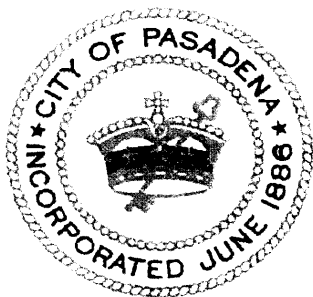


Attachment D

PASADENA WATER & POWER

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**ENERGY TRADING, RISK & SETTLEMENTS  
PROCEDURES AND CONTROLS MANUAL**

**Approved on:** 9/26/14

**By:**

**Energy & Credit Risk Management Committee**

**Signed:**

A handwritten signature in cursive script, which appears to read "Phyllis Currie".

**Phyllis Currie, PWP General Manager / Chairperson**

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### APPENDICES

1. Attachment 1 - Trading Authority Delegation to Alliance for Cooperative Energy Services Power Marketing, LLC.
2. Attachment 2 - Manual - Policies, Procedures for Participation in the California Independent System
3. Attachment 3 - Counterparty Credit Evaluation and Procedures Manual
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## **I. Overview:**

Pasadena Water and Power's (PWP's) Energy and Credit Risk Management Policy (Policy) establishes guidelines for PWP to plan, execute and control the management of a variety of risks associated with procuring and optimizing the portfolio of energy resources used to meet PWP's retail electric demand in a cost effective manner.

This document is an integral part of the Policy and it contains the procedures and controls for energy trading, risk and settlement activities; detailed responsibilities of the oversight management as well as the responsibilities of the Front Office, Middle Office and Back Office; and transaction requirements, authorizations and approvals for energy purchases and sales in different markets at different levels of risk.

Some of the important acronyms and definition of key terms used in this document are listed below. Additional definitions of terms used in energy and credit risk management are listed in Appendix C of the Policy.

### Important Acronyms:

- **ETRM:** An acronym for the Energy Trading and Risk Management system used by PWP to capture, schedule and support energy transactions and activities conducted with bilateral counterparties and the California Independent System Operator (CAISO)
- **PSBU:** An acronym for Power Supply Business Unit, a business unit within PWP that is responsible for resource planning, managing long term resources and contracts, power production activities, and energy trading functions
- **FACBU:** An acronym for Finance, Administration and Customer Service Business Unit, a business unit within PWP that is responsible for managing the Middle Office and the Back Office
- **RMC:** An acronym for Energy and Credit Risk Management Committee which is responsible for overseeing compliance with the Policy

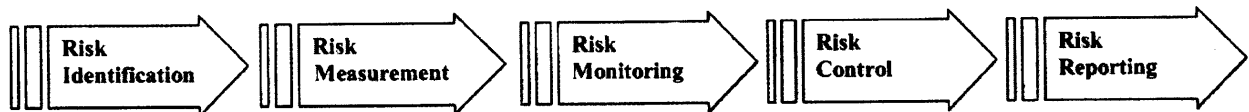
### Key Definitions:

- **Back Office:** The management and staff which have the primary responsibility for financial handling of trading operations including trade confirmations, energy accounting and settlements and other processes that support the Front Office
- **Commodity:** An asset such as electricity or natural gas that is traded but also consumable
- **Derivative:** A contract, position, or asset that has no real value of its own, but whose value depends on, or is derived from, some other underlying asset or combination of assets
- **Financial Product:** A contract such as futures, options, swaps, bonds, stocks or insurance policy, that involves the exchange of money between two agents and does not involve the physical delivery of a product such as electricity or natural gas

- **Front Office:** The management and staff which have the primary responsibility for energy trading operations
- **Middle Office:** The group within PWP that is responsible for providing risk oversight and controls for energy transactions
- **Physical Product:** An energy product in its “physical” form such as electricity (the flow of electrons) which is generally measured in megawatts or kilowatts or natural gas (methane) which is generally measured in million British thermal units (mmBTU) and generally involves the delivery of the product itself
- **Risk:** The impact of unexpected change or the uncertainty about future cash flows and asset values or events that could cause actual outcomes to differ from expected
- **Transaction Lead Time:** The length of time between the transaction execution date and the transaction effective date
- **Transaction Term:** The length of the transaction from the effective date to the termination or expiration date

## II. Risk Management Process:

PWP’s risk management process involves the identification and management of its energy portfolio risks and it comprises five key elements: risk identification, risk measurement, risk monitoring, risk control, and risk reporting.



PWP’s energy portfolio consists of its physical assets such as power plants, transmission lines, fixed and variable priced supply contracts and resources of varying maturity, and retail load obligation.

As summarized in Table I below, PWP’s energy portfolio risks include market (price), volumetric, operational and organizational, counterparty credit, liquidity, and regulatory and legal risks. PWP must manage these risks to achieve its core business objectives to meet the load requirements of its customers and deliver reliable electric service in a safe and environmentally sustainable manner, at reasonable and stable rates, while optimizing the value of its assets.

**TABLE I - SUMMARY OF ENERGY PORTFOLIO RISKS**

<b>Risk Type</b>	<b>Description</b>	<b>Management Technique</b>
Market (Price) Risk	Risk due to changes in the market prices of energy commodities which can have an adverse impact on energy cost. The short-term energy market is volatile and prices change frequently	Establishing and monitoring risk limits and tolerance, understanding of sources of risk, and managing portfolio and assets
Volumetric Risk	The risk that unexpected fluctuations in retail load or the availability/energy produced by supply resources will adversely affect net revenues	Establishing adequate reserves, diversifying portfolio and reducing concentration; and refining and evaluating load and resource forecasts
Operational and Organizational Risk	The risk that deficiencies in internal control or information systems or failure to effectively execute business activities will result in unexpected economic loss.	Establishing proper supervision and segregation of duties and operational plans; and establishing independent backup systems and compliance monitoring
Counterparty Credit Risk	Exposure to economic loss resulting from a counterparty not performing or defaulting	Monitoring of credit exposure relative to approved limits; and using credit enhancement tools, such as letter of credit
Liquidity Risk	The risk of an asset's value changing due to liquidity issues such as a market with low trading activity or undue influence of market power or improper price discovery or lack of transparency	Maintaining flexibility in the number and location of trade points and the products (transaction types) utilized
Regulatory and Legal Risks	The risk that contracts are not legally enforceable or documented correctly or that regulatory agencies or courts may take actions or adopt measures that adversely impact the portfolio value	Establishing clear compliance and regulatory structures; and maintaining an active legal and regulatory review program

### **III. Management Oversight:**

The oversight management of PWP's energy and credit risk management program is provided by PWP's General Manager. The Energy Risk and Credit Management Committee (RMC) supports the General Manager in the implementation of PWP's energy and credit risk management program and provides essential management services to meet the Policy objectives. The operational risk management functions are segregated and provided by the Front Office, Middle Office and Back Office as outlined below.

#### **General Manager:**

The General Manager reports to the City Manager and has the overall responsibility for executing the approved procedures and ensuring compliance with the Policy adopted by the City Council. The General Manager will provide regular updates to the City Manager on the energy portfolio risk management activities. The General Manager will also provide semi-annual reports to the Municipal Services Committee regarding energy risk management activities and annual reports to the City Council on the adequacy of the Policy, including recommendations for any necessary changes to the Policy. In addition, the General Manager is responsible for the overall direction, structure, conduct, control, and the appropriate risk tolerances for Pasadena. The General Manager will also:

- Establish the scope of energy portfolio and risk management activities, the purpose for engaging in transactions, and the appropriate risk tolerances or threshold for retail energy needs and wholesale power operations;
- Ensure that risk tolerances are consistent with PWP's strategic direction and overall market assessment, and propose changes in the risk tolerance, as appropriate, based on strategic direction and overall market expectations;
- Periodically assess the adequacy and functioning of the system of controls over market, credit, and operational risks;
- Establish a multi-year strategic direction for portfolio development and optimization (e.g., the Integrated Resource Plan), subject to approval by the City Council;
- At least annually, review the strategic direction and propose revisions, as appropriate, for approval by the City Council;
- Establish an overall position risk tolerance for the Power Supply Group for the next 36 months;
- Review the risk profile vs. risk tolerance of the Power Supply Group on a regular basis;
- Ensure that PWP has the required organizational infrastructure and resources (e.g., adequate staffing, number, level and experience of staff, compensation policy processes, systems, etc.) to fulfill the goals of the Policy and meet its core business objectives;
- Assure that staff are adequately trained to perform risk management activities;
- Approve counterparties and authorized Traders. Grant approval or denial of transactions that fall outside of Traders' authorized limits;
- Establish the tone of the organization with respect to the importance of risk control activities;

- Establish a standard for effective, timely oral communications among management and staff to maintain up-to-date information on the risk position of PWP;
- Monitor the effectiveness and integrity of personnel assigned to energy sale, purchase, and risk management activities;
- Ensure that compensation policies for operations personnel do not create incentives for taking imprudent risks;
- Assure that capital allocation is consistent with performance objectives and overall strategic direction of PWP;
- Assure adequate capital reserves are maintained for credit, operations, and liquidity;
- Ensure that all risk control activities (position monitoring, portfolio assessment, establishment of volume limits, transaction and Credit Limits, etc.) are independent of energy purchases and sales;
- Approve the designation of individuals authorized to commit PWP to energy sales or purchases; and,
- Perform duties associated with Risk Management Committee participation as noted in the following section.

***Energy and Credit Risk Management Committee (RMC):***

The RMC is responsible for overseeing compliance with the Policy, and reviewing and recommending changes to the Policy as necessary. The RMC will also:

- Recommend procedures and controls for the implementation of effective market/credit risk management, and make amendments to procedures and controls as necessary;
- Authorize all products and commodity types;
- Review current trading operations, controls, authorizations and policies at monthly meetings;
- Ensure that PWP's energy procurement practices and trading activities are aligned with PWP's risk objectives;
- Evaluate all potential risks affecting PWP at present and in the future;
- Maintain communication with the Power Supply Business Unit (PBSU), Finance, Administration and Customer Service Business Unit (FACBU), City Finance / Treasurer's Office and the City Attorney's Office on a regular basis;
- Receive monthly reports from the Energy Risk Manager containing PWP's energy portfolio review, credit exposure updates, exception reports as well as any other documentation pertaining to market conditions and proposed hedge strategies to protect PWP;
- Review trade capture, trading authority, credit and contract exceptions as well as operational/scheduling errors.

The General Manager is the chairperson of the RMC and has the overall responsibility for organizing and conducting RMC meetings. The RMC shall meet regularly, but at a minimum monthly, to discuss risk management, operating processes, trading controls and authorizations. Additional meetings can occur at the discretion of the RMC chairperson. The RMC meetings can be conducted in person, through telephone conference calls, and/or using electronic media. A quorum of at least 5 of committee voting members must be present.

***Operational Separation of Duties: Front Office; Middle Office; and Back Office:***

PWP's risk management functions are segregated into Front Office, Middle Office and Back Office for separation of duties that provides effective system of controls over financial and operational risks.

**Front Office:**

The Front Office is primarily responsible for resource planning and procuring resources to meet physical, financial, contractual, and regulatory requirements in the most cost-effective manner. The Front Office shall maintain and optimize a balanced portfolio of resources to cover retail forecasted load and other regulatory and reliability requirements, and shall establish minimum coverage requirements for capacity, natural gas, power and energy related products.

The Front Office is responsible to ensure that the procedures and processes needed to transact business within the Policy are in place and shall perform all duties related to actual transacting in the wholesale natural gas and energy markets. The Front Office Manager<sup>1</sup> is responsible for overall management of the Front Office. The Front Office is the primary interface with potential wholesale transacting counterparties.

In addition, the Front Office is responsible to:

- Ensure daily compliance with the Policy and timely responses to issues arising from day-to-day operations, and comply with various regulatory policies and procedures to maintain system integrity;
- Develop physical and financial transaction expertise in the different markets, and execute trades (physical or financial) within the limits specified herein;
- Provide a first line of defense against credit risk by conducting business with only pre-approved counterparties and by helping to identify market participants that are believed not creditworthy or which lack integrity;
- Maintain communication with the General Manager/RMC on the status of all energy portfolio activities;
- Continuously validate business strategies and report results to the General Manager/RMC;
- Consider and recommend to the General Manager/RMC appropriate actions and/or practices to incorporate into this Policy;

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<sup>1</sup> The Front Office Manager function is performed by the PSBU Assistant General Manager.



- Continuously monitor for breakdowns in segregation of duties especially in light of potential changes in personnel, organizational structure, and information systems;
- Provide timely input to the daily position report;
- Monitor market conditions and maintain operational procedures to manage positions proactively for changing market risks;
- Monitor the effectiveness of internal communications (e.g., dissemination of market information to all relevant parties);
- Maintain frequent and consistent communication with other Pasadena personnel with responsibilities relative to this Policy;
- Ensure safe, reliable, and economic dispatch of generating units;
- Provide the Energy Risk Manager with updates as to the current availability status of all operating units within PWP's portfolio;
- Monitor operational risk and report findings to the General Manager/RMC; and
- Ensure sales of physical products and financial products related to tax-exempt financed facilities and commodities comply with private-use limitations.

**Power Resource Planning Manager:** The Power Resource Planning Manager reports to the Front Office Manager and is responsible to:

- Develop and continually review the 5 year extended energy forecast;
- Develop power supply cost estimates for the 5 year extended forecast;
- Develop forecasts needed for production cost model simulations;
- Perform modeling, analysis and forecasting of load patterns and resource utilization;
- Develop and implement a sustainable long-term power supply resources plan that meets renewable energy portfolio standards, climate change regulations and other PWP's objectives;
- Identify long-term trade opportunities, negotiate long-term contracts that appropriately allocate risks, and implement long-term transactions with the Front Office Manager's approval within the Policy guidelines;
- Manage and administer contracts for future delivery and for projects that are not yet operational; and
- Monitor, report on, and where appropriate, take action through trade associations or directly on Federal and State environmental and other legislation and regulations to determine the potential impact to power resources and risk management implementation strategies.

**Energy Trading Manager:** The Energy Trading Manager<sup>2</sup> reports to the Front Office Manager and is responsible to:

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<sup>2</sup> The Energy Trading Manager position is currently classified by the City as Wholesale Operations Manager – Trading.

- Monitor energy commodity markets on an ongoing basis and maintain communication with Pre-schedulers or Principal Energy Traders<sup>3</sup> and Energy Risk Manager<sup>4</sup> regarding the status of the energy portfolio;
- Implement short-term trade opportunities with the Front Office Manager's approval within the Policy guidelines;
- Provide resource availability as required;
- Develop trading strategies and executes transactions as prescribed by the RMC guidelines in the balance of month and long-term markets (up to 36 months);
- Work with the Energy Risk Manager in order to optimize PWP assets within approved transaction limits;
- Hedge positions in order to minimize certain types of risk;
- Initiate or responds to deals with counterparties in the balance of month and term markets;
- Coordinate the input of all term and balance of month trade details into various PWP systems;
- Monitor the effectiveness of transactions, hedging activities and optimization strategies;
- Participate in Long Term, Seasonal and Monthly Congestion Revenue Rights (CRR) allocations;
- Supervise Principal Energy Traders including (Pre-schedulers and Real-time Schedulers);
- Execute short-term energy supply contracts up to a month in duration; and
- Identify and execute long-term opportunities of one to thirty-six months in duration upon approval by the appropriate authority level.

Pre-schedulers or Principal Energy Traders: The Pre-schedulers or Principal Energy Traders reports to the Energy Trading Manager and are responsible to:

- Monitor short-term energy markets on an ongoing basis;
- Close open positions and optimize the use of dispatchable assets or options in the day-ahead markets for capacity, natural gas, power and energy related products;
- Assist the Energy Trading Manager with hedging positions in the short-term markets for natural gas and power;
- Coordinate the input of all trade details/transactions into various PWP systems;
- Create bids and day-ahead schedules for submittal to the California Independent System Operator (CAISO) for CAISO-related transactions;
- Create tags for all inter-balancing authority transactions with a point of delivering within the CAISO;

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<sup>3</sup> The Pre-scheduler or Principal Energy Trader position is currently classified by the City as Principal Power Dispatcher

<sup>4</sup> The Energy Risk Manager position is currently classified by the City as Wholesale Operations Manager - Risk

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- Perform planned outage coordination with the CAISO for local power plants and for projects within the CAISO that PWP serves as the Scheduling Coordinator;
- Schedule local generation as requested by PWP's Power Delivery Group to maintain system reliability;
- Perform additional duties as assigned by Energy Trading Manager;
- Develop operational strategies and provide timely instructions to Real-Time Schedulers to use in the applicable market;
- Schedule natural gas transactions; and
- Prepare PWP supplemental energy and ancillary service bids for the CAISO.

The Real-Time Schedulers - Trading or Authorized Agents for real-time scheduling report to the Energy Trading Manager and are responsible to:

- Monitor short-term energy markets on an ongoing basis;
- Maintain constant communication with Pre-schedulers real time activities;
- Provide back up to Pre-schedulers as necessary;
- Match PWP resources to PWP load in real time and balance PWP's hourly needs;
- Monitor real-time load and schedule local generation as requested by PWP's Power Delivery Group to maintain system reliability;
- Create bids and schedules for submittal to the California Independent System Operator (CAISO) for CAISO-related transactions;
- Initiate or respond to deals with counterparties in the hourly markets;
- Manage PWP CAISO changes in the day-ahead and hourly schedules as needed;
- Coordinate the input of all hourly trade details into applicable systems and transfer these details to PWP for integration into PWP's energy trading and management system; and
- Modify and create real-time tags in Open Access Technology International (OATI) system.

### **Middle Office:**

The Middle Office is responsible for providing risk oversight and controls as well as performing all functions related to quantitative analysis, market analysis, compliance review, credit administration, and management reporting. Given its business objectives, PWP has a low-to-moderate risk tolerance. The current acceptable risk tolerance limit is about \$10 to \$12 million per fiscal year, which is equivalent to about 1.0¢ per kilowatt-hour of retail rate impact for one year. The Middle Office adopts and updates as necessary the Policy and related procedures and controls manuals so that portfolio management functions occur in compliance with the City Council-adopted Policy and RMC adopted procedures, guidelines and controls.

The Middle Office will monitor, verify and report on the compliance with the Policy and risk management program, review all risk management activities, determine portfolio and credit exposure, transaction compliance and on-going approval of counterparties. The Middle Office will be responsible for reporting to the RMC on risk management issues, and recommending to the RMC when changes in policy or operating procedures are required. These recommendations may relate to the temporary or permanent halting of transactions with one or more counterparties, exceptions to rules and procedures, other operational exceptions, and any other topic that the Middle Office determines to represent an unacceptable risk exposure. The functions of the Middle Office can be broadly defined as Quantitative Analysis, Compliance Review, Credit Administration, and Management Reporting.

**Energy Risk Manager:** The Energy Risk Manager reports to the Assistant General Manager – Finance, Administration and Customer Service and is responsible to:

- Implement the Policy, focusing on Middle Office functions;
- Monitor compliance with the Policy;
- Serve as the in-house expert on financial products and pricing and structuring of physical contracts with embedded financial features (e.g., options);
- Provide financial and physical market pricing expertise when evaluating the feasibility of structured products and services to customers;
- Recommend portfolio-hedging strategies to the Front Office;
- Take specific courses of action if the risk position of a transaction or the portfolio exceeds, or is approaching, the limits established by this Policy;
- Ensure that risks for all transactions have been identified and can be valued;
- Verify all new products (before their use) and transactions (before opening) to ensure that the risks and economics of such transactions are consistent with the Policy;
- Monitor for breakdowns in execution of duties, especially during changes in personnel, organizational structure, and information systems;
- Monitor transactions and positions for adherence to risk limit policies, monitor stress tests, report market risk, review and approve pricing models and valuation systems, and develop cash reconciliation procedures;
- Establish limits and controls for transacting employees in applicable trading systems and in PWP's energy trading and risk management system.
- Approve credit exposure measurement standards, set credit limits and monitor their use, review credits, review and monitor risk reduction arrangements, and guide the use of documentation and credit support tools;
- Prepare the position report that contains a list of all open and recently closed transactions for trade-based activity and verify the validity and accuracy of the market data used in mark-to-market calculations;
- Report the risk taking and risk management activities of the organization through the position report, perform cash flow-at-risk (CFaR) or counterparty credit value-at-risk

(CVaR) or related risk metrics calculations on a transactional and portfolio basis, as needed;

- Facilitate accounting and program performance evaluation through review and analysis of closed positions;
- Ensure that risk exposure monitoring and reporting is an independent function residing outside of Traders' duties;
- Independently monitor and analyze market and financial risks, and report findings to the General Manager/RMC;
- Perform independent evaluation and review of the creditworthiness of PWP's counterparties, obtain the General Manager's signature on approvals, and communicate results to the Front Office and RMC;
- Facilitate energy supply governing agreements;
- Generate regular counterparty credit exposure reports and provide regular update on the energy portfolio review to the RMC;
- Provide price and volatility inputs for risk models and document changes in valuation/risk models;
- Monitor ongoing financial strength of counterparties;
- Report any breaches of authorization limits to the General Manager/RMC;
- Ensure that all trades can be processed efficiently and credit policy has been followed;
- Approve all new products to ensure that they will be controlled for accounting and cash flow purposes;
- Use the transaction level detail available on the position report to estimate credit exposures;
- Prepare or contract for preparation of counterparty credit reports as necessary;
- Provide analysis regarding the credit exposure impact of additional transactions with existing counterparties;
- Determine the financial exposure of Pasadena's energy commodity portfolio by applying standard risk measurement and valuation standards;
- Perform rigorous risk analysis to evaluate the risk exposure on a transactional and portfolio basis;
- Monitor all transactions to ensure compliance of transactions with the RMC procedures, guidelines and controls;
- Provide quantitative limitations for sale of physical products and financial products for each of the tax-exempt financed facilities and commodities, update quantitative limitations as necessary, and monitor impact of transactions related to tax exempt financed facilities or commodities;
- Monitor counterparty creditworthiness and objectively measure and monitor credit limits and credit histories, and may temporarily halt trading or permanently halt trading with the concurrence of the RMC, with an approved counterparty because of credit exposure or credit condition; and

- Report to the General Manager/RMC related to risk management, and performance in alignment with the Policy and related procedures, guidelines and controls and the requests of the RMC.

PWP's Assistant General Manager of Finance, Administration and Customer Service is responsible for overall management of Middle Office.

**Back Office:**

The Back Office is primarily responsible for energy accounting and settlements, regulatory compliance, settlement of bills, recording transactions, contract management and compliance. The Back Office is also responsible for accurate transactions records and settlements and associated reports, independently monitoring and recording transactions into a tracking database, and verifying and reporting on compliance with procedures as reflected in deal tracking documentation. In addition, the Back Office is responsible for contract management and ensuring compliance with transaction tracking documentation. Assistant General Manager – Finance, Administration and Customer Service is responsible for managing the Back Office.

**Energy Settlements Manager:** The Energy Settlements Manager reports to the Assistant General Manager – Finance, Administration and Customer Service and is responsible to:

- Manage the all Back Office functions, validate all transactions, conduct check-out with counterparties, validate CAISO settlements and invoicing, reconcile power and natural gas transactions, and cross-check the information in the Energy Trading and Risk Management System (ETRM<sup>5</sup>);
- Review all deals on a daily basis to ensure that all transactions are captured in the ETRM system;
- Confirm the terms and conditions of all transactions beyond real time by checking out with counterparties;
- Perform contract management and compliance activities, and administer the terms and conditions of applicable agreements;
- Review and maintain copies of agreements and transaction confirmation agreements, and provide periodic transaction settlement reports for financial tracking and planning purposes;
- Validate risk management system recording of trading transactions;
- Serve as a contact for counterparties with regards to billing and payment processes of transactions;
- Maintain an effective monitoring system over the transaction processing;
- Independently confirm information on transactions exceeding balance-of-week;
- Develop and apply accounting policies to financial transactions;
- Settle transactions (verification, accounts payable/receivable);

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<sup>5</sup> PWP currently uses the SettleCore ETRM software system

- Prepare financial statement disclosures;
- Correctly classify and report transactions. (Certain transactions may differ with regard to their reporting requirements, depending on whether they qualify as “existing assets, liabilities, and firm commitments” or “anticipated transactions” for hedge accounting. The City Finance Department and FACBU shall determine how transactions are classified for reporting purposes and ensure that hedges are accounted for in accordance with generally accepted accounting principles);
- Forward invoicing instructions for review to the City Finance Department and FACBU;
- Coordinate accounts receivable/payable data flow between accounting and risk management systems;
- Generate monthly accounting reports for review and input by the City Finance Department into PWP’s general ledger and income statements;
- Create energy accounting daily information request report;
- Conduct a mid-month and month’s end check-out with counterparties for all transactions to reconcile actual versus estimated energy flow;
- Generate confirms for counterparties when PWP is the seller;
- Monitor Day-Ahead/Hourly execution and settlement and provide feedback to the Front Office and Middle Office; and
- Coordinate internal cost of fuel reporting.

**Accounting Disclosure Compliance and Audit:**

The City Finance Department is responsible for verifying that the appropriate accounting treatment for transactions is performed in line with GASB guidelines. The City’s independent auditors will perform on a minimum of an annual basis, a review to ensure appropriate accounting measures are being utilized by the City Finance Department and PWP.

The RMC, with concurrence of the City Finance Director will retain an independent auditor to conduct an audit of PWP’s energy and credit risk management program on a biennial basis (occurring every two years). Findings of the audit will be reported to the Chairperson of the RMC, and the City Manager. The external auditors shall:

- Verify proper segregation of external reporting, risk management, accounting, treasury, and portfolio management duties, and maintenance of files;
- Sample and review derivative execution activities for compliance with this Policy, any related guidelines and/or limits, other Pasadena policies, regulatory requirements, and exception reporting;
- Track sample transactions through the accounting and reporting systems from the initial trade through the liquidation of the position to the appropriate entry to the general ledger, verifying the accuracy of entries and accounts;
- Review mark-to-market procedures and track entries and adjustments to the general ledger;

- Ensure that there is a lock out feature in the ETRM system to prevent the Front Office from making any changes to deal details three days after the delivery date;
- Ensure that all systems deemed essential to PWP energy risk management operations by the RMC are accessible 24 hours and backed up on a minimum of a daily basis. Ensure that the Front, Middle and Back Offices maintain and annually test a business continuity plan that includes a chosen location where operations can carry on in the event current offices are not accessible; and,
- Engage outside expertise, on at least a biennial basis, to perform a technology vulnerability assessment to identify the potential for any unauthorized access to PWP's network and ETRM system and follow up such periodic assessment with appropriate protections to mitigate any such risks.

#### **IV. Transaction Authorization and Limits:**

The Front Office is responsible for executing transactions to provide supply reliability, optimize PWP's assets and mitigate its risk. All executed transactions must be captured and entered into PWP's ETRM system. The transaction authorization and limits for authorized personnel are shown in Table II below.



**Table II  
Transaction Authorizations and Limits**

	<b>Real Time Schedulers</b>	<b>Pre-Schedulers</b>	<b>Energy Trading Manager</b>	<b>Assistant General Manager - PSBU</b>	<b>General Manager</b>	<b>General Manager with City Manager's Approval</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	Purchases to meet load, covered sales, hedges
<b>Term</b>	≤ 1 Day	≤ 1 Week	≤ 1 Month	≤ 3 Months	≤ 1 Year	> 1 year ≤ 3 Years
<b>Lead Time</b>	≤ 1 Day  Hourly to balance of day  Same-day transactions or day-ahead activities performed on weekends and holidays	≤ 1 Week  Day ahead to balance of week  Transaction can be executed within one-week period prior to the transaction effective date or initial delivery date	≤ 1 Month  Week ahead to month ahead  Transaction can be executed within one-month period prior to the transaction effective date or initial delivery date	≤ 3 Months  Month ahead to quarter ahead  Transaction can be executed within the three-month period prior to the transaction effective date or initial delivery date	≤ 1 Year  Up to 1 year  Transaction can be executed within the twelve-month period prior to the transaction effective date or initial delivery date	≤ 1.5 Years  Up to 1.5 years  Transaction can be executed within the eighteen-month period prior to the transaction effective date or initial delivery date
<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 115% of estimated requirement or available	Up to 115% of estimated requirement or available	Up to 115% 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	From pre-approved counterparty credit list or with credit facility

\* Note: Energy sales and purchases are limited to sales from capacity and purchases to meet load requirements (or to replace higher cost resources or limited energy/hydro). "Sleeving" transactions shall not be executed for any purposes. Sleeving transactions occur when two counterparties which do not have credit with each other, ask a third party that has credit with both to be a middleman to facilitate a trade.

Transactions may be conducted with approved counterparties and only within the authorized trading limits specified above in Table A - Transaction Authorizations and Limits.

During normal operating conditions, the credit limit specified for each particular Counterparty, (see Attachment 4 – Authorized Counterparty List), must be maintained.

During a system emergency, credit limits may be exceeded as necessary to meet retail load, minimum take, and/or energy, capacity and fuel scheduling obligations pursuant to Section 4.2 of the Policy.

Transactions can only be conducted pursuant to the terms of a fully executed agreement signed by the counterparty(ies) and the City, as authorized by the City Council. The Western Systems Power Pool ("WSPP") Agreement has been approved by the City Council for wholesale power transactions with WSPP members. In addition, the City Council has approved the use of the North American Energy Standards Board ("NAESB") Base Contract for sale and purchase of natural gas with approved Counterparties. The General Manager may execute NAESB or other enabling agreements with unapproved Counterparties for the purpose of conducting transactions during a system emergency. In addition, the General Manager may execute additional master enabling agreements or individual transaction agreements pursuant to City Council resolutions and/or ordinances;

The trading authority delegation to Alliance for Cooperative Energy Services Power Marketing LLC ("ACES"), which is currently engaged to perform real-time trading activities and limited day-ahead activities on demand for PWP, is provided in Attachment 1. In addition, the manual covering the procedures and controls for all market activities with the CAISO is provided in Attachment 2.

## **V. Transacting Employee Code of Conduct**

The code of conduct for transacting employees is as follows:

- A. No transacting employee is allowed to execute any transaction that is not a PWP authorized instrument or transaction. Exceptions from this prohibition can be made only with the prior written approval of the General Manager.
- B. No transacting employee shall, directly or indirectly, publish, disclose, or otherwise divulge any oral or written information, including, but not limited to, information relating to any policies, transactions, positions, or PWP objectives to any person that is not a PWP employee or authorized agent, without the prior written consent of PWP General Manager, which is to be provided to the Risk Manager for filing.
- C. No transacting employee is allowed to, directly or indirectly, enter into, or hold any beneficial ownership interest in any transactions for any energy or energy-related product of any product of any type, without the prior written approval of PWP General Manager.
- D. No transacting employee is allowed to, directly or indirectly hold any beneficial ownership interest in any company that is currently on PWP's Authorized Counterparty List. Beneficial ownership interest includes investment or stocks or interests worth more than \$2,000 in any company on PWP's Authorized Counterparty List. Investments in diversified mutual funds registered with the

Security Exchange Commission, government bonds and in insurance policies are non-reportable interests.

- E. It is against the PWP policy to, directly or indirectly hide the execution of any transaction, delay or improperly document any transaction, misrepresent the accuracy of any information relating to any transaction or prospective transaction. Transacting staff and other staff responsible for entering transaction related information must ensure that all transactions are captured in the ETRM System by the end of the day on which the transaction was entered into. Failure to enter transaction information on a timely basis will be deemed to be a cover up of a transaction and a breach of this Code of Conduct.

## **VI. Controls on Transactions**

PWP's risk processes include manual and systematic controls. Some of PWP's processes are performed within the ETRM system used by PWP to capture, schedule and support transactions and activities conducted with bilateral counterparties and the CAISO. The ETRM system has a direct interface with the CAISO for scheduling, downloading CAISO dispatches, awards, prices, settlement files, etc., performing shadow settlements (estimates of CAISO charges based on PWP's bid awards and publicly available market data) and allocations, and tracking CAISO disputes.

The ETRM system is a fully integrated system that is a single application with a single user-login, and a modular, role-based system that allows users access to the various modules and screens based on their user-roles. Access to the ETRM system is appropriately segregated from the Front Office, Middle Office and Back Office functions. Access to modify transactions within the ETRM system is restricted to authorized personnel in the Front Office and access to establish and/or change transaction authorizations and limits within the ETRM is restricted to authorized personnel in the Middle Office. In addition, access to perform settlement functions within the ETRM system is restricted to authorized personnel in the Back Office.

PWP is committed to maintaining the highest level of ethics and integrity and to promote a risk informed organization. Employees are hired through the City process after meeting the requirements pertaining to experience, education, background, and employment history for their specific job position. Employees are evaluated annually and are given a performance appraisal review and training through internal and external opportunities. All transacting employees are provided with the Policy which includes a Code of Conduct, and related procedural documents. Employees are required to formally acknowledge receipt of policies and practices. All transacting employees are also provided with a copy of the ETRM user guide.

### **Authorized Markets**

PWP is authorized to transact in the following markets for purchases and sales for the purpose of meeting load requirements and wholesale sales commitments, providing reliability, replacing higher cost resources, or optimizing the use of PWP's energy portfolio:

- CAISO markets, including: Energy, Capacity, Ancillary Services, Congestion, Losses, Transmission, Inter SC Trades, Congestion Revenue Rights, Demand Response, etc.;
- U.S. electric power in the Western Electricity Coordinating Council (WECC) for energy, capacity, transmission, and ancillary services;
- U.S. and Canadian natural gas markets accessible to PWP; and
- U.S. and Canadian emissions credits and allowances, and renewable energy markets accessible to PWP.

Required master or enabling agreements must be in effect prior to any transactions. For purchase and sale of power and related products, a “WSPP” agreement is preferred, and for physical natural gas products purchase and/or sale a “NAESB” is required. Risks of participation shall be controlled by adhering to the procedures, transaction authorizations and limits defined in the Policy and specified herein.

**CAISO Market:** The CAISO market operates as a commodity exchange and is composed of interrelated processes. The energy markets (day-ahead, hour-ahead and real-time) use a full network model that models transmission losses and reactive power load and produces prices at every point in the system. *PWP’s physical energy schedules are financially settled at their respective nodal price, or LMP.*

PWP also participates in the congestion revenue rights market and may use CRRs which are financial instruments to manage its exposure to transmission congestion charges in the day-ahead market process. CRRs are allocated and auctioned, and are settled based on the marginal cost of congestion, a component of the integrated forward market locational marginal prices. A revenue rights obligation entitles its holder to receive payment if congestion in a given trading hour is in the same direction as the obligation, and requires the holder to pay a charge if congestion in a given trading hour is in the opposite direction of the revenue right. A revenue rights option entitles its holder to a payment if congestion is in the same direction as the option, but requires no charge if congestion is in the opposite direction. Monthly revenue rights are valid for one month and are made on a time-of-use basis, while seasonal rights have a term of one season, either on- or off-peak. Long-term rights have a term of 10 years and are allocated on a seasonal and time-of-use basis. Merchant transmission revenue rights have a term of 30 years or the intended life of the facility, whichever is less. Rights can be traded bilaterally. In addition, PWP participates in the CAISO reliability requirements and resource adequacy programs.

### ***Transaction Process***

Transactions may be conducted only with approved counterparties and only within the authorized trading limits set forth in Table II, including the credit limit specified for each particular counterparty.

A limited number of short-term transactions with non-approved counterparties are allowed during a system emergency with the permission of the General Manager to meet retail loads and/or maintain power system stability. A system emergency is defined as a natural disaster, major equipment failure, or CAISO failure to deliver power for any reason that affects PWP’s ability to provide power to retail load. Each member of the trading group within the Front Office is accountable for identifying when the current market conditions call

for the execution of deals in line with the approved PWP authorization limits. Additionally, transaction staff is responsible for transacting deals to best provide supply reliability, mitigate PWP's risk and optimize PWP's assets.

The transaction process can involve real-time deals and term deals. Real time deals involve only Real-time Schedulers or authorized agents. Term deals can involve all levels in the transactional hierarchy, up to the General Manager. Real time deals are hourly and balance-of-day transactions where the Real-time Schedulers have sole authority, up to the constraints defined in this document, to buy or sell to balance load requirements with resources.

Real-Time Schedulers (or authorized agents) and Pre-schedulers may purchase or sell transmission capacity and Congestion Revenue Rights CRRs, and/or energy at any location where PWP has the physical ability to receive/deliver energy, or an existing contractual obligation to receive or deliver energy.

The General Manager, Front Office Manager, Power Resources Manager or Energy Trading Manager may enter into contracts for a capacity product guaranteed by the seller to be acceptable to the CAISO to meet the PWP's capacity requirements, including those defined in the CAISO tariff. The intent of these contracts will be to satisfy and/or meet reliability requirements pertaining to PWP's participation in the CAISO markets and further, that these contracts can be settled financially. Capacity products may include but are not limited to Resource Adequacy (Local, System or Flexible Capacity) attributes. Although capacity products are procured for the purpose of meeting minimum reliability requirements, PWP has the ability to sell any surplus capacity product it has above its minimum reliability level. In addition, the Front Office may enter into transmission and/or power transactions that are based on price relationships between different locations, where PWP has the physical ability to receive/deliver.

### ***Trade Capture***

The Front Office Traders/Schedulers are responsible for capturing in ETRM all bilateral power, transmission, capacity, natural gas, renewable energy, and emission allowance or related transactions that they execute promptly after execution. The Front Office transacting staff should ensure that all transactions of one day in duration or greater are time-stamped and that the terms of the deal such as: price, volume, month and location are specified. And that the underlying bilateral contract with the given counterparty is identified when appropriate. Transaction details will be stored and readily available in the ETRM system for the greater of 6 months or the duration of the transaction and on and/or offsite for at least 5 years following the end of the transaction or termination of a contract.

Most transactions with the CAISO are captured via the ETRM system. Transactions not captured by ETRM must be entered directly into the ETRM system by the Traders/Schedulers.

Transactions that are verbally executed must be executed via PWP recorded phone lines. All phone lines of PWP's Traders/Schedulers are recorded. Transactions executed through other electronic platforms must be recorded, documented and entered into the ETRM system.

The Traders/Schedulers will access the ETRM system to submit bids and offers for generation, demand, ancillary services, and virtual transactions. The generation awards demand awards, ancillary services awards, virtual transaction awards, financial transmission/congestion revenue rights, bilateral transactions and imports/exports are captured in the ETRM system as a result of the interface with CAISO.

The responsible transacting employee must deliver the deal transaction abstract including but not limited to counterparty, volume, terms and escalations to the Traders/Schedulers for entry into the ETRM system as soon as practicable but no later than the day of execution. The Energy Trading Manager will ensure that all deals captured in the ETRM system complete and accurate. The ETRM system has built-in validation controls functionalities to assist in ensuring deals entered into system are captured completely.

Once a deal has been transacted, the logistics for nomination, transportation or transmission scheduling are addressed within the Front Office.

**Power Transaction Trade Capture:**

- Transactions executed by the Front Office are passed on to the Traders/Pre-schedulers for entry into the ETRM system. Transactions that fall within the CAISO are transmitted to CAISO through the ETRM system. Once market awards have been received from the CAISO, the transactions become part of PWP's final schedule for the next day. For non CAISO system resources, these transactions are recorded and maintained in the ETRM system for internal tracking purposes.
- The Pre-schedulers are responsible for creating tags in OATI Webtag system and entering the appropriate paths and associated terms into the system based on current transmission agreements;
- Transmission capacity for the physical transaction path is assigned from current transmission resources within the Open Access Same-time Information System (OASIS) via OATI system;
- Tag fields to be completed include: volume, transmission provider, control area, purchase and selling entities, point of receipt, point of delivery and the OASIS number assigned to each path;
- Once tagged into the OATI system, all participants must evaluate and approve all details of the tag -- if the original tag is not approved, then a different tag is resubmitted until approval is obtained;
- Real-Time Schedulers or authorized agents are responsible for tagging their own transacted deals and for receiving approval from participants -- if the original details of the tag are not approved, then a different tag is resubmitted until approval is obtained;
- Any CAISO related scheduling needs that arise during real time should follow the operational strategies and instructions provided by the Pre-schedulers;
- To handle any possible deviations from the original schedule, the Real-Time Schedulers stay informed of congestion flow management issues and curtailments affecting PWP by a constant monitoring of the OATI Webtag system; and,

- In the event PWP's flow is affected, any changes or new deals that are executed to maintain needed energy flow are entered into the ETRM system for accounting and operational tracking, to OATI for new tagging and to the CAISO as necessary within stipulated CAISO guidelines.

#### **Gas Transaction Trade Capture:**

- Term deals transacted by the Front Office are handed off to the Traders/Pre-schedulers for coordination with the contracted vendor to schedule natural gas needs on a monthly and/or day-ahead basis as applicable (*some long-term deals can be scheduled on monthly basis, but when not possible, daily scheduling is administered*);
- Deals transacted by Pre-schedulers or Principal Energy Traders are scheduled by the by Pre-schedulers or Principal Energy Traders to balance PWP's natural gas needs;
- While Southern California Gas Company (SoCal Gas) is the primary transporter for PWP, additional providers, TransCanada and Pacific Gas and Electric are also used at times;
- The Pre-schedulers are responsible for double checking that entered data is correctly balanced in the given transporter website(s);
- Each leg of the transport has to be scheduled on the given transporter's nomination site to put in needed volume levels, given contract number and upstream/downstream points by the contracted vendor; and,
- When discrepancies are identified during scheduling, the by Pre-schedulers or Principal Energy Traders will work with the transporter / supplying counterparty to determine the cause of the error and to reach resolution.
- When discrepancies are identified after delivery has occurred, the Back Office will work with the transporter / supplier counterparty to determine cause of the error and to reach resolution.

#### ***Trade Confirmation***

With the exception of transactions with the CAISO, written confirmations are required for most transactions with a term more than a week. For physical power transactions executed under WSPF agreement with a term of less than a week, no written confirmations are required. Similarly, for physical gas transactions executed under NAESB agreement with a term of less than a week, no written confirmations are required.

Upon execution of transactions with terms of a week or longer, the Front Office will notify the Back Office directly or via the ETRM system to obtain or generate the related trade confirmation letters. If the counterparty is responsible for generating the trade confirmation letter, the Back Office will ensure the timely receipt of the trade confirmation letter prepared by counterparty, review transaction details on confirmation letter and ensure that transactions details such as flow date(s) and volumes, and commercial terms are accurately captured in the ETRM system. If there are any discrepancies between external confirmation letters and ETRM, the Back Office will discuss the transaction details with the Trader/Scheduler, review the voice recordings and/or contact the external counterparty directly to resolve the issue. Afterwards, the Back Office will forward the confirmation letter

to the Trading Manager for the appropriate approval and signature, and send a copy of the fully executed confirmation letter to the counterparty for their record prior to the start of the trade term.

If PWP is responsible for generating the trade confirmation letter, the Back Office will prepare the trade confirmation letter, forward the letter to the Energy Trading Manager for the appropriate approval and signature, and send a copy of the signed confirmation letter to the counterparty for execution prior to the start of the trade term. The Back Office will ensure timely receipt of a copy of the fully executed confirmation letter from the counterparty for PWP's record prior to the start of the trade term.

In addition, the Back Office will also ensure that all confirmation letters in ETRM are promptly and duly executed. For physically-settled power transactions, the Back Office will reconcile, on a monthly basis, total transacted volumes by Pre-scheduler or Principal Energy Trader by counterparty with the total volumes captured in the ETRM system. For natural gas transactions, the Back Office will reconcile, on a monthly basis, total transacted volumes by Pre-scheduler or Principal Energy Trader by counterparty in the ETRM system with the total volumes provided by SoCal Gas / meter statements or the applicable pipeline bulletin boards. The Back Office will also validate natural gas imbalance volumes reflected in the ETRM system by reconciling imbalance information from the ETRM system to imbalance data from external sources from any entity for whom PWP executes and schedules natural gas transactions, or for any entity that provides PWP with transaction and scheduling data.

## **VII. Risk and Credit Management**

The Middle Office is responsible for providing risk oversight and controls as well as performing all functions related to quantitative analysis, compliance review, credit administration, and management reporting. Given its business objectives, PWP has a low-to-moderate risk tolerance. The current acceptable risk tolerance limit is about \$10 to \$12 million per fiscal year, which is equivalent to about 1.0¢ per kilowatt-hour of retail rate impact.

The Energy Risk Manager will monitor transactions captured in ETRM for compliance with the Policy. The ETRM system is designed to create mark-to-market reports. The Middle Office ensures that forward price, volatility and correlation information from Platts or ACES proprietary forward curve system or equivalent information services are loaded on a regular basis into the ETRM system in order to generate mark-to-market reports. The Middle Office will also ensure that mark-to-market valuations are performed in accordance with the approved mark-to-market methodology. The methodology used to create forward curves and value transactions is approved by the RMC.

The manual covering counterparty credit evaluation and procedures is provided in Attachment 3, and the Authorized Counterparty List is provided in Attachment 4.



## **VIII. Settlements and Accounting**

The Back Office is responsible for recording and validating all bilateral and generated physical power and natural gas transactions, confirming power check-outs with counterparties directly or through PWP's authorized agents for real-time trading activities, performing reconciliation of power and natural gas transactions, and cross-checking the information in the ETRM system. In addition, the Back Office is responsible for contract management and ensuring compliance with power and natural gas confirmations, performing settlement and invoicing validation of CAISO transactions in accordance with CAISO Tariff, CAISO Business Practice Manual for Settlements and CAISO Billing Business Practice Manual for Credit Management.

The Back Office or PWP's authorized agents for real-time trading activities will perform a checkout process at mid-month and at the end of each month for power transactions as well as contact each counterparty to confirm the total volume and price. The Back Office or PWP's authorized agents for real-time trading activities will then generate a monthly Purchases and Sales Report for use by the Back Office to reconcile actual versus estimated energy flow and to create or validate invoices.

The checkout process for natural gas involves comparing the Gas Log Report data and ETRM system entries against the SoCal Gas Envoy Pipe Support Report. Once the information has been validated, invoices can be processed or created. Any discrepancies with counterparties will be resolved using Final Pipe Support Reports from SoCal Gas Envoy system.

The following procedures outline the Back Office month end discrepancy process:

- Review the power tags for physical power transaction and reconcile with the ETRM system;
- Review the voice recording or message logs or entries in the ETRM system;
- Follow-up with Traders/Schedulers to verify the details of the transaction
- Make corrections within the ETRM system, if necessary; and
- Review and Final Pipe Support Reports from SoCal Gas Envoy system, which is by all counterparties in a natural gas transaction as the final system of record for natural gas flows .

The Back Office also records, validates and settles all CAISO transactions in accordance with the CAISO market rules and tariff within a strict market timetable. The ETRM system is used to perform shadow settlements (estimates) for CAISO charges. If discrepancies are found during the shadow settlement process, then the Back Office will file a dispute with the CAISO.

After the month-end checkout process, the Back Office sends the information required for invoicing to the City Finance Department for use in generating invoices and mailing or e-mailing or faxing invoices to the counterparties. The Back Office also submits validated invoices to the City Finance Department for payment.

In addition, the Back Office validates renewable energy and emission transactions and utilizes the Western Renewable Energy Generation Information System (WREGIS), an independent renewable energy tracking system managed by the Western Electricity Coordinating Council (WECC), to track the renewable credits associated with the resources. The Back Office also track, monitor and ensure that the renewable credits are accurate and deposited into the WREGIS so that the renewable credits can be counted toward PWP's renewable portfolio standard (RPS).

The Back Office staff monitors accounts receivable balances and advises the Energy Risk Manager of any payments in arrears or underpayments. On a daily basis, the Back Office staff is responsible for reconciling that all PWP's systems are internally balanced. The Back Office provides the City Finance Department with the month-end Accrual Report for making monthly accounting entries including actual revenues billed, expenses incurred and accruals to be reversed. The month-end Accrual Report contains the assigned account number, fund number, sub-class number when available, amount, and description of the revenue or expense account. The Back Office is responsible for inputting or transferring accounts receivable and payable information from the City Finance Department's financial system into the ETRM system.

## **IX. Private Use Limitations (Tax-exempt Financed Assets)**

All sale transactions from resources funded with tax-exempt bonds (such as Intermountain Power Project, Hoover, Southern Transmission System, Northern Transmission System, Mead-Phoenix/Mead-Adelanto, Magnolia Power Project, and the local generating units (Broadway, GT1, GT2, GT3 and GT4) are subject to private use limitations. IRS regulations effective on November 22, 2002, state, in part, that to avoid violating private use limitations, all transactions must be less than three years unless they are with another tax-exempt agency. In addition, overall project-wide private use may not exceed 10% from non-tax-exempt uses. A list of facilities financed with tax-exempt financing and any deals either made with non-tax exempt entities that exceed three (3) years or that could have tax-exempt financing-related implications due to other conditions will be maintained on PWP server / network system by the Middle Office. The Back Office will be responsible for providing regular reports on the sale of physical products and financial products from tax-exempt financed facilities and projects to the Front Office. The Middle Office will be responsible for ensuring compliance with the private use limitations. The reports will be reviewed with the RMC on a regular basis.

## **X. New Product Approval Process**

A new product is a commodity type, pricing mechanism, or derivative instrument that is sufficiently different from the instruments and markets previously approved, such that it requires different systems, operational procedures, or accounting treatment. Examples of new products would include entry into different products or market lines, the use of derivatives with different risk characteristics, or the use of derivatives to implement different business strategies or goals.

The purpose of defining a process for the introduction of a new product or instrument is to ensure that the exposures associated with it are thoroughly reviewed and understood by RMC. The General Manager must approve the use of all new products or the entry into different commodity markets before execution of any such transaction.

In essence, any transaction, which brings a new type of risk or an unauthorized risk attribute, should be considered a new transaction and must be approved by the General Manager before execution. If there are any questions about whether a transaction is approved or not, the General Manager must provide approval in writing before any such transaction is executed.