) has appropriate personnel resources, operating procedures and technical abilities to promptly and effectively respond to all CAISO communications and directions, including, but not limited to, the CAISO's issuance of invoices and collateral requests to the Market Participant.

5. Capitalization. The City has demonstrated compliance with the minimum capitalization requirements as specified in the CAISO Tariff and is not aware of any material change in financial condition having occurred (or being imminent) since the release of the City's, or its guarantor's, most recent financial statements that would invalidate such compliance.

ISSUES/ANALYSIS

The City is able to execute the attached form based upon compliance by the City or its agents as follows:

1. Training. Staff has verified that its scheduling coordinator, Shell Energy, has appropriately trained employees who are available at all times to respond to CAISO direction on the dispatch and transmission of energy, and that those employees who enter into CAISO market transactions on behalf of the City have received appropriate training, including CAISO training requirements, and are authorized to transact business and operations on behalf of the City.

2. Risk Management. The City has established a Risk Management Committee comprised of the City Treasurer, City Manager, Management Services Director and Electric Utility Director to oversee risk management policies and to periodically report to the City Council the potential monetary risk faced by the City in the CAISO energy and transmission markets and how risk is being managed to avoid cost impacts unacceptable to the City. The City's current Risk Management Plan is attached to this report.

3. Congestion Revenue Rights. The City manages its CRRs to minimize unanticipated transmission congestion costs. The City has paid (and received payment for) congestion costs for energy deliveries in excess of its CRRs for energy generated at San Juan for delivery to the City and for congestion within the Los Angeles basin.

While congestion costs can be very high in any particular month, the three-year average of daily congestion costs indicates that Colton generally pays less than $5,000 per month (and in some months actually receives credits) for transmission congestion.

The Electric Department has worked with its scheduling coordinator to minimize congestion costs from Palo Verde to the Los Angeles basin and is currently evaluating the need to acquire additional CRRs.

4. Personnel. Staff has verified that its scheduling coordinator, Shell Energy, has appropriately trained employees, operating procedures and technical abilities to respond to CAISO communications and directions, including, but not limited to, the CAISO's issuance of invoices and collateral requests to the City.

5. Capitalization. The City currently meets its capitalization requirements with the CAISO Tariff and is eligible to request an unsecured line of credit of $1 million. Currently, Shell Energy provides the CAISO credit requirements of the City.

FISCAL IMPACTS

There are no direct fiscal impacts from this recommended action.

ALTERNATIVES

1. City Council may provide alternative direction to staff.

ATTACHMENTS

Officer Certification Form
City of Colton Electric Department Risk Management Plan

California ISO
Shaping a Renewed Future

OFFICER CERTIFICATION FORM

Market Participant Name:_____**("Market Participant")**

I, David X. Kolk, an officer of a prospective or existing Market Participant, understanding that California Independent System Operator Corporation ("CAISO") is relying on this certification as evidence that Market Participant meets the minimum participation requirements set forth in the CAISO Tariff and the Business Practice Manual ("BPM") for Credit Management, hereby certify that I have full authority to represent on behalf of Market Participant and further represent as follows, as evidenced by my initialing each representation in the space provided below:

1. All employees or agents entering into CAISO market transactions on behalf of the Market Participant have received appropriate[1] training and are authorized to transact on behalf of Market Participant. Furthermore, these same employees or agents have satisfied all applicable CAISO training requirements as specified in CAISO Tariff Sections 4.5.1.1.10.1 and 36.5.2. _____.

   (Answer) CED relies on its Scheduling Coordinator, Shell Energy North America, to perform this function. Shell Energy is limited to prompt month transactions and is not authorized to enter into firm energy purchases on behalf of the City. The City believes that Shell Energy has provided appropriate training for all employees who are subject to CAISO training requirements.

2. Market Participant has and maintains written risk management policies, procedures, and controls, approved by Market Participant's independent risk management function[2] and applicable to transactions in the CAISO markets in which it participates and for which employees or agents entering into CAISO market transactions provided pursuant to the CAISO Tariff or applicable CAISO Operating Agreement have been trained, that provide an appropriate, comprehensive risk management framework that, at a minimum, clearly identifies and documents the range of risks to which Market Participant is exposed through its participation in an organized wholesale electric market. These risks may include but are

[1] As used in this representation, the term "appropriate" as used with respect to training means training that is commensurate and proportional in sophistication, scope and frequency to the volume of transactions and the nature and extent of the risk taken by the Market Participant.

[2] As used in this representation, a Market Participant's "independent risk management function" can include appropriate corporate persons or bodies that are independent of the Market Participant's trading functions, such as a risk management committee, a risk officer, a Market Participant's board or board committee, or a board or committee of the Market Participant's parent company.

not limited to credit risk, liquidity risk and market risk, and related transaction controls._____ .
(Answer) Yes. A copy of the City's Risk Management Plan is attached.

The CAISO at any time may request information and documents from Market Participants regarding their risk management policies, procedures, and controls, including, but not limited to, information and documents relating to the liquidity of their financial resources and their settlement procedures. If requested, Market Participant shall make information and documents available to the CAISO within five (5) Business Days.

3. A Market Participant that is also a Congestion Revenue Rights ("CRR") Entity must additionally attest and answer the relevant sections below unless such attestation and answers have been previously provided and there are no material changes to the responses. If there are no material changes from the attestations and answers previously provided to the CAISO, acknowledge by initialing here _____ and skip to section 4. Otherwise, narrative responses should be submitted in a separate document citing the appropriate references in Market Participant's current governing risk management policies, procedures, and controls.
   a. Please attest and answer the following:

      i) Market Participant, or the company Market Participant may outsource certain risk management functions to, has the ability to periodically value its Congestion Revenue Rights positions using analytically based methodologies, predicated on the use of industry recognized valuation methodologies which is consistent with the level of risk the Market Participant engages in within the ISO Markets._____

         (a) Describe the valuation and risk assessment methodologies used.
         (b) Discuss the highest risks to your CRR trading strategy and the methods used to assess your CRR holdings and activities relevant to such risks.

(Answer to a) The City of Colton is currently an "Existing Transmission Contract" customer and only has congestion risk for a portion of its resources. The City used the CAISO's published "3 Year Historic Expected Value" of daily congestion costs used to determine credit obligations of CRR participants to determine its maximum daily expected congestion risks. The City has control over scheduling of its largest resource, San Juan Unit 3 (30 MW) and has requested its Scheduling Coordinator, Shell Energy, to sell energy at Palo Verde in excess of its CRRs during periods of high congestion costs between Palo Verde and the LA basin. The only other areas of significant congestion costs are from the Mead 230 to Colton (3 MW maximum) and Victorville to Colton (10 MW less losses through the LADWP system) that historically have small or negative congestion costs for which the City does not have CRRs.

(Answer to b) The City's greatest congestion risk is for congestion in excess of its CRRs between Palo Verde and Colton. The City has instructed its SC to sell energy in excess of 22 MW (up to 29 MW of energy is delivered at Palo Verde from San Juan) to avoid significant congestion costs. Because congestion costs are determined

in the day-ahead markets, the City may incur congestion costs for short periods while the high congestion costs are recognized but should not incur long-term costs due to transmission line outages or other events that result in high congestion costs for extended time periods.

ii) Such valuation and risk assessment functions are validated either by persons within Market Participant's organization independent from those trading in the CAISO's CRR markets or by an outside firm qualified and with expertise in this area of risk management._____

(a) Describe your processes ensuring the independence of your valuation and risk assessment functions.
(b) Describe the processes that are in place to ensure risks are adequately reported throughout the organization.

(Answer to a) The City has created a risk management oversight committee that includes the City Manager, Management Services Director (the City's Chief Financial Officer) and City Treasurer (an elected official) to review all purchases and sales of firm energy and capacity, RECs, CRRs and Emission Allowances. The City operates under a standard "Budget at Risk" approach that attempts to limit variations from forecasted power supply budgets. A copy of the Risk Management Plan is attached showing the maximum budget at risk amounts.

(Answer to b) The Risk Oversight Committee is charged with making periodic reports to the City Manager and City Council on risks faced by the Electric Utility and any violations of the Risk Management Policy. Each quarter, the Risk Oversight Committee will review transactions (other than prompt month transactions made for the purpose of reducing daily energy costs) and verify that all transaction were in compliance with the Risk Management Policy. The Committee will then report to the City Manager and specifically cite any instances where risk management policies were violated for possible disciplinary actions by the City Manager. Each quarterly Committee report will also be presented by the City Treasurer to the City Council.

iii) Having valued its CRR positions and analyzed the potential risks, Market Participant applies procedures and controls, in accordance with written policies, to limit its risks using industry recognized practices, such as value-at-risk limitations, concentration limits, or other controls designed to prevent Market Participant from purposefully or unintentionally taking on risk that is not commensurate or proportional to Market Participant's financial capability to manage such risk._____

(a) Discuss the relevant methods used to limit exposure in the CRR markets:
(b) Describe the sources of liquidity your firm has access to in order to minimize the risk of default at various levels of risk events (sections of publically available SEC filings may be referenced):

(c) Briefly describe how Delegation of Authority or other policy, procedures and controls is used to restrict traders in the types of transactions they may enter into and their corresponding trade limits.

(Answer to a) The City has begun a review of congestion costs on a weekly basis using data published on the CAISO's OASIS site to identify any of its transmission paths that are experiencing heavy congestion. If congestion costs warrant changes to the City's scheduling procedures, the City notifies Shell to change the City's schedules, if feasible. In addition, Shell has been requested to notify the City if it identifies any unusual congestion costs that could affect the City.

(Answer to b) The City's entire portfolio is currently invested in LAIF (Local Agency Investment Fund), a State pool. The funds are readily accessible on any given business day (up to $10 million). The City has more than $3.0 million in electric department funds available.

(Answer to c) The City's Scheduling Coordinator can schedule energy from the City's resources and make purchases in the real-time or day-ahead market to meet Colton's daily loads. The Utility Director can make short-term firm energy purchases of up to six months (primarily replacement energy to replace City resources on extended outages) so long as the total firm energy does not exceed 105 percent of forecasted monthly load and the proposed energy quantities are verified and approved in advance by the City's Management Services Director. Any firm purchases in excess of six months must be approved by the City Council prior to the proposed purchase. If resource adequacy capacity is required by the City, the Utility Director may purchase the required RA up to monthly requirements.

At this time, the City does not anticipate purchasing CRRs and will instead rely upon its allocated CRRs, although the City continues to evaluate whether purchasing additional CRRs would benefit the City.

Each person purchasing energy, CRRs, emission allowances, resource adequacy capacity or renewable energy credits must attest that they have read and understood the City risk management policies.

iv) Exceptions to Market Participant's written risk policies, procedures and controls applicable to Market Participant's CRR positions are documented and explain a reasoned basis for the granting of any exception._____

(Answer) Each quarter, the Risk Oversight Committee will review transactions and verify that all transaction were in compliance with the Risk Management Policy. The Committee will then report to the City Manager and cite any instances where risk management policies were violated for possible disciplinary

actions by the City Manager. Each quarterly Committee report will also be presented by the City Treasurer to the City Council.

Any proposed transaction that requires an exception to the Risk Management Policy must obtain City Manager approval in advance of the transaction after the reasons for the proposed exception are approved by the Risk Oversight Committee.

b. A Market Participant that answers "Yes" to either of the following questions need only submit a copy of its current governing risk management policies, procedures and controls, and any associated documentation, if requested by the CAISO. The CAISO retains the right to request these documents at any time and for any reason under Section 2 of this certification form.

i. Market Participant only receives CRRs from the CAISO's allocation process and does not participate, nor foresees participating in the coming year, in the CRR auctions or purchasing CRRs through any other means except for the limited purpose of unwinding allocated CRR positions. Yes:___X___No:_____

ii. Market Participant transacts in the CRR Market with the intent to hedge the congestion risk related to the Market Participant's physical transactions as a load serving entity or generation provider and monitors all of the Market Participant's CRR market activity to endeavor to ensure that its CRR positions are either generally proportionate to or generally do not exceed the Market Participant's physical transactions as a load serving entity or generation provider, and are generally appropriate to fulfill the Market Participant's intention to hedge its physical transactions. Yes:___X___No:_____

c. If you responded "No" to questions 3bi and 3bii, based on calculations and results provided by the CAISO, Market Participants whose CRR credit holding requirement, at any time during the past 12 months, was greater than zero are required to provide to the CAISO, in accordance with the CAISO Tariff, a copy of its current governing risk management policies, procedures and controls applicable to its CRR trading activities unless such risk management policies, procedures and controls applicable to its CRR trading activities have been previously provided and there are no material changes to these documents. If there have been no material changes to the risk management policies, procedures and controls previously provided to the CAISO, acknowledge by initialing here _____

4) Market Participant has appropriate personnel resources, operating procedures and technical abilities to promptly and effectively respond to all CAISO communications and directions, including, but not limited to, the CAISO's issuance of invoices and collateral requests to the Market Participant. _____

(Answer) Yes. The City has contracted with Shell Energy as its Scheduling Coordinator. Shell Energy personnel are familiar with the CAISO's operating

procedures, and Shell Energy maintains a 24 hour operation and receives the City's invoices from the CAISO.

5) Market Participant has demonstrated compliance with the minimum capitalization requirements as specified in Tariff Section 12.1, and is not aware of any material change in financial condition having occurred (or being imminent) since the release of Market Participant's, or its guarantor's, most recent financial statements that would invalidate such compliance. _____

(Answer) Yes. The City currently meets its capitalization requirements with the CAISO under Section 12 of the tariff. Currently, Shell Energy manages the credit requirements of the City with the CAISO.

6) I acknowledge that I understand the relevant provisions of Section 12 of the CAISO Tariff and the Business Practice Manual for Credit Management applicable to Market Participant's business in the CAISO markets, including those provisions describing CAISO's minimum participation requirements and the enforcement actions available to CAISO if a Market Participant does not satisfy those requirements. I acknowledge that the information provided herein is true and accurate to the best of my belief and knowledge after due investigation. In addition, by signing this certification, I acknowledge the potential consequences of making incomplete or false statements in this certification.

Date:_____ _____

(Signature)

Print Name:___David X. Kolk_____

Title: ___Electric Utility Director_____

Subscribed and sworn before me_____a notary public of the State of_____in and for the County of _____this____day of_____, 20___.

_____
(Notary Public Signature)

My commission expires:____/____/____

The fully executed Officer Certification Form and associated risk management policies, procedures and controls documentation, as required, should be sent to:
Kevin King at kking@caiso.com

Mailing address:
California Independent System Operator Corporation
Kevin King – Manager, Credit & Corporate Insurance
250 Outcropping Way
Folsom, CA 95630

If you should have any questions related to this form, please contact Kevin King at (916) 608-1247.

City of Colton
Electric Utility Department

Risk Management Plan

Version 1.0
May, 2012

Energy Risk Management Policy

The **Colton Electric Department** (CED) engages in business activities that inherently involve various forms of market and credit risk. These risks create uncertainty in CED's financial performance resulting from uncertain market or credit factors that affect cash flows and overall financial performance.

CED's objective is to develop the least cost power supply portfolio to meet the load requirements of retail customers in compliance with all applicable legislative and regulatory requirements.

CED personnel are precluded by this policy from engaging in many of the risk-taking activities common in the industry for speculative purposes. CED's policy is to avoid unnecessary risk and to limit the risks associated with normal cost-hedging activities to the extent practical.

Risk Management means limiting and reducing risk associated with CED's business activities that could result in economic loss. Risk management includes activities that identify measure, assess, limit and reduce risk. As related to the use of derivatives, risk management means reducing risks in the broad sense of the term, including activities that select one type of risk over another when is considered more tolerable but it does not include activities that increase risk.

From a risk management perspective, CED's primary objective is to meet its retail energy and legislative/regulatory requirements. Power supply activities are to be focused around these objectives. Taking any unnecessary risk in order to arbitrage market opportunities or risks unrelated to CED's normal power supply business activities is considered inappropriate. Power transactions made with the sole intent of maximizing revenues (or speculating) expose CED to unnecessary financial risks and are generally prohibited.

Risk management in the context of this document is defined as financial risk management.

Individuals responsible for purchasing energy, capacity, natural gas, transmission, congestion revenue rights, emission allowances or renewable energy credits for CED may not engage in activities that expose CED to speculative commodity trading risk. Any activities that are not related to CED's normal power supply business and have the effect, or potential, of increasing financial risk are to be avoided.

The **Risk Management Policy** (the 'Policy') articulates CED's objectives, techniques and controls for managing such risks related to wholesale energy markets. The policy scope covers all wholesale capacity, energy, congestion revenue rights, renewable energy

credits, emission allowances and natural gas contracts within or considered for CED's portfolio.

To the extent feasible, given political, regulatory and environmental constraints, CED shall ensure that the cost of its fuels, energy and related transmission resources, including congestion revenue rights, shall remain competitive over the long term. CED will also attempt to remain compliant with all renewable and emission reduction regulations by actively managing its purchases and inventory of renewable energy credits and emission allowances. Therefore, CED shall conduct its fuel and energy procurement in a manner necessary to compete successfully in the marketplace as a cost hedger.

Personnel Policies and Other Responsibilities: All relevant CED staff must acknowledge and comply with the Policy consistent with Colton's personnel policies.

While this Policy does not explicitly address regulatory risk, retail-level risk, transmission reliability risk or electric supply reliability risk, this Policy will be used as the foundation to cover such risks. The Utility Director will be responsible for monitoring the feasibility and recommending the need for expanding this Policy to cover these areas in the future.

Appendix A provides a glossary of risk-management related terms that are either used in this Policy or closely related to the terms used.

Section 2
Organizational Objectives

CED is exposed to three primary risks in conducting normal daily activities: load variability, cost variability and counterparty risk. From the perspective of risk mitigation, CED's primary objective is to purchase sufficient energy to meet retail load requirements. Power supply activities are to be focused around this objective.

Taking any unnecessary risks in order to arbitrage market opportunities or risks unrelated to CED's normal power supply business is considered inappropriate. These risks could result from commodity transactions made with the sole purpose of attempting to maximize revenues.

CED's primary mission is serving the electricity needs of CED's retail customers.

Specific objectives, listed in order of priority, to achieve this mission include:

1. Providing low-cost electric power to its customers through the use of CED's generation resources, including those power purchase agreements with the Southern California Public Power Authority (SCPPA), and short-term wholesale natural gas and power purchases.

2. Providing a reliable supply of natural gas for CED's Magnolia and Agua Mansa Power Plants to support the objective of providing reliable electric power.

3. Optimizing CED's generation and transmission resources to ensure that they are used in the most economical way.

4. Acquiring and managing Congestion Revenue Rights (CRRs) to help reduce the cost of transmission service.

5. Acquiring Renewable Energy Credits (RECs) of the appropriate type and quantity necessary to comply with California's Renewable Portfolio Standards (RPS).

6. Acquiring and managing Emission Allowances (EAs) to protect CED's ratepayers from potential penalties for non-compliance with emission standards.

Section 3
Organizational Structure and Responsibilities

While risk is inherent in any organization, a policy is required to track risk-related responsibilities within the staffing structure. Lines of authority and responsibility for managing and controlling risk exposure should be clearly defined. Specifically, the separation between business groups and independent risk management oversight must be maintained.

The general policies for the organizational structure and responsibilities are as follows:

1) CED has established a Risk Oversight Committee (ROC) comprised of the Utility Director, Management Services Director and City Treasurer to provide managerial oversight of the Policy's implementation, compliance and revision. The ROC will report to the City Manager.

2) The Management Services Director will serve as the City's Risk Management Officer and Chairperson of the ROC.

    1. Responsibilities of the ROC include:
        a. Setting, changing and approving the design of all internal control processes;

        b. Assessing the adequacy and functioning of the systems of control over market and credit risk;

        c. Approving all statistical modeling parameters, risk tolerance and risk factors associated with acquiring energy, CRRs, RECs and EAs;

        d. Approving all forward strategies proposed by CED for acquiring necessary capacity and energy resources;

        e. Recommending to the City Manager all policies, types of financial and physical transactions and controls including new products and instruments as described in this Policy;

        f. Reviewing and recommending any amendments to this Risk Management Policy to the City Manager;

        g. Reviewing and assessing the adequacy of risk reports generated by the risk management function;

h. Insuring that results of risk management activities are reported to the City Manager on at least a semi-annual basis.

2) The ROC will meet on a regular basis but not less than once each calendar quarter.

3) The CED staff and consultants are functionally organized using a "Front-Middle-Back Office" model defined as:

1. The Front Office executes transactions (purchasing or selling). CED's Scheduling Coordinator (currently Shell Energy, N.A.) acts as CED's front-office.

   Front office activities will be functionally independent from all middle and back office activities. The front office will neither perform nor supervise risk management activities, financial accounting or settlements.

   CED's SC shall be responsible for monthly check-outs with each counterparty and providing the verified data to CED's Utility Director for approval and forwarding to the Middle Office.

2. The Middle Office performs risk control and verification.

   Middle Office activities and responsibilities include:
   a. Verifying all power supply invoices;
   b. Performing a monthly reconciliation of energy production and requirements to verify where all of CED's energy and natural gas were generated or purchased and that purchases and use are equal.
   c. Verifying the monthly congestion charges and identifying the potential need for additional CRRs
   d. Verifying monthly emissions (in CO_2e) by resource and ensuring that CED has sufficient EAs to meet emission reduction requirements.

3. The Back Office (the City of Colton's Finance Department) supports the Front and Middle Offices with a wide range of treasury, accounting and administrative activities including actual payment of invoices, confirmations and credit collection. Its activities are under the purview of the Colton Management Services Director.

4. Where practical and as a means of internal checks and balances, the Utility Director is responsible for determining an adequate segregation of duties so that each individual staff member will only perform work associated with one of the three control offices.

a. CED's SC will schedule all CED's resources to meet daily forecasted loads.

b. CED's Utility Financial Analyst will verify all invoices and perform a monthly energy reconciliation that identifies where all of CED's energy supply originated and whether or not the energy was used to meet load or was surplus to CED's retail load and sold in the retail market. The Financial Analyst will also review all CAISO invoices and supplier invoices to verify that CED is paying the appropriate invoiced amounts.

c. The Utility Director will request Colton's Finance Department process payments or issue invoices for CEDs energy costs.
    i. Neither the SC nor the Utility Director may issue payment to any of CED's counter-parties.

5. On a monthly basis, the Financial Analyst/Utility Director will verify CED's CRR positions with CED's SC and identify transmission paths where CED has exposure to CAISO congestion costs.

    a. The Financial Analyst will also review all congestion costs paid by CED as received in monthly CAISO billings and report these costs to the Utility Director.

    b. At this time, CED only has one transmission line segment subject to congestion costs outside the Los Angeles basin and has CRRs for all but 8 MW of the generation transmitted over this path. Within the basin, CED is subject to congestion charges from the Load Aggregation Point to Colton and this risk cannot be mitigated with CRRs.

    c. If necessary, the Utility Director will inform CED's SC of potential congestion charges and CED and CED's SC will develop a protocol for minimizing monthly congestion costs. This may include selling energy from resources using congested paths outside the CAISO control area or reducing generation if possible from resources on congested paths.

6. On a monthly basis, the Financial Analyst will estimate CED's emissions based upon EIA emission factors and net generation by resource. The Financial Analyst will then report to the Utility Director CED's net emissions and un-retired Emission Allowances and recommend whether CED should purchase additional EAs.

    a. The Utility Director will inform the Management Services Director of any planned EA purchases prior to a purchase, including maximum price, quantity of EAs to be purchased and the proposed vintage. The Utility

Director shall also inform the Management Services Director of which EA holding accounts the EAs will be held in.

7. On a monthly basis, the Financial Analyst will determine CED's net short renewable energy purchases and identify how many and of what category Renewable Energy Credits (RECs) that CED can purchase.

    a. The REC accounting will be by compliance period and category.

    b. If CED determines that it must purchase RECs to stay compliant with RPS regulations, the Utility Director will inform the Management Services Director of any proposed purchases of RECs and demonstrate to the Management Services Director's satisfaction that the proposed purchase meets the appropriate compliance period and category so that all purchases count towards CED's RPS requirements.

Section 4
Risk Inventory and Portfolio Definitions

While much of the organization is involved with energy, this Policy only applies to those activities related to transacting in the wholesale electricity and natural gas markets. Collectively, these transactions are organized into the "Portfolio."

The general policies for risk inventory and portfolio definitions are as follows:

1. The scope of the Portfolio includes wholesale electricity contracts, wholesale natural gas contracts, electric power generation capacity, fuel requirements, forecasted electric power demand, transmission, ancillary services, CRRs, EAs and RECs.

2. The Utility Director will take steps to track all positions in some form of integrated portfolio management information systems from deal origination through settlement. The ROC will evaluate the status of such a system annually to determine its effectiveness in supporting the implementation of this Policy.

Section 5
Risk and Risk Tolerance

Physical power transactions consist of combinations of physical capacity and/or energy elements with various pricing schemes and delivery constraints that are the basis of all physical power transactions. Financial power transactions will take on many of the same characteristics of the physical power transactions but have a financial or cost settlement mechanism either in addition to or instead of the physical delivery mechanism of physical products. Inherent in these transactions are exposures to various risks that could affect CED's financial performance.

A sound control framework, coupled with specific limits, is fundamental to establishing proper control over the risks managed by CED. To be useful, limits and their structures must co-exist with the ability to execute power acquisition strategies. Lax or ineffective limits will not afford control over risk, while overly restrictive limits will stifle the approved resource acquisition strategy. Therefore, it is important to structure limits around the major sources of risks facing CED.

There are a wide array of risks that can impact the effectiveness and performance of CED. The general policies for risk and risk tolerance will be as follows:

1. CED faces price risk in the electricity and natural gas wholesale markets. CED has a low tolerance for such risk and through physical control of resources and financial hedges, attempts to minimize risk.

2. Limit structures to control market risk are measured by Budget at Risk

    a. Budget at Risk (BaR): An estimate of the potential change in portfolio value (which may consist of several commodities such as electricity prices and natural gas prices) or cost parameters given a level of statistical confidence over a pre-defined holding period (day, month, year).

    b. CED will have a budget BaR of less than 5 % of total energy and capacity costs at least one month ahead;

    c. CED will have a budget BaR of less than 10 % of total capacity and energy costs prior to the beginning of the calendar year;

    d. CED will have a budget BaR of less than 20 % of total capacity and energy costs prior to the beginning of the second year.

    e. CED will have a budget BaR of less than 30 % of total capacity and energy costs prior to the beginning of the third year.

An example of how budget BaR is to be calculated is included in Appendix B.

3. CED will not actively assume market risk by entering transactions for the purpose of speculation. Transactions entered into for purposes of hedging may contain residual or non-hedgeable risk but must be entered exclusively for purposes of hedges. Hedged portfolios must demonstrate a reduced risk exposure.

4. CED also faces operational risk that is defined as the uncertainty of an entity's financial performance due to imperfections in the scope, context or execution of operating procedures within the organization, including human error. CED will manage operational risk by establishing, implementing and monitoring the Policy including resource allocations necessary for full policy implementation.

Section 6
Financial Risk Measurement, Control and Limit Structure

Risk measurement plays a central role in an organization's ability to achieve its objectives. Measurement provides the specific metrics against which to determine CED's current position and where it is heading. A limit structure based on these measurements provides the control to help avoid major problems and mechanism for reporting any violations to management.

The general policy for financial risk measurement, control and limit structure is as follows:

1. Only transactions that are in full compliance with the Policy may be entered into:

    a. The types of transactions and transaction strategies authorized under this Policy are listed in Appendix C. The list of authorized transactions includes contracts that may be characterized as derivatives. The addition of new transaction types, including the revision of existing transaction types, must be submitted to the ROC using its procedures for approval.

    b. Transactions for the purpose of market making or speculation are expressly forbidden.

2. All transactions will be measured and limited with regard to the series of valuations and risk measurements as established by the ROC. Proposed transactions that would have the net effect of causing violations of the risk limits may not be entered without written approval from the ROC/City Manager.

3. The ROC will establish and enforce a limit structure based on the risk tolerance statement within this Policy.

    a. Limits will be established for the overall Portfolio.

    b. Standard Limits will be established that will prompt notification only to the ROC in the event of the portfolio meeting or exceeding said limits.

    c. Maximum Limits will be established that will prompt a hedging response in the event of the portfolio meeting or exceeding said limits such that the portfolio is hedged sufficiently to comply with the Standard Limits.

d. Authorized Transaction Limits for Power purchases and Sales have been developed and shall be adhered to. Once developed and approved the Approved Power Strategy shall be reviewed every six months by the ROC.

e. Natural gas trading shall adhere to the Approved Power Strategy and shall be reviewed annually by the ROC.

f. Transmission and ancillary services shall adhere to the Approved Power Strategy and shall be reviewed annually by the ROC.

4. In the event that any of the limits mentioned above are exceeded, a Control Exception Report will be written. This will serve to document the issue, how it occurred and any remedies put in place. The Control Exception Report will be prepared by the ROC for review and recommendations made the City Manager to approve processes going forward and other actions deemed necessary.

Section 7
Power Strategy Sheet

CED will develop and publish an annual Power Strategy Sheet (PSS) that identifies forecasted monthly peak load and required reserves, forecasted energy use, natural gas requirements, renewable energy requirements and emission allowances for the next 36 months. The PSS will identify CED's net short and long positions in capacity, energy, natural gas, renewable energy, CRRs and emission allowances on a monthly basis.

The PSS shall be updated on at least an annual basis and shall be presented to the ROC for approval. Any forward transactions reducing CED's net short positions for any product (capacity, energy, natural gas, renewable energy credits, congestion revenue rights and emission allowances) will be immediately entered into the Power Strategy Sheet to reduce future short positions.

Any and all financial hedges will also be shown in the PSS along with the corresponding physical position.

Only the Electric Utility Director or City Manager may authorize (in writing) purchases of capacity, energy or natural gas supplies exceeding CED's monthly net short position. If the Utility Director authorizes such a purchase, he will notify the City Manager in writing of the purchase and the reason for the purchase.

The Electric Utility Director will be responsible for ensuring that adequate energy and natural gas is acquired in advance of need. The Electric Utility Director will be responsible for reducing BaR to 5% one month in advance, 10% one year in advance, 20% two years in advance and 30% three years in advance.

An example of the PSS is shown in Appendix D.

Section 8
Authorized Transaction Limits

Except as otherwise delegated below, the Colton City Council retains ultimate authority for all power supply transactions. The City Council has delegated the authority to purchase capacity, energy and other commodities necessary to provide electricity service to the Utility Director. However, as a matter of practice, all long-term contracts (exceeding six months) are presented to the City Council for review and approval.

Power supply resource and scheduling activities are segregated into three distinct groups, Term Resource Planning, Pre-Scheduling/balance of month and Real-Time Scheduling. Each function has special concerns and responsibilities in the power supply decision process.

The ROC has responsibility for:

1. Reviewing and approving all long-term power supply strategies (greater than six months).

2. All optimization strategies and statistical/procedural risk management methods including risk tolerances and resulting exposures.

Before presenting any transactions to the City Council for the authority to enter into term contracts for capacity, energy or natural gas that exceed 6 months in duration, the Utility Director will inform the City Manager and CFO and present a power strategy sheet showing that the proposed contract does not violate any of the conditions shown below.

The CED Utility Director will have the ability to enter into term agreements extending up to 6 months for energy, capacity, natural gas and transmission. The Utility Director may also enter into agreements for EAs and RECs for 12 months by submitting a PSS and Transaction Request form to the Management Services Director and up to 24 months if receiving approval, in writing by the City Manager and then receiving a signed Transaction Request from the Management Services Director.

The Utility Director can enter into power purchase agreements that in total (taking into consideration all of CED's resources) do not exceed:

1. Monthly transactions for capacity not to exceed 115 % of forecasted peak demand.

    a. Under the CAISO tariff, if a resource is scheduled for maintenance for more than 2 weeks, its Resource Adequacy (RA) capacity value is 0. During the periods when a resource is unavailable, the Utility Director

must purchase additional RA capacity to meet CAISO requirements without regard to the 115% limitation so long as he does not exceed 115% of forecasted loads when unavailable resources are excluded from the calculation.

2. Monthly firm energy purchases that do not exceed 105% of total forecasted energy use;

3. Monthly natural gas purchases that do not exceed forecasted natural gas use.

The Utility Director is charged with ensuring that CED:

1. Does not purchase capacity, energy and natural gas in excess of forecasted need;
2. Acquires sufficient capacity, energy and natural gas supplies to meet the BaR criteria established in Section 4.
3. Acquires sufficient capacity to meet any CAISO RA obligations.

Pre-Schedule/Balance of Month Operations

As directed by the Utility Director, prompt month transactions may be made by CED's SC.

Real Time Scheduling

As directed by the Utility Director, short-term transactions may be made by CED's real-time traders or SC in the prompt month.

In real time scheduling, or within a day, the principle concern is to serve hourly loads. Real time scheduling is delegated to CED's SC to minimize daily power supply costs within the scheduling day.

Section 9: Transaction Management

Before entering into any term transaction exceeding 6 months, the Utility Director or City Manager shall notify the Management Services Director of his/her intent by submitting a Transaction Sheet to the RMO. A sample Transaction Sheet is shown in Appendix E.

The Transaction Sheet is used to verify that any proposed transaction is within the limits of the Power Strategy Sheet. No transaction shall be made until the Management Services Director verifies that the proposed transaction does not exceed the net short position identified in the Power Strategy Sheet. If the proposed transaction is a cap or other hedging instrument, the Management Services Director shall verify that there is an existing physical transaction that is being offset by the hedge.

The Management Services Director approval of the Transaction Sheet is intended solely to verify that the proposed transaction is within the limits of the Power Strategy Sheet. The Utility Director shall be responsible for determining the type and cost of any proposed transaction.

Once the Management Services Director has verified that the proposed transaction is within the limits of the Power Strategy Sheet, the Utility Director shall be authorized to enter into power purchase agreements or hedges subject to their Authorized Transaction Limits.

Once the transaction has been completed and confirmed by the Counterparty, a copy of the confirmation and deal sheet[3] shall be sent to the Management Services Director.

Immediately after a transaction is confirmed, it is the responsibility of the Utility Director to update the Power Strategy Sheet to reflect all current transactions and to provide an updated version of the Power Strategy Sheet to the Management Services Director.

[3] The deal sheet and confirmation are standard industry terms that reflect the commodity, price, quantity, location and time of a transaction that are approved by both parties along with any special conditions of the transaction outside normal industry standards.

Section 10
Credit Risk and Counterparty Control

CED recognizes the need to manage credit risk as an essential component of the diligent management of its business.

1. The Energy Department will only trade with approved counterparties. The Management Services Director has the authority to approve or disapprove counterparties who are proposed by CED and will maintain a list of all approved counterparties. Any CAISO approved counterparty or counterparty approved by CED's SC shall be deemed an approved counterparty.

Section 11
Reporting to Management

Clear and meaningful periodic reporting will help keep management involved with risk management. The general policies for reporting to management will be as follows:

The ROC will establish a risk-reporting framework that serves the needs of each level of the City.

Section 12
Annual Report to the City Manager

The ROC will maintain records of CED's historic performance under this Policy. Before the end of January of each year, the ROC will report to the City Manager the results of operating under the Policy for the preceding year. Any annual report shall identify any violations of the Risk Management Policy.

Section 13
Personnel Policies and Other Responsibilities

The operational risk of non-compliant behavior by personnel can be considerable in trading and risk management operations. The general policies for personnel and other responsibilities are as follows:

1. The Utility Director is responsible for ensuring that each member of the Front, Middle and Back Offices reads and understands this RMP.

2. Each member of the Front, Middle and Back Offices must disclose any conflicts of interest with potential and actual counterparties and must not conceal trading or transactional activities and is responsible for reporting any violations of this Policy according to the Control Exception Reporting Procedure. CED's SC shall be responsible for verifying that no conflicts of interest exist between its energy traders and counterparties.

3. Non-compliance with or violation of this Policy is subject to the City of Colton's Discipline Program.

Section 14
Policy Revision Process

Due to the dynamic nature of markets, it is important to recognize that CED's risk management programs will evolve over time as market and business factors change. A mechanism will be implemented for amending elements of the risk management program, including this Policy, in order to reflect such changes. This section specifies a process for revising and implementing this Policy. The general policies for the Policy revision process are as follows:

1. The ROC is responsible for creating and approving the specific procedures with the concurrence of the City Manager, required for implementing this Policy.

Appendix A
Glossary of Terms

Arbitrage: The risk-free exploitation of temporary market price anomalies in related commodities or instruments, generally by the purchase of a commodity or instrument that is relatively low in price and the sale of the commodity or instrument that is relatively high priced. In order to be market neutral, the purchase and sale of the commodities or instruments should be simultaneous.

Call Option: An option that gives the buyer (holder) the right, but not the obligation, to buy a futures contract (enter into a long futures position) for a specified price within a specified period of time in exchange for a one-time premium payment. It obligates the seller (writer) of an option to sell the underlying futures contract (enter into a short futures position) at the designated price, should the option be exercised.

Congestion Cost: The charge made by the CAISO for transmitting 1 MW of energy for 1 hour between two points on a segment of transmission line operated by the CAISO.

Congestion Revenue Right (CRR): The right to receive the congestion charge or the obligation to pay over a specific transmission line segment

Cost VaR (Value at Risk): Cost VaR summarizes the expected maximum "cost" exposure over a target horizon with a given confidence level. For example, if trends indicate that an expected (or average) cost is $100 but volatility indicates that this cost may fluctuate wildly, VaR will capture the magnitude of this volatility as a summary number. This number, or estimate, can then be added to average or expected cost in order to measure the impact of volatility on potential cost.

Counterparty: A party on either side of a transaction (i.e. purchasing counterparty as opposed to a selling counterparty). External transacting parties such as the CAISO and NYMEX are not included in calculating counterparty credit exposures.

Counterparty VaR: the dollar estimate of the risk that subsequent changes in market price will result in increased counterparty credit exposure.

Credit VaR: The statistical estimate of potential losses in a portfolio due to changes in counterparty credit ratings.

Derivative: Any financial instrument, such as a future contract, swap or option, which derives its value from the value of an underlying security or physical commodity.

Discretionary resource: Resources that are flexible in their dispatch and, as a result, are often managed as options in the sense that they may or may not be scheduled for

dispatch. Discretionary resources contain less contractual scheduling limitations than must-take resources.

Displacement: The replacement of one generation resource with the matching amount of another competitively priced resource. Displacements provide for economic optimization of discretionary resources.

Electric Capacity: The maximum amount of electric power available for generation or use, usually expressed in kilowatts (kW) or megawatts (MW).

Electrical Energy: The generation or use of electric power over some period, usually expressed in megawatthours (MWh), kilowatthours (kWh) or gigawatthours (GWh).

Emission Allowance: An instrument issued by the State of California allowing the holder to generate 1 ton of Greenhouse Gas.

Exercise Price: Also known as the strike price. The price at which futures are brought or sold if an option is exercised.

Hedge Book: the portfolio of long and short positions as they relate to load balancing. The hedge book differs from the trade book in that it is a collection of transactions initiated for the sole intent of achieving load balance. While the hedge book can share similar characteristics with the trade book (i.e. futures and options positions can exist in both books) the hedge book is not designed to maximize profits. The hedge book is designed to mitigate exposure to risk associated with load variability and volatility in cost.

Least Cost Supply Portfolio: the mix of resources which optimizes the cost/risk profile of the utility. For example, if the utility is risk adverse, a least-cost supply mix may have a higher cost than a supply mix that exposes the utility to greater fluctuations in volatility and reliability.

Load balancing: Meeting fluctuations in demand for power.

Load Management: Economic reduction of electric energy demand during a utility's peak generating periods. Load management differs from conservation in that load management strategies shift the use of energy while conservation programs reduce the demand for energy.

Optimization: The process of utilizing strategies and instruments to optimize economic benefits associated with load and resource management. Optimization differs from trading in that the strategic rationale for a transaction is the driver rather than the economic benefit alone. Trading functions are designed to form a commodity position with the intent of speculating on market arbitrage opportunities.

Option: A contract that gives the holder the right, but not the obligation, to purchase or sell the underlying commodity at a specified price during a specified time period.

Premium: The price of an option.

Prompt Month: The month following the current operating month.

Put Option: An option that gives the buyer, or holder of the contract, the right but not the obligation to sell a futures contract at a specific price during a specific time period in exchange for a one-time premium payment. It obligates the seller, or writer, of the option to buy the underlying futures contract at the designated price should the option be exercised at that price.

Speculation: The taking of an unhedged position (short or long) with the intent of holding the position in anticipation of changes in market prices.

Stop-Loss: A benchmark or "trigger" point at which a position will either be covered or closed. If a position is "out of the money" the amount "out of the money" will be limited by a stop-loss limitation. For example, if a stop-loss limit is $100,000, a corresponding position should be covered or closed if it is out of the money $100,000 or more.

Supply Requirements: Those requirements related to reliability and reserve standards mandated by the requirements of regulatory agencies of competent jurisdictions.

Swap: A custom-tailored, individually negotiated transaction designed to manage financial risk. In a typical commodity or price swap parties exchange payments based upon the change in the price of a commodity or market index while fixing the price they effectively pay for the physical commodity. The transaction enables each party to manage exposure to commodity price or index values. Settlements are made in cash.

Transaction Liquidity: The existence of sufficient volume of transactions of a particular product and commodity that generally assures a party's ability to locate a counterparty that is willing to either buy or sell the product in question.

Uncovered Option: An option on an underlying asset for which the seller is not long (in the case of a call option) or short (in the case of a put option) the underlying commodity.

Underlying Commodity: The commodity upon which the value of a derivative is dependent.

Volatility: The magnitude and frequency of changes in prices over time. Standard deviation is a measure of volatility.

Wheeling: In the electric market wheeling refers to the interstate or intrastate sale of electricity or the transmission of power from one system to another

WECC: The Western Electric Coordinating Council a regional reliability council created and recognized by the North America Electric Reliability Corporation is responsible for establishing guidelines and procedures related to the reliable electric operation of the 11 western U.S. states as well as parts of Canada and Mexico.

WSPP: The Western Systems Power Pool is a power pool comprised of most western utilities and power marketers. A significant development of WSPP is the WSPP agreement, a standardized enabling agreement, or master contract, utilized by over 200 utilities, marketers and other entities across the U.S.

Appendix B
Example of Calculating Budget at Risk

CED has two resources for July 20xx. Expected generation from the two resources is 30 MW per hour from the first resource and 10 MW per hour for all 744 hours of the month from the second. Resource A has a heat rate of 7,500 BTU/kWh, while Resource B has a heat rate of 10,000 BTU/kWh.

At the time that the budget was prepared (March), forward natural gas prices were $5.00/MMBTU for July.

Based upon the expected generated, total natural gas consumption and costs for July is estimated to be:

Resource A		
Natural Gas Use (MMBTU)		167,400
Nat Gas Costs	$	837,000
Resource B		
Natural Gas Use (MMBTU)		74,400
Nat Gas Costs	$	372,000
Total Natural Gas Cost	$	1,209,000

CED determines that the most variability that it is willing to accept the risk that natural gas costs for July are no more than 110% of the budgeted amount, or $120,090 or less.

CED has to choose a range or volatility for natural gas. For simplicity, we propose to initially use a value of 20% increase in natural gas costs. That is, CED wants to ensure that if natural gas costs rise by 20% between January and July, power supply costs will not increase by more than 10%.

If natural gas costs rose to $6/MMBTU and CED did not cap costs, CED's costs would increase to:

Resource A		
Natural Gas Use (MMBTU)		167,400
Nat Gas Costs	$	1,004,400
Resource B		
Natural Gas Use (MMBTU)		74,400
Nat Gas Costs	$	446,400
Total Natural Gas Cost	$	1,450,800

The potential cost is greater than CED's pre-determined risk cap. CED should determine how much of its July gas requirements to ensure that even if natural gas costs rise, CED's total costs will not rise as much.

By fixing a portion of its July requirements at today's costs, CED can cap its future costs. Using the above example, if CED purchased 50 % of its July requirements at current costs, even a 20% increase in gas costs results in CED's total gas costs rise by less than the target amount.

In this case, a 20% rise in natural gas costs results in a $120,000 increase in CED's costs.

It should also be noted that during the period, if natural gas prices begin to rise, CED will have to increase its future purchases or enter into more call options to keep prices below the target.

A question that arises is why not fix all of CED's budget and buy natural gas in advance to meet all of CED's requirements? There are several basic reasons but primarily doing this exposes CED to market price risk and forecast risk. If natural gas prices fell over the period, CED would be paying too much for natural gas. Also, CED's loads are variable and purchasing 100% of forecasted gas requirements exposes CED to potentially having too much gas that it might have to sell at a loss.

A more difficult question is what is a reasonable target price for future natural gas costs? In the above example, an arbitrary choice of a 20% increase was chosen. A better way to choose would be based upon the variability of natural gas costs.

A second issue is the use of call options or price caps. Capping natural gas costs is a means of ensuring prices do not exceed the target amount but provide a means of benefiting from price declines. However, there is generally some cost associated with caps as opposed to purchasing forward contracts.

Any analysis of the best combination of options, forward contracts and fixed price purchases should take into account transaction costs, hedging costs and market price risk. There is no unbreakable or correct rule that provides the only way of meeting CED's price stability goals.

Appendix C
Approved Transaction Types

Consistent with the objective of the CED Risk Management Policy, transaction staff is authorized to enter into the wholesale sales and purchase transactions listed below. All transactions must conform to the risk exposure and maximum amounts identified in the Power Strategy Sheet and any other applicable CED policies and procedures and operational standard documents governing specific approved transaction types and authorized transaction limits Operational standards may be updated from time-to-time with the approval of the ROC Committee. Any transaction or group of transactions that, if executed, would cause CED's risk limits to be exceeded is unauthorized.

1. The purchase of fixed-price forward or future contracts on the commodity (long forward or future contracts) in an amount equal to or less than the projected requirements for the commodity.

2. The sale of fixed-price forward or futures contracts on the commodity (short covered forward or futures contracts) in an amount equal to or less than the projected excess inventory of the commodity.

3. The purchase of call options on the commodity or on futures contracts on the commodity (long call option) in an amount equal to or less than the projected requirements for the commodity. Call options may include variable price contracts for energy (heat rate options) or fixed strike price options.

4. The purchase of put options on the commodity or on futures contracts on the commodity (long put options) in an amount equal to or less than the projected excess inventory of the commodity.

Transaction Types Requiring ROC Approval

Given a valid hedging or portfolio management purpose, the Utility Director may request the ROC to recommend that the City Manager approve other wholesale electricity and natural gas transactions not listed in the previous sections. Such trades may not be made without prior ROC approval and may not exceed the approved time frame.

Speculative Transaction Types

The following transactions are inherently speculative and therefore can only be entered into in combinations that are not expected to result in an increase in portfolio risk. Entering into these types of transactions require a favorable recommendation by the ROC to the City Manager and City Manager approval.

The purchase of fixed-price forward or futures contracts on the commodity (long forward or futures contracts) in an amount greater than the projected requirements of the commodity unless associated with a wholesale arbitrage or opportunistic transaction that is being finalized so as to hedge the risk of a particular transaction.

The sale of fixed-price forward or futures contracts on the commodity (short uncovered forward or futures contracts) in an amount greater than the projected excess inventory of the commodity.

The purchase of call options on the commodity or futures contracts on the commodity in an amount greater than the projected requirements for the commodity,

The sale of call options on the commodity or on futures contracts on the commodity (short call options) in any amount. The sale of excess capacity or capacity and energy will not be considered to be the sale of a call for purposes of this part of the policy.

The purchase of put options on the commodity or on futures contracts on the commodity (long put option) in an amount greater than the projected excess inventory of the commodity.

The sale of put options on the commodity or on futures contracts on the commodity (short put options) in any amount.

In addition, CED will not engage in credit intermediation ("sleeving") transactions without prior approval of the ROC and City Manager.

CED will not engage in transactions that increase the BaR.