

# Agenda Report

October 20, 2014

**TO:** Honorable Mayor and City Council

**THROUGH:** Municipal Services Committee (October 14, 2014)

**FROM:** Water and Power Department

**SUBJECT: ADOPTION OF THE REVISED ENERGY PORTFOLIO RISK  
MANAGEMENT POLICY FOR WATER AND POWER DEPARTMENT  
WHOLESALE ENERGY TRANSACTIONS**

## **RECOMMENDATION:**

It is recommended that the City Council:

1. Find that the proposed action is exempt from the California Environmental Quality Act ("CEQA") pursuant to State CEQA Guidelines Section 15061(b)(3) (General Rule); and
2. Adopt the revised Energy and Credit Risk Management Policy ("Policy") for Pasadena Water and Power ("PWP") wholesale energy transactions.

## **EXECUTIVE SUMMARY**

The City Council adopted an Energy and Credit Risk Management Policy ("Policy") in 1999 to provide PWP with a structure to plan, execute and control the management of a variety of risks associated with energy and natural gas purchases, sales and distribution in the wholesale energy markets. PWP has prepared a proposed revision to the original policy that:

- a) Streamlines the original Policy and provides for separate procedural documents on key areas of the energy risk management program;
- b) Extends the maximum wholesale energy transaction term for PWP's General Manager from one year to three years with the City Manager's approval;
- c) Includes new and updated legislation and regulations in the energy and natural gas markets;
- d) Allows financially-settled transactions only within the California Independent System Operator ("CAISO") energy market; and,
- e) Requires separate City Council approval for financially-settled transactions outside of the CAISO energy market.

The original and proposed revised policies are included as attachments to this report as Attachment A and Attachment B, respectively.

A summary of the proposed changes to the original Policy are shown in Table 1.

**Table 1  
 Summary of Changes to the Policy**

<b>Current Policy</b>	<b>Revised Policy</b>
<ul style="list-style-type: none"> <li>Contains outdated energy risk management procedures and details as well as references to the defunct Power Exchange that are no longer relevant in today's evolving energy market</li> </ul>	<ul style="list-style-type: none"> <li>Focuses on the framework and policies for an effective energy risk management program and provides for separate procedural documents that will be managed administratively within the Policy Guidelines</li> </ul>
<ul style="list-style-type: none"> <li>Does not address current transmission and energy market structures</li> </ul>	<ul style="list-style-type: none"> <li>Reflects current transmission market structure and PWP's status as a Participating Transmission Owner in CAISO and Federal Energy Regulatory Commission ("FERC") energy markets</li> </ul>
<ul style="list-style-type: none"> <li>Limits the maximum wholesale energy transaction term for the General Manager to one year</li> </ul>	<ul style="list-style-type: none"> <li>Extends the maximum wholesale energy transaction term for the General Manager to three years with the City Manager's approval</li> </ul>
<ul style="list-style-type: none"> <li>Ambiguous on authorized "tenor" (how far in the future a transaction can start / end), and assumes that financially-settled transactions are allowed without reference to required authorizations from the City Council</li> </ul>	<ul style="list-style-type: none"> <li>Clarifies transaction authorization and limits. Allows for financially-settled transactions necessary to operate within the CAISO, and requires City Council approval for financially-settled transactions outside of CAISO markets</li> </ul>
<ul style="list-style-type: none"> <li>Includes general language regarding employee code of conduct or conflict of interest</li> </ul>	<ul style="list-style-type: none"> <li>Strengthens code of conduct and requires transacting employees to sign an acknowledgement and employee compliance form on an annual basis</li> </ul>
<ul style="list-style-type: none"> <li>Does not reference authorization limits for third-party administrators who transact in the wholesale energy markets on PWP's behalf</li> </ul>	<ul style="list-style-type: none"> <li>Includes specific reference to the transactions, limits and authorizations for third-party administrators acting on PWP's behalf</li> </ul>

**BACKGROUND**

PWP must manage various risks and uncertainties of obtaining electricity and natural gas resources to reliably meet the energy requirements of its retail electric customers. PWP must also ensure that total power supply costs remain within the approved budget and financial risks to the electric utility are minimized. Additionally, PWP is required to manage and protect its energy portfolio which consists of physical assets such as power plants, transmission lines, fixed and variable priced supply contracts and resources of varying maturities.

About 70% to 80% of the energy needed to meet PWP's retail energy requirements comes from either long-term contracts that are authorized by the City Council or energy generated from PWP's local power plant. The remaining 20% to 30% of required energy is procured in the wholesale energy markets. PWP has been participating in the wholesale energy market since the 1970s, and currently participates in the CAISO energy market to meet various operational and regulatory requirements. PWP utilizes the wholesale energy markets to economically offset or sell excess capacity from existing resources or to buy replacement power or natural gas as needed.

### ***Current Policy***

In 1999, the City Council adopted the Energy and Credit Risk Management Policy, which describes the risk management process and defines the limits that are considered appropriate for PWP in a normal course of procuring energy and natural gas. Under the Policy, the City Council adopts high-level broad policy, provides strategic direction, and delegates authority to PWP's General Manager to execute the Policy. Since the policy was adopted in 1999, the City Council has approved several Authorizing Resolutions for energy products extending the General Manager's authority to execute certain contracts for purchases, sales and exchanges of energy, transmission, natural gas, emission credits and associated products

The Policy also authorized the formation of the Energy and Credit Risk Management Committee which is responsible for ensuring compliance with the Policy. The Energy and Credit Risk Management Committee is comprised of the following members:

- General Manager
- Assistant General Manager and Chief Deputy
- Assistant General Manager, Power Supply
- Assistant General Manager, Finance and Administration
- Utility Risk Manager
- Wholesale Operations Manager
- Settlements Manager
- Power Resource Planning Manager

The Energy and Credit Risk Management Committee meets each month to review key transactions, new legislation and regulations, financial risk levels and counterparty credit status. The City Finance Director (or designee) and the City Attorney (or designee) act as advisors to the Energy and Credit Risk Management Committee.

PWP follows best industry practices by maintaining a formal separation of duties and management functions related to energy transactions. This is achieved by creating separate and unique functions for its energy trading, risk management and financial settlements activities:

<b>Front Office (Energy Trading)</b>	<b>Middle Office (Risk Management)</b>	<b>Back Office (Financial Settlements)</b>
Wholesale Operations Manager	Utility Risk Manager	Settlements Manager
AGM – Power Supply	AGM – Finance and Administration	AGM – Finance & Administration

This separation of key functions ensures that all aspects of energy transactions are not performed by the same individual/functional group, and that effective financial and risk controls are maintained at all times.

PWP has been managing its energy portfolio risks and executing energy transactions in accordance with the Policy since it was approved by the City Council in 1999. PWP maintains a very low tolerance for risk and prohibits speculation or energy trading solely to earn a return based on anticipated favorable market conditions. In addition, PWP has in place credit and trading control procedures to measure and monitor its credit and market risks. PWP also ensures that only authorized staff members and/or agents execute wholesale energy transactions with approved counterparties to cover load obligation and/or sell limited excess resources. The current transaction authorizations and limits for authorized personnel are shown in Table 2.

**Table 2**  
**Current Transaction Authorizations and Limits**

	<b>Real Time Schedulers</b>	<b>Pre-Schedulers</b>	<b>Energy Trading Manager</b>	<b>Assistant General Manager – Power Supply</b>	<b>General Manager</b>
<b>Type</b>	Purchases to meet load, covered sales	Purchases to meet load, covered sales	Purchases to meet load, covered sales, hedges	Purchases to meet load, covered sales, hedges	Purchases to meet load, covered sales, hedges
<b>Term</b>	Hourly to balance of day	Day ahead to balance of week	Week ahead to month ahead	Month ahead to quarter ahead	Up to 1 year
<b>Total Volume</b>	Up to 100% of estimated requirement or available	Up to 100% of estimated requirement or available	Up to 100% of estimated requirement or available	Up to 110% of estimated requirement or available	Up to 110% of estimated requirement or available
<b>Counterparty Credit</b>	From pre-approved counterparty credit list	From pre-approved counterparty credit list	From pre-approved counterparty credit list	From pre-approved counterparty credit list	From pre-approved counterparty credit list or with credit facility

PWP also provides regular training for all staff on related policies and procedures and changes in regulation and legislative requirements.

**Changes to the Energy Market**

Since the adoption of the current Policy in 1999, the wholesale energy market has evolved and several regulatory requirements have been introduced and implemented as follows:

Year	Event
2001	Power Exchange became defunct
2005	PWP became a Participating Transmission Owner in the CAISO Markets and transferred operational control of various transmission facilities and entitlements to the CAISO
2007	PWP retained ACES Power Marketing ("ACES") for real-time trading and executed trading authority delegation to ACES
2009	CAISO introduced the Market Redesign Technology Upgrade to address congestion management of CAISO-controlled electricity grid and improve the forward energy market for California. As a result, all physical energy resources, demands, transactions, and transmission assets scheduled through the CAISO markets are now settled financially.
2010	FERC enacted Order 741 which reformed and standardized credit policies used in the organized wholesale electric markets
2013	CAISO implemented new rules regarding minimum criteria for direct participation to comply with the Commodity Futures Trading Commission's regulations and the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act"). The Dodd-Frank Act was enacted to increase transparency, accountability and ensure stability in the commodity and financial markets

As energy markets and new regulations have evolved, PWP has developed and put in place several procedural documents to ensure continued participation in the CAISO and FERC energy markets.

**REVISED POLICY**

The revised Policy focuses on the framework and policies for an effective energy risk management program. The revised Policy reflects recent changes in the wholesale energy markets and more clearly defines segregation of duties and the roles and responsibilities of the Energy and Credit Risk Management Committee. It also strengthens the code of conduct and requires employees involved in with the energy and credit risk management activities and other related activities to complete an acknowledgement and compliance form on an annual basis. In addition, there are three key changes to the revised Policy:

1. Provision for Separate Procedural Documents
2. Extension of the Transaction Term for Wholesale Energy Transactions
3. Limitations on the Approval of Financially Settled Transactions

Changes to the Policy will not alter or amend any of the existing Authorizing Resolutions for energy products. All power supply transactions conducted under the current and revised Policy will be limited by the authority delegated by the City Council pursuant to

the Authorizing Resolutions for energy products. A list of existing City Council Authorizing Resolutions for energy products is included as Appendix A of the revised Policy.

A complete list of the detailed changes between the current Policy and the revised Policy are listed in Attachment C.

### ***Provision for Separate Procedural Documents***

The revised Policy provides for separate procedural documents on key elements of the program. This would provide added flexibility for the Energy and Credit Risk Management Committee to administratively manage the procedural documents and incorporate new compliance requirements as required. The current energy risk management procedural documents are listed below and included as Attachments D, E, F and G.

- Energy Trading, Risk and Settlements Procedures and Controls Manual
- Manual - Policies and Procedures for Participation in the CAISO Market
- Counterparty Credit Evaluation and Procedures Manual
- Trading Authority Delegation to ACES

### ***Extension of the Transaction Term for Wholesale Energy Transactions***

PWP manages and forecasts its power supply costs at least 24 to 36 months in advance as part of its budget and rate implementation processes. The revised Policy proposes to extend the maximum term for wholesale energy transactions for the General Manager from one year to three years, with the City Manager's approval, to take advantage of market opportunities under certain conditions. Examples of specific conditions include:

1. Opportunities to maximize advantages in the wholesale energy market when short-lived, low-cost opportunities are provided to purchase energy or natural gas due to low market price volatility. During these periods, forward prices for energy may fall below PWP's projected power supply costs and present PWP with the opportunity to procure replacement power or natural gas when its projected energy requirement is higher than existing secured resources. Likewise, during periods of high market volatility, the forward prices for energy may be higher than PWP's projected power supply costs and present PWP with the opportunity to sell excess energy resources to generate incremental revenue and offset its power supply costs.
2. Opportunities to procure replacement energy during periods of planned or unplanned extended interruption of long term resources such as maintenance of the Intermountain Power Plant or the delay of energy delivery from approved renewable resources. This would allow PWP to take advantage of favorable future energy prices in the wholesale market and reduce power supply costs.

There is a risk that market energy prices may go lower or higher after a buying or selling opportunity. The extended wholesale energy transaction term will be used in a manner that keeps projected power supply costs within expected levels and in accordance with the Policy.

### ***Limitations on the Approval of Financially-Settled Transactions***

The revised Policy would allow for the financially-settled transactions necessary to operate within the CAISO energy market, and requires City Council approval for any financially-settled transactions outside of the CAISO energy market. Under CAISO market design, all energy and related transactions are financially-settled. Market participants including PWP receive credits for energy and energy products delivered to the electricity grid based on the price at the delivery point. Similarly, market participants are charged for energy and energy products taken from the electricity grid based on the price at the take-out point. The credits and charges are not always the same due to transmission congestion and losses. The CAISO electricity grid has over three thousand delivery and take-out points. The current Policy assumes that financially-settled transactions are allowed without reference to required additional authorizations from the City Council. PWP believes that it is important that the City Council separately consider and provide additional authorizations prior to PWP conducting any financial-settled transactions outside of the CAISO energy market.

In accordance with the revised policy, PWP will improve the reporting of its energy and credit risk management activities and will present semi-annual reports on its energy risk management activities to the Municipal Services Committee. In addition, annual reports will be presented to the City Council on the adequacy of the Policy, including any necessary changes to the Policy.

### **COUNCIL POLICY CONSIDERATION**

This action supports the City Council's strategic goal to maintain fiscal responsibility and stability.

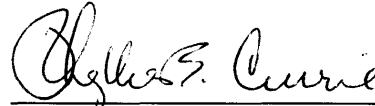
### **ENVIRONMENTAL ANALYSIS:**

The revised Policy has been determined to be exempt from the CEQA process pursuant to State CEQA Guidelines Section 15061(b)(3), the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA. The proposed adoption of the revised Energy and Credit Risk Management Policy is an administrative action that does not involve any direct or indirect changes to the physical environment. This action does not have the potential for causing a significant effect on the environment and is therefore exempt from CEQA per Section 15061(b)(3) (General Rule).

**FISCAL IMPACT:**

There is no fiscal impact as a result of this action and it will not have any indirect or support cost requirements. The adoption of the revised Policy will enable PWP to better manage the risks that are inherent in its energy portfolio, and enhance the overall effectiveness of PWP's energy risk management program.

Respectfully submitted,



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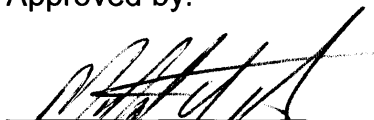
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Approved by:



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**Attachments:**

- Attachment A – Current Energy and Credit Risk Management Policy
- Attachment B – Revised Energy and Credit Risk Management Policy
- Attachment C – Key Changes between Current Policy and Revised Policy
- Attachment D – Energy Trading, Risk and Settlements Procedures and Controls Manual
- Attachment E – Manual - Policies and Procedures for Participation in the CAISO Market
- Attachment F – Counterparty Credit Evaluation and Procedures Manual
- Attachment G – Trading Authority Delegation to ACES