Resolution No. 9454
Resolution of the Council of the City of Palo Alto Approving Revisions
to the City of Palo Alto Energy Risk Management Policy

A. The City of Palo Alto (the “City”) adopted a policy governing the management, monitoring and hedging of risks associated with electric and natural gas commodity transactions effected by the Department of Utilities. That policy is memorialized in the document entitled “Energy Risk Management Policy” (the “Policy”), which the City has previously updated on an annual basis.

B. Staff has carefully reviewed the Policy, including with the help of a consultant, to identify opportunities to update, clarify, and streamline the language of the Policy.

C. In addition to changes throughout the Policy that would accomplish that objective, Staff specifically recommends that the Policy be updated to:

   (1) Identify two new authorized products (purchase and sale of emission allowances and purchases of carbon offsets) and modify one existing product (purchases of resource capacity products);

   (2) Cross-reference the City’s Conflict of Interest Code in the Conflict of Interest section of the Policy;

   (3) Add a new section concerning compliance with Dodd-Frank legislation and regulation; and

   (4) Enhance the Policy’s Glossary with definitions for relevant term used in the Policy.

D. At its August 6, 2014 meeting, the Utilities Advisory Commission (UAC) recommended that the City Council approve the amendments to the Policy proposed by staff, with two additional changes:

   (1) The requirement that Council review the Policy be changed from an annual to biennial (every two years) review; and

   (2) The term “resource adequacy capacity products” be added to the Policy’s glossary.
E. The Council has reviewed staff's analysis, the resulting staff report, and the UAC's recommendation.

NOW, THEREFORE, the Council of the City of Palo Alto hereby RESOLVES, as follows:

SECTION 1. The Council hereby approves the City of Palo Alto Energy Risk Management Policy, as amended, which is attached to this Resolution.

SECTION 2. The Council finds that the adoption of this resolution does not constitute a project under the California Environmental Quality Act and no environmental assessment is required.

INTRODUCED AND PASSED: October 6, 2014

AYES: Berman, Burt, Holman, KniSS, Price, Scharff, Shepherd

NOES: Schmid

ABSENTIONS:

ABSENT: Klein

ATTEST:

APPROVED:

[Signatures]

APPROVED AS TO FORM:

[Signatures]

[Signatures]

City Clerk

Mayor

City Manager

Director of Utilities

Director of Administrative Services
City of Palo Alto

Energy Risk Management Policy

August 2014
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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)
- Organizational structure for risk management controls to include the front, middle, and back offices (Section C, pp. 4-5)
- Transacting (Section D, 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 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 Committee (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 biennially (every 2 years). 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 have 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 role.

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(1), 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;
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(1), 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”). 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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# GLOSSARY OF TERMS

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Back Office</td>
<td>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.</td>
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<tr>
<td>Call Options</td>
<td>An option that allows the owner the right to purchase energy at the specified strike price.</td>
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<td>Cap Price</td>
<td>A structured product that contains a strip of multiple call option contracts with identical, but staggered expirations.</td>
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<tr>
<td>Carbon Offsets</td>
<td>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.</td>
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<tr>
<td>Credit Risk</td>
<td>The probable change in the value of a contract due to a counterparty defaulting.</td>
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<tr>
<td>Electric Ancillary Services</td>
<td>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.</td>
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<tr>
<td>Electric Heat Rate Product</td>
<td>A contract based on how efficiently a generator uses heat energy in fuel (i.e., natural gas) to generate electricity.</td>
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<td>Front Office</td>
<td>Front office functions include the sector of energy procurement operations in utilities associated with purchasing or selling of a commodity.</td>
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<tr>
<td>Index-based Price</td>
<td>A price that varies based on published index prices.</td>
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<tr>
<td>Market Risk</td>
<td>The probable change in value of (or sensitivity to) a contract, position, or portfolio due to general changes in market conditions.</td>
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<tr>
<td>Master Agreement</td>
<td>A standardized agreement for the purchase and sale of energy.</td>
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<tr>
<td>Middle Office</td>
<td>Middle office functions include energy risk management activities carried out by Administrative Services Department staff.</td>
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<tr>
<td>Physical Fixed Price</td>
<td>A contract for a fixed price which settles when one counterparty delivers the commodity to another counterparty and pays a cash settlement.</td>
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<td>Resource Adequacy Capacity Products</td>
<td>Products that provide the City with designated resource adequacy capacity from a generation unit located in the CAISO control area, and that provide resource adequacy requirement (RAR) attributes or local area reliability (LAR) attributes will fully qualify as resource adequacy qualifying capacity. Products that provide the City with designated resource adequacy capacity from a generation unit located in the CAISO control area, that provides resource adequacy requirement (RAR) attributes or local area reliability (LAR) attributes will fully qualify as resource adequacy qualifying capacity. RAR and LAR are acronyms defined by the City’s Resource Adequacy Program.</td>
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<tr>
<td>Risk Management</td>
<td>The set of skills and processes for measuring, controlling, and hedging risk.</td>
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<td>Supply Portfolio</td>
<td>The composition and amount of all purchased power.</td>
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<tr>
<td>Transmission Product</td>
<td>The sale or purchase of a non-energy asset to transport energy.</td>
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