Agenda Report

March 5, 2018

TO: Honorable Mayor and City Council

THROUGH: Municipal Services Committee (February 27, 2018)

FROM: Water and Power Department

SUBJECT: **ADOPT THE PROPOSED CHANGES TO THE 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 proposed changes to the Energy and Credit Risk Management Policy for Pasadena Water and Power ("PWP") wholesale energy transactions.

EXECUTIVE SUMMARY:

PWP's current Energy and Credit Risk Management Policy ("Policy") was adopted by the City Council on October 20, 2014. The Policy governs PWP's activities in the wholesale energy and natural gas markets and establishes guidelines for PWP to manage its energy portfolio risks. The Policy also requires PWP's General Manager to:

a) Provide regular reports to the Municipal Services Committee ("MSC") and the City Council on energy risk management activities and the adequacy of the Policy;

b) Conduct an independent compliance assessment of the energy portfolio risk management program ("Program") every two years, and;

c) Make recommendations for any necessary changes to the Policy.

PWP is recommending the following changes to the Policy based on its review of the Program and the results of a recent independent compliance assessment of the Program:

a) Change the section titled "Audit" to "Assessment" and replace any references to "audit" under this section with "assessment";

b) Change the requirement to conduct an independent assessment of the Program every two years to every three years;

c) Amend the section titled "Transaction Types" to include a requirement that Authorizing Resolutions be reviewed at least every three years or as may be deemed necessary; and

d) Add the City Internal Audit Manager as an advisor to the Risk Management Committee ("RMC") and make miscellaneous edits to the Policy for clarity.

A redline version of the current Policy with the recommended changes and the proposed revised Policy are included this report as Attachment 1 and Attachment 2, respectively.

BACKGROUND:

The primary objectives of the Policy are to limit financial risks associated with participating in energy and natural gas markets to procure and optimize the energy portfolio used to meet retail electric demands, guide energy and natural gas activities to ensure stable and competitive rates. The Policy also confirms that the total financial exposure of the energy portfolio is limited to the amount of the energy reserve funds. The energy portfolio is comprised of PWP's generation and transmission assets, short and long term power supply contracts for natural gas and power, transactions and trades in the markets, and retail load obligation.

The Policy has four accompanying documents that contain the procedures and controls for energy trading, credit, risk, and settlement activities in the wholesale energy market. The RMC is the management oversight body that supports the General Manager to implement the Policy. The RMC updates the procedures and controls documents on an as-needed basis. The City Council has authorized the RMC to make changes to the procedural documents as necessary within the Policy guidelines; however, the City Council has sole authority to amend the Policy.

Independent Assessment Report Summary

On June 20, 2016, the City Council authorized PWP's General Manager to retain Burns & McDonnell Company, Inc. ("Burns & McDonnell") to conduct an independent compliance assessment of the Program in accordance with the Policy compliance and monitoring requirements. The purpose of the assessment was to verify that stated objectives are carried out and that internal controls are in place for processes to comply with the Policy. The assessment scope included a review of adequacy of the policy, staff compliance with the policy, fraud risk and an evaluation of the effectiveness of mandated financial systems and risk controls.

After the completion of the assessment of the program, Burns & McDonnell submitted its report to the RMC. Burns & McDonnell stated its opinion as "*Based on data collected, interviews conducted, and analysis of PWP operations, Burns & McDonnell did not identify any severe or critical risks associated with the Energy Portfolio Management practices. Severe or critical risk can be characterized by the immediate necessity to report possible violations to appropriate authorities, work with legal counsel to defend enforcement actions, and/or the expenditure of significant unplanned expenses to remediate. Medium or moderate risk would be characterized as an urgent need to remediate process failures, but with a diminished probability of adverse statutory or regulatory action. The absence of severe emergent issues does not indicate an absence of risk or even a diminished probability of adverse actions.*

Findings and/or recommendations associated with low or medium risk criteria do not pose an immediate threat. In general, issues related to documentation, process definition, and/or procedural development."

In the report, Burns & McDonnel defines risk measurement criteria as, "*The measurement criteria utilized for the assessment were rated on a ranked scale of risk in terms of impact to the organization. The criteria risk rankings utilized for this assessment are as follows:*

- ***High**: A high risk criterion, if not satisfied, would result in a material impact to reliable electric operations or financial condition of PWP*

- ***Medium**: A medium risk criterion, if not satisfied, could result in issues requiring near-term remediation that if not addressed may result in material impacts; or, issues that may degrade PWP's position in the community or marketplace.*

- ***Low**: A low risk criterion, if not satisfied, would create issues for improvement or may provide additional mitigation against unknown probability events.*"

Findings did not identify any severe or critical risks associated with PWP's energy risk management activities and/or practices, but identified certain deficiencies in PWP's Program that could be remedied through improved organizational structure, process management and enhanced reporting. The results of the assessment were categorized into findings and recommendations, and were further categorized into different risk levels: low, medium or high. These findings were defined as issues of potential non-compliance, practices elevating risk, and/or other issues requiring remediation in the near-term. Opportunities for improvement were defined as recommendations which, if implemented in the intermediate-to-long term, may further mitigate long range risk.

The assessment report included four findings with recommended mitigations and nine additional recommendations, which were mainly related to documentation or process management issues. The assessment report also included management responses to the findings and recommendations. The findings and recommendations are summarized in Table 1 and Table 2, respectively. The management responses to the findings and recommendations, including the actions taken by PWP to date to address the issues identified in the assessment report, are included in this report as Attachment 3 and Attachment 4, respectively.

Table 1 - Summary of Findings

Item No.	Risk Rating	Findings
F1	Medium	IT Policies and/or procedures related to the Energy Risk Management program, especially the energy and trading risk management "ETRM" system, were insufficient or missing to demonstrate control over the policy requirements. PWP currently uses Settlecore ETRM system provided by Power Settlements to manage its power and natural gas transactions.
F2	Medium	Insufficient documentation on monitoring processes involving transaction validation, and inadequate documentation on dispute resolution processes with the CAISO.
F3	High	Evaluation of information systems management requirements was hampered by a lack of controls and/or procedures necessary to implement risk management program requirements. While the practices of the individuals in the IT Group appear acceptable, the overall effectiveness of the risk management program, with respect to systems, cannot be fully measured due to a lack of documentation.
F4	Medium	Use of non-City supported instant messaging services for energy procurement and transactions.

Note: Staff has addressed and resolved all findings noted above. Detailed responses to the findings and actions taken are provided in Attachment 3.

Table 2 - Summary of Recommendations

Item No.	Risk Rating	Recommendations
R1	Medium	Update the Policy to include provision for review and possible amendments to the authorizing resolutions on a periodic basis.
R2	Medium	Improve record keeping for potential infractions and/or exceptions.
R3	Medium	Enhance training on risk management to include interactive and dynamic modules, and deliver training annually through incremental and/or interactive basis
R4	High	Make provisions for a stand-alone role, at the enterprise level, to manage compliance functions and oversee multiple frameworks of regulatory, statutory, and/or issues of contract conformance as well as issues relating to trading, power supply, and/or energy markets.
R5	High	Increase senior management communications on risk management with staff members in the form of periodic emails, newsletters, or organizational meetings.
R6	High	Create a Compliance Officer position for energy portfolio compliance monitoring.
R7	High	Create standardized and/or automated reports for risk analysis.
R8	Medium	Document settlement procedures and outline processes for performing checkout, reconciliation and final resolution of potential issues.
R9	High	Enhance credit evaluation procedures and benchmark credit practices regionally and nationally.

Note: Staff is the process of addressing and resolving all recommendations noted above. Detailed responses to the recommendations and actions taken are provided in Attachment 4.

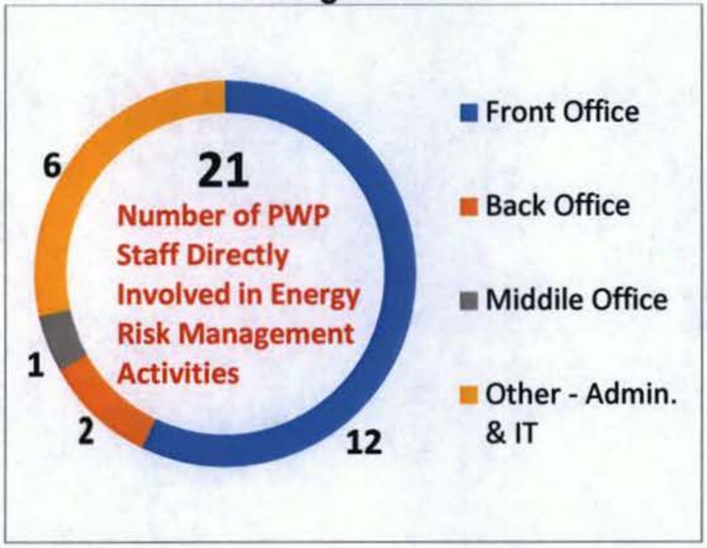
Overall Program Compliance and Performance

In accordance with the Policy compliance requirement, the RMC conducts regular monthly meetings. Representatives from the City's Attorney's Office, Finance Department, and the City Manager's Office serve as advisors to the RMC and actively participate in the meetings. In addition, the RMC reviews and evaluates energy portfolio and transactional matters, discusses the energy portfolio risk reports including violations and/or operational errors, approves changes to the procedural documents, and ensures prudent risk mitigation and management.

Most importantly, the RMC ensures that the energy portfolio exposure and associated financial risks are limited to the amount of the energy reserve funds, and that staff with direct involvement in the Program receives adequate training on the Policy. A compliance report on the training that was provided to staff on the Policy is summarized below. Also provided below is a report on the energy portfolio risk metrics and results, as well as a report on violations and operational/scheduling errors that occurred during the evaluation period.

Training:
In 2017, a total of twenty-one PWP employees from different functional areas were identified to have direct involvement with the Program as shown in Figure 1. The Front Office is the group responsible for wholesale energy activities, the Middle Office is the group responsible for risk and credit management activities and the Back Office is the group responsible for energy settlements and accounting.

Figure 1



Each of the twenty-one employees received training on the Policy and associated procedural documents and completed the required acknowledgement and employee compliance form certifying that they have received, read and understood the Policy and related procedural documents. The identified employees also completed the Employee Qualifications and Code of Conduct Form 700 disclosures forms and were provided with various training opportunities on the energy market operations and regulations as it relates to their specific functional areas. In addition to the twenty-one employees, twenty-six staff from the Power Plant and Power Dispatch completed an online training on the Federal Energy Regulatory Commission ("FERC") anti-market manipulation rule ("MMR"). The 2017 policy compliance report for participating employees is provided in Table 3.

Table 3
Policy Compliance Report
(Number of Employees)

	Training - Policy & Procedures	Acknowledgement & Employee Compliance Form	Form 700	FERC Anti-Market Manipulation Training
Completed	21	21	21	47
Incomplete	0	0	0	0
Total	21	21	21	47

Energy Portfolio Risk Metrics:
Regarding anti-speculation risk policy Burns & McDonnel report states, "*Through interviews, observations of trading behavior, and technical analysis of transaction data, there was no evidence of policy violations. Trading behavior adhered to the established risk parameters. Transacting employees are well aware in their responsibilities and perform accordingly.*" Only permitted transactions and product types were executed by approved energy trading personnel in accordance with the transaction authorizations and limits. With one exception, all transactions were with approved creditworthy counterparties within available credit. The exception is addressed in this staff report in the Violations and Operational/Scheduling Errors section. Increased monitoring is currently in place to identify transactions that require further examination for compliance with the Policy.

The RMC reviewed the energy portfolio risk model results and risk reports on a monthly basis and found the risk metrics to be within acceptable parameters and tolerance limits. The RMC also found the energy and credit risk management program to be working as designed. A summary of the energy portfolio risk metrics and associated risk limits as well as the energy portfolio results are provided in Table 4.

Table 4

Energy Portfolio Risk Metrics & Results		
Risk Metric/Criteria	**Allowable Risk Limit**	**Burns & McDonnel/RMC Findings**
• Speculation	• Prohibited (No risk appetite) • Zero Tolerance	• No Speculation observed or noted
• Cash Flow-at-Risk (CFaR) or Net-Margin earnings-at-Risk • Open Position Cost Value-at-Risk	• 1¢ per KWh rate impact for 12 months. Approx. $11 million per year (Risk of loss over defined time period)	• Maximum of $2.0 million (within tolerance limit)
• Aggregate Counterparty Credit Value-at-Risk	• $10 million (Total exposure to all counterparties)	• Maximum of $1.15 million (within tolerance limit)
• Energy Portfolio Cost (Budget Vs Actual)	• Within approved budget	• Actual direct energy cost was less than budget
• Transmission Congestion Activities – Net Revenues	• Favorable – Congestion revenues exceeds congestion payments	• $743,579 (January to October 2017)
• Congestion Revenue Rights ("CRR")	• Favorable – CRR fair value exceeds initial cost	• Unrealized gain of about $1.5 million as of March 2017
• Maximum Energy Portfolio Exposure	• Energy Reserve Amount (The greater of two months of energy cost or actual energy reserve amount	• Maximum exposure was less than actual energy reserve amount

<u>Violations and Operational/Scheduling Errors</u>:
Staff identified a single policy violation during the evaluation period involving a natural gas transaction with a value of about $7,700 with a counterparty that had been removed from the approved counterparty list, but had not also been removed in a timely manner from the electronic platform ("ICE") used for natural gas transactions. The non-removal was due to an administrative error. The Policy requires all transactions to be with approved, creditworthy counterparties. In addition to the policy violation, several operational/scheduling errors occurred during the period. The violation and operational/scheduling errors were categorized into the following five categories based on cause:

- Communication
- Policy
- Procedures
- Personnel/Training
- Regulatory Compliance

Appropriate measures and corrective actions were taken and when necessary additional training was provided to responsible employees or functional groups to ensure that these errors do not recur. In certain cases, operational/scheduling errors were made by ACES, PWP's third party contractor for real-time trading transactions. PWP worked with ACES to improve processes to minimize the potential of similar errors occurring again. Errors by a third party are considered in the performance review of the third party's services and contract evaluation. Detailed information on the violation and operational/scheduling errors are provided in this report as Attachment 5.

Recommended Changes to the Policy

Based on its review of the Program and the results of the independent compliance assessment of the Program, PWP is recommending the following changes to the Policy:

a) Change the section titled "Audit" to "Assessment" and replace any references to "audit" under this section with "assessment". An audit triggers a requirement to retain a Certified Public Accounting firm to conduct a compliance audit in accordance with the California Government Code Section 1236 using the Institute of Internal Auditors' International Professional Practices Framework, and to provide an audit opinion. This is contrary to the original intent of this section, which is to retain an energy portfolio risk management consultant to conduct an independent review and compliance assessment of the Program;

b) Change the requirement to conduct an independent assessment of the Program from every two years to every three years. This change is recommended due to the comparatively small value of completing the assessment every two years when compared to the significant investment of staff time and the cost to obtain the consultant services. This change is also prudent;

c) Amend the section titled "Transaction Types" to include a requirement that Authorizing Resolutions be reviewed at least every three years or as may be deemed necessary. This is a recommendation of the assessment Consultant, which is consistent with industry best practices; and

d) Add the City Internal Audit Manager as an advisor to the Risk Management Committee ("RMC") and make miscellaneous edits to the Policy for clarity. The City Internal Audit Manager has been the representing the City Manager's Office as an advisor to the RMC and this addition will make it formal. The miscellaneous edits to the Policy will remove some repetition and provide necessary clarifications.

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 changes to 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 proposed changes to the Policy will enhance the effectiveness of the Program and enable PWP to better manage the risks that are inherent in its energy portfolio.

Respectfully submitted,

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Attachments:

Attachment 1 – Redline Version of the Current Energy and Credit Risk Management Policy with Proposed Changes
Attachment 2 – Revised Energy and Credit Risk Management Policy
Attachment 3 – Management Responses to Findings and Actions Taken
Attachment 4 – Management Responses to Recommendations and Actions Taken
Attachment 5 – Summary Report on Violation and Operational/Scheduling Errors