

Agenda Report

October 4, 2004

To: CITY COUNCIL
Through: MUNICIPAL SERVICES COMMITTEE (9/29/04)
From: CITY MANAGER
Subject: Adoption of Pasadena's Transmission Owner Tariff and Authorization to enter into Transmission Control Agreement with the California Independent System Operator

RECOMMENDATION

It is recommended that the City Council:

- 1) Authorize the City Manager to enter into a Transmission Control Agreement (TCA), as may be modified periodically, with the California Independent System Operator (ISO) and other Participating Transmission Owners;
- 2) Authorize the City Manager to enter into a Letter Agreement between Southern California Public Power Authority (SCPPA) and Pasadena;
- 3) Adopt the City of Pasadena, California Transmission Owner Tariff (TO Tariff); and,
- 4) Approve the following actions that may be required to enable Pasadena Water and Power (PWP) to become a Participating Transmission Owner (PTO):
 - a. File the TO Tariff with the Federal Energy Regulatory Commission (FERC) as a non-jurisdictional rate filing
 - b. Take such actions as are necessary to administer and implement the TO Tariff, including any changes to the TO Tariff necessary for FERC to accept the filing; and,
 - c. Execute such documents as are necessary to render the TO Tariff consistent with ISO Tariff, as it is amended from time to time.

BACKGROUND

As a PTO, PWP will turn over operational control of its existing high voltage transmission scheduling rights to the ISO for use by all ISO market participants. In exchange PWP's electric supply reliability will be further enhanced through access to the entire ISO-controlled transmission grid, while simultaneously lowering the overall

cost of transmission for PWP electric customers. Furthermore, becoming a PTO will eliminate the need to renew or replace Pasadena's transmission contract with Southern California Edison (SCE) that will expire in 2010. Pasadena would continue to have the ability to import power from its resources to serve the City and would continue to develop and schedule its own power supply. Joining the ISO by becoming a PTO would neither increase nor decrease Pasadena's exposure to rotating blackouts.

Pasadena is not the first municipal utility to become a PTO. Five other municipal utilities, the Cities of Anaheim, Azusa, Banning, Riverside, and Vernon, have successfully operated as PTOs and are enjoying the benefits of reduced transmission costs and greater access to the ISO grid. In light of these positive examples and anticipated benefits to Pasadena, PWP recommends that Pasadena complete the process of becoming a PTO.

Pasadena TO Tariff and TRR

Pasadena's TO Tariff addresses matters relating to expansion of interconnection with PWP's transmission facilities as well as Pasadena's Transmission Revenue Requirement (TRR), or total costs, associated with the transmission entitlements to be turned over to the ISO. The TO Tariff must be approved by the City Council and filed with FERC along with supporting testimony and will not become effective until it is accepted by FERC. Once filed, the TO Tariff will be subject to the comments, objections and oppositions filed at FERC by any interested parties, in particular the ISO and other users of the ISO grid. As a result, FERC may require changes to the TO Tariff before accepting it (See "Risks and Uncertainties"). The General Manager should be authorized to prepare, approve, and file necessary changes to the TO Tariff in order to meet the January 1, 2005 effective date.

Transmission Control Agreement

The TCA is a multi-party agreement between the ISO and all PTOs under which the PTOs agree to turn over operational control of their transmission (essentially, the right to use transmission to schedule energy) to the ISO. Execution of the TCA and the ISO's filing of this document with FERC is the final step that commits Pasadena to become a PTO. Should Pasadena later desire to withdraw from the arrangement with the ISO, there is an off-ramp provision in the agreement that allows the City to terminate the contract with advance notice of two years. Should Pasadena terminate the TCA, PWP would continue to purchase transmission and related services at tariff rates from the ISO (as is done currently) until an alternative to the ISO service can be arranged.

PWP's transmission costs included in the TRR will be pooled with those of the other PTOs to derive a common transmission access charge, which is currently 0.27¢/kWh. At the current rate, PWP will pay the ISO approximately \$3.5 million per year for using the ISO grid to serve native load and contractual energy sales exported from the ISO, and may incur additional transmission usage charges that can vary with system and market conditions. Since the ISO will reimburse PWP for all costs included in Pasadena's TRR, PWP anticipates net annual savings ranging from \$3-5 million.

SCPPA Transmission Letter Agreement

Several of the transmission entitlements that Pasadena would be turning over to ISO operational control are facilities that were financed through SCPPA with tax exempt bonds (the Southern Transmission System, the Mead-Adelanto Project and the Mead Phoenix Project). Regulations adopted by the Internal Revenue Service (IRS) generally limit the use of such facilities by private entities. However, the IRS has adopted regulations that permit transmission facilities financed with tax-exempt bonds to be turned over to an organization like the ISO. The existing agreements with SCPPA for the transmission projects require that Pasadena refrain from taking any action that would jeopardize the tax-exempt status of the bonds. Therefore, in order to protect SCPPA's interests in the event that future action by the IRS would no longer allow the ISO to control Pasadena's transmission entitlements, SCPPA has requested that Pasadena execute a letter agreement. The letter agreement commits Pasadena to follow SCPPA's direction to terminate the TCA on short notice if such action is needed to protect the tax-exempt status of the bonds. The terms of the TCA recognize this need and provide municipal PTOs with appropriate termination rights.

Risks and Uncertainties

PWP's calculation of the potential benefits to Pasadena is based on the current ISO Tariff and Pasadena's TRR as recommended. Each of the municipal PTOs have experienced challenges to their TRR at FERC, and as a result some costs in their TRR have been reduced, eliminated, or are subject to refund. PWP anticipates similar challenges that could substantially lower or eliminate the benefit of PTO status. It is likely that FERC will allow Pasadena's as-filed TRR to go into effect as of the TCA effective date (January 1, 2005), but that certain amounts received from the ISO will be subject to potential refunds (with interest) until there is a final resolution of any challenges, which could take several years. PWP will return to Council with additional information and recommendations regarding the possibility of such refunds once these issues are identified.

The ISO Tariff provisions are currently undergoing FERC review, and subject to future revisions without PWP's consent or concurrence. In addition, FERC is reviewing the method of collecting transmission costs in the context of its recently issued rule making proceeding on adopting a standard market design for utilities across the country. Although it is impossible to guarantee the outcome of FERC's review or the rulemaking proceeding, PWP expects that cost benefits to Pasadena will continue to be available.

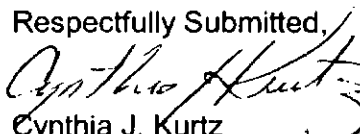
Other risks, which thus far have not been observed by current municipal PTOs, stem from the possibility of transmission congestion that can increase costs or reduce the ability to import external resources (the latter risk is effectively mitigated through 2010 by firm transmission rights granted by the ISO to new PTOs). Any such congestion costs would reduce the cost benefit to Pasadena of becoming a PTO.

If new information or adverse finding result in reduced net benefit to PWP from


becoming a PTO prior to PWP signing or FERC accepting of the TCA, PWP can potentially delay or forego the process. If this information becomes available after the TCA is in effect, PWP would be able to terminate its PTO status with the ISO on two-year's notice (or more quickly if due to a potential adverse action affecting the tax-exempt status of SCPPA's bonds).

FISCAL IMPACT

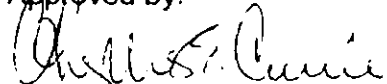
As a PTO, PWP will incur new administrative and consulting costs, and may incur additional transmission usage charges that can vary with system and market conditions. The ISO will reimburse PWP for all costs included in Pasadena's TRR. PWP anticipates the net effect will be annual savings ranging from \$3-5 million that could lead to retail electric rate reductions for PWP customers.

Respectfully Submitted,

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Attachments

Pasadena Transmission Owner Tariff (To Tariff)

Pasadena Transmission Revenue Requirement (TRR) Support

Attachment A

Transmission Owner Tariff

**CITY OF PASADENA, CALIFORNIA
TRANSMISSION OWNER TARIFF**

Issued on: _____, 2004

Resolution No. _____ Effective: January 1, 2005
Sheet No. 1

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1. **Preamble.** Pasadena's TRR for its high voltage transmission facilities and Entitlements placed under the ISO's operational control, and certain terms and conditions relating to transmission expansion of and interconnection with Pasadena's high voltage transmission facilities and Entitlements placed under the ISO's operational control, are set forth in this TO Tariff.
2. **Effective Date.** This TO Tariff is effective on the date on which Pasadena became a Participating TO, January 1, 2005, and shall continue to be effective so long as Pasadena is a party to the TCA.
3. **TO Definitions.** Certain capitalized terms used in this TO Tariff that are set out immediately below shall have the meanings set out immediately below. Capitalized terms used in this tariff and not defined below shall have the meanings set out in the ISO Tariff as it may be amended from time to time.
 - 3.1 **Completed Application.** An application that satisfies all of the information and other requirements of this TO Tariff, including any required deposit.
 - 3.2 **Direct Assignment Facilities.** Facilities or portions of facilities that are constructed by the Participating TO for the sole use or benefit of a particular party requesting Interconnection under this TO Tariff. Direct Assignment Facilities shall be specified in the Interconnection Agreement that governs service to such party.
 - 3.3 **Facilities Study Agreement.** An agreement between a Participating TO and either a Market Participant, Project Sponsor, or identified principal beneficiaries pursuant to which the Market Participants, Project Sponsor, and identified principal beneficiaries agree to reimburse the Participating TO for the cost of a Facility Study.
 - 3.4 **Facility or Facilities Study.** An engineering study conducted by a Participating TO to determine required modifications to the Participating TO's transmission system, including the cost and scheduled completion date for such modifications that will be required to provide needed services.
 - 3.5 **Local Regulatory Authority.** In the case of Pasadena, the Pasadena City Council.
 - 3.6 **MAP or Mead-Adelanto Project.** A 500 kV AC transmission line with termination facilities at the Adelanto Switching station and Marketplace Substation, as more fully described in the Mead-Adelanto Project Agreements as defined in the MAP Joint Ownership Agreement.
 - 3.7 **MAP Joint Ownership Agreement.** That certain agreement entered into by the Mead-Adelanto Project owners, as the same may be revised, amended or supplemented from time to time.

- 3.8 **MAP Coordinating Committee.** Governing committee of the MAP.
- 3.9 **MAP Operation Agreement.** That certain agreement entered into by the Mead-Adelanto Project owners and Los Angeles, which, among other things, designates Los Angeles as operation manager for the Mead-Adelanto Project.
- 3.10 **Marketplace Administrative Committee.** Governing committee of the Marketplace Substation.
- 3.11 **Marketplace Owners.** Each of the Mead-Phoenix owners and each of the Mead-Adelanto owners, their successors and assigns.
- 3.12 **Marketplace Substation.** The common terminal for the Mead-Phoenix and Mead-Adelanto Projects and includes the Marketplace-McCullough tie line as common facilities, as more fully described in the Marketplace Substation Participation Agreement.
- 3.13 **Marketplace Substation Participation Agreement.** That certain agreement entered into by the Marketplace Owners, which provides, among other things, for ownership, construction, operation, maintenance, and rights of use associated with the Marketplace Substation.
- 3.14 **McCullough – Victorville Line 2.** A 500kV transmission line interconnecting McCullough Switching Station and Victorville Switching Station as more fully described in the McCullough-Victorville Line 2 Transmission Agreement.
- 3.15 **McCullough-Victorville Line 2 Transmission Agreement.** That certain agreement entered into by the LADWP and Pasadena which provides for, among other things, ownership, construction, operation, maintenance, and rights of use associated with the McCullough-Victorville Line 2 and related facilities.
- 3.16 **MPP or Mead-Phoenix Project.** A 500 kV AC transmission line interconnecting the Westwing Switchyard, Mead Substation, and Marketplace Substation, as more fully described in the Mead-Phoenix Agreements as defined in the Mead-Phoenix Project Joint Ownership Agreement.
- 3.17 **MPP Joint Ownership Agreement.** That certain agreement entered into by the Mead-Phoenix Project owners, as the same may be revised, amended or supplemented from time to time.
- 3.18 **MPP Management Committee.** Governing committee of the MPP.
- 3.19 **MPP Operation Agreement.** That certain agreement entered into by the Mead-Phoenix Project owners, SRP and Western, which, among other things, designates SRP and Western as operation managers for the Mead-Phoenix Project.

- 3.20 Net FTR Revenue.** The sum of: 1) The revenue received by Pasadena from the sale, auction, or other transfer of the FTRs provided to it pursuant to Section 9.4.3, or any substantively identical successor provision, of the ISO Tariff; and 2) for each hour: a) the Usage Charge revenue received by Pasadena associated with its ISO Tariff Section 9.4.3 FTRs; minus b) Usage Charges that are: i) incurred by the Scheduling Coordinator for Pasadena under ISO Tariff Section 7.3.1.4, ii) associated with Pasadena's ISO Tariff Section 9.4.3 FTRs, and iii) incurred by Pasadena for its energy transactions but not incurred as a result of the use of the transmission by a third-party and minus c) the charges paid by Pasadena pursuant to ISO Tariff Section 7.3.1.7, to the extent such charges are incurred by the Scheduling Coordinator of Pasadena on Congested Inter-Zonal Interfaces that are associated with the ISO Tariff Section 9.4.3 FTRs provided to Pasadena. The component of Net FTR Revenues represented by item 2) immediately above shall not be less than zero for any hour.
- 3.21 Participating TO.** A party to the TCA whose application under Section 2.2 of the TCA has been accepted and who has placed its transmission assets and Entitlements under the ISO's Operational Control in accordance with the TCA. A Participating TO may be an Original Participating TO or a New Participating TO. For purposes of this TO Tariff, the Participating TO is Pasadena.
- 3.22 PDCI.** Pacific Intertie Direct Current (D-C) Transmission Facilities
- 3.23 Pacific Intertie Direct Current (D-C) Transmission Facilities.** A double-pole, +/-500 kV DC transmission line and facilities which conveys energy from BPA and other Pacific Northwest utilities at NOB to Sylmar as more fully described in the Pacific Intertie D-C Transmission Facilities Agreement.
- 3.24 Pacific Intertie D-C Transmission Facilities Agreement.** That certain agreement entered into by the owners/participants in the PDCI, which provides for, among other things, ownership, construction, operation, maintenance, and rights of use associated with the Pacific Intertie Direct Current (D-C) Transmission Facilities.
- 3.25 Pacific Intertie D-C Transmission Facilities Advisory Committee.** A committee established by the Pacific Intertie Direct Current (D-C) Transmission Facilities Agreement consisting of one representative from each participating agency which serves as advisor and consultant to LADWP for all design, construction, operation, additions, betterments, and replacements.
- 3.26 PDCI Operating Agent.** Pursuant to Article 8 of the Pacific Intertie D-C Transmission Facilities Agreement, shall be the Los Angeles Department of Water and Power ("LADWP").
- 3.27 Project Proponent.** A Market Participant or group of Market Participants that: (i) advocates a transmission addition or upgrade; (ii) is unwilling to pay the full cost of the proposed transmission addition and upgrade, and thus is not a Project

- Sponsor; and (iii) initiates proceedings under the ISO ADR Procedures to determine the need for the proposed transmission addition or upgrade.
- 3.28 STS or Southern Transmission System.** The direct current transmission line between the Intermountain Power Project ("IPP") and the Adelanto Switching Station.
- 3.29 System Impact Study.** An engineering study conducted by a Participating TO to determine whether a request for Interconnection to the Participating TO's transmission system would require new transmission additions or upgrades.
- 3.30 System Impact Study Agreement.** An agreement between a Participating TO and an entity that has requested Interconnection to the Participating TO's transmission system pursuant to which the entity requesting Interconnection agrees to reimburse the Participating TO for the cost of a System Impact Study.
- 3.31 Transmission Revenue Balancing Account Adjustment ("TRBAA").** A mechanism established by the Participating TO which will ensure that all Transmission Revenue Credits and other credits specified in Sections 6 and 8 of Appendix F, Schedule 3 of the ISO Tariff, flow through to ISO Tariff and TO Tariff transmission customers.
- 3.32 Transmission Revenue Credit.** Collectively, 1) the sum of: a) all revenues received by the Participating TO from the ISO for Wheeling service, plus b) Usage Charge revenues received by the Participating TO pursuant to Section 7.3.1.6(ii) of the ISO Tariff, plus c) Net FTR Revenue received by the Participating TO; minus 2) any charges attributable to the Participating TO (but not those attributable to the FTR Holder) pursuant to Section 7.3.1.7. After the Transition Period set forth in the ISO Tariff, the definition of Transmission Revenue Credits for the New Participating TOs shall be the same as that of the Original Participating TOs.
- 3.33 Transmission Revenue Requirement ("TRR").** The TRR is the total annual authorized revenue requirements associated with transmission facilities and Entitlements turned over to the Operational Control of the ISO by the Participating TO. The costs of any transmission facility turned over to the Operational Control of the ISO shall be fully included in the Participating TO's TRR. The TRR includes the costs of transmission facilities and Entitlements and deducts Transmission Revenue Credits and credits for Standby Transmission Revenue and the transmission revenue expected to be actually received by the Participating TO for Existing Rights and Converted Rights. The TRR is shown in Appendix I.
- 4. Eligibility.** Transmission service over Pasadena's high voltage transmission facilities and Entitlements placed under the ISO's Operational Control shall be provided only to Eligible Customers as defined by the ISO Tariff. Any dispute as to whether a customer is eligible for wholesale transmission service shall be resolved by FERC and any dispute as to whether a Pasadena End-Use Customer is eligible for service under this TO Tariff shall

be resolved by the Local Regulatory Authority. At the present time, there are no Pasadena End-Use Customers eligible for service under this tariff.

5. Access Charges. The applicable Access Charges are provided in the ISO Tariff.

5.1 Transmission Revenue Requirement. As set forth in the ISO Tariff, the Transmission Revenue Requirement for each Participating TO shall be used to develop the Access Charges set forth in the ISO Tariff. Pasadena's Transmission Revenue Requirement is set forth in Appendix I.

5.2 Transmission Revenue Balancing Account Adjustment ("TRBAA"). The Participating TO shall maintain a Transmission Revenue Balancing Account ("TRBA") that will ensure that all Transmission Revenue Credits and the refunds, specified in Sections 6 and 8 of Appendix F, Schedule 3 of the ISO Tariff, flow through to transmission customers. The TRBAA shall be equal to:
 $TRBAA = TRC_f + TRC_j + I$

$TRC_j =$ The balance representing the prior period difference between the projected Transmission Revenue Credits and the actual credits.

$TRC_f =$ The forecast of Transmission Revenue Credits for the following calendar year.

$I =$ The interest balance for the TRBA, which shall be calculated using the interest rate pursuant to Section 35.19(a) of FERC's regulations under the Federal Power Act (18 CFR Section 35.19(a)). Interest shall be calculated based on the average TRBA principal balance each month, compounded quarterly.

The Pasadena TRBAA, calculated in accordance with the ISO Tariff and approved by the Pasadena City Council, is stated in Appendix I.

6. Ancillary Services--Applicability and Charges. If any Ancillary Services are required, Pasadena will not provide such services, but transmission customer will be required to meet any such requirement in accordance with the ISO Tariff.

7. Billing and Payment.

7.1 [intentionally left blank]

7.2 The ISO, in accordance with the ISO Tariff, shall pay the Participating TO, among other things, Wheeling, Usage, Access Charge revenues, and FTR auction proceeds (excluding Usage Charge revenues payable to FTR Holders) in accordance with the ISO Tariff.

7.3 Users of Pasadena's high voltage transmission facilities and Entitlements placed under the ISO's Operational Control shall pay to the ISO all applicable charges in accordance with the ISO Tariff.

8. **Expansion of, and Interconnection to, Pasadena's Interests in STS, MAP, MPP, Marketplace Substation, PDCI, and McCullough-Victorville Line 2.** Expansion of and/or interconnection to the high voltage transmission facilities presently placed under the ISO's Operational Control by Pasadena, which consist of Pasadena's minority interests in the STS, MAP, MPP, Marketplace Substation, PDCI, and McCullough-Victorville Line 2 require approval of the owners and/or the management committees of those facilities. Therefore Pasadena does not have the legal authority to compel expansion and interconnection. Pasadena will assist in the submission of expansion and/or interconnection requests from third parties to the appropriate bodies of a project pursuant to the individual agreements. It is Pasadena's intent to facilitate the submission of such requests to the full extent allowed by the agreements governing or otherwise applying to those projects and the applicable laws and regulations. The project agreements have the provisions, described immediately below, that address expansion and interconnection requests. Third parties making such requests will be responsible for reimbursing all of Pasadena's reasonable expenses incurred by Pasadena in facilitating submission of such requests to such governing bodies. Sections 8a, 9a, and 10a, and their subparts, of this Pasadena TO Tariff shall apply as described in Section 8a.

8.1 **Expansion**

8.1.1 **Southern Transmission System.** Pursuant to Section 6 of the Intermountain Power Project Construction Management and Operating Agreement, the Coordinating Committee may consider increasing the available transmission capability of the transmission line.

8.1.2 **Mead-Adelanto Project.** Pursuant to Section 11.4 of the MAP Operation Agreement, the Project Coordinating Committee may consider increasing the available transmission capability of the transmission line.

8.1.3 **Mead-Phoenix Project.** Pursuant to Section 11.4 of the MPP Operation Agreement, the Project Management Committee may consider increasing the available transmission capability of the transmission line.

8.1.4 **Marketplace Substation.** Pursuant to Section 10.6 of the Marketplace Substation Participation Agreement, the Administrative Committee may consider increasing the capability of the Substation.

8.1.5 **Pacific Direct Current Intertie.** Pursuant to Articles 2, 11, and 12 of the Pacific Intertie D-C Transmission Facilities Agreement, the Operating Agent will consult with the DC Facilities Advisory Committee with respect to all additions, betterments, and replacements for the facilities.

8.1.6 McCullough-Victorville Line 2. For inquiries regarding long-term transmission capacity transactions (a term of more than one year), interested parties can contact Mr. Son T. Hoang of LADWP at (213) 367-0231.

8.2 Interconnection

8.2.1 Southern Transmission System. Pursuant to Section 6.13 of the Intermountain Power Project Construction Management and Operating Agreement, the Coordinating Committee has the power to approve and designate contracts.

8.2.2 Mead-Adelanto Project. Pursuant to Section 6.2.10 of the MAP Ownership Agreement, the Project Coordinating Committee has the power to approve and designate contracts.

8.2.3 Mead-Phoenix Project. Pursuant to Section 6.2.10 of the MPP Ownership Agreement, the Project Management Committee has the power to approve and designate contracts.

8.2.4 Marketplace Substation. Pursuant to Section 13 of the Marketplace Substation Participation Agreement, any entity may interconnect transmission lines at the Marketplace Substation subject to approval by each Marketplace Owner and execution of an interconnection agreement between the Marketplace Owners and the requesting entity.

8.2.5 Pacific Direct Current Intertie. Pursuant to Articles 2, 11, and 12 of the Pacific Intertie D-C Transmission Facilities Agreement, the Operating Agent will consult with the DC Facilities Advisory Committee with respect to all additions, betterments, and replacements for the facilities.

8.2.6 McCullough-Victorville Line 2. For inquiries regarding long-term transmission capacity transactions (a term of more than one year), interested parties can contact Mr. Son T. Hoang of LADWP at (213) 367-0231.

8.3 Project Managers and Operators. Each transmission project in which Pasadena has Entitlements has a project manager and an operating agent or manager. They are as follows and can be contacted in connection with any request for expansion or interconnection.

	<u>Project Manager</u>	<u>Operating Agent</u>
STS	LADWP	LADWP
Mead-Phoenix Project	SRP, WAPA (DSW)	SRP, WAPA (DSW)

Mead-Adelanto Project	LADWP	LADWP
Marketplace Substation	LADWP	LADWP
PDCI	LADWP	LADWP
McCullough-Victorville Line 2	LADWP	LADWP

8a. Obligation to Interconnect or Construct Transmission Expansions and Facility Upgrades.

8a.1 Participating TO Obligation to Interconnect. Sections 8a, 9a, and 10a, and their subparts, are provided for consistency with other PTOs' TO Tariffs and for potential future application should Pasadena acquire transmission facilities or acquire additional legal authority in its existing facilities which would provide Pasadena sufficient legal authority to implement these Sections. These Sections 8a, 9a, and 10a have no current application to the transmission facilities turned over to ISO operational control by Pasadena, which facilities are Pasadena's minority interests in STS, MAP, MPP, the Marketplace Substation, and PDCI, which are covered solely by Sections 8, 9, and 10 as to expansions and interconnections. Neither are they applicable to any other Pasadena facilities as of the date this TO Tariff was adopted/approved. If the situation changes so that Pasadena has legal authority over transmission facilities so that Pasadena is able to implement the provisions of Sections 8a, 9a, and 10a so that those provisions become effective, to the extent consistent with Sections 9a.2.1 and 9a.3.3 of this TO Tariff, the Participating TO shall, at the request of a third party pursuant to Section 210, interconnect its system to the generation of such third party, or modify an existing Interconnection. Interconnections under this TO Tariff shall be available to entities eligible to request interconnection consistent with the provisions of Section 210(a) of the FPA.

8a.1.1 Upgrade to Transmission System. Interconnection must be consistent with Good Utility Practice, in conformance with all Applicable Reliability Criteria, all applicable statutes, and regulations. The Participating TO will not upgrade its existing or planned transmission system to accommodate the Interconnection if doing so would impair system reliability, or would otherwise impair or degrade pre-existing firm transmission service.

8a.1.2 Costs Associated with Interconnection. The cost of any Direct Assignment Facilities constructed pursuant to this section shall be borne by the party requesting the Interconnection. Any additional costs associated with accommodating the Interconnection shall be allocated in accordance with the cost responsibility methodology set forth in the ISO Tariff for transmission expansions or upgrades. Any disputes regarding such cost allocation shall be resolved in accordance with the ISO ADR

Procedures. If a Market Participant fails to raise through the ISO ADR Procedures a dispute as to whether a proposed transmission addition or upgrade is needed, or as to the identity, if any, of the beneficiary, then the Market Participant shall be deemed to have waived its right to raise such dispute at a later date. The determination under the ISO ADR Procedures as to whether the transmission addition or upgrade is needed and the identity, if any, of the beneficiaries, including any determination by FERC or on appeal of a FERC determination in accordance with that process, shall be final.

8a.1.3 Execute Interconnection Agreement. Prior to the construction of any Interconnection facilities pursuant to this TO Tariff, the party requesting an Interconnection shall execute an appropriate Interconnection Agreement that will be filed with FERC, or the Local Regulatory Authority, in the case of a Local Publicly Owned Electric Utility, and that will include, without limitation, cost, responsibilities for engineering, equipment, and construction costs. All costs shall be paid in advance by the requesting party.

8a.1.4 Coordination with ISO on Interconnection Requests. The Participating TO shall coordinate with the ISO, pursuant to the provisions of the TCA, in developing Interconnection standards and guidelines for processing Interconnection requests under this TO Tariff.

8a.2 Participating TO Obligation to Construct Transmission Expansions or Facility Upgrades. The Participating TO shall be obligated to: (1) perform System Impact or Facility Studies where the Project Sponsor or the ISO agrees to pay the study cost and specifies the project objectives to be achieved, and (2) build transmission additions and facility upgrades where the Participating TO is obligated to construct or expand facilities in accordance with and subject to the limitations of the ISO Tariff and this TO Tariff.

8a.2.1 Obligation to Construct. A Participating TO shall not be obligated to construct or expand Interconnection facilities or system upgrades unless and until the conditions stated in Section 9a.2.1 hereof have been satisfied.

8a.2.2 Local Furnishing Participating TO Obligation to Construct. A Local Furnishing Participating TO shall not be obligated to construct or expand Interconnection facilities or system upgrades unless and until the conditions stated in Section 9a.3.3 hereof have been satisfied.

8a.3 Request for FERC Deference Regarding Need Determination. It is intended that FERC grant substantial deference to the factual determinations of the ISO, (including the ISO's ADR Procedures), the Pasadena City Council, WECC, or RTG coordinated planning processes as to the need for or construction of a facility, the need for full cost recovery, and the allocation of costs.

9. Expansion Process for Pasadena's Interests in STS, MPP, MAP, Marketplace Substation, PDCI, and McCullough-Victorville Line 2. The Expansion process for Pasadena's Interests in the STS, MPP, MAP, Marketplace Substation, PDCI, and McCullough-Victorville Line 2 which it has turned over to ISO operational control, is as stated in Section 8 above. Section 9a and its subparts do not currently apply to those interests or any other Pasadena facilities.

9a. Expansion Process.

9a.1 Determination of Facilities. A Participating TO shall perform a Facilities Study in accordance with this Section where (1) the Participating TO is obligated to construct or expand facilities in accordance with the ISO Tariff and this TO Tariff; (2) a Market Participant agrees to pay the costs of the Facilities Study and specifies the project objectives to be achieved in terms of increased capacity or reduced congestion; or (3) the Participating TO is required to perform a Facilities Study pursuant to the ISO Tariff.

9a.1.1 Payment of Facilities Study's Cost.

9a.1.1.1 Market Participant to Pay for Facilities Study. Where a Market Participant requests a Facilities Study and the need for the transmission addition or upgrade has not yet been established in accordance with the procedures established herein and the ISO Tariff, the Market Participant shall pay the cost of the Facilities Study.

9a.1.1.2 Project Sponsor or Project Proponent to Pay for Facilities Study. Where the facilities to be added or upgraded have been determined to be needed in accordance with the procedures established herein and the ISO Tariff, the Project Sponsor, Project Proponent, or the ISO requesting the study shall pay the reasonable cost of the Facilities Study. When the Participating TO is the Project Sponsor in accordance with the ISO Tariff, the costs of the Facilities Study shall be recovered through the Access Charges and transmission rates.

9a.1.1.3 Principal Beneficiaries to Pay for Facilities Study. Where the facilities to be added or upgraded have been determined to be needed and the principal beneficiaries have been identified by the ISO or ISO ADR Procedures in accordance with the ISO Tariff, the Project Sponsor and the identified principal beneficiaries shall pay the reasonable cost of the Facilities Study, in such proportions as may be agreed, or, failing agreement, as determined in accordance with the ISO ADR Procedures.

9a.1.2 Payment Procedure. Where a Facilities Study is being conducted pursuant to this TO Tariff, the Participating TO shall, as soon as

practicable, tender to the Market Participant, Project Sponsor, Project Proponent, ISO, or identified principal beneficiaries, as the case may be, a Facilities Study Agreement that defines the scope, content, assumptions, and terms of reference for such study, the estimated time required to complete it, and such other provisions as the parties may reasonably require and pursuant to which such Market Participant, Project Sponsor, Project Proponent, the ISO, or identified principal beneficiaries agree to reimburse the Participating TO the reasonable cost of performing the required Facilities Study. If the Market Participant, Project Sponsor, Project Proponent, the ISO, or identified principal beneficiaries, as the case may be, agree to the terms of the Facilities Study Agreement, they shall execute the Facilities Study Agreement and return it to the Participating TO within ten Business Days. If such Market Participant, Project Sponsor, Project Proponent, the ISO, or identified principal beneficiary elects not to execute a Facilities Study Agreement, the Participating TO shall have no obligation to complete a Facilities Study.

9a.1.3 Facilities Study Procedures. Upon receipt of an executed Facilities Study Agreement, a copy of which has been provided to the ISO by the party requesting the Facilities Study, the Participating TO will use due diligence to complete the required Facilities Study in accordance with the terms of the Facilities Study Agreement.

9a.2 Obligation to Build.

9a.2.1 Due Diligence to Construct. Subject to Section 9a.3.3 of this TO Tariff, the Participating TO shall use due diligence to construct, within a reasonable time, additions or upgrades to its transmission system that it is obligated to construct pursuant to the ISO Tariff and this TO Tariff. The Participating TO's obligation to build will be subject to: 1) its ability, after making a good faith effort, to obtain the necessary approvals and property rights under applicable federal, state, and local laws; 2) the presence of a cost recovery mechanism with cost responsibility assigned in accordance with the ISO Tariff; and 3) a signed Participation Agreement. The Participating TO will not construct or expand its existing or planned transmission system, if doing so would impair system reliability as determined through systems analysis based on the Applicable Reliability Criteria.

9a.2.2 Delay in Construction or Expansion. If any event occurs that will materially affect the time for completion of new facilities, or the ability to complete them, the Participating TO shall promptly notify: (1) the Project Sponsor with regard to facilities determined to be needed; (2) the Parties to the Participation Agreement with regard to facilities determined to be needed pursuant to the ISO Tariff where principal beneficiaries were identified; and (3) the ISO. In such circumstances, the Participating TO shall, within thirty days of notifying such Project

Sponsor, Parties to the Participation Agreement, and the ISO of such delays, convene a technical meeting with such Project Sponsor, Parties to the Participation Agreement, and the ISO to discuss the circumstances which have arisen and evaluate any options available. The Participating TO also shall make available to such Project Sponsor, Parties to the Participation Agreement, and the ISO, as the case may be, studies and work papers related to the cause and extent of the delay and the Participating TO's ability to complete the new facilities, including all information that is in the possession of the Participating TO that is reasonably needed to evaluate the alternatives.

9a.2.2.1 Alternatives to the Original Facility Additions. If the review process of Section 9a.2.2 determines that one or more alternatives exist to the originally planned construction project, the Participating TO shall present such alternatives for consideration to the Project Sponsor, Parties to the Participation Agreement, and the ISO, as the case may be. If upon review of any alternatives, such Project Sponsor, the ISO, or Parties to the Participation Agreement wish to evaluate or to proceed with one of the alternative additions or upgrades, such Project Sponsor, the ISO, or Parties to the Participation Agreement may request that the Participating TO prepare a revised Facility Study pursuant to Sections 9a.1.1, 9a.1.2, and 9a.1.3 of this TO Tariff. In the event the Participating TO concludes that no reasonable alternative exists to the originally planned addition or upgrade and the Project Sponsor or Parties to the Participation Agreement or the ISO disagree, the dispute shall be resolved pursuant to the ISO ADR Procedure

9a.2.2.2 Refund Obligation for Unfinished Facility Additions. If the Participating TO and the Project Sponsor, the ISO, or Parties to the Participation Agreement, as the case may be, mutually agree that no other reasonable alternatives exist, the obligation to construct the requested additions or upgrades shall terminate and any deposit not yet applied toward the expended project costs shall be returned with interest pursuant to FERC Regulation 35.19(a)(2)(iii). However, the Project Sponsor and any identified principal beneficiaries, as the case may be, shall be responsible for all costs prudently incurred by the Participating TO through the time the construction was suspended.

9a.3 Provisions Relating To Transmission Construction On the Systems Of Other TOs.

9a.3.1 Responsibility for Third Party Additions. A Participating TO shall not be responsible for making arrangements for any engineering, permitting, and construction of any necessary facilities additions on the

system(s) of any other entity or for obtaining any regulatory approval for such facilities. The Participating TO will undertake reasonable efforts through the coordinated planning process to assist in making such arrangements, including, without limitation, providing any information or data required by such other electric system pursuant to Good Utility Practice.

9a.3.2 Coordination of Third-Party System Additions. Where transmission additions or upgrades being built pursuant to the ISO Tariff require additions or upgrades on other systems, to the extent consistent with Section 9a.3.3 of this TO Tariff, the Participating TO shall coordinate construction on its own system with the construction required by others. The Participating TO, after consultation with the ISO, the Project Sponsor, and Parties to the Participation Agreement, as the case may be, may defer construction if the new transmission facilities on another system cannot be completed in a timely manner. The Participating TO shall notify such Project Sponsor, Parties to the Participation Agreement, and the ISO, in writing of the basis for any decision to defer construction and the specific problems which must be resolved before it will initiate or resume construction of the new facilities. Within forty Business Days of receiving written notification by the Participating TO of its intent to defer construction pursuant to this section, such Project Sponsor, Parties to the Participation Agreement, or the ISO may challenge the decision in accordance with the ISO ADR Procedure.

9a.3.3 Expansion by "Local Furnishing Participating TOs". Notwithstanding any other provision of this TO Tariff, prior to requesting that a Local Furnishing Participating TO construct or expand facilities, the ISO or Project Sponsor shall tender (or cause to be tendered) an application under Section 211 of the FPA requesting FERC to issue an order directing the Local Furnishing Participating TO to construct or expand facilities as necessary to provide transmission service as determined pursuant to the ISO Tariff. Such Local Furnishing Participating TO shall thereafter, within ten Business Days of receiving a copy of the Section 211 application, waive its right to a request for service under Section 213(a) of the FPA and to the issuance of a proposed order under Section 212(c) of the FPA. Upon receipt of a final order from FERC under Section 211 of the FPA that is no longer subject to rehearing or appeal, such Local Furnishing Participating TO shall construct or expand facilities to comply with that FERC order and shall transfer to the ISO Operational Control over the Local Furnishing Participating TO's expanded transmission facilities in accordance with the ISO Tariff.

- 10. Interconnection Process for Pasadena's Interests in STS, MPP, MAP, the Marketplace Substation, PDCI, and McCullough-Victorville Line 2.** The interconnection process for Pasadena's Interests in the STS, MPP, MAP, Marketplace Substation, PDCI, and McCullough-Victorville Line 2 which it has turned over to ISO

operational control, is as stated in Section 8 above. Section 10a, and its subparts, do not currently apply to those interests or any other Pasadena facilities.

10a. Interconnection Process.

10a.1 Applicability. All requests for Interconnection directly to the ISO Controlled Grid from parties eligible to request such Interconnection consistent with Section 210(a) of the FPA shall be processed pursuant to the provisions of this Section 10 which is subject to the applicable interconnection, integration, exchange, operating, joint ownership and joint participation agreements, and the rights and obligations of owners of jointly-owned facilities.

10a.2 Applications. Parties requesting Interconnections shall submit written applications to the Participating TO and shall send a copy of the application to the ISO. The Participating TO shall time-stamp the application to establish study priority.

10a.3 Completed Application. A Completed Application shall provide all of the information listed in 18 CFR § 2.20, including, but not limited to, the following:

- (i) The identity, address, telephone number, and facsimile number of the entity requesting service;
- (ii) The Interconnection point(s) and the location of the transmission addition contemplated by the applicant;
- (iii) The resultant (or new) maximum amount of Interconnection capacity requested at each point which may experience such an increase; and the increased transmission capacity of the transmission addition requested;
- (iv) The proposed date for initiating an Interconnection. In addition to the information specified above, when required to properly evaluate system conditions, the Participating TO also may ask the applicant to provide the following:
- (v) The electrical location of the source of the power (if known) to be transmitted pursuant to the applicant's request for Interconnection. If the source of the power is not known, a system purchase will be assumed;
- (vi) The electrical location of the ultimate load (if known). If the location of the load is not known, a system sale will be assumed; and
- (vii) Such other information as the Participating TO reasonably requires to process the application.

The Participating TO will treat the information in (v) and (vi) as confidential at the request of the applicant except to the extent that disclosure of this information is required by this TO Tariff, by regulatory or judicial order, for reliability

purposes pursuant to Good Utility Practice, or pursuant to RTG or ISO transmission information sharing agreements. The Participating TO shall treat this information consistent with the standards of conduct contained in Part 37 of FERC's regulations.

10a.4 Notice of Need for System Impact Study. After receiving a Completed Application for Interconnection, the Participating TO shall determine on a nondiscriminatory basis whether a System Impact Study is needed. If the Participating TO determines that a System Impact Study is necessary to accommodate the requested Interconnection, it shall so inform the applicant (and shall send a courtesy copy to the ISO), as soon as practicable. In such cases, the Participating TO shall within twenty Business Days of receipt of a Completed Application, tender a System Impact Study Agreement that defines the scope, content, assumptions and terms of reference for such study, the estimated time required to complete it, and such other provisions as the parties may reasonably require, and pursuant to which the applicant shall agree to reimburse the Participating TO for the reasonable costs of performing the required System Impact Study. For an Interconnection request to remain a Completed Application, the applicant shall execute the System Impact Study Agreement and return it to the Participating TO within ten Business Days. If the applicant elects not to execute a System Impact Study Agreement, its application shall be deemed withdrawn, and the applicant shall reimburse to the Participating TO and the ISO all costs reasonably incurred in processing the application.

10a.5 System Impact Study Cost Reimbursement and Agreement.

10a.5.1 Cost Reimbursement. The System Impact Study Agreement shall clearly specify the maximum charge, based on the Participating TO's estimate of the cost and time for completion of the System Impact Study. The charge shall not exceed the reasonable cost of the study. In performing the System Impact Study, the Participating TO shall rely, to the extent reasonably practicable, on existing transmission planning studies. The applicant will not be assessed a charge for such existing studies; however, the applicant will be responsible for the reasonable charges associated with any modifications to existing planning studies that are reasonably necessary to evaluate the impact of the applicant's request.

10a.5.2 Multiple Parties. If multiple parties request Interconnection at the same location, the Participating TO may conduct a single System Impact Study. The costs of that study shall be pro-rated among the parties requesting Interconnection.

10a.6 System Impact Study Procedures. Upon receipt of an executed System Impact Study Agreement, the Participating TO will use due diligence to complete the required System Impact Study within a sixty day period. The System Impact Study shall identify any system constraints which cannot be reasonably accommodated through ISO Congestion Management, such that transmission

expansions or upgrades would be required to provide the requested Interconnection. In the event that the Participating TO is unable to complete the required System Impact Study within such time period, it shall so notify the applicant and provide an estimated completion date along with an explanation of the reasons why additional time is required to complete the required studies. A copy of the completed System Impact Study and related work papers shall be made available to the applicant and the ISO. The Participating TO will use the same due diligence in completing the System Impact Study for others as it uses when completing studies for its affiliated UDC. The Participating TO shall notify the applicant and the ISO immediately upon completion of the System Impact Study.

10a.6.1 Failure to Execute an Interconnection Agreement. If the Participating TO finds that the transmission system will be adequate to accommodate all of a request for Interconnection and that no costs are likely to be incurred for new transmission additions or upgrades, the applicant must execute an Interconnection Agreement within ten Business Days of completion of the System Impact Study or the application shall be deemed terminated and withdrawn.

10a.6.2 Facilities Study Procedures. If a System Impact Study indicates that additions or upgrades to the transmission system are needed to meet an applicant's request, the Participating TO shall, within fifteen Business Days of the date of the System Impact Study, tender to the applicant a Facilities Study Agreement that defines the scope, content, assumptions and terms of reference for such study, the estimated time required to complete it, and such other provisions as the parties may reasonably require, and pursuant to which the applicant agrees to reimburse the Participating TO for performing the required Facilities Study. For a service request to remain a Completed Application, the applicant shall execute the Facilities Study Agreement and return it to the Participating TO within ten Business Days. If the applicant elects not to execute a Facilities Study Agreement, its application shall be deemed withdrawn and the applicant shall reimburse to the Participating TO all costs reasonably incurred in processing the application not covered by the System Impact Study Agreement.

10a.7 Relevant Sections Apply Upon Receipt of Facilities Study Agreement. Upon receipt of an executed Facilities Study Agreement by the Participating TO, the relevant portions of Sections 9a.1.3 through 9a.3.3 of this TO Tariff shall apply.

10a.8 Partial Interim Service. If the Participating TO determines that there will not be adequate transmission capability to satisfy the full amount of a Completed Application for an increase in the maximum rate of delivery or receipt associated with a new request for Interconnection, the Participating TO nonetheless shall be obligated to offer and provide the portion of the requested Interconnection that can be accommodated without any additions or upgrades. However, the Participating TO shall not be obligated to provide the incremental amount of

requested Interconnection that requires the addition of facilities or upgrades to the transmission system until such facilities or upgrades have been placed in service.

10a.9 Expedited Procedures for New Facilities. In lieu of the procedures set forth above, the applicant shall have the option to expedite the process by requesting the Participating TO to tender at one time, together with the results of required studies, an "Expedited Service Agreement" pursuant to which the applicant would agree to compensate the Participating TO for all costs reasonably incurred pursuant to the terms of this TO Tariff. In order to exercise this option, the applicant shall request in writing an Expedited Service Agreement covering all of the above-specified items within twenty Business Days of receiving the results of the System Impact Study identifying needed facility additions or upgrades or costs incurred in providing the requested Interconnection. The Participating TO shall tender an Expedited Service Agreement within ten Business Days of the applicant's request. While the Participating TO agrees to provide the applicant with its best estimate of the new facility costs and other charges that may be incurred, unless otherwise agreed by the parties, such estimate shall not be binding and the applicant must agree in writing to compensate the Participating TO for all costs reasonably incurred pursuant to the provisions of this TO Tariff. The applicant shall execute and return such Expedited Service Agreement within ten Business Days of its receipt or the applicant's request for Interconnection will cease to be a Completed Application and will be deemed terminated and withdrawn. In that event, the applicant shall reimburse to the Participating TO all costs reasonably incurred in processing the application not covered by the terms of the System Impact Study Agreement.

11. Uncontrollable Forces and Indemnification.

11.1 Procedures to Follow if Uncontrollable Force Occurs. In the event of the occurrence of an Uncontrollable Force which prevents a Party from performing any of its obligations under this TO Tariff, such Party shall (i) immediately notify the other Parties in writing of the occurrence of such Uncontrollable Force, (ii) not be entitled to suspend performance in any greater scope or longer duration than is required by the Uncontrollable Force, (iii) use its best efforts to mitigate the effects of such Uncontrollable Force, remedy its inability to perform, and resume full performance hereunder, (iv) keep the other Parties apprised of such efforts on a continual basis and (v) provide written notice of the resumption of performance hereunder. Notwithstanding any of the foregoing, the settlement of any strike, lockout, or labor dispute constituting an Uncontrollable Force shall be within the sole discretion of the Party to this TO Tariff involved in such strike, lockout, or labor dispute and the requirement that a Party must use its best efforts to remedy the cause of the Uncontrollable Force and mitigate its effects and resume full performance hereunder shall not apply to strikes, lockouts, or labor disputes. No Party will be considered in default as to any obligation under this TO Tariff if prevented from fulfilling the obligation due to the occurrence of an Uncontrollable Force.

11.2 Indemnification. A Market Participant shall at all times indemnify, defend, and save the Participating TO harmless from any and all damages, losses, claims, (including claims and actions relating to injury or to death of any person or damage to property), demands, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the Participating TO's performance of its obligations under this TO Tariff on behalf of a Market Participant, except in cases of negligence or intentional wrongdoing by the Participating TO.

12. Regulatory Filings. Nothing contained herein shall be construed as affecting, in any way, the right of Pasadena to unilaterally make application to FERC as it deems necessary and appropriate to recover its Transmission Revenue Requirements, or for a change in its terms and conditions, including changes in rate methodology, or for a change in designation of transmission and Entitlements to be placed under the ISO's control, pursuant to the applicable FERC rules, regulations, policies, and governing statutes.

13. Miscellaneous.

13.1 Notices. Any notices, demand, or request in accordance with this TO Tariff, unless otherwise provided in this TO Tariff, shall be in writing and shall be deemed properly served, given, or made: (i) upon delivery if delivered in person, (ii) five days after deposit in the mail if sent by first class United States mail, postage prepaid, (iii) upon receipt of confirmation by return electronic facsimile if sent by facsimile, or (iv) upon delivery if delivered by prepaid commercial courier service, in each case addressed to a Party at the address set forth in Appendix II. Any Party may at any time, by notice to the other Parties, change the designation or address of the person specified in Appendix II to receive notice on its behalf. Any notice of a routine character in connection with service under this TO Tariff shall be given in such a manner as the Parties may determine from time to time, unless otherwise provided in this TO Tariff.

13.2 Waiver. Any waiver at any time by any Party of its rights with respect to any default under this TO Tariff, or with respect to any other matter arising in connection with this TO Tariff, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this TO Tariff. Any delay short of the statutory period of limitations in asserting or enforcing any right shall not constitute or be deemed a waiver.

13.3 Confidentiality.

13.3.1 Maintaining Confidentiality if Not for Public Disclosure. The Participating TO shall maintain the confidentiality of all of the documents, data, and information provided to it by any other Party that such Party may designate as confidential, provided, however, that the information will not be held confidential by the receiving Party if (1) the designating Party is required to provide such information for public disclosure pursuant to this TO Tariff or applicable regulatory

requirements, or (2) the information becomes available to the Public on a non-confidential basis (other than from the receiving Party).

13.3.2 Disclosure of Confidential Information. Notwithstanding anything in this Section 11.3.2 to the contrary, if any Party is required by applicable laws or regulations, or in the course of administrative or judicial proceedings, to disclose information that is otherwise required to be maintained in confidence pursuant to this Section 11.3.2, the Party may disclose such information; provided, however, that as soon as such Party learns of the disclosure requirement and prior to making such disclosure, such Party shall notify the affected Party or Parties of the requirement and the terms thereof. The affected Party or Parties may, at their sole discretion and own costs, direct any challenge to or defense against the disclosure requirement and the disclosing Party shall cooperate with such affected Party or Parties to the maximum extent practicable to minimize the disclosure of the information consistent with applicable law. The disclosing Party shall cooperate with the affected Parties to obtain proprietary or confidential treatment of confidential information by the person to whom such information is disclosed prior to any such disclosure.

13.4 Titles. The captions and headings in this TO Tariff are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the rates, terms, and conditions of this TO Tariff.

13.5 Severability. If any term, covenant, or condition of this TO Tariff or the application or effect of any such term, covenant, or condition is held invalid as to any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest, by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this TO Tariff and their application shall not be affected thereby but shall remain in force and effect. The Parties shall be relieved of their obligations only to the extent necessary to eliminate such regulatory or other determination, unless a court or governmental agency of competent jurisdiction holds that such provisions are not severable from all other provisions of this TO Tariff.

13.6 Preservation of Obligations. Upon termination of this TO Tariff, all unsatisfied obligations of each Party shall be preserved until satisfied.

13.7 Governing Law. This TO Tariff shall be interpreted, governed by, and construed under the laws of the State of California, without regard to the principles of conflict of laws thereof, or the laws of the United States, as applicable, as if executed and to be performed wholly within the State of California.

- 13.8 Appendices Incorporated.** The appendices to this TO Tariff are attached to this TO Tariff and are incorporated by reference as if fully set forth herein.
- 13.9 Consistency with ISO Tariff.** This TO Tariff is intended to be consistent with the ISO Tariff, and, if necessary, shall be amended to conform with any changes authorized or required in any final order in FERC Docket No. ER00-2019.
- 13.10 Disputes.** Except as limited by law, the ISO ADR Procedures shall apply to all disputes between parties which arise under this TO Tariff or under or in respect of the proposed terms and conditions of a Facilities Study Agreement, System Impact Study Agreement or Expedited Service Agreement. The ISO ADR Procedures set forth in Section 13 of the ISO Tariff shall not apply to disputes as to whether rates and charges set forth in this TO Tariff (other than charges for studies) are just and reasonable under the FPA.

APPENDIX 1

Transmission Revenue Requirement and TRBAA

The Pasadena HV Base Transmission Revenue Requirement is **\$12,976,583**.

The HVTRBAA is a **negative \$98,674** for calendar year 2005 and has been computed in accordance with ISO Tariff as shown in the attached Exhibit A.

Pasadena's HVTRR is **\$12,877,909 (sum of above)**.

Pasadena's Gross Load, consistent with its TRRs, used by the ISO to develop the transmission Access Charge is **1,239,884 MWh**.

All of Pasadena's transmission facilities and Entitlements placed under the ISO's Operational Control are High Voltage Facilities as defined by the ISO Tariff.

The TRBAA will be recalculated annually consistent with the ISO Tariff, approved by the Pasadena City Council, and provided to the ISO.

APPENDIX II

NOTICES

Designated Representative:

Phyllis E. Currie
General Manager
Pasadena Water and Power
150 S. Los Robles, Suite 200
Pasadena, California 91101

Tel. No. (626) 744-4425
Fax No. (626) 744-4670

Attachment B

Pasadena Water & Power
Transmission Revenue Requirements
Test Year Twelve Months Ended December 31, 2003
Adjustments to reflect July 2004 Annual Expense Levels

Line No.	Actual Calendar 2003	Adjustments					Adjusted Test Year
		Debt Service/ Depreciation (PWP Ownership)	Operation & Maintenance	A & A Costs	Property Taxes	Prior Year Corrections	
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
SCPPA Projects							
<u>Southern Transmission System</u>							
1	Debt service	\$3,951,258	\$22,590				\$3,973,848
2	Operation & maintenance	\$866,568		\$78,012			\$944,580
3	Authority & agency costs	\$39,888			\$7,418		\$47,306
4	Property taxes	\$0				\$0	\$0
5	Prior fiscal year correction	\$139,347				-\$139,347	\$0
6	Total Southern Transmission System	\$4,997,061	\$22,590	\$78,012	\$7,418	\$0	\$4,965,732
<u>Mead-Adelanto</u>							
7	Debt service	\$944,616	-\$175,728				\$768,888
8	Operation & maintenance	\$83,484		\$2,052			\$85,536
9	Authority & agency costs	\$12,888			\$2,568		\$15,456
10	Property taxes	\$31,950				\$2,058	\$34,008
11	Prior fiscal year correction	\$22,512				-\$22,512	\$0
12	Total Mead-Adelanto	\$1,095,450	-\$175,728	\$2,052	\$2,568	\$2,058	\$903,888
<u>Mead-Phoenix</u>							
13	Debt service	\$471,384	-\$84,660				\$386,724
14	Operation & maintenance expenses	\$53,766		\$9,018			\$62,784
15	Authority & agency costs	\$9,162			\$2,502		\$11,664
16	Property taxes	\$103,740				-\$24,072	\$79,668
17	Prior fiscal year correction	-\$50,565				\$50,565	\$0
18	Total Mead-Phoenix	\$587,487	-\$84,660	\$9,018	\$2,502	-\$24,072	\$540,840
19	TOTAL SCPPA PROJECTS	\$6,679,998	-\$237,798	\$89,082	\$12,486	-\$22,014	\$6,410,480
TRANSMISSION CONTRACTS							
<u>Los Angeles Dept of Water & Power</u>							
20	Adelanto-Sylmar (110 MW)	\$1,137,400		\$103,400			\$1,240,800
21	Northern Transmission System	\$746,443		\$14,321			\$760,764
22	Victorville-Sylmar (25MW)	\$258,500		\$23,500			\$282,000
23	Hoover-Sylmar (28 MW)	\$317,100		\$63,420			\$380,520
24	Transmission Scheduling	\$45,023		-\$45,023			\$0
25	Total LADWP Contracts	\$2,504,466	\$0	\$159,618	\$0	\$0	\$2,664,084
26	<u>Southern California Edison Contract</u>	\$143,961		\$30,788			\$174,749
27	TOTAL TRANSMISSION CONTRACTS	\$2,648,427	\$0	\$190,406	\$0	\$0	\$2,838,833
PWP OWNERSHIP							
<u>Pacific-Northwest DC Intertie</u>							
28	Operation & Maintenance	\$198,643		\$57,773			\$256,416
29	Depreciation	\$672,468	\$5,582				\$678,050
30	Interest Expense	\$698,888					\$698,888
31	Total Pacific-Northwest DC Intertie	\$1,569,999	\$5,582	\$57,773	\$0	\$0	\$1,633,354
<u>McCullough-Victorville</u>							
32	Property Tax	\$2,476				\$0	\$2,476
33	Operation & Maintenance	\$28,223		\$15,474			\$43,697
34	Depreciation	\$672,468	\$5,582				\$678,050
35	Interest Expense	\$698,888					\$698,888
36	Total McCullough-Victorville	\$1,402,055	\$5,582	\$15,474	\$0	\$0	\$1,423,111
37	TOTAL PWP OWNERSHIP	\$2,972,054	\$11,164	\$73,247	\$0	\$0	\$3,056,465
38	Administrative & general expenses	\$597,863					\$597,863
39	Wholesale Revenues	\$946,080		\$36,000			\$982,080
40	Regulatory expense	\$0		\$55,000			\$55,000
41	Subtotal	\$11,952,263	-\$228,634	\$371,735	\$12,486	-\$22,014	\$11,976,542
42	GFT (in lieu of taxes, 8.35% of subtotal)	\$998,014	-\$18,924	\$31,040	\$1,043	-\$1,838	\$1,000,041
43	Transmission Revenue Requirement	\$12,950,277	-\$245,558	\$402,775	\$13,529	-\$23,852	\$12,976,583

Pasadena Water & Power
Adjustments to Actual 2003 Expenses

Line No.	(A)	Debt Service (B)	Depreciation (C)	Operation & Maintenance (D)	A & A Costs (E)	Property Taxes (F)	Total Adjustments (G)
SCPPA Projects:							
<u>STS</u>							
1	Fiscal 2004 monthly cost	\$331,154	\$0	\$78,715	\$3,942	\$0	
2	Fiscal 2004 cost annualized	\$3,973,848	\$0	\$944,580	\$47,304	\$0	
3	Actual 2003 cost	\$3,951,258	\$0	\$866,588	39,888	0	
4	Adjustment	\$22,590	\$0	\$78,012	\$7,416	\$0	\$108,018
<u>Mead-Adelanto:</u>							
5	Fiscal 2004 monthly cost	\$64,074	\$0	\$7,128	\$1,288	\$2,834	
6	Fiscal 2004 cost annualized	\$768,888	\$0	\$85,536	\$15,456	\$34,008	
7	Actual 2003 cost	\$944,616	\$0	\$83,484	\$12,888	\$31,950	
8	Adjustment	-\$175,728	\$0	\$2,052	\$2,568	\$2,058	-\$169,050
<u>Mead-Phoenix:</u>							
9	Fiscal 2004 monthly cost	\$32,227	\$0	\$5,232	\$972	\$6,639	
10	Fiscal 2004 cost annualized	\$386,724	\$0	\$62,784	\$11,664	\$79,668	
11	Actual 2003 cost	\$471,384	\$0	\$53,766	9,162	103,740	
12	Adjustment	-\$84,660	\$0	\$9,018	\$2,502	-\$24,072	-\$97,212
LADWP							
<u>Adelanto-Sylmar</u>							
13	Fiscal 2004 monthly cost	\$0	\$0	\$103,400	\$0	\$0	
14	Fiscal 2004 cost annualized	\$0	\$0	\$1,240,800	\$0	\$0	
15	Actual 2003 cost	\$0	\$0	\$1,137,400	\$0	\$0	
16	Adjustment	\$0	\$0	\$103,400	\$0	\$0	\$103,400
<u>NTS</u>							
13	Fiscal 2004 monthly cost	\$0	\$0	\$63,397	\$0	\$0	
14	Fiscal 2004 cost annualized	\$0	\$0	\$760,764	\$0	\$0	
15	Actual 2003 cost	\$0	\$0	\$746,443	\$0	\$0	
16	Adjustment	\$0	\$0	\$14,321	\$0	\$0	\$14,321
<u>Victorville-Sylmar</u>							
17	Fiscal 2004 monthly cost	\$0	\$0	\$23,500	\$0	\$0	
18	Fiscal 2004 cost annualized	\$0	\$0	\$282,000	\$0	\$0	
19	Actual 2003 cost	\$0	\$0	\$258,500	\$0	\$0	
20	Adjustment	\$0	\$0	\$23,500	\$0	\$0	\$23,500
<u>Hoover-Sylmar</u>							
21	Fiscal 2004 monthly cost	\$0	\$0	\$31,710	\$0	\$0	
22	Fiscal 2004 cost annualized	\$0	\$0	\$380,520	\$0	\$0	
23	Actual 2003 cost	0	\$0	\$317,100	0	0	
24	Adjustment	\$0	\$0	\$63,420	\$0	\$0	\$63,420
<u>Transmission Scheduling</u>							
25	Fiscal 2004 monthly cost	\$0	\$0	\$0	\$0	\$0	
26	Fiscal 2004 cost annualized	\$0	\$0	\$0	\$0	\$0	
27	Actual 2003 cost	0	\$0	\$45,023	0	0	
28	Adjustment	\$0	\$0	-\$45,023	\$0	\$0	-\$45,023
Southern California Edison							
29	Fiscal 2004 monthly cost	\$0	\$0	\$14,562	\$0	\$0	
30	Fiscal 2004 cost annualized	\$0	\$0	\$174,749	\$0	\$0	
31	Actual 2003 cost	\$0	\$0	\$143,961	\$0	\$0	
32	Adjustment	\$0	\$0	\$30,788	\$0	\$0	\$30,788

Pasadena Water & Power
Adjustments to Actual 2003 Expenses

Line No.	(A)	Debt Service (B)	Depreciation (C)	Operation & Maintenance (D)	A & A Costs (E)	Property Taxes (F)	Total Adjustments (G)
PWP Ownership							
<u>Pacific-Northwest DC Inter tie</u>							
33	Fiscal 2004 monthly cost	\$0	\$56,504	\$21,368	\$0	\$0	
34	Fiscal 2004 cost annualized	\$0	\$678,050	\$256,416	\$0	\$0	
35	Actual 2003 cost	0	\$672,488	\$198,643	0	0	
36	Adjustment	\$0	\$5,582	\$57,773	\$0	\$0	\$63,355
<u>Mu Cullough-Victorville</u>							
37	Fiscal 2004 monthly cost	\$0	\$56,504	\$3,641	\$0	\$206	
38	Fiscal 2004 cost annualized	\$0	\$678,050	\$43,697	\$0	\$2,476	
39	Actual 2003 cost	0	\$672,468	\$28,223	0	\$2,476	
40	Adjustment	\$0	\$5,582	\$15,474	\$0	\$0	\$21,056
Administrative & general expenses							
41	Fiscal 2004 monthly cost	\$0	\$0	\$56,851	\$0	\$0	
42	Fiscal 2004 cost annualized	\$0	\$0	\$682,214	\$0	\$0	
43	Actual 2003 cost	0	\$0	\$667,854	0	0	
44	Adjustment	\$0	\$0	\$14,360	\$0	\$0	\$14,360

Pasadena Water & Power
 Southern California Public Power Authority Project
 Southern Transmission System Project

Line No.		Net Debt Service	Operation & Maintenance	Capital Improvements	Authority & Agency Costs	Property Taxes	Prior Fiscal Year Corrections	Total Expenses
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
	July-04	331,154	78,715		3,942			413,811
1	December-03	330,683	83,892	0	3,530	0		418,105
2	November-03	330,683	83,892	0	3,530	0	139,347	557,452
3	October-03	330,683	83,892	0	3,530	0		418,105
4	September-03	330,683	83,892	0	3,530	0		418,105
5	August-03	330,683	83,892	0	3,530	0		418,105
6	July-03	330,683	83,892	0	3,530	0		418,105
7	June-03	327,860	60,536	0	3,118	0		391,514
8	May-03	327,860	60,536	0	3,118	0		391,514
9	April-03	327,860	60,536	0	3,118	0		391,514
10	March-03	327,860	60,536	0	3,118	0		391,514
11	February-03	327,860	60,536	0	3,118	0		391,514
12	January-03	327,860	60,536	0	3,118	0		391,514
13	December-02	327,860	60,536	0	3,118	0		391,514
14	November-02	327,860	60,536	0	3,118	0		391,514
15	October-02	327,860	60,536	0	3,118	0		391,514
16	September-02	327,860	60,536	0	3,118	0		391,514
17	August-02	327,860	60,536	0	3,118	0		391,514
18	July-02	327,860	60,536	0	3,118	0		391,514
19	Total fiscal 2002-2003	3,934,320	726,432	0	37,416	0	0	4,698,168
20	Total calendar year 2003	3,951,258	866,568	0	39,888	0	139,347	4,997,061
	Total fiscal 2004-2005	3,973,848	944,580	0	47,304	0	0	4,965,732

Source: Bills rendered by STS Project to Pasadena Water & Power

Pasadena Water & Power
 Southern California Public Power Authority Project
 Mead-Adelanto Project

Line No.	(A)	Net Debt Service (B)	Operation & Maintenance (C)	Capital Improvements (D)	Authority & Agency Costs (E)	Property Taxes (F)	Prior Fiscal Year Corrections (G)	Total Expenses (H)
	July-04	64,074	6,699	429	1,288	2,834		75,324
1	December-03	83,227	9,362	0	1,117	2,577		96,283
2	November-03	83,227	9,362	0	1,117	2,577	22,332	118,615
3	October-03	83,227	9,362	0	1,117	2,577		96,283
4	September-03	83,227	9,362	0	1,117	2,577		96,283
5	August-03	83,227	9,362	0	1,117	2,577		96,283
6	July-03	83,227	9,362	0	1,117	2,577		96,283
7	June-03	74,209	4,552	0	1,031	2,748	-90	82,450
8	May-03	74,209	4,552	0	1,031	2,748	90	82,630
9	April-03	74,209	4,552	0	1,031	2,748	90	82,630
10	March-03	74,209	4,552	0	1,031	2,748	90	82,630
11	February-03	74,209	4,552	0	1,031	2,748		82,540
12	January-03	74,209	4,552	0	1,031	2,748		82,540
13	December-02	74,209	4,552	0	1,031	0		79,792
14	November-02	74,209	4,552	0	1,031	0		79,792
15	October-02	74,209	4,552	0	1,031	0		79,792
16	September-02	74,209	4,552	0	1,031	0		79,792
17	August-02	74,209	4,552	0	1,031	0		79,792
18	July-02	74,209	4,552	0	1,031	0		79,792
19	Total fiscal 2002-2003	890,508	54,624	0	12,372	16,488	180	974,172
20	Total calendar year 2003	944,616	83,484	0	12,888	31,950	22,512	1,095,450
	Total fiscal 2004-2005	768,888	80,388	5,148	15,456	34,008	0	903,888

Source: Bills rendered by Mead-Adelanto Project to Pasadena Water & Power

Pasadena Water & Power
Southern California Public Power Authority Project
Mead-Phoenix Project

Line No.	(A)	Net Debt Service (B)	Operation & Maintenance (C)	Capital Improvements (D)	Authority & Agency Costs (E)	Property Taxes (F)	Prior Fiscal Year Corrections (G)	Total Expenses (H)
	July-04	32,227	4,540	692	972	6,639		45,070
1	December-03	41,771	5,057	0	833	8,576		56,237
2	November-03	41,771	5,057	0	833	8,576	-50,565	5,672
3	October-03	41,771	5,057	0	833	8,576		56,237
4	September-03	41,771	5,057	0	833	8,576		56,237
5	August-03	41,771	5,057	0	833	8,576		56,237
6	July-03	41,771	5,057	0	833	8,576		56,237
7	June-03	36,793	3,904	0	694	8,714		50,105
8	May-03	36,793	3,904	0	694	8,714		50,105
9	April-03	36,793	3,904	0	694	8,714		50,105
10	March-03	36,793	3,904	0	694	8,714		50,105
11	February-03	36,793	3,904	0	694	8,714		50,105
12	January-03	36,793	3,904	0	694	8,714		50,105
13	December-02	4,664	3,904	0	694	8,714		17,976
14	November-02	4,664	3,904	0	694	8,714		17,976
15	October-02	4,664	3,904	0	694	8,714		17,976
16	September-02	4,664	3,904	0	694	8,714		17,976
17	August-02	4,664	3,904	0	694	8,714		17,976
18	July-02	4,664	3,904	0	694	8,714		17,976
19	Total fiscal 2002-2003	248,742	46,848	0	8,328	104,568	0	408,486
20	Total calendar year 2003	471,384	53,766	0	9,162	103,740	-50,565	587,487
	Total fiscal 2004-2005	386,724	54,480	8,304	11,664	79,668	0	540,840

Source: Bills rendered by Mead-Phoenix Project to Pasadena Water & Power

Pasadena Water & Power
LADWP Transmission Contracts

Line No.	Adelanto-Sylmar (110 MW)	NTS	Victorville-Sylmar (25 MW)	Hoover-Sylmar (26 MW)	Transmission Scheduling	Totals
(A)	(B)	(C)	(D)	(E)	(F)	(G)
July-04	103,400	63,397	23,500	31,710	0	222,007
1 December-03	103,400	58,377	23,500	31,710	0	216,987
2 November-03	103,400	58,377	23,500	31,710	5,405	222,392
3 October-03	0	58,377	0	0	0	58,377
4 September-03	103,400	56,964	23,500	31,710	5,405	220,979
5 August-03	103,400	56,611	23,500	31,710	13,298	228,519
6 July-03	103,400	56,609	23,500	31,710	0	215,219
7 June-03	103,400	57,032	23,500	31,710	5,405	221,047
8 May-03	103,400	57,032	23,500	31,710	3,631	219,273
9 April-03	103,400	57,032	23,500	31,710	5,486	221,128
10 March-03	103,400	57,427	23,500	0	0	184,327
11 February-03	103,400	57,535	23,500	31,710	0	216,145
12 January-03	103,400	115,070	23,500	31,710	6,393	280,073
13 December-02	103,400	57,535	23,500	31,710	6,237	222,382
14 November-02	103,400	57,535	23,500	31,710	0	216,145
15 October-02	206,800	0	47,000	63,420	5,405	322,625
16 September-02	0	49,656	0	0	5,405	55,061
17 August-02	103,400	47,678	23,500	31,710	10,810	217,098
18 July-02	103,400	47,679	0	31,710	0	182,789
19 Total fiscal 2002-2003	1,240,800	661,211	258,500	348,810	48,772	2,558,093
20 Total calendar year 2003	1,137,400	746,443	258,500	317,100	45,023	2,504,466
Total fiscal 2004-2005	1,240,800	760,764	282,000	380,520	0	2,664,084

Source: Bills rendered by LADWP to Pasadena Water & Power

Pasadena Water & Power
Southern California Edison Contract

Line No.	Southern California Edison	
	(A)	(B)
1	December-03	28,546
2	November-03	12,180
3	October-03	0
4	September-03	31,212
5	August-03	0
6	July-03	13,018
7	June-03	13,521
8	May-03	16,187
9	April-03	13,249
10	March-03	16,048
11	February-03	0
12	January-03	0
13	December-02	12,540
14	November-02	12,317
15	October-02	0
16	September-02	0
17	August-02	0
18	July-02	0
19	Total fiscal 2002-2003	83,862
20	Total calendar 2003	143,961

Source: Bills rendered by SCE to Pasadena Water & Power

Pasadena Water & Power Ownership
Pacific-Northwest DC Intertie

Line No	(A)	Depreciation (B)	Interest Expense (C)	Operation & Maintenance (D)	Property Taxes (E)	Prior Fiscal Year Corrections (F)	Total Expenses (G)
1	December-03	56,765		42,457	0	0	99,222
2	November-03	56,765		62,099	0	0	118,864
3	October-03	56,765		0	0	0	56,765
4	September-03	56,765		23,652	0	0	80,417
5	August-03	56,765		0	0	0	56,765
6	July-03	56,765		0	0	0	56,765
7	June-03	55,313		15,665	0	0	70,978
8	May-03	55,313		16,767	0	0	72,080
9	April-03	55,313		13,546	0	0	68,859
10	March-03	55,313		24,457	0	0	79,770
11	February-03	55,313		0	0	0	55,313
12	January-03	55,313		0	0	0	55,313
13	December-02	55,313		0	0	0	55,313
14	November-02	55,313		0	0	0	55,313
15	October-02	55,313		0	0	0	55,313
16	September-02	55,313		0	0	0	55,313
17	August-02	55,313		0	0	0	55,313
18	July-02	55,313		-25,000	0	0	30,313
19	Total fiscal 2002-2003	663,756		45,435	0	0	709,191
20	Total calendar year 2003	672,468		198,643	0	0	871,111
	Total fiscal 2003-2004	678,050					
	Total fiscal 2004-2005	678,050	698,888				

Pasadena Water & Power Ownership
McCullough-Victorville

Line No	(A)	Depreciation (B)	Interest Expense (C)	Operation & Maintenance (D)	Property Taxes (E)	Prior Fiscal Year Corrections (F)	Total Expenses (G)
21	December-03	56,765		-2,646	0	0	54,119
22	November-03	56,765		9,611	0	0	66,376
23	October-03	56,765		0	0	0	56,765
24	September-03	56,765		0	0	0	56,765
25	August-03	56,765		8,212	0	0	64,977
26	July-03	56,765		0	0	0	56,765
27	June-03	55,313		13,046	0	0	68,359
28	May-03	55,313		0	0	0	55,313
29	April-03	55,313		0	0	0	55,313
30	March-03	55,313		0	0	0	55,313
31	February-03	55,313		0	0	0	55,313
32	January-03	55,313		0	0	0	55,313
33	December-02	55,313		0	0	0	55,313
34	November-02	55,313		0	0	0	55,313
35	October-02	55,313		0	0	0	55,313
36	September-02	55,313		0	0	0	55,313
37	August-02	55,313		0	0	0	55,313
38	July-02	55,313		23,500	0	0	78,813
39	Total fiscal 2002-2003	663,756		36,546	0	0	700,302
40	Total calendar year 2003	672,468		28,223	0	0	700,691
	Total fiscal 2003-2004	678,050	From PWP Accounting Records				
	Total fiscal 2004-2005	678,050	698,888				

Source: City of Pasadena Accounting System

Pasadena Water & Power
Development of Investment Base and Interest Expense
Test Year Twelve Months Ended December 31, 2003

Line No.	(A)										(B)	
	Station Equip	Undrpd Conductor & Insdgnl Conduit	Structures & Improvem't	McCullough-Victorville	Towers & Poles	Overhd Conductor & Device	Land & Land Rights	Poles & Poles, Roads & Trails	Total Transmission Systems			
1	Gross plant in service	\$31,692,785	\$11,293,055	\$4,000,478	\$1,459,503	\$1,432,212	\$1,184,088	\$470,880	\$442,817	\$33,445	\$52,953,754	
2	Less accumulated provision for depreciation	\$16,678,157	\$3,954,146	\$1,078,890	\$228,569	\$508,057	\$382,540	\$348,736	\$167,895	\$3,089	\$24,368,374	
3	Net plant in service	\$15,014,628	\$7,338,909	\$2,921,588	\$1,230,934	\$924,155	\$801,548	\$122,144	\$274,922	\$2,356	\$28,585,380	
4	Interest expense	4.89%	4.89%	4.89%	4.89%	4.89%	4.89%	4.89%	4.89%	4.89%	4.89%	
5	PWP	\$734,215	\$356,873	\$99,110	\$80,144	\$45,338	\$36,238	\$6,057	\$13,430	\$1,440	\$1,367,776	
	Pacific-Northwest DC Interbe (annual int exp)	\$387,108	\$179,438	\$49,555	\$30,072	\$22,889	\$18,810	\$3,028	\$6,715	\$720	\$668,888	
	Pacific-Northwest DC Interbe (monthly int exp)	\$30,582	\$14,953	\$4,130	\$2,506	\$1,899	\$1,568	\$252	\$580	\$60	\$55,241	
	McCullough-Victorville (annual int exp)	\$387,108	\$179,438	\$49,555	\$30,072	\$22,889	\$18,810	\$3,028	\$6,715	\$720	\$668,888	
	McCullough-Victorville (monthly int exp)	\$30,582	\$14,953	\$4,130	\$2,506	\$1,899	\$1,568	\$252	\$580	\$60	\$55,241	

Source: City of Pasadena Accounting System

Pasadena Water & Power Ownership
Allocated Administrative & General Expenses

LABOR COSTS

Line No.		Power System Op	Wholesale Energy		Power Dist Engineering	Substation Engineering	Distribution Expense Overhead	Distribution Exp Underground	Meter Test	Substation Construction, Maintenance, Transmission		Total Labor Costs
		841300	841500-0560	841500-0561	843110-0568	843120-0568	843210-0560	843220-0570	843310-0568	843320-0568	843320-0570	
(A)		(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)
1	December-03	12,007	3,910	8,628	0	2,370	3,556	0	0	0	0	30,471
2	November-03	18,755	7,852	7,024	214	0	3,242	978	0	0	4,234	42,299
3	October-03	11,889	5,407	4,107	0	0	3,459	0	0	0	7,407	32,269
4	September-03	11,767	4,998	5,329	0	0	2,397	0	0	0	5,034	29,525
5	August-03	12,477	5,275	4,708	4,165	0	2,747	207	0	0	364	29,943
6	July-03	9,574	5,275	4,089	0	0	411	1,207	0	1,747	1,135	23,438
7	June-03	17,919	8,201	2,548	0	0	3,454	1,396	0	4,016	1,084	38,618
8	May-03	11,981	5,419	0	0	0	1,828	63	0	4,940	1,212	25,443
9	April-03	10,898	5,791	0	0	4,988	3,567	1,087	464	2,935	1,856	31,586
10	March-03	11,834	6,347	0	500	1,061	2,390	4,258	298	4,826	3,062	34,576
11	February-03	12,221	5,348	0	0	0	2,677	1,499	0	2,780	9,070	33,595
12	January-03	11,241	4,992	0	0	0	2,472	15	100	2,915	1,779	23,514
13	December-02	17,186	8,985	6,932	0	0	5,066	0	1,973	5,864	12,849	58,855
14	November-02	11,552	5,063	5,048	0	0	3,520	0	0	2,097	6,748	34,028
15	October-02	11,159	4,206	5,171	0	9,670	3,557	0	0	5,151	4,037	42,951
16	September-02	10,980	5,135	5,048	0	8,791	2,461	0	0	4,256	3,025	39,696
17	August-02	11,747	2,774	5,276	4,988	9,038	2,607	2,584	0	3,271	6,590	48,875
18	July-02	11,107	4,924	1,319	0	6,947	3,235	0	0	5,569	14,098	47,199
19	Total fiscal 2002-2003	149,825	67,185	31,342	5,488	40,495	36,834	10,902	2,835	48,620	65,410	458,936
20	Total calendar year 2003	152,563	68,815	36,433	4,879	8,419	32,200	10,710	862	24,159	36,237	375,277

Pasadena Water & Power Ownership
 Allocated Administrative & General Expenses

NON-LABOR OPERATING COSTS

Line No.		Power System Op 841300	Distribution Exp Underground 843220-0570	Meter Test 843310-0570	Substation Const, Maint, Trans 843320-0570	Total Non-labor Operating Costs
	(A)	(B)	(C)	(D)	(E)	(F)
1	December-03	1,948	0	0	296	2,244
2	November-03	1,392	7,665	519	190	9,766
3	October-03	2,711	228	0	5,016	7,955
4	September-03	1,454	6	0	1,723	3,183
5	August-03	1,756	0	859	1,809	4,424
6	July-03	13,002	23	0	75	13,100
7	June-03	13,266	42	707	5,387	19,402
8	May-03	2,786	554	0	3,341	6,681
9	April-03	2,220	298	0	5,294	7,812
10	March-03	3,008	0	0	4,313	7,321
11	February-03	3,133	0	0	5,965	9,098
12	January-03	1,645	0	203	1,935	3,783
13	December-02	2,207	0	0	1,742	3,949
14	November-02	1,870	29	1,428	5,776	9,103
15	October-02	3,554	693	1,518	9,834	15,599
16	September-02	2,285	10	0	0	2,295
17	August-02	1,374	81	0	7,954	9,409
18	July-02	2,397	0	848	2,595	5,840
19	Total fiscal 2002-2003	39,744	1,707	4,704	54,136	100,291
20	Total calendar year 2003	48,321	8,816	2,288	35,344	94,769

Pasadena Water & Power Ownership
Allocated Administrative & General Expenses

GENERAL & ADMINISTRATIVE COSTS

Line No.	(A)	(B)	(C)	(D)	(E)
		General Manager (5% of G&A Exp)	Finance and Administration (5% of G&A Exp)	Power Supply (7.5% of G&A Exp)	Total
1	December-03	2,480	12,194	6,647	21,321
2	November-03	1,662	13,720	12,058	27,440
3	October-03	2,555	9,638	15,525	27,919
4	September-03	1,589	8,547	2,243	12,380
5	August-03	1,183	8,624	1,544	11,350
6	July-03	1,191	9,048	1,843	12,082
7	June-03	2,286	10,588	5,613	18,487
8	May-03	1,635	7,280	5,407	14,322
9	April-03	1,300	8,360	4,559	14,219
10	March-03	1,819	8,426	5,682	15,927
11	February-03	1,296	7,847	711	9,854
12	January-03	1,234	5,543	4,730	12,507
13	December-02	2,614	9,950	8,393	20,956
14	November-02	1,300	9,656	5,215	16,171
15	October-02	1,665	-19,947	6,540	-11,742
16	September-02	1,642	22,775	6,050	30,467
17	August-02	1,530	20,974	6,416	28,919
18	July-02	1,270	8,886	6,000	16,156
19	Total fiscal 2002-2003	19,590	101,337	65,316	186,243
20	Total calendar year 2003	20,228	111,016	66,563	197,808

Source: City of Pasadena Accounting System

Pasadena Water & Power
Calculation of Regulatory Expenses
Test Year Twelve Months Ended December 31, 2003

Line No.	(A)	Consulting (B)	Legal (C)	Total (D)
1	Fees for filing	\$30,000	\$25,000	\$55,000.00

Pasadena Water & Power
 Wholesale Revenues

Line No.	(A)	Wholesale Revenues (B)	Prior Fiscal Year Corrections (C)	Total Expenses (D)
	July-04	81,840		81,840
1	December-03	80,400	0	80,400
2	November-03	80,400	0	80,400
3	October-03	80,400	0	80,400
4	September-03	80,400	0	80,400
5	August-03	80,400	0	80,400
6	July-03	80,400	0	80,400
7	June-03	77,280	0	77,280
8	May-03	77,280	0	77,280
9	April-03	77,280	0	77,280
10	March-03	77,280	0	77,280
11	February-03	77,280	0	77,280
12	January-03	77,280	0	77,280
13	December-02	77,280	0	77,280
14	November-02	77,280	0	77,280
15	October-02	77,280	0	77,280
16	September-02	77,280	0	77,280
17	August-02	77,280	0	77,280
18	July-02	77,280	0	77,280
19	Total fiscal 2002-2003	927,360	0	927,360
20	Total calendar year 2003	946,080	0	946,080
	Total fiscal 2004-2005	982,080		982,080

Source: City of Pasadena Accounting System