

## MEMORANDUM

**TO:** UTILITY ADVISORY COMMISSION

**FROM:** ADMINISTRATIVE SERVICES DEPARTMENT

**DATE:** AUGUST 6, 2014

**SUBJECT:** Staff Recommendation that the Utilities Advisory Commission Recommend that City Council Adopt an Updated Energy Risk Management Policy

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### Request

Staff requests that the Utilities Advisory Commission (UAC) recommend that City Council approve the proposed Energy Risk Management Policy (ERMP).

### Executive Summary

The City of Palo Alto's ERMP serves as the overriding document for the monitoring of risks associated with electric and gas commodity transactions. This Policy is to be reviewed by the City Council on an annual basis. In line with the Policy requirement to submit the Policy to the City Council for approval each year, staff requests that the UAC review and recommend the Policy for approval, prior to Council consideration tentatively scheduled for September 8, 2014.

### Background

The Council last approved the ERMP on July 9, 2012 (CMR ID# 2916). The City's ERMP requires that staff update it annually.

### Discussion

Electricity and gas prices have displayed significant volatility over time and purchasing electricity and gas can carry inherent financial risks. The ERMP is the overarching document for the management of the City's risks associated with purchasing electric and gas commodities. In addition to the ERMP, there are two more detailed sets of documents that support it and are used to mitigate risk: the Energy Risk Management Guidelines and Energy Risk Management Procedures. The Guidelines are prepared by Administrative Services staff in concert with Utilities staff. Energy Risk Management Procedures are prepared by the Front, Middle, and Back Offices. As a whole, the Energy Risk Management Policy, Guidelines, and Procedures codify for staff a variety of principles and activities designed to minimize risks by, for example, ensuring transparent and appropriate purchasing procedures, segregating duties, establishing acceptable risk parameters and limits, and instituting multiple review processes. The

ERMP and Guidelines are reviewed and approved by the Utilities Risk Oversight and Coordinating Committee (UROCC), which consists of the Directors of Utilities, Administrative Services, Public Works, and a representative from the City Manager's Office. The Procedures are approved by the Utilities and Administrative Services Directors.

The ERMP clearly delineates that all contract transactions, whether carried out under purchasing Master Agreements or not, must be fully in compliance with the Municipal Code. Transactions with the Northern California Power Agency, including scheduling, are covered under a separate Member Services Agreement.

Compared to the existing ERMP, the proposed 2014 ERMP reflects the following changes:

Substantive Changes:

- Added: ERM Program Structure Diagram (p. 3)
- Added two new authorized products and modified one existing (p. 8):
  - purchase and sale of emission allowances
  - purchases of carbon offsets
  - purchases of resource capacity products
- Conflict of Interest Policy – now refers back to the City's Conflict of Interest Code (p. 8)
- Added Dodd-Frank applicability and compliance paragraph (p. 8)
- Enhanced Glossary (pp. 10-11)

Finally, there have been a number of edits to clarify or clean-up text and to make the ERMP easier to use. The UAC can follow changes to the existing ERMP in the "redlined" version of the update or Attachment A. The UROCC has reviewed and approved the attached, updated ERMP.

Staff recommends that the UAC review the ERMP, provide comment, and recommend Council approval.

Attachments:

- A. Energy Risk Management Policy – redlined version
- B. Energy Risk Management Policy as approved by the UROCC on May 15, 2014

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# City of Palo Alto

## Energy Risk Management Policy

August 2014  
July 2012

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# City of Palo Alto Energy Risk Management Policy

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## A. OBJECTIVE AND SCOPE

The City of Palo Alto (City), Department of Utilities (CPAU) purchases and sells ~~gas and~~ electricity ~~and gas~~ to meet the needs of its customers. The City's Energy Risk Management ~~(ERM)~~ Policy (ERM Policy) describes the management organization, authority, and processes to monitor, measure, and control market risks, which include price risk, credit risk, and operational risk, to which the City is exposed in the normal course of managing its energy portfolio to meet the needs of the City's gas and electric and gas utility customers.

The ERM Policy describes the key policies and control structures for prudent energy risk management processes, in accordance with the City's municipal code, and applicable law, as well as all pertinent legal requirements. ~~This occurs while ensuring adherence to~~ The ERM Policy focuses ~~control structures and policies are focused~~ on the following areas:

- Segregation of duties and delegation of authority (Section C, pp. 4-5)
- Organizational structure for risk management controls to include the front, middle, and back offices (Section C, pp. 4-5)
- Transacting (Section E, p. 6)
- Counterparty credit (Section E, pp. 6-7)
- Reporting (Section F, p. 7)
- Permitted transaction and product types (Section G, pp. 7-8)
- Conflict of interest (Section I, p. 8)

The ERM Policy sets forth ~~serves as~~ the City's objectives, policies and control structures for prudent ~~key policy level document on~~ energy risk management. This Policy is supported by policy/implementation-level and operations-level documents, including: ~~the Energy Risk Management Guidelines (ERM Guidelines); Energy Risk Management Procedures (ERM Procedures) for the Front, Middle, and Back Offices; and the Long-Term Electric Acquisition Plan (LEAP), Gas Utility Long-Term Plan (GULP), and the Utilities Strategic Plan. Together these three documents serve to meet the requirements set forth in the Palo Alto Municipal Code Chapter 2.30 Contracts and Purchasing Procedures ("PAMC") as they relate to Wholesale Commodity Contracts, Authority, and Transactions~~ The ERM Policy does not address general CPAU business risks such as fire, accident, casualty, worker health and safety, and general liability. Neither does the Policy cover the water fund, the electric and gas distribution business units, nor the telecommunications business unit.

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## Energy Risk Management Policy, Guidelines, and Procedures Diagram

### Energy Risk Management Policy (Highest Level)



### Energy Risk Management Guidelines (Guiding Principles)



### Energy Risk Management Procedures-Front Office, Middle Office, Back Office (Detailed instructions on how to perform the procedures.)

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## B. APPLICABILITY

The ERM Policy applies to all City employees engaged in ~~the decision-making process~~ for transacting in the electric and gas energy markets. ~~All it is critical that all members of the City are aware that participation in the City's energy procurement business entails a host of risks and that all~~ members participating in the energy procurement process must have knowledge of the ERM Policy and ~~adhere to~~ use it during such participation.

~~The ERM Policy applies to the electric and natural gas supply business units.~~ The electric and ~~natural~~ gas supply business units are part of the electric and natural gas enterprise funds that deal with the acquisition and potential sale of energy supply resources.

The relevant business units are required to follow the ERM Policy regarding these topics: ~~describes the~~ management, organization, authority, processes, tools and systems to monitor, measure, and control risks to which CPAU is exposed. ~~This is in relation-related~~ to the acquisition and management of wholesale electric and gas commodity products and services to meet load.

~~The City is a member of the Northern California Power Agency (NCPA), which executes transactions on the City's behalf. The NCPA Commission approves its own energy risk management policies and procedures for the acquisition of energy supply resources. The City's energy risk management staff, however, will be actively involved in NCPA's Risk~~

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~~Oversight Committee and meetings to monitor possible risk exposures resulting from the City's membership in the NCPA Joint Powers Agency, even where the City is neither a project nor a program participant, and to ensure that NCPA observes best practices in its energy risk management program as it relates to the City are observed.~~

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~~The ERM Policy does not address general CPAU business risks such as fire, accident, casualty, worker health and safety, and general liability. Neither does the policy cover the water fund, the electric and natural gas distribution business units, nor the telecommunications business unit.~~

## **C. RISK MANAGEMENT ROLES, RESPONSIBILITIES, AND ORGANIZATION**

~~This section defines the overall roles and responsibilities for the City's implementation of the ERM Policy. Additionally, the ERM Guidelines and Procedures contain more specific information describing these roles and responsibilities within the energy risk management program structure at the City.~~

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### **1. City Council**

The City Council reviews and adopts by resolution the ERM Policy as developed and recommended by the Utilities Risk Oversight and Coordinating Committee (UROCC) and delegates its implementation to the City Manager. The Council will, at a minimum, review the Policy annually. Additionally, the City Council shall receive quarterly updates from the City Manager regarding energy risk management activities.

### **2. Utilities Advisory Commission**

The Utilities Advisory Commission (UAC) is responsible for advising the City Council on long-range planning and policy matters relating to the electric and gas utilities. While it has no formal responsibility in energy risk management, the UAC shall receive informational copies of the quarterly reports sent to the Council regarding energy risk management activities.

### **3. City Manager**

The City Manager has overall responsibility for executing and ensuring compliance with policy adopted by the City Council. The City Manager reports quarterly to the City Council regarding energy risk management activities.

### **4. Utilities Risk Oversight and Coordinating Committee (UROCC)**

~~The Utilities Risk Oversight and Coordinating Committee (UROCC)~~ consists of the following four voting members: the Director of Utilities (designated as the Chairperson), the Director of Administrative Services/Chief Financial Officer, the Director of Public

Works, and a representative from the City Manager's Office. The staff City Attorney assigned to Utilities and the City Auditor serve as non-voting advisors to the UROCC. In accordance with 2007 Government Auditing Standards, the City Auditor's participation as an advisor to the UROCC is not considered an audit service and does not impair the City Auditor's objective ability to audit CPAU. The Energy Risk Senior ManagementSr. Financial Analyst serves as the Secretary to the UROCC. A quorum, consisting of at least three (3) voting members of the UROCC, may take action on any matter within the subject matter jurisdiction of the UROCC. The UROCC Roles and Purpose document was unanimously adopted by the UROCC on July 18, 2013.

The UROCC is responsible for monitoring compliance with the ERM Policy. The UROCC is the primary body responsible for approving and implementing the ERM Guidelines consistent with the City Council-approved ERM Policy.

##### **5. CPAU/ASDManagement Oversight**

City Staff (CPAU, ASD) implements and oversees ERM Policy, the ERM Guidelines, and ERM ProceduresRisk management oversight at thean operational level in the City's is accomplished through supervisory review and approval and appropriate separation of duties. The separate functions of the Front Office, Middle Office, and Back Office, are described in the ERM Guidelines. Risk management functions are separated, as follows:

###### **a. Utilities Resource Management Front Office – Planning and Procurement**

In reporting to the Director of Utilities, the Front Office representative is primarily responsible for resource planning and procuring energy supplies and services. The Front Office, by delegation of the City Manager, has a critical role in risk management through its transacting operations. ~~The Front Office staff havehas~~ the authority to commit the financial capital of the City to energy transactions with counterparties. ~~As such, the Front Office is a central clearing point for risk assumption and risk mitigation.~~

~~The Front Office's roles in energy risk management include:~~

- ~~• Developing and implementing the Utilities Director approved Front Office procedures consistent with the Council approved ERM Policy and the UROCC approved ERM Guidelines;~~
- ~~• Developing and implementing energy portfolio management plans, strategies and guidelines in support of CPAU's objectives and in accordance with the City's ERM Policy and legal and regulatory requirements;~~
- ~~• Developing and recommending for annual approval retail rates and financial plans, including appropriate levels of gas and electric utility reserves in support of CPAU's objectives;~~

- Ensuring adherence to the ERM Policy, the ERM Guidelines and the ERM Procedures, including the proper recording of transactions, monitoring, and valuation of risk;
- Reporting position, valuation and market conditions, and energy portfolio risk to the UROCC; and
- Ensuring the proper reporting of contractual commitments in the City's financial reporting system.

The Front Office's Procedures are developed by staff, approved by the Utilities Director, and provided to the UROCC for information.

***b. ASD Middle Office – Risk Management Controls and Reporting***

~~In reporting to the Director of Administrative Services, the Middle Office representative provides the primary independent oversight role.~~ The Middle Office consists of the Energy Risk Senior Management Analyst/Manager, and ~~he~~ or ~~she~~ shall institute, supervise, and review all energy risk management activities, including portfolio exposure, credit exposure, transaction compliance, and ongoing approval of counterparties and transacting limits. In reporting to the Director of Administrative Services/Chief Financial Officer, the Middle Office representative provides the primary independent oversight of the energy procurement role.

The Middle Office's energy risk management responsibilities include:

- ~~Monitoring CPAU's risk exposures and ensuring compliance with the ERM Policy, the ERM Guidelines, and the ERM Procedures;~~
- ~~Reporting to the UROCC on risk management issues, and making recommendations which may relate to the temporary or permanent cessation of transactions with one or more counterparties, citing exceptions to rules and procedures, other operational exceptions, or any other topic the Risk Manager believes represents an unacceptable risk exposure; and~~
- ~~Recommending, as necessary, updates to the ERM Policy, the ERM Guidelines, and the ERM Procedures.~~

~~The Middle Office's Procedures are developed by staff, approved by the Director of Administrative Services, and provided to the UROCC for information.~~

***c. Back Office – Settlement and Recording***

The Back Office is primarily responsible for settlement of bills, recording transactions, bookkeeping and accounting, and contract administration. Functions within the Back Office are performed by both the Administrative Services Department (ASD) and CPAU staff and are detailed in the ERM Guidelines.

The Back Office roles in risk management oversight include:

- Ensuring that bills reflect trade orders;
- Independently monitoring and recording transactions into a tracking database; and
- Verifying and reporting on compliance with procedures as reflected in the deal tracking documentation.

Back Office Procedures are collectively developed by ASD and CPAU staff, jointly approved by the Director of Administrative Services and the Utilities Director, and provided to the UROCC for information.

#### 6. NORTHERN CALIFORNIA POWER AGENCY (NCPA)

The City is a member of the Northern California Power Agency (NCPA), which executes transactions on the City's behalf. The NCPA Commission approves its own energy risk management policies and procedures for the acquisition of energy supply resources. The City's energy risk management staff, however, will be actively involved in NCPA's Risk Oversight Committee and meetings to monitor possible risk exposures resulting from the City's membership in the NCPA Joint Powers Agency, even where the City is neither a project nor a program participant, to ensure that NCPA observes best practices in its energy risk management program as it relates to the City.

#### **D. TRANSACTIONSTRANSACTING POLICY**

Transactions~~The Transacting Policy ensures transactions~~ executed under the Electric Master Agreements and the Gas Master Agreements (collectively, Master Agreements) ~~must be~~ executed as described in this section in a manner consistent with the authority granted by the Council to the City Manager to transact under these contracts and the PAMC. ~~Such~~~~The Transacting Policy also ensures such~~ transactions should also be carried out to manage risk inherent to the electric and gas supply portfolio without exposing the City to unnecessary risk. The policy has three key elements:

##### ***1. Anti-speculation***

Speculative buying and selling of energy products ~~is~~are prohibited. Speculation is defined as buying energy not needed for meeting forecasted load or selling energy that is not owned. Additionally, in no event shall transactions be entered into in order to speculate on market conditions. The ERM Guidelines shall prescribe volume and sales dollar amount limits for forward purchases and sales.

### 2. Maximum Transaction Term

The maximum term of any supply resource transaction (purchase or sale) is three years, as stated in PAMC Section 2.30.210(l), unless approved by the City Council.

### 3. Competitive Process

CPAU will work with Purchasing to issue a Request for Proposal (RFP)~~endeavor~~ to obtain three or more quotations from eligible electric and gas supply counterparties and select the best price. The ERM Guidelines include trade capture guidelines to ensure the proper execution of transactions.

## E. COUNTERPARTY CREDIT POLICY

~~The Counterparty Credit Policy is designed to minimize the potential adverse financial impacts, and credit exposure to the City in the event of a defaulting counterparty. Specifically, the policy seeks to minimize credit exposure related to wholesale commodity transactions and potentially defaulting counterparties shall be minimized by:~~

- ◆ 1. Establishing a credit risk management governance and oversight structure within the existing ERM program;
- ◆ 2. Providing a framework to enable the City to qualify energy suppliers and transact with eligible counterparties;
- ◆ 3. Providing counterparty transacting parameters (limits) to control and measure the City's exposure to any one supplier;
- ◆ 4. Implementing a mechanism to monitor and report on supply portfolio-related counterparty credit exposures; and
- ◆ 5. Managing counterparty credit requirements ~~from the City~~.

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Furthermore, ~~the~~ PAMC Section 2.30.340 sets forth creditworthiness standards and certain contractual provisions applicable to contracts for wholesale utility commodities. As such, transactions carried out under the Master Agreements are limited to counterparties with a Standard and Poor's issuer rating of BBB- or better, or a Moody's Investor Services issuer rating of Baa3 or better. Only the Council can approve exemptions to this requirement.

The ERM Guidelines shall set forth specific counterparty credit limits for volume, term and credit exposure, and counterparty reporting requirements.

## **F. RISK MANAGEMENT REPORTING POLICY**

~~Reporting Key to ERM is the monitoring of critical risks and the accurate and timely information to relevant that must be provided to all parties is a key component involved in any aspects of energy risk management, to allow them to perform their functions appropriately.~~ Quarterly reports will be distributed to the UROCC, the UAC, and the Council; those reports shall provide sufficient details on the City's forward contract purchases, market exposure, credit exposure, counterparty credit ratings, transaction compliance, and other relevant data.

The Front and Middle Offices' staffs shall prepare performance reports containing an analysis of physical and financial positions of all electric and gas commodity contracts. The frequency and content of performance reports for each oversight body shall be prescribed in the ERM Guidelines. Should the risks associated with the portfolio or a specific transaction within the portfolio fall outside of the risk limits prescribed in the ERM Guidelines, the Risk Manager will work with the City Attorney's Office to report this fact to the UROCC within one business day via email, and will evaluate the risk of holding any of the contracts in the portfolio to delivery ~~and report along with reporting~~ to the Council in the next quarterly energy risk management report.

## **G. AUTHORIZED PRODUCTS POLICY**

The Council has delegated to the City Manager the authority to transact under Council-approved Master Agreements. ~~The purpose of the Authorized Products Policy is to ensure that products~~ transacted under the Master Agreements ~~(listed below) must bear~~ consistent with the needs of CPAU and fall within the authority granted by the Council to the City Manager. The following products and/or transactions are approved to be executed under the Master Agreements:

- A. Purchase of physical fixed price, index-based price, call options, capped-price or collar-priced energy, ~~natural~~ gas, capacity, transportation, basis and transmission products to meet load requirements;
- B. Sale of physical fixed price or index-based price energy, ~~natural~~ gas, capacity, storage, and transmission incidental to load;
- C. Purchase of electric heat rate products to meet load;
- D. Purchase and Sale of Renewable Energy Credits with or without bundled energy;
- E. Purchase of ~~gas~~ Gas storage;
- F. Purchase and Sale of Electric Ancillary Services;
- G. ~~Purchase and sale of local and system capacity to meet the City's resource adequacy requirement;~~ Purchase of resource adequacy capacity products to meet the City's resource adequacy requirement and the sale of resource adequacy capacity products to reduce cost associated with the City's resource adequacy obligation;

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- H. Fixed price or index-priced purchases and sales to substitute the use of higher cost resources with lower cost market alternatives;
- I. Fixed price or index-priced forward purchases and sales of transmission and transmission rights to meet contractual obligations or to dispose of surplus capacity;  
~~and~~
- J. Purchase of physical call options and physical collars; ~~and-~~
- K. Purchase and Sale of Emission Allowances from bilateral trades and from the California Air Resources Board administered Cap and Trade Program auctions and reserve auctions to satisfy actual and/or forecasted GHG emissions compliance obligations; and
- L. Purchases of carbon offsets to supply voluntary programs and/or to satisfy GHG emission compliance.

**H. TRANSACTING AUTHORITY ~~POLICY~~**

In accordance with PAMC section 2.30.210(1270(a)), the City Manager has the authority to purchase and sell wholesale energy commodities for terms of up to three years ~~and for a price not to exceed \$250,000 or more in any one year under open purchase contracts.~~ PAMC section 2.30.270(b) governs the City Manager’s delegation of authority. Delegation of authority for and on behalf of the City Manager shall be established in the ERM Guidelines. The City Clerk maintains the list of CPAU ~~staff~~ individuals who are authorized to engage in wholesale utility commodity transactions.

**I. CONFLICT OF INTEREST ~~POLICY~~**

In accordance with Chapter 2.09 of the PAMC and applicable California law, ~~City~~ the City’s personnel who are involved in transacting and exercising oversight of CPAU’s supply resource acquisition, contract negotiation, risk management, and back office programs may not participate in decisions in which they have a conflict of interest. ~~Should an employee become aware of a conflict of interest during the course of fulfilling his or her responsibilities, he or she shall report it, without delay, to the Director, or her or his designee, who shall resolve the conflict.~~

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## **J. DODD-FRANK APPLICABILITY AND COMPLIANCE**

Certain elements of the ERM Policy may be subject to compliance with the Dodd-Frank Wall Street Reform and Consumer Protection Act (the “Dodd-Frank Act”, or “Dodd-Frank”).<sup>1</sup> Since Congress adopted the Dodd-Frank Act in 2010, its applicability to municipal utilities and the counterparties that engage in energy transactions with them has been in a state of flux. Certain types of transactions may or may not be subject to disclosure, recordkeeping and reporting requirements under Dodd-Frank, depending on the details of each individual transaction and the characteristics of the transacting parties.

The City Attorney’s Office is currently conducting a review of Dodd-Frank applicability to City transactions, to determine the adequacy of the City’s compliance with any relevant Dodd-Frank provisions. When this review is complete, the City Attorney’s office will advise the UROCC and Utilities Management staff on whether updates to the ERM Policy are needed.

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<sup>1</sup> Pub. L. 111-203, 124 Stat. 1376 (2010).

## GLOSSARY OF TERMS

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Back Office	<del>Back office</del> A set of <del>business</del> functions <u>are performed by certain positions in the</u> Utilities and Administrative Services Departments. <u>Their duties include</u> <del>including</del> trade confirmation, accounting, and other processes that support the transaction of commodities.
Call Options	An option that allows the owner the right to purchase energy at the specified strike price.
Cap Price	A structured product that contains a strip of multiple call option contracts with identical, but staggered expirations.
Carbon Offsets	A way for a company or person to reduce the level of carbon dioxide for which they are responsible by paying money to an organization that works to reduce the total amount produced in the world.
<del>Collar</del>	<del>A combination of a price with a maximum and minimum value.</del>
<del>Congestion Revenue Rights (CRRs)</del>	<del>A hedging tool or a financial instrument that entitles the holder to a CRR payment. This occurs when congestion (a characteristic of the transmission system produced when constraints on the system prevent the optimum economic dispatch of generation to meet demand) is in the direction of the CRR Source (a node or a trading hub where generation is scheduled into the electric grid) to the CRR Sink (a node or a trading hub specified as the point of withdrawal for consumption).</del>
Credit Risk	The probable change in the value of a contract due to a counterparty defaulting.
Electric Ancillary Services	Those services necessary to support the transmission of electric power from seller to purchaser given the obligations of control areas and transmitting utilities within those control areas to maintain reliable operations of the interconnected transmission system. <u>For example, the ancillary service of increasing energy output if the grid needs additional energy and additional revenue for the City when excess power is available.</u>
Electric Heat Rate Product	A contract based on how efficiently a generator uses heat energy in fuel (i.e., natural gas) to generate electricity.
Front Office	<del>Front office functions include the</del> The sector of energy procurement operations in utilities <u>associated with</u> <del>where trading</del> (purchasing or selling of a commodity) <del>occurs</del> .
<del>Hydro Risk</del>	<del>The risk that altered precipitation patterns result in less than normal hydro electric generation.</del>
Index-based Price	A price that varies based on published index prices.
Market Risk	The probable change in value of (or sensitivity to) a contract, position, or portfolio due to general changes in market conditions.

Master Agreement	A standardized agreement for the purchase and sale of energy.
Middle Office	<del>Middle office</del> The set of business functions include energy risk management activities carried out by the Administrative Services Department staff, that carries out energy risk management activities.
Physical Fixed Price	A contract for a fixed price which settles when one counterparty delivers the commodity to another counterparty and pays a cash settlement.
<del>Physical Position</del>	<del>The volumetric sum of all physical transactions.</del>
<del>Portfolio Exposure</del>	<del>The monetary sum of all positions that are subject to change.</del>
Risk Management	The set of skills and processes for measuring, controlling, and hedging risk.
Supply Portfolio	The composition and amount of all purchased power.
Transmission Product	The sale or purchase of a non-energy asset to transport energy.
<del>Volume Risk</del>	<del>The risk of the volume of a contract or position changing from current expectations.</del>
<del>Weather Risk</del>	<del>The risk of weather changing from current expectations and causing changes to expected load or generation.</del>

# **City of Palo Alto**

## **Energy Risk Management Policy**

**August 2014**



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**City of Palo Alto Energy Risk Management Policy  
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## **A. OBJECTIVE AND SCOPE**

The City of Palo Alto's (City) Department of Utilities (CPAU) purchases and sells electricity and gas to meet the needs of its customers. The City's Energy Risk Management Policy (ERM Policy) describes the management organization, authority, and processes to monitor, measure, and control market risks, which include price risk, credit risk, and operational risk, to which the City is exposed in the normal course of managing its energy portfolio to meet the needs of the City's electric and gas utility customers.

The ERM Policy describes the key policies and control structures for prudent energy risk management processes, in accordance with the City's municipal code, financial requirements set forth by the City Council and the Director of Administrative Services, and applicable law. The ERM Policy focuses on the following areas:

- Segregation of duties and delegation of authority (Section C, pp. 4-5)
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- Permitted transaction and product types (Section G, pp. 7-8)
- Conflict of interest (Section I, p. 8)

The ERM Policy sets forth the City's objectives, policies and control structures for prudent energy risk management. This Policy is supported by policy/implementation-level and operations-level documents including: the Energy Risk Management Guidelines (ERM Guidelines); Energy Risk Management Procedures (ERM Procedures) for the Front, Middle, and Back Offices; and the Long-Term Electric Acquisition Plan (LEAP), Gas Utility Long-Term Plan (GULP), and the Utilities Strategic Plan. The ERM Policy does not address general CPAU business risks such as fire, accident, casualty, worker health and safety, and general liability. Neither does the Policy cover the water fund, the electric and gas *distribution* business units, nor the telecommunications business unit.

## **Energy Risk Management Policy, Guidelines, and Procedures Diagram**

**Energy Risk Management Policy (Highest Level)**

**Approved by: City Council**



**Energy Risk Management Guidelines (Guiding Principles)**

**Approved by: Utilities Risk Oversight Coordinating Council (UROCC)**



**Energy Risk Management Procedures-(Detailed instructions on how to perform the procedures.) Front Office (approved by Utilities Director) Middle Office (approved by Administrative Services Department (ASD) Director, Back Office (approved by Utilities and ASD Directors)**

### **B. APPLICABILITY**

The ERM Policy applies to all City employees engaged in transacting in the electric and gas markets. All members participating in the energy procurement process must have knowledge of the ERM Policy and adhere to it during such participation.

The electric and gas supply business units are part of the electric and natural gas enterprise funds that deal with the acquisition and potential sale of energy supply resources.

The relevant business units are required to follow the ERM Policy regarding these topics: management, organization, authority, processes, tools and systems to monitor, measure, and control risks to which CPAU is exposed. This is in relation to the acquisition and management of wholesale electric and gas commodity products and services to meet load.

## **C. RISK MANAGEMENT ROLES, RESPONSIBILITIES, AND ORGANIZATION**

This section defines the overall roles and responsibilities for the City's implementation of the ERM Policy. Additionally, the ERM Guidelines and Procedures contain more specific information describing these roles and responsibilities within the energy risk management program structure at the City.

### **1. City Council**

The City Council reviews and adopts by resolution the ERM Policy as developed and recommended by the Utilities Risk Oversight and Coordinating Committee (UROCC) and delegates its implementation to the City Manager. The Council will, at a minimum, review the Policy annually. Additionally, the City Council shall receive quarterly updates from the City Manager regarding energy risk management activities.

### **2. Utilities Advisory Commission**

The Utilities Advisory Commission (UAC) is responsible for advising the City Council on long-range planning and policy matters relating to the electric and gas utilities. While it has no formal responsibility in energy risk management, the UAC shall receive informational copies of the quarterly reports sent to the Council regarding energy risk management activities.

### **3. City Manager**

The City Manager has overall responsibility for executing and ensuring compliance with policy adopted by the City Council. The City Manager reports quarterly to the City Council regarding energy risk management activities.

### **4. Utilities Risk Oversight and Coordinating Committee (UROCC)**

The UROCC is an advisory board which governs by the UROCC Roles and Purpose document. UROCC consists of city management and staff. It is comprised of the Director of Utilities (designated as the Chairperson), the Director of Administrative Services/Chief Financial Officer, the Director of Public Works, and a representative from the City Manager's Office. The staff City Attorney assigned to Utilities and the City Auditor serve as non-voting advisors to the UROCC. The Energy Risk Senior Management Analyst serves as the Secretary to the UROCC. A quorum, consisting of at least three (3) voting members of the UROCC, may take action on any matter within the subject matter jurisdiction of the UROCC. The UROCC Roles and Purpose document was unanimously adopted by the UROCC on July 18, 2013.

The UROCC is responsible for monitoring compliance with the ERM Policy. The UROCC is also responsible for approving and implementing the ERM Guidelines consistent with the City Council-approved ERM Policy.

## **5. CPAU/ASD Oversight**

City Staff (CPAU, ASD) implements and oversees ERM Policy, the ERM Guidelines, and ERM Procedures at the operational level in the City's Front Office, Middle Office and Back Office.

*a. Utilities Resource Management Front Office – Planning and Procurement* In reporting to the Director of Utilities, the Front Office representative is primarily responsible for resource planning and procuring energy supplies and services. The Front Office, by delegation of the City Manager, has a critical role in risk management through its transacting operations. Front Office staff has the authority to commit the financial capital of the City to energy transactions with counterparties up to the limits designated in the ERM Guidelines.

### *b. ASD Middle Office – Risk Management Controls and Reporting*

The Middle Office consists of the Energy Risk Senior Management Analyst, and he or she shall institute, supervise, and review all energy risk management activities, including portfolio exposure, credit exposure, transaction compliance, and ongoing approval of counterparties and transacting limits. In reporting to the Director of Administrative Services/Chief Financial Officer, the Middle Office representative provides the primary independent oversight of the energy procurement practices.

### *c. Back Office – Settlement and Recording*

The Back Office is primarily responsible for settlement of bills, recording transactions, bookkeeping and accounting, and contract administration. Functions within the Back Office are performed by both the Administrative Services Department (ASD) and CPAU staff and are detailed in the ERM Guidelines.

## **6. NORTHERN CALIFORNIA POWER AGENCY (NCPA)**

NCPA balances the City of Palo Alto's portfolio. The City is a member of the Northern California Power Agency (NCPA), which executes transactions on the City's behalf. The NCPA Commission approves its own energy risk management policies and procedures for the acquisition of energy supply resources. The City's energy risk management staff, however, will be actively involved in NCPA's Risk Oversight Committee and meetings to monitor possible risk exposures resulting from the City's membership in the NCPA Joint Powers Agency, even where the City is neither a project nor a program participant, to ensure that NCPA observes best practices in its energy risk management program as it relates to the City.

## **D. TRANSACTIONS**

Transactions executed under the Electric Master Agreements and the Gas Master Agreements (collectively, Master Agreements) must be executed as described in this section in a manner consistent with the authority granted by the Council to the City Manager to transact under these contracts and the PAMC. Such transactions should also be carried out to manage risk inherent to the electric and gas supply portfolio without exposing the City to unnecessary risk. There are three key elements:

### ***1. Anti-speculation***

Speculative buying and selling of energy products is prohibited. Speculation is defined as buying energy not needed for meeting forecasted load or selling energy that is not owned. Additionally, in no event shall transactions be entered into in order to speculate on market conditions. The ERM Guidelines shall prescribe volume and sales dollar amount limits for forward purchases and sales.

### ***2. Maximum Transaction Term***

The maximum term of any supply resource transaction (purchase or sale) is three years, as stated in PAMC Section 2.30.210(l), unless approved by the City Council.

### ***3. Competitive Process***

CPAU will work with Purchasing to issue a Request for Proposal (RFP) to obtain three or more quotations from eligible electric and gas supply counterparties and select the best price. The ERM Guidelines include the trade capture process to ensure the proper execution of transactions.

## **E. COUNTERPARTY CREDIT**

Credit exposure related to wholesale commodity transactions and potentially defaulting counterparties shall be minimized by:

1. Establishing a credit risk management governance and oversight structure within the existing ERM program;
2. Providing a framework to enable the City to qualify energy suppliers and transact with eligible counterparties;
3. Providing counterparty transacting parameters (limits) to control and measure the City's exposure to any one supplier;
4. Implementing a mechanism to monitor and report on supply portfolio-related counterparty credit exposures; and

## 5. Managing counterparty credit requirements.

Furthermore, PAMC Section 2.30.340 sets forth creditworthiness standards and certain contractual provisions applicable to contracts for wholesale utility commodities. As such, transactions carried out under the Master Agreements are limited to counterparties with a Standard and Poor's issuer rating of BBB- or better, or a Moody's Investor Services issuer rating of Baa3 or better. Only the Council can approve exemptions to this requirement.

The ERM Guidelines shall set forth specific counterparty credit limits for volume, term, credit exposure, and counterparty reporting requirements.

## **F. RISK MANAGEMENT REPORTING**

Reporting of critical information to relevant parties is a key component of energy risk management. Quarterly reports will be distributed to the UROCC, the UAC, and the Council; those reports shall provide sufficient details on the City's forward contract purchases, market exposure, credit exposure, counterparty credit ratings, transaction compliance, and other relevant data.

The Front and Middle Offices' staff shall prepare performance reports containing an analysis of physical and financial positions of all electric and gas commodity contracts. The frequency and content of performance reports for each oversight body shall be prescribed in the ERM Guidelines. Should the risks associated with the portfolio or a specific transaction within the portfolio fall outside of the risk limits prescribed in the ERM Guidelines, the Energy Risk Senior Management Analyst will work with the City Attorney's Office to report this fact to the UROCC within one business day via email, and will evaluate the risk of holding any of the contracts in the portfolio to delivery and report to the Council in the next quarterly energy risk management report.

## **G. AUTHORIZED PRODUCTS**

The Council has delegated to the City Manager the authority to transact under Council-approved Master Agreements. Physical products transacted under the Master Agreements (listed below) must be consistent with the needs of CPAU and fall within the authority granted by the Council to the City Manager. The following products and/or transactions are approved to be executed under the Master Agreements:

- A. Purchase of physical fixed price, index-based price, call options, capped-price or collar-priced energy, gas, capacity, transportation, basis and transmission products to meet load requirements;

- B. Sale of physical fixed price or index-based price energy, gas, capacity, storage, and transmission incidental to load;
- C. Purchase of electric heat rate products to meet load;
- D. Purchase and sale of renewable energy credits with or without bundled energy;
- E. Purchase of gas storage;
- F. Purchase and sale of electric ancillary services;
- G. Purchase of resource adequacy capacity products to meet the City's resource adequacy requirement and the sale of resource adequacy capacity products to reduce cost associated with the City's resource adequacy obligation;
- H. Fixed price or index-priced purchases and sales to substitute the use of higher cost resources with lower cost market alternatives;
- I. Fixed price or index-priced forward purchases and sales of transmission and transmission rights to meet contractual obligations or to dispose of surplus capacity;
- J. Purchase of physical call options and physical collars; and
- K. Purchase and sale of emission allowances from bilateral trades and from the California Air Resources Board administered Cap and Trade Program auctions and reserve auctions to satisfy actual and/or forecasted GHG emissions compliance obligations; and
- L. Purchases of carbon offsets to supply voluntary programs and/or to satisfy GHG emission compliance.

## **H. TRANSACTING AUTHORITY**

In accordance with PAMC section 2.30.210(l), the City Manager has the authority to purchase and sell wholesale energy commodities for terms of up to three years and for a price not to exceed \$250,000 or more in any one year. PAMC section 2.30.270(b) governs the City Manager's delegation of authority. Delegation of authority for and on behalf of the City Manager shall be established in the ERM Guidelines. The City Clerk maintains the list of CPAU staff authorized to engage in wholesale utility commodity transactions.

## **I. CONFLICT OF INTEREST**

In accordance with Chapter 2.09 of the PAMC and applicable California law, City personnel who are involved in transacting and exercising oversight of CPAU's supply resource acquisition, contract negotiation, risk management, and back office programs may not participate in decisions in which they have a conflict of interest.

## **J. DODD-FRANK APPLICABILITY AND COMPLIANCE**

*Certain elements of the ERM Policy may be subject to compliance with the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act," or "Dodd-*

Frank”).<sup>1</sup> Since Congress adopted the Dodd-Frank Act in 2010, its applicability to municipal utilities and the counterparties that engage in energy transactions with them has been in a state of flux. Certain types of transactions may or may not be subject to disclosure, recordkeeping and reporting requirements under Dodd-Frank, depending on the details of each individual transaction and the characteristics of the transacting parties.

The City Attorney’s Office is currently conducting a review of Dodd-Frank applicability to City transactions, to determine the adequacy of the City’s compliance with any relevant Dodd-Frank provisions. When this review is complete, the City Attorney’s office will advise the UROCC, Utilities, and ASD Management staff on whether updates to the ERM Policy are needed.

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<sup>1</sup> Pub. L. 111-203, 124 Stat. 1376 (2010).

## **GLOSSARY OF TERMS**

Back Office	Back office functions include a set of positions in the Utilities and Administrative Services Departments. Their duties include trade confirmation, accounting, and other processes that support the transaction of commodities.
Call Options	An option that allows the owner the right to purchase energy at the specified strike price.
Cap Price	A structured product that contains a strip of multiple call option contracts with identical, but staggered expirations.
Carbon Offsets	A way for a company or person to reduce the level of carbon dioxide for which they are responsible by paying money to an organization that works to reduce the total amount produced in the world.
Credit Risk	The probable change in the value of a contract due to a counterparty defaulting.
Electric Ancillary Services	Electric Ancillary Services (e.g., scheduling and dispatch) are necessary to support the transmission of electric power from seller to purchaser given the obligations of control areas and transmitting utilities within those control areas to maintain reliable operations of the interconnected transmission system. For example, the ancillary service of increasing energy output if the grid needs additional energy and additional revenue for the City when excess power is available.
Electric Heat Rate Product	A contract based on how efficiently a generator uses heat energy in fuel (i.e., natural gas) to generate electricity.
Front Office	Front office functions include the sector of energy procurement operations in utilities associated with purchasing or selling of a commodity.
Index-based Price	A price that varies based on published index prices.
Market Risk	The probable change in value of (or sensitivity to) a contract, position, or portfolio due to general changes in market conditions.

Master Agreement	A standardized agreement for the purchase and sale of energy.
Middle Office	Middle office functions include energy risk management activities carried out by Administrative Services Department staff.
Physical Fixed Price	A contract for a fixed price which settles when one counterparty delivers the commodity to another counterparty and pays a cash settlement.
Risk Management	The set of skills and processes for measuring, controlling, and hedging risk.
Supply Portfolio	The composition and amount of all purchased power.
Transmission Product	The sale or purchase of a non-energy asset to transport energy.