

City of Palo Alto

Energy Risk Management Policy

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CITY OF
**PALO
ALTO**

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)
- Organizational structure for risk management controls to include the front, middle, and back offices (Section C)
- Transacting (Section D)
- Counterparty credit (Section E)
- Reporting (Section F)
- Permitted transaction and product types (Section G)
- Conflict of interest (Section I)

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 within business units engaged in transacting in the electric and gas markets. All employees 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 and employees within these business units are responsible for the acquisition and potential sale of energy supply resources.

Employees within 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 the City is exposed.

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 every three 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 Utilities General Manager (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. 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 Utilities General Manager, the Front Office 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 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 electric loads and electric supplies on a daily, hourly, and sub-hourly basis. The City is a member of the Northern California Power Agency (NCPA), which executes transactions on the City’s behalf. NCPA also undertakes transactions for durations greater than a month under the terms of the Council approved Market Purchase Program Agreement (MPP¹). The NCPA Commission approves its own energy risk management policies for the acquisition of energy supply resources. The City’s energy risk management staff, however, is 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.

All transactions undertaken by NCPA on behalf of Palo Alto under the MPP shall be governed by NCPA’s Risk Management Policy and Regulations, the City’s Energy Risk Management Policy and Guidelines, and the Council Resolution (6055374) approving the MPP Agreement. In the event of a conflict between the City’s and NCPA’s ERM governing documents, staff will direct NCPA to adhere to the City’s ERM Policy and Guidelines, via staff’s authorization of individual transactions under the MPP.

¹ Staff Report #11086

D. TRANSACTIONS

Transactions under the Electric Master Agreements and the Gas Master Agreements (collectively, Master Agreements) must be executed as described in this section and in a manner consistent with the authority granted by the Council to the City Manager and the Palo Alto Municipal Code (PAMC). Such transactions will be carried out to manage risk inherent to the electric and gas supply portfolios 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. In no event shall transactions be entered into for the purpose of speculating 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 five years, as stated in PAMC Section 2.30.210(k), unless approved by the Council.

3. Competitive Process

The Front Office will endeavor to obtain three or more quotations from eligible electric and gas supply counterparties and select the best price. The ERM Guidelines outline the trade capture process.

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.

PAMC Section 2.30.340 sets forth creditworthiness standards and certain contractual provisions applicable to contracts for wholesale utility commodities and services. 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 (*See* PAMC Section 2.30.340(d)(2)(c)).

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 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 shall prepare performance reports containing an analysis of physical and financial positions. 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 quantify the risk, identify and recommend a remedy, if any, and report to the UROCC within one business day via email. The event and remedy, if any, will be reported to the Council in the next quarterly energy risk management report.

G. AUTHORIZED PRODUCTS

The Council shall delegate to the City Manager the authority to transact under Council-approved Master Agreements. 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:

1. 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;
2. Sale of physical fixed price or index-based price energy, gas, capacity, storage, and transmission incidental to load;
3. Purchase of electric heat rate products to meet load;
4. Purchase and sale of renewable energy credits (RECs) with or without bundled energy;
5. Purchase of gas storage;
6. Purchase and sale of electric ancillary services;
7. 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;
8. Fixed price or index-priced purchases and sales to substitute the use of higher cost resources with lower cost market alternatives;
9. Fixed price or index-priced forward purchases and sales of transmission and transmission rights to meet contractual obligations or to dispose of surplus capacity;
10. Purchase of physical call options and physical collars;

11. 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;
12. Purchases of carbon offsets to supply voluntary programs and/or to satisfy GHG emission compliance; and
13. Sales of Low Carbon Fuel Standard (LCFS) credits.

H. TRANSACTING AUTHORITY

In accordance with PAMC section 2.30.210(k), the City Manager has the authority to purchase and sell wholesale energy commodities for terms of up to five 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

Congress adopted the Dodd-Frank Act¹ in 2010, which includes a variety of federal regulations largely affecting financial institutions. Certain types of "swap" transactions are subject to disclosure, registration and reporting requirements under Dodd-Frank, depending on the details of each individual transaction and the characteristics of the transacting parties. Since Dodd-Frank's enactment, City utility transactions have fallen below applicable Dodd-Frank compliance triggers and have meet the Act's exemptions from the definition of "swaps".

¹ Pub. L. 111-203, 124 Stat. 1376 (2010).

GLOSSARY OF TERMS

Back Office	A set of positions in the Utilities and Administrative Services Departments whose responsibilities include trade confirmation, accounting, and other processes that support commodity transactions
California Independent System Operator (CAISO)	A non-profit public benefit corporation that oversees the operation of California's bulk electric power system, transmission lines, and electricity market generated and transmitted by its member utilities.
Call Options	An option that allows the owner the right to purchase energy at the specified price
Cap Price	A structured product that contains a strip of multiple call option contracts with identical but staggered expirations
Carbon Offsets	A reduction in emissions of greenhouse gases (GHGs) made in order to compensate for or to offset an emission made elsewhere.
Credit Risk	The probable change in the value of a contract due to a counterparty defaulting
Electric Ancillary Services	The services (e.g., scheduling and dispatch) 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, spare generating capacity that can quickly increase its energy output if the grid needs additional energy is an ancillary service
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	A set of positions in the Utilities Department whose responsibilities include energy procurement operations. NCPA staff is permitted to undertake Palo Alto Front Office functions on the City's behalf, as needed to conduct transactions authorized under the City's Market Purchase Program Agreement with NCPA.
Index-based Price	A price that varies based on published index prices.
Low Carbon Fuel Standard (LCFS) Credit	A product that can be bought or sold under the California Air Resource Board's program to reduce the carbon intensity of transportation fuels

Market Risk	The probable change in value of (or sensitivity to) a contract, position, or portfolio due to general changes in market conditions
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Market Purchase Program	Program established by NCPA whereby a member may authorize NCPA to transact on behalf of the member
Master Agreement	A standardized agreement for the purchase and sale of wholesale energy commodities
Middle Office	A set of positions in the Administrative Services Department whose responsibilities include 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
Resource Adequacy (RA)	A regulatory construct developed to ensure that there will be sufficient resources available to serve electric demand under all but the most extreme conditions
Resource Adequacy Qualifying Capacity	Products from a generation unit located in the CAISO control area that meet RA requirements
Risk Management	The set of skills and processes for measuring, controlling, and hedging risk.
Supply Portfolio	The composition and amount of all purchased energy
Transmission Product	The sale or purchase of a non-energy asset to transport energy