ATTACHMENT D

CALIFORNIA INDEPENDENT SYSTEM OPERATOR

AND

THE CITY OF ROSEVILLE

METERED SUBSYSTEM AGREEMENT

METERED SUBSYSTEM AGREEMENT

THIS AGREEMENT is dated this _____ day of _____, 20___ and is entered into, by and between:

(1) **The City of Roseville,** a duly chartered city under the laws of the State of California, which owns and operates a municipal electric utility system engaged in the generation, transmission, distribution, purchase and sale of electric power and energy at wholesale and retail, having its principal place of business located at 311 Vernon Street, Roseville, California 95678 (" Roseville");

and

(2) **California Independent System Operator Corporation**, a California non-profit public benefit corporation having its principal place of business located in such place in the State of California as the ISO Governing Board may from time to time designate, initially 151 Blue Ravine Road, Folsom, California 95630 (the "ISO").

Roseville and the ISO are hereinafter referred to individually as "Party" or collectively as the "Parties."

Whereas:

A. Roseville is a MSS Operator of a Metered Subsystem engaged in, among other things, generating, transmitting or distributing electric power in the Roseville Service Area;

B. The ISO, a NERC or its successor-certified Control Area, is engaged in, among other things, exercising Operational Control over certain electric transmission facilities forming the ISO Controlled Grid, scheduling transactions that utilize those transmission facilities, and operating certain markets, including markets for Imbalance Energy and Ancillary Services, pursuant to the terms of the ISO Tariff and has certain statutory obligations under California law to maintain the reliability of the ISO Controlled Grid, as well as certain NERC and Western Electricity Coordinating Council ("WECC") or its successor-mandated responsibilities to ensure the reliable operation of the entire electric grid within the ISO Control Area;

C. Roseville is a Local Publicly Owned Electric Utility under the laws of the State of California and utilizes tax-exempt financing for one or more of its projects that restricts the amount of private use of such projects;

D. Roseville's System is within the ISO Control Area and is interconnected to the transmission facilities of the Western Area Power Administration ("WAPA");

E. Roseville desires to continue to operate its generation, transmission and distribution resources in an integrated manner to reliably serve its Load and, as or through a Scheduling Coordinator, to schedule transactions using the ISO Controlled Grid and participate in the ISO's markets as a buyer and a seller;

F. The Parties are entering into this Agreement in order to establish the terms and conditions on which (1) Roseville will operate Roseville's System electric resources within the ISO Control Area; (2) Roseville, as or through a Scheduling Coordinator, will schedule transactions using the ISO Controlled Grid and participate in the ISO's markets; and (3) the Parties will meet their obligations under the ISO Tariff, as may be modified by this Agreement, in connection therewith;

G. It is the intent of the Parties that any ISO charges will be charged to Roseville's Scheduling Coordinator based on the principle of cost causation, with due regard for historic considerations, timing and transition issues, and other relevant factors; and

H. In order to maintain the reliability of the interconnected electric systems encompassed by the WECC, the WECC RMS Agreement requires the ISO to require all Generators in its Control Area, including Roseville, to comply with certain WECC reliability criteria and to be subject to penalties imposed by the WECC Reliability Criteria Agreement should they fail to do so, which requirements are set forth in Section 10.4.

NOW THEREFORE, in consideration of the mutual covenants set forth herein, **THE PARTIES AGREE** as follows:

ARTICLE I
DEFINITIONS AND INTERPRETATION

1.1 Master Definitions Supplement. Unless defined in the introduction or Section 1.2 of this Agreement, all terms used in this Agreement with initial capitalization shall have the same meaning as those contained in the Master Definitions Supplement to the ISO Tariff.

1.2 Special Definitions for this Agreement. In this Agreement, the following terms shall have the meanings set opposite them:

"MSS Aggregator" means Northern California Power Agency ("NCPA") or its successor acting as a single MSS operator on behalf of Roseville, and other non-contiguous Metered Subsystems of NCPA's members, as described in a separate agreement between the ISO and the MSS Aggregator.

"Point of Interconnection" means any point at which Roseville's System is directly interconnected with the interconnected electric grid in the ISO Control Area, including the transmission facilities of WAPA. The initial Points of Interconnection are described in Section 4.1.

"Roseville's System" means all transmission facilities, distribution facilities, and generating facilities owned or controlled by Roseville. A description of the generation facilities and Points of Interconnection comprising Roseville's System is set forth in Schedule 1.

"Settlement Agreement" means the Settlement Agreement Among Pacific Gas and Electric Company, Northern California Power Agency, Silicon Valley Power of Santa Clara, California, the City of Roseville, California and the California Independent System Operator Corporation in FERC Dockets ER01-2998-000, ER02-358-000, and EL02-64-000, as accepted by FERC.

"Under Frequency Load Shedding" or "UFLS" means automatic Load Shedding, accomplished by the use of such devices as under frequency relays, intended to arrest frequency decline and assure continued operation within anticipated islands.

1.3 Rules of Interpretation. The following rules of interpretation and conventions shall apply to this Agreement:

(a) the singular shall include the plural and vice versa;

(b) the masculine shall include the feminine and neutral and vice versa;

(c) "includes" or "including" shall mean "including without limitation";

(d) references to a Section, Article or Schedule shall mean a Section, Article or a Schedule of this Agreement, as the case may be, unless the context otherwise requires;

(e) any reference to the ISO Tariff or any provision of the ISO Tariff will mean a reference to the ISO Tariff or provision then in effect as modified during the term of this Agreement, unless otherwise specifically provided;

(f) unless the context otherwise requires, references to any law shall be deemed references to such law as it may be amended, replaced or restated from time to time;

(g) unless the context otherwise requires, any reference to a "person" includes any individual, partnership, firm, company, corporation, joint venture, trust, association, organization or other entity, in each case whether or not having separate legal personality;

(h) unless the context otherwise requires, any reference to a Party includes a reference to its permitted successors and assigns;

(i) any reference to a day, week, month or year is to a calendar day, week, month or year;

(j) the captions and headings in this Agreement are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Agreement; and

ARTICLE II
TERM AND TERMINATION

2.1 Effective Date. This Agreement shall be effective as of the date it is accepted for filing and made effective by FERC, and shall remain in full force and effect until terminated pursuant to Section 2.2 or upon such other date as the Parties shall mutually agree.

2.2 Termination

2.2.1 Termination by Default. Either Party (the terminating Party) may terminate this Agreement by giving written notice of termination in the event that the other Party (the defaulting Party) commits any default under this Agreement or the applicable provisions of the ISO Tariff which, if capable of being remedied, is not remedied within 30 days after the terminating Party has given the defaulting Party written notice of the default, unless excused by reason of Uncontrollable Forces under Article XVIII of this Agreement.

2.2.2 Termination on Notice. Either Party shall have the right to terminate this Agreement in accordance with this Section 2.2.2, subject to the procedural requirements set forth in Section 2.2.3. Either Party may terminate this Agreement by giving the other Party written notice at least six (6) months in advance of the intended effective date of termination. The ISO's right to terminate this Agreement in accordance with this Section 2.2.2 shall arise only after December 31, 2004.

2.2.3 Filing. With respect to any notice of termination given pursuant to this Section, the ISO must file a timely notice of termination with FERC. The filing of the notice of termination by the ISO will be considered timely if: (1) the request to file a notice of termination is made after the preconditions for termination have been met, and (2) the ISO files the notice of termination within 30 days of receipt of such request from Roseville or issuance of its own notice of termination. This Agreement shall terminate upon the date on which the notice of termination is permitted by FERC to become effective.

ARTICLE III
GENERAL TERMS AND CONDITIONS

3.1 Scope of Agreement. Except as specifically provided otherwise, the provisions of this Agreement will apply only with respect to the facilities comprising Roseville's System and to Loads and Generating Units directly connected only to Roseville's System. Subject to the terms of Article II, this Agreement shall not affect Roseville's ability to join or establish another Control Area or Roseville's right to exercise any available legal recourse to obtain or confirm that it possesses other forms of transmission rights.

3.2 ISO Responsibility. The Parties acknowledge that the ISO is responsible for the efficient use and reliable operation of the ISO Controlled Grid and the operation of the ISO's Control Area consistent with achievement of planning and Operating Reserve criteria no less stringent than those established by the WECC and NERC and in accordance with the ISO Tariff and further acknowledge that the ISO may not be able to satisfy fully these responsibilities if parties to agreements with the ISO, including Roseville, fail to comply fully with all of their obligations under those agreements.

3.3 Relationship Between Agreement and ISO Tariff

3.3.1 If and to the extent a matter is specifically addressed by a provision of this Agreement (including any schedules or other attachments to this Agreement), the provision of this Agreement shall govern notwithstanding any inconsistent provision of the ISO Tariff and, except as provided in Section 3.3.2, any ISO Tariff provision that is referenced in this Agreement.

3.3.2 If and to the extent this Agreement provides that a matter shall be determined in accordance with the applicable provisions of the ISO Tariff, the applicable provisions of the ISO Tariff shall govern.

3.3.3 Except as provided in Section 3.3.1, Roseville shall, with respect to the operation of any of the Generating Units of Roseville's System, comply with the requirements applicable to Participating Generators under Article 5 of the ISO Tariff and all other provisions of the ISO Tariff governing Participating Generators. Nothing in this Agreement shall obligate Roseville to execute, except as already executed, a Participating Generator Agreement with respect to any Roseville Generating Unit.

3.3.4 Except as provided in Section 3.3.1, Roseville shall, with respect to the operation of any Load in Roseville's System, comply with the requirements applicable to Participating Loads under Article 5 of the ISO Tariff and all other provisions of the ISO Tariff governing Participating Loads. Nothing in this Agreement shall obligate Roseville to execute a Participating Load Agreement with respect to any Roseville Load.

3.3.5 Except as provided in Section 3.3.1, Roseville shall, with respect to the operation of the distribution facilities of Roseville's System, comply with the requirements applicable to Utility Distribution Companies under Article 4 of the ISO Tariff. Nothing in this Agreement shall obligate Roseville to execute a UDC Operating Agreement.

3.3.6 The applicability of any provision of the ISO Tariff to Roseville, including as provided in Sections 3.3.1 through 3.3.5, inclusive, shall, in the event of a dispute between the Parties, be determined through the ISO ADR Procedures in accordance with Article 13 of the ISO Tariff.

3.3.7 Nothing in this Agreement shall preclude Roseville from becoming a Participating TO by executing the TCA and fulfilling all other applicable requirements. If Roseville becomes a Participating TO, it shall comply with the requirements applicable to Participating TOs under Article 3 of the ISO Tariff or any settlement of FERC Docket No. ER00-2019-000.

3.3.8 This Agreement shall serve, with respect to Roseville, as the written agreements required by Sections 4.1.1, 5, 10.3.1, 23.1.1, and 23.4 of the ISO Tariff and the written agreement required for Participating Loads.

3.4 Amendment to Agreement

3.4.1 Except with respect to the ISO's rights set forth in Section 3.4.2 of this Agreement, this Agreement may be modified only by mutual written agreement between the Parties. Amendments that require FERC approval shall not take effect until FERC has accepted such amendments for filing and made them effective. This shall not modify Roseville's or the ISO's rights under Section 206 of the Federal Power Act.

3.4.2 The ISO shall have the right to apply unilaterally under Section 205 of the Federal Power Act to change the rates, terms, and conditions under this Agreement for services provided to Roseville. In proposing any changes, unless in response to a FERC order as provided in Section 3.7, the ISO will consider the principles in this Agreement as detailed in Section 3.5.2. Additionally, unless in response to a FERC order as provided in Section 3.7, any changes proposed by the ISO shall be subject to the following:

3.4.2.1 The ISO shall provide Roseville 30 days advance written notice of such change.

3.4.2.2 The ISO shall meet and confer with Roseville regarding the change, provided that the scheduling of such meeting shall not be unreasonably delayed.

3.4.2.3 Roseville may waive these requirements upon written request by the ISO.

3.4.2.4 The ISO shall provide Roseville with a copy of the FERC filing if, and when, made.

3.4.3 In addition to changes that may otherwise be contemplated by Section 3.6 or Section 3.7, the Parties recognize that their responsibilities and operations may change during the term of this Agreement. The Parties agree that, in the event any such change substantially affects the allocation of rights, responsibilities, and obligations between the Parties under this Agreement, including if Roseville becomes directly connected to the ISO Controlled Grid, the Parties, while continuing to honor the terms and conditions of this Agreement, will make good faith efforts to negotiate an appropriate amendment to this Agreement and shall endeavor in that process to restore that allocation.

3.5 Amendment to ISO Tariff.

3.5.1 Nothing in this Agreement shall affect in any way the authority of the ISO to modify unilaterally the ISO Tariff in accordance with Section 19 of the ISO Tariff or of the ISO and Roseville to exercise their rights under the Federal Power Act or any other law, or to pursue any legal remedies.

3.5.2 In making amendments to the ISO Tariff as provided in Section 3.5.1, the ISO will consider the impact on Metered Subsystems and the principles reached in this Agreement, including but not limited to:

3.5.2.1 Cost Causation: The intent of the Parties is that ISO charges will be charged to the Scheduling Coordinator for the MSS Operator, based on the principle of cost causation, with due regard for historic considerations, timing and transition issues, and other relevant factors.

3.5.2.2 Load Following Capability: Roseville desires the opportunity to elect to maintain Load following capability, through its Scheduling Coordinator or the Scheduling Coordinator of its MSS Aggregator, to match Roseville Load, and to make economic resource decisions with the resources in Roseville's portfolio.

3.5.2.3 Efficiency: For efficient use of transmission facilities and to decrease Congestion, the ISO desires that all Market Participants operate using similar rules and Scheduling timelines.

3.6 Market Design 2002. The ISO is in the process, simultaneously with the negotiations of this Agreement, of redesigning the ISO's markets ("MD02"). To the extent possible, the components of MD02 that impact Metered Subsystems will be incorporated in this Agreement. If components of the MD02 design are not known until after the execution of this Agreement, the Parties agree to amend this Agreement in accordance with Sections 3.4 and 3.5.2.

3.7 Changes to Conform To FERC Orders. Nothing in this Article III shall be interpreted to limit the ISO's right to modify the ISO Tariff or this Agreement to comply with or conform to any FERC order.

ARTICLE IV
INTERCONNECTION

4.1 Points of Interconnection. The Points of Interconnection are described in Schedule 1. To the extent Roseville establishes additional Points of Interconnection, they will be governed by this Agreement.

4.2 Interconnection Operation Standards. The standards set forth in Schedule 2 are incorporated herein. Roseville agrees to make the requirements of the ISO Tariff a consideration in any negotiations in which it may participate regarding the interconnection and operation of Roseville's System.

4.3 Operation, Maintenance, and Load Serving Responsibilities. Roseville shall operate and maintain all facilities forming any part of Roseville's System, as specified in Schedule 1, and Roseville's Scheduling Coordinator shall be responsible for the supply of the Energy and Ancillary Services required to reliably provide electric service to the Loads connected to Roseville's System within the ISO Control Area in accordance with Applicable Reliability Criteria, including WECC and NERC criteria.

ARTICLE V
OPERATIONS

5.1 Outages

5.1.1 Roseville shall coordinate Outages of Generating Units and transmission facilities, including the Points of Interconnection, constituting parts of Roseville's System with the owners of the transmission facilities with which Roseville's System is interconnected.

5.1.2 Notwithstanding anything to the contrary in this Agreement, to the extent required by any valid law, regulation or order issued by any state or federal authority having jurisdiction over Roseville or Roseville's System, which law, regulation or order applies to entities that have executed a written undertaking required by Section 5 of the ISO Tariff, Roseville shall coordinate Outages of Generating Units and transmission facilities constituting parts of Roseville's System with the ISO, pursuant to any generally applicable program established by the ISO to implement such law, regulation or order. The coordination requirements in this Section 5.1.2 shall not conflict with those in Section 5.1.1.

5.2 **Safety and Reliability.** Roseville shall operate and maintain Roseville's System in accordance with applicable safety and reliability standards, WECC and NERC requirements, regulatory requirements, operating guidelines, and Good Utility Practice so as to avoid any material impact on the ISO Control Area. Without limiting the foregoing, Roseville shall operate and maintain Roseville's System, during normal and System Emergency conditions, in compliance with Roseville's Electric Emergency Plan ("EEP") and the safety and reliability requirements applicable to Utility Distribution Companies in the ISO Operating Procedures and standards. In the event any such ISO Operating Procedure or standard is revised to modify the requirements applicable to Utility Distribution Companies, the Parties shall comply with such revision. Roseville shall notify the ISO as soon as is reasonably possible of any condition that it becomes aware of that may compromise or affect the safety and reliability of the ISO Control Area.

5.3 **Single Point of Contact.** The ISO and Roseville shall each provide a single point of contact on a 24-hour, 7-day basis for the exchange of operational procedures and information. The initial points of contact are set forth in Schedule 6. A Party must update the information in Schedule 6 as the information changes. Changes to Schedule 6 shall not constitute an amendment to this Agreement.

5.4 **Transmission Losses, Outages, and Congestion.** Roseville shall be responsible for transmission losses within Roseville's Service Area and to any Points of Interconnection. In addition, Roseville shall be responsible for transmission line Outages and transmission Congestion within Roseville's Service Area and at the Points of Interconnection.

ARTICLE VI
INFORMATION SHARING

6.1 **Forecasts.** Roseville or its designee shall provide to the ISO annually its ten-year forecasts of Demand growth, internal Generation, and expansions of or replacements for those transmission facilities that are part of Roseville's System identified in Schedule 1 and other transmission facilities that are part of Roseville's System that serve similar functions or that otherwise will or may significantly affect any Point of Interconnection. Such forecast shall be provided on the date that Utility Distribution Companies are required to provide similar forecasts, which is currently October 15. The ISO shall notify Roseville or its designee of any changes in this date. Peak Demand forecasts for Roseville shall be submitted weekly by Roseville's Scheduling Coordinator and monthly in accordance with the ISO Demand Forecasting Protocol.

6.2 **System Surveys.** Roseville and the ISO shall cooperate to perform system surveys of facilities at or near the Points of Interconnection that may significantly affect the facilities of the other Party.

6.3 Maintenance Schedules. Roseville shall provide the ISO on an annual basis with a schedule of planned maintenance of those Generating Units and transmission facilities identified in Schedule 1, and other transmission facilities serving a similar function or which otherwise would significantly affect the ISO Control Area in accordance with Schedule 4. Roseville and the ISO shall also maintain records of the Maintenance Outages scheduled by Roseville on such facilities and their actual duration.

6.4 Reliability Information. Roseville and the ISO shall each have the obligation to inform the other Party, as promptly as possible, of any circumstance of which it becomes aware (including, but not limited to, abnormal temperatures, storms, floods, earthquakes, and equipment depletions and malfunctions and deviations from Registered Data and operating characteristics) that is reasonably likely to threaten the reliability of the ISO Controlled Grid or the integrity of Roseville's System respectively. Roseville and the ISO each shall also inform the other Party as promptly as possible of any incident of which it becomes aware (including, but not limited to, equipment outages, over-loads or alarms) which, in the case of Roseville, is reasonably likely to threaten the reliability of the ISO Controlled Grid, or, in the case of the ISO, is reasonably likely to adversely affect Roseville's System. Such information shall be provided in a form and content which is reasonable in all the circumstances, sufficient to provide timely warning to the other Party of the threat and, in the case of the ISO, not unduly discriminatory with respect to the ISO's provision of similar information to other entities.

6.5 Major Outage Reports. Roseville shall promptly provide such information as the ISO may reasonably request concerning Roseville's operation of Roseville's System to enable the ISO to meet its responsibility under the ISO Tariff to conduct reviews and prepare reports following major Outages. Where appropriate, the ISO will provide appropriate assurances that the confidentiality of commercially sensitive information shall be protected. The ISO shall have no responsibility to prepare reports on Outages that affect customers on Roseville's System, unless the Outage also affects customers connected to the system of another entity within the ISO Control Area. Roseville shall be solely responsible for the preparation of any reports required by any governmental entity or the WECC with respect to any Outage that affects solely customers on Roseville's System.

6.6 Annual Reviews and Reports

6.6.1 The ISO shall make available to Roseville any public annual reviews or reports regarding performance standards, measurements or incentives relating to the ISO Controlled Grid that the ISO makes available to MSS Operators and Participating TOs.

6.6.2 Roseville shall make available to the ISO any public annual reviews or reports regarding performance standards, measurements or incentives relating to Roseville's System that may affect the ISO Control Area.

6.6.3 The ISO and Roseville shall jointly develop any necessary forms and procedures for collection, study, treatment, and transmittal of system data, information, reports and forecasts.

6.7 Roseville or its designee shall install and maintain direct telemetry links to the ISO's EMS system to provide real-time data to the ISO, including but not limited to Generation output, line and transformer flows at the Roseville Points of Interconnection, and bus voltages at the Roseville Points of Interconnection and at each Generating Unit, subject to any exemption available in accordance with the ISO Tariff. Additional data points to be transmitted to the ISO EMS system will be mutually agreed by the ISO and Roseville.

ARTICLE VII
EMERGENCY OPERATIONS

7.1 In General.

Except with respect to Sections 7.4.1, 7.4.4, 7.4.5, 7.5.1, and 7.5.2, or unless Roseville is short of resources to meet its forecasted Demand and exports, as determined in accordance with Section 4.5.3 of the ISO Tariff, the terms of this Article VII shall only apply during a System Emergency that is not a result of a deficiency of resources to serve Loads in the ISO Control Area but instead occurs due to operating contingencies, which may include but not be limited to forced loss of resources and/or transmission components or may otherwise be caused by an Uncontrollable Force, as further described in Attachment B to the Roseville EEP. In the event a System Emergency occurs or the ISO determines that a System Emergency is threatened or imminent, Roseville shall, in accordance with Good Utility Practice and the Roseville EEP, attached to Schedule 11: (a) comply with all directions from the ISO concerning the management and alleviation of a threatened or actual System Emergency, which may include shutting down or starting a Generating Unit, altering the scheduled delivery of Energy or Ancillary Services to or from, as well as within, the ISO Control Area, and/or disconnecting Roseville customers' Load and (b) comply with all other procedures concerning System Emergencies set out in the Roseville EEP, ISO Protocols, and ISO Operating Procedures, in accordance with the applicable provisions of this Agreement. Without limiting the generality of the foregoing:

7.1.1 When requested by the ISO during a System Emergency, Roseville shall operate all of the Generating Units of Roseville's System to supply the ISO with generating capacity and/or Energy that can be made available by those Generating Units in order to make available as much generating capacity and/or Energy as possible to the ISO during the term of any System Emergency, consistent with: (a) maintaining the adequate supply of

Energy to Loads on Roseville's System, other than in accordance with Section 7.4 of this Agreement; and (b) due consideration for particular obligations of Roseville identified in the EEP attached to Schedule 11 or in the limitations specified in Schedule 14, provided that Roseville shall provide the ISO with advance notice of any changes to the Roseville EEP or limitations in Schedule 14 that Roseville's obligations impose on the operation of the Generating Units of Roseville's System, and any changes agreed to by the ISO shall be amendments to this Agreement. For that purpose, Roseville shall provide the ISO any update to the Roseville EEP and any change to Schedule 14 with regard to any limitations on the operation of the Generating Units of Roseville's System. Roseville shall provide the ISO updates regarding the status of the limitations in Schedule 14 promptly whenever it becomes aware of factors that affect such limitations, provided that updates shall be provided at least quarterly and no updates may be provided later than the deadline for the submission by other Generators of changes in limitations on the operation of Generating Units, which is currently the deadline for the submission of final Hour-Ahead Schedules, except when a change is due to a Forced Outage. In making as much generating capacity and/or Energy available that can be made available by its Generating Units to the ISO as possible for use in System Emergency conditions, subject to the foregoing, Roseville shall:

7.1.1.1 Schedule, reschedule and operate to the maximum extent possible, the Generating Units and other sources of power of Roseville's System within and without the ISO's Control Area to maximize the amount of generating capacity and/or Energy available that can be made available by those Generating Units to the ISO; and

7.1.1.2 Reschedule outages of equipment and facilities, including Generating Units and any facilities which may impact the operation of Generating Units, to maximize the amount of generating capacity and/or Energy available that can be made available by those Generating Units to the ISO.

7.1.2 In the event that the ISO issues a Dispatch instruction that contravenes the Roseville EEP attached to Schedule 11 or any limitation set forth in Schedule 14 duly communicated in accordance with Section 7.1.1, Roseville or its Scheduling Coordinator shall not be required to follow that instruction, although it may consent to do so in a particular case (without prejudice to Roseville's right to direct its Scheduling Coordinator to decline any such instructions thereafter). If Roseville or its Scheduling Coordinator does not follow such an instruction, it shall notify the ISO that it will not follow the Dispatch instruction due to the previously communicated limitation.

7.1.3 Roseville's Scheduling Coordinator shall receive compensation for generating capacity and/or Energy supplied in response to System Emergency Dispatch instructions issued by the ISO in accordance with the ISO Tariff.

7.1.4 During a System Emergency, the ISO and Roseville shall communicate in accordance with procedures established in this Agreement and the ISO Tariff.

7.1.5 Notwithstanding anything to the contrary in Articles V, VII, VIII, IX, or X of this Agreement, or any ISO Tariff provision, Roseville shall not be expected or required to curtail Load or offer to the ISO generating capacity or Energy from its Generating Units in a System Emergency that is due to the failure of other Load serving entities to provide resources adequate to serve Load and maintain Operating Reserves or maintain an Approved Credit Rating in accordance with the ISO Tariff.

7.1.5.1 Nothing in this Section 7.1.5 or this Agreement is intended to affect Roseville's obligation to comply with any market mitigation requirement, including any must-offer requirement, that the FERC may impose.

7.2 Notice. When a System Emergency occurs, the ISO shall notify Roseville's control center as part of the process by which it notifies all Utility Distribution Companies and MSS Operators of System Emergency conditions. Details of the notification process are set forth in Schedule 7.

7.3 Records. Roseville and the ISO shall maintain all appropriate records with respect to operations during a System Emergency in accordance with the ISO Tariff.

7.4 Load Shedding

7.4.1 Automatic Load Shedding. Roseville shall implement and have at all times operational an automatic Under Frequency Load Shedding (UFLS) program described in Schedule 8 and any under-voltage relay protection program that may be described in Schedule 9.

7.4.2 Manual Load Shedding Priorities. Section 4.5.3 of the ISO Tariff provides that the ISO will determine each UDC or MSS that has insufficient resources to meet its forecasted Demand in accordance with the ISO forecast. If Load Shedding is required solely due to insufficient resources to meet Load and/or inability to meet Operating Reserve obligations (as defined by WECC or its successor and implemented by the ISO), as determined in accordance with Section 4.5.3 of the ISO Tariff, and only if Roseville is short of resources to meet its forecasted Demand and exports, as determined in accordance with Section 4.5.3 of the ISO Tariff, will Roseville be required to shed Load, as directed by the ISO. Roseville shall provide the ISO with detailed real time information, in graphical or tabular format for those contracts and resources that do not have direct telemetry, demonstrating its full resource sufficiency during any time that the ISO interrupted firm Load within the ISO Control Area or during which time an ISO direction to interrupt firm Load was in force, like other MSS Operators and UDCs seeking similar exclusion from firm Load Shedding obligations, and Roseville and its Scheduling Coordinator shall be subject to the provisions of Section 4.5.3 of the ISO Tariff for any failure to make such demonstration.

7.4.3 Manual Load Shedding. When called upon to do so by the ISO in accordance with Section 7.4.2 to avert, manage, or alleviate a System Emergency, Roseville shall implement the manual Load Shedding program described in Schedule 10. The ISO shall notify Roseville when conditions exist that would require Roseville to implement the Load curtailment and Interruptible Load programs described in Schedules 10, 10A, and 10B. Subject to the provisions of Sections 7.1.2 and 7.4.2, if the ISO determines that Load curtailment is required to manage a System Emergency, the ISO shall determine the amount and location, if applicable, of Load to be reduced and, to the extent practicable, shall allocate a portion of the required Demand reduction to Roseville and each UDC and MSS Operator based on the ratio of its Demand at the time of the ISO Control Area annual peak Demand for the previous year to total ISO Control Area annual peak Demand for the previous year, taking into account system considerations and Roseville's curtailment rights. The ISO shall consult with Roseville, together with other Market Participants, in the ISO's annual development of a prioritization schedule for the Load Shedding program in accordance with Section 2.3.2.6 of the ISO Tariff.

7.4.4 Load Restoration. Load shed in accordance with Section 7.4.1, 7.4.2, and 7.4.3 of this Agreement shall be restored pursuant to Schedule 12.

7.4.5 The ISO shall use reasonable efforts to coordinate Roseville's Under Frequency Load Shedding program with the Under Frequency Load Shedding programs of other MSS Operators and Utility Distribution Companies, and the implementation of all such other programs, so that no one entity bears a disproportionate share of Load Shedding in the ISO Control Area. Roseville warrants that its UFLS program does and will continue to fully adhere to the applicable WECC plans and requirements governing such programs, in accordance with Schedule 8.

7.4.6 To the extent Roseville reduces Roseville's System Load in response to a System Emergency, it shall exercise its best efforts to maintain the same level of Generation and imports as was scheduled prior to the Load reduction in order to provide the ISO with Energy, subject to the provisions of Section 7.1.2. Roseville's Scheduling Coordinator shall receive compensation for any Energy or Ancillary Services made available to the ISO as a result of such Load Shedding in accordance with the ISO Tariff and ISO Operating Procedures.

7.5 Electrical Emergency Plan

7.5.1 Roseville shall cooperate with the ISO's implementation of the Electrical Emergency Plan ("ISO EEP") developed by the ISO in accordance with Section 2.3.2.4 of the ISO Tariff. Roseville shall implement the Roseville EEP attached to Schedule 11 of this Agreement and filed with FERC for informational purposes, and the ISO shall cooperate with Roseville's implementation of the EEP.

7.5.2 Roseville shall notify its customers pursuant to its EEP of any voluntary Load curtailments of which the ISO notifies Roseville pursuant to the ISO EEP.

7.5.3 When the ISO allocates an amount of Load curtailment to Roseville pursuant to the ISO EEP to manage a System Emergency, Roseville shall notify its customers and cause customers to curtail that amount of Load.

ARTICLE VIII
LOCAL AND REGIONAL RELIABILITY

8.1 Reliability Within Roseville's System

8.1.1 Roseville shall be responsible for maintaining the reliability of electric service to customers in Roseville's System in accordance with Applicable Reliability Criteria, WECC and NERC requirements, regulatory requirements, and Good Utility Practice, subject to the responsibilities of the ISO as the operator of the Control Area in which Roseville's System is located.

8.1.2 Roseville shall be responsible for any reliability Generation, Voltage Support, and Black Start service requirements within Roseville's System and at the Points of Interconnection.

8.1.3 If and to the extent the WECC criteria change or Roseville does not maintain sufficient Generation to meet the reliability criteria in Schedule 16, as may be amended, as applied to Roseville's System and thus avoid adverse impacts on the ISO Controlled Grid, then Roseville's Scheduling Coordinator may be assessed costs incurred by the ISO to support the reliability of Roseville's System. The ISO will notify Roseville that the reliability criteria have not been met and the Parties shall negotiate in good faith over necessary modifications and, if they cannot reach agreement, submit the dispute to dispute resolution in accordance with Article XV of this Agreement.

8.2 Control Area Reliability. For the costs specified in this Article VIII, Roseville, through its Scheduling Coordinator, shall be responsible for supplying or bearing its proportionate share of the costs of generating resources required for the reliability of electric service to Loads in the ISO Control Area, except for Reliability Must-Run ("RMR") Generation costs on the ISO Controlled Grid, where such costs are the responsibility of the Participating TO where the RMR unit is interconnected, provided further that Roseville is not a Participating TO. Roseville, through its Scheduling Coordinator, may meet such obligation from resources it owns or with respect to which it has contractual entitlements to the Energy and Ancillary Services or it may purchase those products through the ISO's markets in accordance with the terms of the ISO Tariff.

8.2.1 Roseville's reliability Generation is currently identified in Schedule 14.

8.2.2 Nothing in this Agreement shall obligate Roseville to make any Generating Units available as Reliability Must-Run Generation, unless Roseville notifies the ISO that it desires to participate in the RMR Unit designation process. To the extent Roseville does not notify the ISO that it desires to participate in the RMR Unit designation process, the ISO agrees not to designate any Roseville Generating Unit as an RMR Unit, provided Roseville agrees that, in circumstances affecting local reliability of the ISO Controlled Grid that would otherwise be mitigated by RMR Units, any Generation not being used to serve Roseville will be made available to the ISO, subject to Article VII of this Agreement.

8.3 **Voltage Support and Regional Reliability Standards.** Roseville and the ISO shall continue to use the Sacramento Valley Study Group or its successor Sacramento area reliability coordination organization ("SVSG") as the forum for establishing real-time operating limits for the affected transmission systems. The limits established by SVSG shall be reflected in Roseville and ISO operating procedures that implement such limits, in a manner consistent with their establishment. SVSG shall be also used as the forum for establishing appropriate voltage control measures for the affected transmission systems. The measures established by SVSG shall be reflected in Roseville and ISO operating procedures that implement such measures, in a manner consistent with their establishment. Roseville, the ISO, and other entities operating electric systems in the Sacramento area have established and will continue to refine coordinated procedures, based on the SVSG-developed measures, delineating responsibilities and corrective actions to be taken in order to maintain sufficient reactive support, coordination of operation and maintenance of affected transmission systems and system expansions. Roseville and the ISO shall operate in accordance with those jointly established and acknowledged procedures.

8.4 **Black Start.** Roseville's Scheduling Coordinator shall either provide its own share of ISO Control Area Black Start capability or bear a portion of the ISO's Black Start costs in accordance with Section 13.7.

8.5 **Ancillary Services.** Roseville's responsibility for the ISO Control Area requirements of Ancillary Services shall be determined in accordance with the ISO Tariff. If Roseville's Scheduling Coordinator schedules sufficient self-provided capacity complying with the applicable requirements of the ISO Tariff, which capacity is committed to the various required Ancillary Services, and maintains the Ancillary Service capacity as available to the ISO for that purpose, Roseville's Scheduling Coordinator shall not be required to purchase capacity in the ISO's Ancillary Service markets. To the extent Roseville's Scheduling Coordinator does not schedule sufficient capacity for this purpose, Roseville may, through its Scheduling Coordinator, purchase the required capacity in the ISO's Ancillary Service markets. To the extent Roseville's Scheduling Coordinator does not maintain the availability of capacity committed to the ISO

for Ancillary Services for that purpose, the Scheduling Coordinator shall be responsible for the applicable charges under the ISO Tariff.

8.6 Imbalance Energy. To the extent that sufficient Energy for the purpose of serving Roseville's Load and exports from Roseville's System, including losses, is not reflected in Schedules submitted by Roseville's Scheduling Coordinator and delivered in real time, Roseville shall be deemed (through its Scheduling Coordinator) to have purchased or sold Imbalance Energy in the ISO's Imbalance Energy market. The ISO will settle with Roseville's Scheduling Coordinator with regard to Imbalance Energy in accordance with the ISO Tariff. If Roseville elects in accordance with Section 23.12 of the ISO Tariff to have its Scheduling Coordinator follow Roseville's System Load and exports from the MSS with Roseville's resources and imports into the MSS, to the extent that the net Imbalance Energy for all of Roseville's Loads and exports from the MSS, and resources and imports into the MSS, is within Roseville's deviation band as specified in Section 13.12, Roseville's Scheduling Coordinator will not be subject to costs or penalties other than the cost of the Imbalance Energy itself. To the extent that Roseville's Scheduling Coordinator is operating outside of its portfolio deviation band, Roseville's Scheduling Coordinator shall be subject to penalties as specified in Section 13.12. In following Load, Roseville's Scheduling Coordinator may utilize any resource available to it regardless of whether, or at what level, that resource is reflected in Schedules submitted by Roseville's Scheduling Coordinator, except with respect to any portion of the capacity of a resource for which Roseville's Scheduling Coordinator has submitted an Ancillary Services capacity bid to the ISO for that resource or to the extent the ISO has issued a System Emergency operating order consistent with Section 7.1.1. If the ISO's MD02 does not result in a single ex post zonal or trading hub-related price in each interval by October 1, 2002, then the ISO agrees to negotiate further with Roseville to assist Roseville in mitigation of charges that Roseville's Scheduling Coordinator may accrue due to the separate incremental and decremental deviation prices in any single zone/trading hub when Roseville's Scheduling Coordinator is operating within the deviation band for Roseville's portfolio as a whole.

8.7 MSS Aggregator. Roseville may elect to have its Load and exports from Roseville's System, including losses, included in the aggregated Load and exports of its MSS Aggregator and reflected in Schedules submitted by the MSS Aggregator's Scheduling Coordinator. The terms and conditions of the MSS Aggregator's agreement with the ISO shall govern the inclusion of Roseville's Load and exports in the portfolio of the MSS Aggregator's Scheduling Coordinator regarding charges, Load following, Imbalance Energy and any application of a deviation band provided for in the context of Load following.

ARTICLE IX
ACCESS

9.1 Existing Contracts and Encumbrances and Access to the ISO Controlled Grid

9.1.1 This Agreement is intended to operate in conjunction with the Settlement Agreement. Nothing in this Agreement shall be construed or interpreted in any manner that would interfere with the terms and conditions of any Existing Contract or Encumbrance or relieve the ISO of its obligation to honor such Existing Contracts and Encumbrances, provided that Roseville's Scheduling Coordinator shall schedule its use of Existing Contracts and Encumbrances as specified in Section 11.3 of this Agreement. The Existing Contracts and Encumbrances are listed on Schedule 13.

9.1.2 Roseville shall have open and non-discriminatory access to the ISO Controlled Grid for the scheduling of transactions that do not utilize Existing Contracts and Encumbrances in accordance with the ISO Tariff and for other transmission services the ISO may provide in the future under the ISO Tariff.

9.1.3 Roseville may use the ISO Controlled Grid in accordance with the ISO Tariff to buy and sell electric products in the ISO's markets and in bilateral transactions with other Market Participants.

9.1.4 If Roseville's designated Scheduling Coordinator uses the ISO Controlled Grid for deliveries of power to Roseville's Load, Roseville shall afford open and non-discriminatory access to the transmission facilities included in Roseville's System to any entity qualified to obtain an order under Section 211 of the Energy Policy Act of 1992 that affords such access to the transmission facilities that such entity owns or controls, pursuant to the relevant provisions of the Energy Policy Act of 1992, FERC orders, and subsequently promulgated FERC regulations.

9.2 Access to ISO Markets

9.2.1 Sales of Energy and Ancillary Services. Energy and Ancillary Services produced by Generating Units and Loads on Roseville's System may be sold in the ISO's markets on the terms applicable under the ISO Tariff to Participating Generators and Participating Loads, respectively, as modified by this Agreement. If Roseville's Scheduling Coordinator or its MSS Aggregator's Scheduling Coordinator submits a bid for Energy or Ancillary Services from a Generating Unit listed in Schedule 14 or Load of Roseville's System, Roseville warrants to the ISO that it has the capability to provide that service in accordance with the ISO Tariff and that it shall comply with ISO Dispatch instructions for the provision of the service in accordance with this Agreement. If Roseville's Scheduling Coordinator submits a bid for Energy or Ancillary Services from a Generating Unit or Load within a Service Area of Roseville's System, any Energy delivered from that Generating Unit or Load shall be added to the calculation of Roseville's

net metered Demand and exports for purposes of determining deliveries to Roseville's System in assessing charges pursuant to Article XIII.

9.2.2 Certification. Roseville shall not use a Scheduling Coordinator to submit a bid for the provision of an Ancillary Service or submit a Schedule for the self-provision of an Ancillary Service unless the Scheduling Coordinator serving Roseville is in possession of a current certificate pursuant to Sections 2.5.6 and 2.5.24 of the ISO Tariff.

9.2.3 Supplemental Energy and Ancillary Service Bids. Bids in the ISO's Supplemental Energy and Ancillary Service markets may only be submitted by Roseville's Scheduling Coordinator.

9.2.4 Black Start and Voltage Support. Roseville or its Scheduling Coordinator shall be entitled to bid the resources on Roseville's System in any open solicitation held by the ISO for Black Start or Voltage Support services, provided that the supply of any service by Roseville shall not impair its ability to provide the service it is required by Article VIII of this Agreement to provide for Roseville's System, and, if the services are sold to the ISO, Roseville or its Scheduling Coordinator shall provide such services in accordance with the ISO Tariff.

ARTICLE X
GENERATING UNITS AND PARTICIPATING LOADS

10.1 Identification of Resources. Roseville has identified in Schedule 14 the individual Generating Units and Participating Loads that it owns, operates or to which it has a contractual entitlement, that are connected to Roseville's System.

10.1.1 Technical Characteristics. Roseville has provided to the ISO in Schedule 14 the required information regarding the capacity and operating characteristics of each of the Generating Units and Participating Loads listed in that schedule. The ISO may verify, inspect, and test the capacity and operating characteristics provided in Schedule 14, and any changes thereto made pursuant to Section 10.1.2 of this Agreement, in accordance with Section 2.5.25 of the ISO Tariff.

10.1.2 Notification of Changes. Roseville shall notify the ISO sixty (60) days prior to any change to the information provided in Schedule 14, provided that such notice shall not be required for changes to parameters of operating limitations set forth in Schedule 14, which shall be made in accordance with the ISO's Operating Procedures. The Parties shall amend Schedule 14, as applicable, to reflect that change. Subject to such notification, and verification, inspection, and testing in accordance with Section 10.1.1, but without waiting for the execution and effectiveness of an amended Schedule 14, the Parties shall implement any new information for a Generating Unit or Participating Load identified in Schedule 14 upon the effective date for the next scheduled update to the ISO's Master File.

10.1.3 Nothing in this section shall preclude Roseville from informing the ISO of changes in limitations on the operation of a Generating Unit, as provided in Section 7.1 of this Agreement, or to comply with environmental laws and regulations, provided that Roseville provides the ISO with advance notice of any changes in such limitations.

10.2 Generating Unit Operation

10.2.1 Roseville shall install and maintain direct telemetry links to the ISO's EMS system for each Roseville Generating Unit that enable the ISO to view the status, voltage, and output of the Generating Unit and ISO certified meters that transmit data automatically to the ISO's meter data acquisition system. Roseville shall calculate and specify to the ISO any distribution loss factor applicable to the Generating Units of Roseville's System.

10.2.2 If Roseville, through its Scheduling Coordinator, chooses to supply Regulation or self-provide Regulation from a Generating Unit, it must provide the ISO with control over the Generating Unit providing Regulation and place the Generating Unit on Automatic Generation Control ("AGC") responsive to the ISO's Regulation signal. Regulation service shall be provided in accordance with the ISO Tariff. Roseville or its Scheduling Coordinator may adjust output of the Generating Units of Roseville's System, in response to Roseville's Load following needs, if elected in accordance with Section 23.12 of the ISO Tariff, provided that, if Roseville is providing Regulation to the ISO from any Generating Unit, it may not adjust the output of that Generating Unit unless the integrity of the ISO's Regulation signal, and the continuous responsiveness of such Generating Unit, via AGC, to the ISO's Regulation signal, is not compromised. If the ISO determines that the integrity of the ISO's Regulation signal or the continuous responsiveness to the ISO's Regulation signal is compromised, Roseville's Generating Unit shall be deemed not to have provided the Regulation, and Roseville shall be subject to the provisions of the ISO Tariff applicable to failure to provide Regulation. To the extent that Roseville chooses not to provide or self-provide Regulation from a Roseville Generating Unit, the ISO shall not control the Generating Unit via a direct link between the ISO and the Generating Unit without Roseville's consent.

10.3 ISO Authority to Dispatch Roseville Resources. The ISO's authority to Dispatch any portion of the capacity of any Generating Unit of Roseville, other than in accordance with a bid submitted to the ISO by Roseville's Scheduling Coordinator, is set forth in and subject to Section 7.1 of this Agreement.

10.4 WECC Requirements Applicable to Participating Generators

10.4.1 Reliability Criteria. Roseville shall comply with the requirements of Section 5.4 of the ISO Tariff applicable to Participating Generators if Roseville's System includes Generating Units.

10.4.2 Payment of WECC Sanctions. Roseville shall be responsible for payment directly to the WECC of any monetary sanction assessed against Roseville by the WECC, as provided in Section 5.4.3 of the ISO Tariff.

ARTICLE XI
SCHEDULING

11.1 Scheduling Coordinator. All Schedules submitted on behalf of Roseville for the delivery of Energy and Ancillary Services to Roseville Load and for exports from Roseville's System shall be submitted by a Scheduling Coordinator certified in accordance with the applicable provisions of the ISO Tariff that has entered into a Scheduling Coordinator Agreement with the ISO that is currently in effect. The Scheduling Coordinator may be Roseville itself or a Scheduling Coordinator designated by Roseville.

11.2 Self-Provided Energy and Ancillary Services. Roseville's Scheduling Coordinator may self-provide all or any portion of its obligation for Energy and Ancillary Services. Whether or not Roseville engages in such self-provision, Roseville's Scheduling Coordinator shall include the gross output, less auxiliary load, of each Generating Unit and import from which Roseville meets that obligation and the gross Load served on Roseville's System and gross exports from Roseville's System in Schedules submitted to the ISO. If the ISO amends the ISO Tariff to relieve Scheduling Coordinators of the obligation to schedule gross Generation, imports, Loads, and exports, and the amendment would have applied to Roseville in the absence of this Agreement, the Parties shall negotiate an amendment to this Agreement to conform the obligations of this section to the modified procedures.

11.3 Scheduling Timelines. Roseville's Scheduling Coordinator shall submit all Schedules, including Schedules for the use of its Existing Contracts and Encumbrances, Schedules for the use of the ISO Controlled Grid as a new firm use, and Schedules for the self-provision of Energy and Ancillary Services, within the timelines established by the ISO Tariff. Roseville's Scheduling Coordinator shall not be precluded from making real-time changes if such scheduling capability is afforded Roseville under Existing Contracts or Encumbrances or the Settlement Agreement. Schedule 13 includes any Scheduling timelines required for Existing Contracts and Encumbrances. Roseville's Scheduling Coordinator shall provide to the ISO by 8:30 a.m. on the day prior to the Trading Day, a reservation amount for the California-Oregon Transmission Project ("COTP") that will not exceed Roseville's Encumbrance. This reservation amount will be the

maximum amount usable by and available to Roseville on the COTP in the Day-Ahead Market, the Hour-Ahead Market and for real-time scheduling changes in accordance with Schedule 13 of this Agreement.

ARTICLE XII
METERING

12.1 Roseville shall ensure installation of ISO-certified revenue quality meters and associated equipment at (a) the Points of Interconnection and, (b) for each Generating Unit connected to Roseville's System, at each bus to which one or more Generating Units is connected, provided that the Demand of any Load at that bus, other than a Generating Unit auxiliary load, is separately metered.

12.2 The provisions of the ISO Tariff applicable to ISO Metered Entities shall apply to Roseville, subject to the particular rights and obligations of the Parties with respect to metering set forth in Schedule 15, including access to and testing of Roseville's meters.

12.3 The calculation of Roseville's Settlement Quality Meter Data shall be in accordance with Schedule 15.

ARTICLE XIII
CHARGES

13.1 **Charges Generally.** Except as may be provided otherwise in the provisions of this Article XIII, Roseville's Scheduling Coordinator shall be responsible for charges incurred in accordance with the ISO Tariff, provided that nothing in this Agreement shall prohibit Roseville from challenging the allocation of any new charge under the ISO Tariff to Roseville on the grounds that the proposed charge is not appropriately assessed against a MSS Operator, or on any other grounds. Further, except as specifically provided in this Agreement, Roseville shall only be responsible for charges allocated by the ISO Tariff to Participating TOs if it becomes a Participating TO, as permitted by Section 3.3.7.

13.2 **Transmission Losses.** Roseville's Scheduling Coordinator shall be responsible for transmission losses, in accordance with the ISO Tariff, only for the delivery of Energy to Roseville's System or from Roseville's System, provided Roseville fulfills its obligation to provide for transmission losses on the transmission facilities forming part of Roseville's System in accordance with Section 5.4 of this Agreement. A Generation Meter Multiplier ("GMM") shall be assigned to the Generating Units on Roseville's System at the Points of Interconnection for use of the ISO Controlled Grid. That GMM shall be 1.0 for all Generating Units within Roseville's System that are located at or behind a Point of Interconnection, to the extent that the Load at the Point of Interconnection for that portion of Roseville's

System exceeds the amount of Generation produced by the Generating Units connected to that portion of Roseville's System, except that a GMM shall be calculated by the ISO for Energy produced pursuant to a Dispatch instruction from the ISO.

13.3 Congestion Costs. Roseville's Scheduling Coordinator shall be responsible for Usage Charges and Grid Operations Charges, and any successor charges through which the ISO collects Congestion costs from Scheduling Coordinators, in accordance with the ISO Tariff, only with respect to Roseville's Scheduling Coordinator's delivery of Energy and Ancillary Services to Roseville's System or exports from the ISO Control Area or to other Loads connected to the ISO Controlled Grid, including Roseville's Scheduling Coordinator's delivery of Energy and Ancillary Services from Generating Units on Roseville's System to Roseville's System Loads other than Loads within the same Service Area to which the Generating Units are connected, provided that Roseville fulfills its obligation to manage Congestion on Roseville's System and at the Points of Interconnection at its own cost in accordance with Section 5.4 of this Agreement.

13.4 Unaccounted-For Energy Costs. Roseville's System shall be treated as a Utility Distribution Company Service Area for purposes of allocating responsibility for Unaccounted-for Energy costs in accordance with the ISO Tariff.

13.5 Reliability Generation. Roseville or its designee shall be responsible for the costs of maintaining the reliability of transmission facilities in Roseville's System, including costs of Generating Units operated by or on behalf of Roseville for that purpose. If and to the extent Roseville does not maintain sufficient Generation to meet the reliability criteria in Schedule 16 as applied to Roseville's System and thus avoid material adverse impacts on the ISO Controlled Grid, then Roseville's Scheduling Coordinator may be assessed costs incurred by the ISO to support the reliability of Roseville's System.

13.6 Voltage Support Costs. If and to the extent Roseville does not satisfy the Voltage Support obligations set forth in accordance with Section 8.3 of this Agreement, Roseville's Scheduling Coordinator shall bear a proportionate share of the ISO's Voltage Support cost in accordance with the ISO Tariff.

13.7 Black Start Costs. If and to the extent Roseville does not provide its own Black Start capability in accordance with Section 8.4 of this Agreement, Roseville's Scheduling Coordinator shall bear a proportionate share of the ISO's Black Start cost in accordance with the ISO Tariff.

13.8 Neutrality Costs. Roseville's Scheduling Coordinator's obligation to pay neutrality adjustments and Existing Contracts cash neutrality charges (or collect refunds) shall be based on Roseville's net metered Demand and exports from the ISO Control Area.

13.9 Summer Reliability Costs. Roseville, through its Scheduling Coordinator, shall have the option to avoid any share of the ISO's costs for any summer Demand reduction program or for any summer reliability Generation procurement program pursuant to ISO Tariff Section 2.3.5.1.8. In order to avoid such costs, Roseville shall secure capacity reserves on an annual basis at least equal to fifteen percent (15%) of its annual peak Demand responsibility. Roseville shall provide documentation to the ISO of the resources proposed to meet that peak Demand responsibility plus such capacity reserves. Such capacity reserves may include on-demand rights to Energy, peaking capacity, and Demand reduction programs. For the purposes of this Section 13.9, Roseville's peak Demand responsibility shall be equal to its forecasted annual peak Demand plus any firm power sales by Roseville plus any Roseville on-demand obligations to third parties, less interruptible Loads, and less any firm power purchases. Firm power for the purposes of this Section 13.9 shall be Energy that is intended to be available to purchaser without being subject to interruption or curtailment by supplier except for Uncontrollable Forces or emergency, and for which the supplier carries WECC-required operating reserves. To the extent that Roseville demonstrates its provision of capacity reserves, Roseville's Scheduling Coordinator shall not be obligated to bear any share of the ISO's costs for any summer Demand reduction program or for any summer reliability Generation procurement program pursuant to ISO Tariff Section 2.3.5.1.8.

13.10 Generating Unit Emissions and Start-Up Costs. If the ISO is compensating Generating Units for emissions and start-up costs and if Roseville's Scheduling Coordinator charges the ISO for the emissions and start-up costs of the Generating Units serving the Load of Roseville's System, then Roseville's Scheduling Coordinator shall bear its proportionate share of the total amount of those costs incurred by the ISO in accordance with the ISO Tariff. If Roseville's Scheduling Coordinator chooses not to charge the ISO for the emissions and start-up costs of the Generating Units serving the Load of Roseville's System, then Roseville's Scheduling Coordinator shall bear its proportionate share of the total amount of those costs incurred by the ISO based on Roseville's System net metered Demand and exports from the ISO Control Area. Roseville shall make the election whether to charge the ISO for these costs on an annual basis on November 1 for the following calendar year.

13.11 Grid Management Charge Adjustment for MSS Load Following. If the ISO is charging Grid Management Charges for uninstructed deviations, and if Roseville's Scheduling Coordinator has uninstructed deviations associated with Load following from resources listed in Schedule 14, then the ISO will net the Generation and imports into the MSS to match the Load and exports out of the MSS, and will not assess Grid Management Charges associated with uninstructed deviations for such portion of Energy that is used to match MSS Load and net exports out of the MSS. If Generation, above the amount to cover Load and exports out of the MSS, was sold into the ISO's Imbalance Energy market, then Roseville's Scheduling Coordinator will only be charged Grid

Management Charges associated with uninstructed deviations for this quantity. Roseville's Scheduling Coordinator will only be charged Grid Management Charges associated with uninstructed deviations if insufficient Generation and imports into the MSS were available to cover Load and exports out of the MSS, and Roseville's Scheduling Coordinator purchased Imbalance Energy from the ISO's market. Only Grid Management Charges associated with uninstructed deviations (the Ancillary Services and Real-Time Energy Operations Charge (ASREO)) will be treated on a net basis. Control Area Services Charges will be based on Gross Load and exports out of the MSS. Roseville's Scheduling Coordinator will be assessed the Congestion Management Charge in accordance with the ISO Tariff. Instructed Imbalance Energy will be assessed the ASREO.

13.12 Deviation Band and Penalties Calculation. Subject to an election by Roseville made in accordance with Section 23.12 of the ISO Tariff to have its Scheduling Coordinator follow Load, the ISO will settle with Roseville's Scheduling Coordinator with regard to Imbalance Energy, based on the applicable zonal or locational ex post prices, in accordance with the ISO Tariff. For purposes of assessing penalties to Roseville's Scheduling Coordinator associated with operating outside the portfolio deviation band described in Section 8.6, the portfolio deviation band shall be three percent (3%) of the lesser of Roseville's metered or Hour-Ahead scheduled Demand and exports from the MSS, adjusted for Forced Outages and any ISO directed firm Load Shedding, for Roseville's portfolio as a whole. Penalties for operating outside of the deviation band will be based on a price that is the effective weighted average ex post price applicable to Roseville for the billing interval. If the metered Generation resources and imports into the MSS exceed the Demand, exports from the MSS, and Energy expected to be delivered by Roseville in response to the ISO's Dispatch instructions and/or Regulation set-point signals issued by the ISO's AGC by more than the deviation band, then the ISO will take back its payment for Imbalance Energy by assessing Roseville's Scheduling Coordinator a penalty of one hundred percent (100%) of the amount of Imbalance Energy that is outside the deviation band. If metered Generation resources and imports into the MSS are deficient in meeting Demand, exports from the MSS, and Energy expected to be delivered by Roseville in response to the ISO's Dispatch instructions and/or Regulation set-point signals issued by the ISO's AGC by more than the deviation band, then Roseville's Scheduling Coordinator shall be assessed a two hundred percent (200%) penalty for the amount of Imbalance Energy that is outside of the deviation band, in addition to the Imbalance Energy charges that may be applicable. Roseville shall not oppose the ISO's allocation of the proceeds of any deviation band penalties as an offset to the ISO's Grid Management Charge.

13.13 Replacement Reserve Allocation. MD02 includes the elimination of Replacement Reserve by October 1, 2002. If Replacement Reserve is not eliminated by October 1, 2002, the Parties agree to negotiate a change to the ISO's allocation of Replacement Reserve costs to Roseville to bring that allocation into conformance with the settlement principles of Section 8.6.

13.14 Penalties for Failure to Provide Ancillary Services Capacity. The Parties agree that Ancillary Services should be provided from the resources that the ISO actually instructs to respond and that the resources instructed to deliver Ancillary Services are expected to provide an incremental response consistent with the standards for the Ancillary Service. However, since Roseville's Scheduling Coordinator may simultaneously be undertaking economic trades or following Loads using the same resource that the ISO has instructed to deliver Ancillary Services, the ISO will incorporate Roseville's documented Load following instructions into its evaluation of Ancillary Services compliance. Penalties for failure to provide committed Ancillary Services capacity will be assessed by the ISO in accordance with the ISO Tariff, on an individual Generating Unit basis, whenever that capacity is considered to have not been made available to the ISO. If the ISO believes that a Roseville Generating Unit did not supply the committed amount of Ancillary Services capacity or associated Energy, based on the Ancillary Services capacity reservation, any instructions issued by the ISO to Roseville or its Scheduling Coordinator to provide associated Energy, and the supporting meter data, when assessing penalties the ISO will give due consideration to operational data that Roseville or its Scheduling Coordinator may provide to demonstrate that the Generating Unit's output was being adjusted for Load-following purposes as allowed by the terms of this Agreement and within the Ancillary Services capacity not provided to the ISO. Additionally, the Parties agree that the current equations for the settlement of real time Energy may under some circumstances result in Ancillary Services capacity penalties that are inappropriate when the Generating Unit is being used simultaneously to follow Load and provide Ancillary Services Energy. Because it is anticipated that the current inadequacies will be resolved by October 1, 2002, by the implementation of new settlements equations that are part of MD02, the Parties agree to negotiate appropriate changes to the current settlements equations in the event that they are not superseded at that time.

13.15 Wheeling Access Charges. Currently, Roseville is not a Participating Transmission Owner. So long as Roseville is not a Participating Transmission Owner, Energy transmitted over the COTP to Roseville is not Energy transmitted over the ISO Controlled Grid. Roseville's Scheduling Coordinator shall be responsible for the Wheeling Access Charge only to the extent that Energy is transmitted over the ISO Controlled Grid, in accordance with ISO Tariff Section 7.1.4.

13.16 Operating and Maintenance Costs. Roseville shall be responsible for all its costs incurred in connection with procuring, installing, operating, and maintaining the facilities, Generating Units, and Participating Loads of Roseville's System for the purpose of meeting its obligations under this Agreement.

13.17 Billing and Payment. Billing and payment will be in accordance with the ISO Tariff.

ARTICLE XIV
PENALTIES AND SANCTIONS

14.1 Penalties. Roseville or its Scheduling Coordinator shall be subject to penalties and/or sanctions for failure to comply with any provisions of this Agreement only to the extent that (a) the penalty or sanction is set forth in the ISO Tariff and has been approved by FERC; and (b) the ISO Tariff provides for the imposition of the same penalty or sanction on a UDC, MSS Operator, Participating Generator, or Participating Load in the same circumstances. Nothing in this Agreement, with the exception of the provisions of Article XV, shall be construed as waiving the rights of Roseville to oppose or protest any penalty or sanction proposed by the ISO to the FERC or the specific imposition by the ISO of any FERC-approved penalty or sanction on Roseville.

14.2 Corrective Measures. If Roseville fails to meet or maintain the requirements set forth in this Agreement or in the applicable provisions of the ISO Tariff, the ISO shall be permitted to take any of the measures, contained or referenced herein or in the applicable provisions of the ISO Tariff that the ISO deems to be necessary to correct the situation.

ARTICLE XV
DISPUTE RESOLUTION

15.1 Dispute Resolution. The Parties shall make reasonable efforts to settle all disputes arising out of or in connection with this Agreement. In the event any dispute is not settled, the Parties shall adhere to the ISO ADR Procedures set forth in Section 13 of the ISO Tariff, which is incorporated by reference, except that any reference in Section 13 of the ISO Tariff to Market Participants shall be read as a reference to Roseville and references to the ISO Tariff shall be read as references to this Agreement.

ARTICLE XVI
REPRESENTATIONS AND WARRANTIES

16.1 Representations and Warranties. Each Party represents and warrants that the execution, delivery and performance of this Agreement by it has been duly authorized by all necessary corporate and/or governmental actions, to the extent authorized by law.

16.2 Necessary Approvals. Each Party represents that all necessary leases, approvals, licenses, permits, easements, rights of way or access to install, own and/or operate its facilities subject to this Agreement have been or will be obtained prior to the effective date of this Agreement.

ARTICLE XVII
LIABILITY AND INDEMNIFICATION

17.1 Liability and Indemnification. The provisions of Section 14 of the ISO Tariff will apply to liability and indemnification arising under this Agreement, except that all references in Section 14 of the ISO Tariff to Market Participants shall be read as references to Roseville and references to the ISO Tariff shall be read as references to this Agreement.

ARTICLE XVIII
UNCONTROLLABLE FORCES

18.1 Section 15 of the ISO Tariff shall be incorporated by reference into this Agreement, except that all references in Section 15 of the ISO Tariff to Market Participants shall be read as a reference to Roseville and references to the ISO Tariff shall be read as references to this Agreement.

ARTICLE XIX
MISCELLANEOUS

19.1 Notices. Any notice, demand or request which may be given to or made upon either Party regarding this Agreement shall be made in writing to the employee or official identified in Schedule 17 of this Agreement, and shall be deemed properly given: (a) upon delivery, if delivered in person, (b) five (5) days after deposit in the mail if sent by first class United States mail, postage prepaid, (c) upon receipt of confirmation by return facsimile if sent by facsimile, or (d) upon delivery if delivered by prepaid commercial courier service. A Party must update the information in Schedule 17 as the information changes. Such changes shall not constitute an amendment to this Agreement.

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

19.3 Governing Law and Forum. This Agreement shall be deemed to be a contract made under, and for all purposes shall be governed by and construed in accordance with, the laws of the State of California, except its conflict of laws provisions. The Parties agree that any legal action or proceeding arising under or relating to this Agreement to which the ISO ADR Procedures do not apply shall be brought in one of the following forums as appropriate: any court of the State of California, any federal court of the United States of America located in

the State of California, or, where subject to its jurisdiction, before the Federal Energy Regulatory Commission.

19.4 Merger. This Agreement constitutes the complete and final agreement of the Parties with respect to the subject matter hereof and supersedes all prior agreements, whether written or oral, with respect to the provisions of this Agreement.

19.5 Counterparts. This Agreement may be executed in one or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same Agreement.

19.6 Consistency with Federal Laws and Regulations. Nothing in this Agreement shall compel either Party to violate federal statutes or regulations, or orders lawfully promulgated thereunder. If any provision of this Agreement is inconsistent with any obligation imposed on a Party by such federal statute, regulation or order, to that extent, it shall be inapplicable to that Party. No Party shall incur any liability by failing to comply with a provision of this Agreement that is inapplicable to it by reason of being inconsistent with any such federal statutes, regulations, or orders lawfully promulgated thereunder; provided, however, that such Party shall use its best efforts to comply with this Agreement, to the extent that applicable federal laws, regulations, and orders lawfully promulgated thereunder permit it to do so.

19.7 Severability. If any term, covenant, or condition of this Agreement 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 Agreement and their application shall not be affected thereby, but shall remain in force and effect and 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 separable from all other provisions of this Agreement.

19.8 Assignments. Either Party may assign its rights and obligations under this Agreement, with the other Party's prior written consent, in accordance with Section 17 of the ISO Tariff, which is incorporated by reference into this Agreement. Such consent shall not be unreasonably withheld.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be duly executed on behalf of each by and through their authorized representatives as of the date hereinabove written.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

By: Terry M. Winter

Name: Terry M. Winter

Title: President and Chief Executive Officer

Date: July 12, 2002

THE CITY OF ROSEVILLE

By:

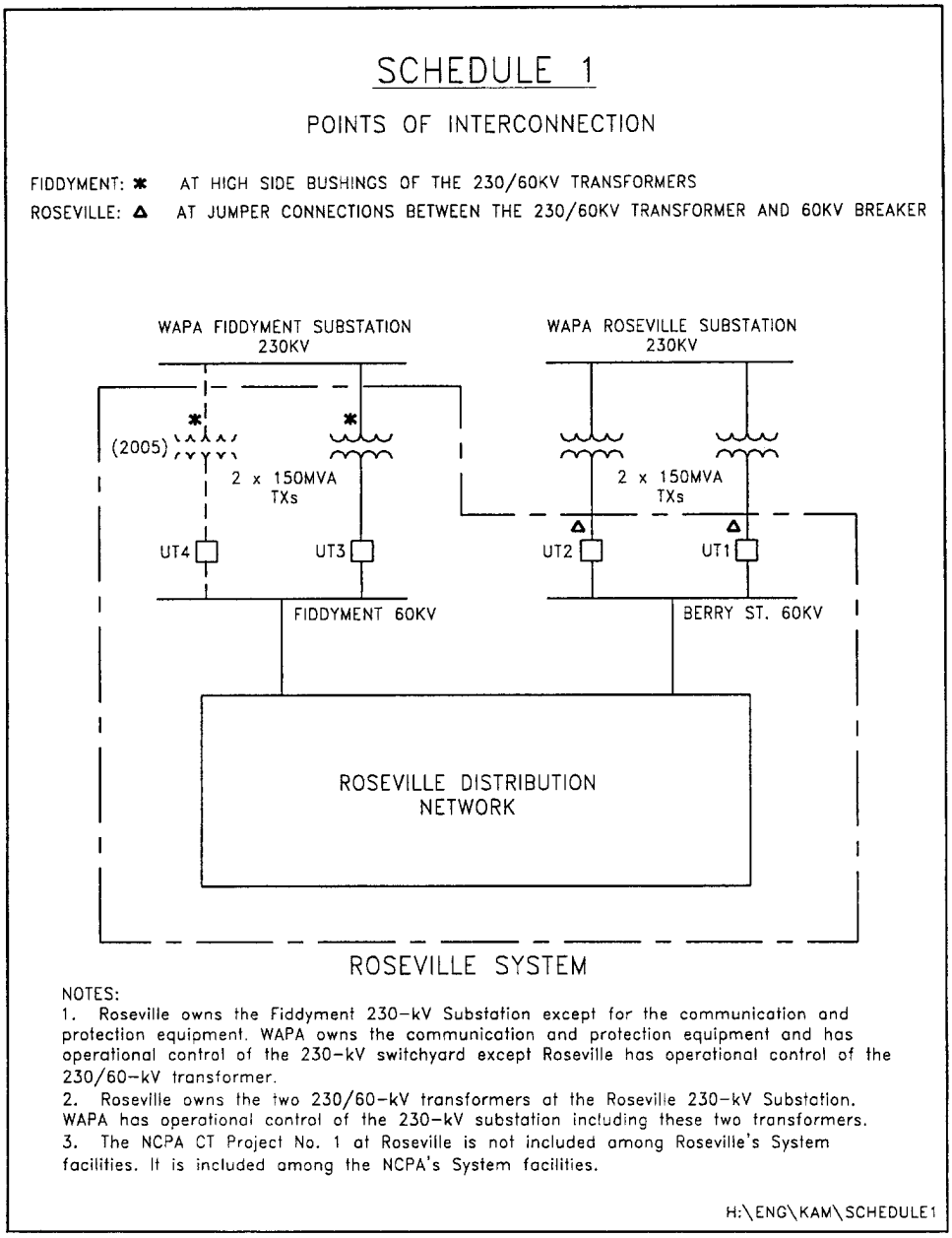
Name: Allen Johnson

Title: City Manager

Date: 7/12/02

SCHEDULE 1
ROSEVILLE'S SYSTEM FACILITIES
[Section 1.2]

The following facilities within the dashed line form Roseville's System, including the Points of Interconnection.



SCHEDULE 2
OPERATION STANDARDS
[Section 4.2]

The ISO shall maintain stable operating parameters and control power and reactive flow in accordance with the following Operation Standards. Roseville shall maintain stable operating parameters and control real and reactive power flows in accordance with WAPA requirements and the general provisions of the following Operation Standards.

Roseville Responsibilities

1.0 Roseville shall operate the facilities of Roseville's System at each Point of Interconnection in accordance with its agreements with WAPA and shall notify the ISO of any material or adverse impact on the ISO Control Area. In accordance with this performance goal, Roseville shall:

1.1 Operate the facilities of Roseville's System at each Point of Interconnection within established operating parameters including normal ratings, emergency ratings, voltage limits, and balance of load between electrical phases.

1.2 Maintain primary and backup protective systems such that faults on Roseville's System facilities will be cleared with minimal impact on the ISO Control Area.

1.3 Operate the facilities of Roseville's System at each Point of Interconnection in accordance with the requirements applicable to Utility Distribution Companies in the ISO Operating Procedures and standards, except as otherwise provided in this Agreement.

ISO Responsibilities

2.0 The ISO shall operate the ISO Controlled Grid and coordinate operations in the ISO Control Area in such manner as to avoid any material or adverse impact on Roseville facilities. In accordance with this performance goal, the ISO shall:

2.1 Participate with all affected parties in the development of joint power quality performance standards and jointly maintain compliance with such standards.

2.2 Observe Roseville grid voltage limits specified in Attachment 1 including requirements for reduced voltage on ISO Controlled Grid facilities which apply during heavy fog (or other unusual operating conditions) as needed to minimize the risk of insulator flashover.

2.3 Support Roseville investigation of power quality incidents, and provide related data to Roseville in a timely manner.

2.4 Support installation of apparatus on the ISO Controlled Grid to improve power quality, and take all reasonable measures to investigate and mitigate power quality concerns caused by actions or events in neighboring systems or control areas.

SCHEDULE 2
ATTACHMENT 1

ROSEVILLE GRID VOLTAGE LIMITS

There are no Roseville grid voltage limitations at the present time.

SCHEDULE 3

[Schedule Not Used]

SCHEDULE 4

MAINTENANCE COORDINATION

[Section 5.1.2]

By October 15th of each year, Roseville shall exchange with the ISO a provisional planned outage program for all Generating Units and transmission facilities in Schedule 1. That document will be updated quarterly or as changes occur to the proposed schedule.

As noted on Schedule 1, some facilities are jointly owned by Roseville and one or more other entities. The ISO acknowledges that, under the terms of the operating agreements applicable to each such facility, Roseville may not be able to control unilaterally the timing of outages. Roseville shall exercise its rights under the operating agreements, if any, applicable to each jointly owned facility listed on Schedule 1 to coordinate scheduling of outages with the ISO in accordance with this Agreement to the maximum extent possible and shall not enter into any operating agreement or amendment to an existing operating agreement with respect to any such facility that diminishes Roseville's rights to schedule outages. However, Roseville shall communicate directly to the ISO regarding its coordination of scheduled outages.

Applications for scheduled work shall be submitted to the ISO by Roseville's Grid Operations group via means to be agreed to by both Parties. The documents submitted by Roseville shall record the details for all work and become the database for reporting and recording outage information.

SCHEDULE 5

[Schedule Not Used]

SCHEDULE 6

OPERATIONAL CONTACT

[Section 5.4]

ISO:

CONFIDENTIAL INFORMATION REDACTED

Roseville:

SCHEDULE 7

EMERGENCIES

[Section 7.2]

The ISO shall notify Roseville's Power Control Center ("PCC") Operator, as identified in Schedule 6, of the emergency, including information regarding the cause, nature, extent, and potential duration of the emergency. The PCC Operator shall make the appropriate notifications within Roseville organization. The PCC Operator shall then take such actions as are appropriate for the emergency.

Roseville shall make requests for information from the ISO regarding emergencies through contacts to the ISO's Operations Shift Supervisor, by Roseville's PCC Operator, or Roseville's Information Officer may coordinate public information with the ISO Communication Coordinator.

Roseville is required to estimate service restoration by geographic areas, and shall use its call center and the media to communicate with customers during service interruptions. Roseville is also required to communicate the same information to appropriate state and local governmental entities. For transmission system caused outages, the ISO's Operations Shift Supervisor will notify the PCC Operator, who will make appropriate notifications within Roseville's organization of any information related to the outage such as cause, nature, extent, potential duration and customers affected.

The PCC Operator and Grid Control Center logs, Electric Switching Orders and Energy Management System temporal database will be used in preparation of outage reviews. These documents are defined as the chronological record of the operation of the activities which occur with the portion of the electrical system assigned to that control center. The log shall contain all pertinent information, including orders received and transmitted, relay operations, messages, clearances, accidents, trouble reports, daily switching program, etc.

Roseville shall retain records in accordance with its standard practices for six years.

SCHEDULE 8

UNDERFREQUENCY LOAD SHEDDING

[Section 7.4.1]

The objective of the Under Frequency Load Shedding (UFLS) program is to provide security and protection to the interconnected bulk power network by arresting frequency decay during periods of insufficient resources

Roseville's UFLS program set forth in this Schedule 8 establishes Under Frequency Load Shedding objectives consistent with the load shedding policies of the Western Electricity Coordinating Council, the North American Electric Reliability Council and Roseville. Roseville's UFLS program satisfies the requirements of the WECC Off-Nominal Frequency Load Shedding and Restoration Plan (Formal Report November 25, 1997). Roseville UFLS program utilizes WECC planning criteria in this area. Per WECC requirements, UFLS is on the feeder side of the transformer.

Roseville's UFLS program incorporates the tripping scheme attached to this Schedule 8.

UNDER FREQUENCY LOAD SHEDDING PROGRAM FOR 2002 SUMMER

GROUP	CIRCUITS	LOAD (MW) (0.95pf)	SETTING (Hz)	GROUP TOTAL	PERCENT	REMARKS
1	FOOTHILLS #1	7.5	59.5			NWRSP/NRSP
1	FOOTHILLS #3	6.4	59.5			NWRSP/NRSP
1	FIDDYMENT #2	4.6	59.5			DEL WEBB
1				18.5	7.40%	
2	SOUTHEAST #1	5.3	58.9			CIRBY
2	SOUTHEAST #2	5.5	58.9			SERSP
2	SOUTHEAST #3	3	58.9			SERSP
2				13.8	5.52%	
3	SOUTHEAST #5	3.7	58.7			SERSP/MAIDU
3	SOUTHEAST #6	3.8	58.7			SERSP
3	SOUTHEAST #7	5.1	58.7			ROCKY RIDGE
3	PARK #1	4	58.7			NCRSP
3	PARK #5	5	58.7			
3				21.6	8.64%	
4	BASELINE #2	4.8	58.5			NWRSP
4	BASELINE #3	6.5	58.5			NWRSP
4	BASELINE #4	6	58.5			NWRSP
4	BASELINE #5	3	58.5			Aquatic center
4				20.3	8.12%	
5	INDUSTRIAL #5	1.8	58.3			NCRSP
5	HARDROCK #2	0.5	58.3			STONERIDGE
5	HARDROCK #3	1	58.3			STONERIDGE
5			58.3			
5				3.3	1.32%	
	TOTAL			77.5	**31.00%**	
	WSCC REQUIREMENTS			***77.75***	***31.10%***	

NOTES:

1. MANUAL RESTORATION ONLY
2. TRIPPING TIME DELAY FOR ALL GROUPS IS 0.1 SECONDS
3. CONTACT NCPA DISPATCH PRIOR TO MANUAL RESTORATION
4. ALL CIRCUIT LOADING VALUES ARE BASED ON 2002 PEAK LOAD FORECAST
5. THE 2002 U/F PROGRAM SHALL BE IMPLEMENTED ON MAY 15, 2002

SCHEDULE 9

OTHER AUTOMATIC LOAD SHEDDING

[Section 7.4.1]

Roseville has an automatic under-voltage Load Shedding program in operation pursuant to requirements established by the Sacramento Valley Study Group (SVSG), as delineated in ISO Operating Procedure T-121, which program is attached to this Schedule 9.

2000 Summer System Emergency Load shedding Schemes (Issue 1)

AUTOMATIC U/V SCHEME FOR SACRAMENTO TRANSMISSION PROBLEMS (20MW)

FEEDERS	Automatic/ Manual	Loading (MW)	Group Total load	Type of Customers	Probability	Areas/Major customers
GROUP 1:						
Baseline 4	Auto	5		Residential	5%	East of Country Club, west of Americana and south of McAnally
Foothills 3	Auto	6		Residential	5%	20% of Del Webb (transfer club house to Base 5), Pleasant Grove around Woodcreek Oaks
Southeast 1	Auto	6		Residential	5%	Cirby Way and North Citby, SERSP areas
Southeast 2	Auto	4		Residential	5%	Ashley Wood, Sierra College Blvd.
			21			
GROUP 2:						
Baseline 3	Auto	6		Residential	1%	Silverado, west of Country Club, and Woodcreek High School
Baseline 5	Auto	6		Residential	1%	30% of Del Webb and City Swimming Pool
Southeast 7	*	3		Residential	1%	Rocky Ridge Drive, between Douglas and Cirby
Southeast 5	*	5		Resid./comm.	1%	Maldu Center, Johnson Ranch Road
			20			
GROUP 3:						
Douglas 2	Auto	5		Resid./comm.	Less than 1%	Harding & Douglas Blvd comm. Areas, residential south of Douglas Blvd., traffic signal @ Harding & Douglas
Douglas 3	*	6		Resid./comm.	Less than 1%	Atlantic street, Tahoe, Shasta, Roseville High School, Teigert concrete, Roseville Tele, traffic lights on Harding
Foothills 1	Auto	5		Residential	Less than 1%	Woodcreek Oaks north of Pleasant Grove, and NRSP's new homes
Baseline 1	Auto	6		Resid./comm.	Less than 1%	From Foothills Blvd to Atkinson, Fair Ground & south of Lawton Ave
			22			

Tracy Transformer Problem & ISO Stage 3 Load Shedding Schemes

FEEDERS	Automatic/ Manual	Loading (MW)	Group Total load	Type of Customers		Areas/Major customers
GROUP 4:						
Foothills 1	Manual	5		Residential	10%	Woodcreek Oaks north of Pleasant Grove, and NRSP's new homes
Southeast 1	Manual	6		Residential	10%	Cirby Way and North Citby, SERSP areas
Southeast 2	Manual	4		Residential	10%	Ashley Wood, Sierra College Blvd.
			15			
GROUP 5:						
Baseline 4	Manual	5		Residential	10%	East of Country Club, west of Americana and south of McAnally
Foothills 3	Manual	6		Residential	10%	20% of Del Webb (transfer club house to Baseline 5), Pleasant Grove around Woodcreek Oaks
Southeast 7	Manual	3		Residential	10%	Rocky Ridge Drive, between Douglas and Cirby
			14			
GROUP 6:						
Baseline 3	Manual	6		Residential	10%	Silverado, west of Country Club, and Woodcreek High School
Industrial 8	Manual	5		Resid./comm.	10%	Misty Wood, Part of Country Club Rd, Gas station
Hardrock 5	Manual	4		Resid./comm.	10%	East Roseville Parkway, Douglas Blvd.,
			15			

Notes: Since statistical data are not available, the probability values are estimates based on guess work. Also, it is recommended to rotate 3 groups for the Tracy tranformer problem.
2000loadshed(7/12/02)

2000 Summer System Emergency Load shedding Schemes (Issue 1)

FEEDERS	Automatic/ Manual	Loading (MW)	Group Total load	Type of Customers		Areas/Major customers
GROUP 7:						
Venon 4	Manual	5		Resid./comm.	5%	Vernon and Riverside commercial areas, traffic signals on Cirby/Foothills
Douglas 2	Manual	5		Resid./comm.	5%	Harding & Douglas Blvd comm. Areas, residential south of Douglas Blvd., traffic signal @ Harding & Douglas
Foothills 5	Manual	6		Resid./comm.	5%	50% of Del Webb, (club house will be on Baseline 5)
			16			
GROUP 8:						
Douglas 3	Manual	6		Resid./comm.	5%	Atlantic street, Tahoe, Shasta, Roseville High School, Teigert concrete, Roseville Tele, traffic lights on Harding
Douglas 5	Manual	5		Resid./comm.	5%	Harding Blvd., Heald College, Hotels on Lead Hill, Folsom Street, Harding Square
Southeast 8	Manual	3		Resid./comm.	5%	Professional Dr., Eureka Road, AAA, Stores & offices
			14			
GROUP 9:						
Vernon 1	Manual	5		Resid./comm.	5%	Cirby and Riverside including the traffic signals, NCPA
Vernon 2	Manual	3		Resid./comm.	5%	Wastewater & Corp Yard & Electric, traffic signal @ Foothills/Vineyard
Southeast 6	Manual	4		Resid./comm.	5%	East Roseville Parkway, Eureka Road & Douglas Blvd., Traffic signals along Douglas., professional centers along Douglas
			12			
GROUP 10:						
Industrial 7	Manual	7		Resid./comm.	1%	NCRSP residential and PricCostco(PriceCostco will be removed from the list after Park Sub on line)
Baseline 2	Manual	6		Resid./comm.	1%	Foothills Blvd, Bel Air shopping area and traffic lights on Foothills Blvd.
Cirby 2	Manual	6		Resid./comm.	1%	Cirby Way, I 80 to Vista Creek, Sunrise north of Cirby, resturant, gas station, retirement homes, medical offices
			19			
GROUP 11:						
Foothills 8	Manual	6		Resid./comm.	1%	Foothills Blvd, Longs & Albertson shopping areas, traffic lights on Foothills Blvd.
Cirby 1	Manual	11		Resid./comm.	1%	Bel Air, Oakmont High School, all residential south of Cirby
	Manual			Resid./comm.	1%	
			17			
GROUP 12:						
Vernon 3	Manual	7		Resid./comm.	1%	Vernon St, Church St., & City Hall areas and the shops, Fire Bldg., Roseville Telephone
	Manual			Resid./comm.	1%	
	Manual			Resid./comm.	1%	
			7			
GROUP 13:						
Industrial 6	Manual	5		Resid./Industrial	Less than 1%	NRSP residential & Micrometallic, ***Field switching-leave HP & Roseville Telephone on line**
Foothills 2	Manual	5		Industrial./comm.	Less than 1%	Albertson, HP warehouse, UP Office, traffic signal @ Foothills/Blue Oaks. **Transfer HP to Industrial 6.**
	Manual				Less than 1%	
			10			
GROUP 14:						
Industrial 1	Manual	5		Resid./comm.	Less than 1%	Diamond Oaks, Diamond K. ***Field switching-leave Police(911) on line**
	Manual				Less than 1%	
	Manual				Less than 1%	
			5			

Notes: Since statistical data are not available, the probability values are estimates based on guess work. Also, it is recommended to rotate 3 groups for the Tracy tranformer problem.
2000loadshed(7/12/02)

SCHEDULE 10

MANUAL LOAD SHEDDING

[Section 7.4.3]

Criteria for the implementation of manual Load Shedding are set forth in the Roseville Electric Emergency Plan attached to Schedule 11.

SCHEDULE 10A

ROTATING LOAD CURTAILMENT PROCEDURES

[Section 7.4.3]

Roseville's rotating Load curtailment procedures are described in the Roseville Electric Emergency Plan attached to Schedule 11. To maintain a minimum amount of continuously interrupted Load, as directed by the ISO, for an extended amount of time, no portion of Roseville's interrupted Load shall be restored unless an equal or greater amount of Load is interrupted first.

SCHEDULE 10B

INTERRUPTIBLE LOAD

[Section 7.4.3]

Should Roseville establish an interruptible Load program and seek to bid any interruptible Load into any ISO market, Roseville shall provide a complete description of the program to the ISO at least sixty (60) days prior to the submission of the first such bid by Roseville's Scheduling Coordinator and all applicable Operating Procedures shall be followed.

SCHEDULE 11

ELECTRIC EMERGENCY PLAN

[Sections 5.2, 7.1, and 7.5.1]

Roseville's current Electric Emergency Plan is attached to this Schedule 11.

CONFIDENTIAL INFORMATION REDACTED

SCHEDULE 12

LOAD RESTORATION

[Section 7.4.4]

Roseville shall follow the procedures set forth below in this Schedule 12 in promoting orderly, coordinated restoration of electric systems after a major system disturbance has occurred which resulted in load shedding by frequency relays in California.

1. Immediately after load shedding by frequency relay has occurred in Roseville's System, Roseville shall remain in contact with PG&E's Area Control Center (ACC) until normal frequency has been restored throughout the ISO Control Area or the ISO Shift Manager has concluded that such full-time communications can be terminated. Emergency communications over the California ACC Hot-line will be under the direction of the ISO Shift Manager and the senior dispatcher present at the PG&E ACC(s).
2. Manual load restoration shall not normally be initiated until the California ACC Hot Line is attended. No load is to be manually restored unless directed by the ISO, either directly or through its assignee, provided that the procedure for the ISO's designation of any assignee is agreed to by Roseville, after the frequency has recovered and there is indication that the frequency can be maintained. Roseville shall await direction from the ISO or its assignee, who will be in contact with the ISO Shift Manager. The ISO Shift Manager shall determine whether adequate generation resources are available on line to support the load to be restored.
3. Roseville's automatic load restoration will be consistent with the WECC Coordinated Off-Nominal Frequency Load Shedding and Restoration Plan.
4. If the ISO cannot meet the WECC and NERC Control Area Disturbance Control Standard or the Control Performance Standard post disturbance, no manual load restoration shall be permitted. If the frequency is such that automatic load restoration occurs under these conditions, if Roseville has restored load automatically, it will manually shed an equivalent amount of load to offset the load which was automatically restored.
5. Restoration of ties and off-site power supply to nuclear generating facilities should be given top priority. Manual load restoration will be deferred during periods of tie restoration. Roseville should be equipped and prepared to drop load manually when necessary to allow frequency recovery sufficient to re-establish ISO intra-area ties and ties between the ISO Control Area and outside systems. Where manual load shedding is required, the ISO shall make reasonable efforts to allocate the load shedding requirement equitably among Roseville, UDCs, and MSS Operators where load shedding shall be beneficial, and such load shedding shall be made in accordance with Section 7.4.

6. Roseville shall use its existing plans and priorities to restore load within the parameters given by the ISO, giving the appropriate priority to essential services such as military, public safety agencies, water treatment plants, sewage treatment plants, etc.

SCHEDULE 13

EXISTING CONTRACTS AND ENCUMBRANCES

[Section 9.1.1]

Existing Contract or Encumbrance	Amount (MW)	Scheduling Timelines	
		To PTO	To ISO
Contract 2948A between WAPA and PG&E (PG&E # 79)	69	20 min into the active half hour	In accordance with the ISO Tariff
COTP Interim Participation Agreement, scheduled in accordance with the Coordinated Operations Agreement among PG&E, SCE, SDG&E and TANC (PG&E # 146)	*	N/A	30 min prior to the start of the active hour
South of Tesla Principles between PG&E and TANC (PG&E # 143)	*	30 min prior to the start of the active hour	In accordance with the ISO Tariff

*The amount of Roseville's Existing Contracts and Encumbrances associated with its ISO contract reference numbers (CRNs) is set forth, and is accounted for, and subject to, Schedule 13 of the NCPA MSS Aggregator Agreement.

Note: Details regarding the agreed upon scheduling provisions for each Existing Contract or Encumbrance are described in the Settlement Agreement.

SCHEDULE 14

GENERATING UNITS AND PARTICIPATING LOADS

[Section 10.1]

Roseville's individual Generating Units and Participating Loads to which it has entitlements, together with certain information required by the ISO, are identified in Schedule 14 to its MSS Aggregator's agreement with the ISO.

SCHEDULE 15

METERING OBLIGATIONS

[Section 12.2]

Obligations and Rights of Roseville

1.0 Submission of Meter Data through the ISO's Revenue Meter Data Acquisition and Processing System ("MDAS"). Roseville agrees to make available to the ISO through MDAS its Meter Data in accordance with the ISO Tariff. The ISO's requirements regarding the frequency with which it requires Meter Data to be made available to it through MDAS by Roseville are referred to in the Metering Protocol of the ISO Tariff.

1.1 Meter Information. Roseville shall provide in the format prescribed by Schedule 15.1 the required information with respect to all of its meters used to provide Meter Data to the ISO. Roseville must immediately notify the ISO of any changes to the information provided to the ISO in accordance with this Section and provide the ISO with any information in relation to such change as reasonably requested by the ISO. Roseville shall have the right to modify Schedule 15.1, although such modification shall not constitute an amendment to this Agreement.

1.2 Transformer and/or Line Loss Correction Factor. If Roseville uses low voltage side metering, it shall use the ISO approved transformer and/or line loss correction factor referred to in the Metering Protocol of the ISO Tariff.

1.3 Rights to Access Metering Facilities. Roseville shall use its best efforts to procure any rights necessary for the ISO to access all Metering Facilities of Roseville to fulfill its obligations under the ISO Tariff, and its obligations under this Agreement. If, after using its best efforts, Roseville is unable to provide the ISO with such access rights, Roseville shall ensure that one of its employees is an ISO Authorized Inspector and such employee undertakes, at the ISO's request, the certification, testing, inspection and/or auditing of those Metering Facilities in accordance with the procedures established pursuant to the Metering Protocol of the ISO Tariff, including the requirement to complete and provide to the ISO all necessary documentation. The ISO acknowledges that it will not be prevented from fulfilling its obligations under the ISO Tariff or this Agreement by reason of the fact that it is provided with escorted access to the Metering Facilities of Roseville.

1.4 Security and Validation Procedures. The security measures and the validation, editing, and estimation procedures that the ISO shall apply to Meter

Data made available to the ISO by Roseville shall be as referred to in the Metering Protocol of the ISO Tariff.

1.5 **Authorized Users.** In addition to the persons referred to in the ISO Tariff, including Roseville and the relevant Scheduling Coordinator, as being entitled to access Meter Data on MDAS, Roseville may set forth in Schedule 15.2 of this Agreement any additional authorized users that shall be entitled to access Roseville's Settlement Quality Meter Data held by the ISO. Roseville shall include in Schedule 15.2 as authorized users the relevant UDCs and TOs. The ISO shall provide the authorized users with any password or other information necessary to access Roseville's Settlement Quality Meter Data held by the ISO on MDAS. Any amendment or addition to Schedule 15.2 shall not constitute an amendment to this Agreement.

1.6 **Certification, Inspection, and Auditing of Meters.** Roseville shall be responsible for all reasonable costs incurred by the ISO or an ISO Authorized Inspector in connection with them carrying out the certification, inspection, testing or auditing of the meters identified in Schedule15.1 from which Roseville provides Meter Data to the ISO. The ISO or ISO Authorized Inspector shall furnish Roseville, upon request, an itemized bill for such costs.

Obligations and Rights of the ISO

2.0 **Direct Polling of MDAS.** The ISO shall allow the Scheduling Coordinator representing Roseville and all authorized users to directly poll MDAS for the Meter Data relating to Roseville in accordance with the procedures referred to in the Metering Protocol of the ISO Tariff.

2.1 **ISO as a Third-Party Beneficiary.** The ISO shall be a third-party beneficiary to any future agreement between Roseville and any other party relating to the Metering Facilities of Roseville for the purpose of granting the ISO access to any relevant information, records and facilities as needed by the ISO to fulfill its obligations under the ISO Tariff and its obligations under this Agreement.

2.2 **Remote and Local Access to Metering Data.** The ISO shall provide Roseville any password or other requirements necessary for Roseville to access its Meter Data remotely or locally at the meter.

Calculation of Roseville Settlement Quality Meter Data

If Roseville elects to use its MSS Aggregator for Load following, the calculation of Roseville's Settlement Quality Meter Data ("SQMD") shall be made as part of its MSS Aggregator's calculation of SQMD. If Roseville does not use its MSS Aggregator for Load following, the calculation of Roseville's SQMD shall be made in accordance with a calculation procedure that is mutually agreed by the Parties, which calculation procedure will generally be as follows:

Roseville SQMD (Gross Load) = Meter Data at the Points of Interconnection + Metered Generation from Internal Generating Units – Final Real-Time WAPA 2948A Energy in accordance with the Settlement Agreement

SCHEDULE 15.1

METER INFORMATION

Roseville 230 kV Substation

Location: 850 Harding Blvd., Roseville, CA 95678

Line No. 1

Resource ID/Meter Number: 5818501

Line No. 2

Resource ID/Meter Number: 5818502

Fiddyment 230-kV Substation

Location: 6821 Fiddyment Rd., Roseville, CA 95747

Resource ID/Meter Number: 5818505

SCHEDULE 15.2

ACCESS TO METER DATA AND AUTHORIZED USERS

[Roseville shall provide in Schedule15.2 a list of all authorized users of Roseville's Settlement Quality Meter Data and any restrictions or limitations placed on them.]

Western Area Power Administration

SCHEDULE 16

TRANSMISSION RELIABILITY CRITERIA

[Section 13.5]

For transmission reliability, Roseville shall abide by all NERC and WECC Planning Criteria and the following:

Power Flow Assessment:

	Criteria	
Contingencies	Thermal [3]	Voltage [4]
Generating unit [1]	A/R	A/R
Transmission line [1]	A/R	A/R
Transformer [1]	A/R [5]	A/R [5]
Overlapping [2]	A/R	A/R

1 All single contingency outages (i.e. generating unit, transmission line or transformer) will be simulated on participating transmission owners' local area systems.

2 Key generating unit out, system readjusted, followed by a line outage.

3 Applicable Rating – Based on ISO Transmission Register or facility upgrade plans.

4 Applicable Rating – ISO Grid Planning Criteria or facility owner criteria as appropriate.

5 Based on judgement of ISO and facility owner, a thermal or voltage criterion violation resulting from a transformer outage may not be cause for Reliability Must-Run Generation solution if the violation is considered marginal (e.g. acceptable loss of life or low voltage), otherwise (e.g. unacceptable loss of life or voltage collapse) a Reliability Must-Run Generation solution would be indicated.

Post Transient Load Flow Assessment:

Contingencies	Reactive Margin Criteria [2]
Selected [1]	A/R

1 If power flow results indicate significant low voltages for a given power flow contingency, simulate that outage using the post transient load flow program. The post-transient assessment will develop appropriate Q/V and/or P/V curves.

2 Applicable Rating – positive margin based on 105% of 1 in 2 year load forecast.

Stability Assessment:

Contingencies	Stability Criteria [2]
Selected [1]	A/R

1 If power flow or post transient study results indicate significant low voltages or marginal reactive margin for a given contingency, simulate that outage using the dynamic stability program.

2 Applicable Rating – ISO Grid Planning Criteria or facility owner criteria as appropriate.

SCHEDULE 17

NOTICES

[Section 19.1]

Roseville

Name of Primary Representative:	Tom Habashi
Title:	Utility Director
Address:	2090 Hilltop Circle
City/State/Zip Code:	Roseville, CA 95747
Email Address:	thabashi@roseville.ca.us
Phone:	(916) 774-5602
Fax No:	(916) 774-3797

Name of Alternative Representative:	Tom Green
Title:	Power Supply Manager
Address:	2090 Hilltop Circle
City/State/Zip Code:	Roseville, CA 95747
Email Address:	tgreen@roseville.ca.us
Phone:	(916) 774-5619
Fax No:	(916) 774-5583

ISO

Name of Primary Representative:	Byron Woertz
Title:	Director of Client Relations
Address:	151 Blue Ravine Road
City/State/Zip Code:	Folsom, CA 95630
Email Address:	bwoertz@caiso.com
Phone:	(916) 608-7066
Fax No:	(916) 608-7074

Name of Alternative Representative:	Deborah A. Le Vine
Title:	Director of Contracts
Address:	151 Blue Ravine Road
City/State/Zip Code:	Folsom, CA 95630
Email Address:	dlevine@caiso.com
Phone:	(916) 351-2144
Fax No:	(916) 351-2487