# NORTHERN CALIFORNIA POWER AGENCY POOLING AGREEMENT

\_\_\_\_\_, 2008

### NCPA POOLING AGREEMENT TABLE OF CONTENTS

NORTHERN CALIFORNIA POWER AGENCY	l
POOLING AGREEMENT	i
TABLE OF CONTENTS	ii
AMENDED AND RESTATED NORTHERN CALIFORNIA POWER AGENCY	1
POOLING AGREEMENT	1
ARTICLE 1 - Definitions	3
ARTICLE 2 - Commission	
ARTICLE 3 - General Manager	
ARTICLE 4 - Consultation with Participant Staff	10
ARTICLE 5 - Load Forecasting & Resource Planning	
ARTICLE 6 - PURCHASES AND SALES	
ARTICLE 7 - Reserved	
ARTICLE 8 - Central Dispatch and Scheduling Services	13
ARTICLE 9 - Accounting	
ARTICLE 10 - Metering	
ARTICLE 11 - Billing	
ARTICLE 12 - Pooling Schedules	
ARTICLE 13 - Other Agreements	
ARTICLE 14 - Reliability Standards, Requirements, Criteria, and Rules	
ARTICLE 15 - Term of Agreement	
ARTICLE 16 - Notices	
ARTICLE 17 - Waiver of Defaults	
ARTICLE 18 - Uncontrollable Forces	
ARTICLE 19 - Liability	
ARTICLE 20 - Reports and Records	
ARTICLE 21 - Assignment of Agreement	
ARTICLE 22 - Settlement of Disputes and Arbitration	20
ARTICLE 23 - Amendments	
ARTICLE 24 - Severability	
ARTICLE 25 - Governing Law	
ARTICLE 26 - Counterparts and Additional Parties	
Pooling Schedule 1.00 - Pool Billing Procedures	
Pooling Schedule 2.01 - Pricing Interparty Sales of Capacity	
Pooling Schedule 2.02 - Principles for Sale of Pool Excess Energy	
Pooling Schedule 3.01 - Economic Dispatch	
Pooling Schedule 4.01 - Allocation of Pool Expenses	
Pooling Schedule 5.01 - Forecasting	
Pooling Schedule 6.01 - NCPA Capacity Pool	
Pooling Schedule 6.02 - NCPA Capacity Pool Resource Adequacy Program	
Pooling Schedule 6.03 - NCPA Capacity Pool Capacity Transfer Process	
Pooling Schedule 6.04 - Calendar Year 2007 Intraparty Capacity Transaction	
Pooling Schedule 6.05 - Pool Accounting Method	50
Pooling Schedule 7.01 Load Following Costs and Allocations	
Pooling Schedule 9.01 - Ancillary Services	
Pooling Schedule 9.02 - Transmission	.UJ 70
Pooling Schedule 9.02 - Appendix A	77
Pooling Schedule 9.02 - Appendix B	73
Pooling Schedule 10.01 - Western Area Power Administration Allocations to Pool Participants	
Pooling Schedule 11.01 - Member Meter Project	75

## AMENDED AND RESTATED NORTHERN CALIFORNIA POWER AGENCY POOLING AGREEMENT

This Amended and Resta	ted Pooling Agreement, hereinafter referred to as the
"Agreement", dated as of	, 2008, is made and entered into by and among the
Northern California Power Agency	y ("NCPA") and those members and associate members of
NCPA signatory hereto.	

#### WITNESSETH:

WHEREAS, other than NCPA, each of the Parties to this Agreement is a party to the NCPA Joint Powers Agreement and is referred to in this Agreement as a "Participant"; and

WHEREAS, NCPA has heretofore been duly established as a public agency pursuant to the Joint Exercise of Powers Act of the Government Code of the State of California and, among other things, is authorized to acquire, construct, finance, and operate buildings, works, facilities and improvements for the generation and transmission of electric capacity and energy for resale; and

WHEREAS, each of the Participants owns a system for the distribution of electric capacity and energy for resale or its own use and is authorized to obtain electric capacity and energy for its present or future requirements, through contracts with NCPA or otherwise; and

WHEREAS, NCPA has established facilities, staff, and the capability for:

- (a) Planning for the addition of generation or transmission facilities.
- (b) Entering into long-term and short-term, interchange transactions, including provision of transmission services.
- (c) Dispatching and scheduling all available resources to meet the combined loads of the Participants; and

WHEREAS, the Parties, desiring to avail themselves of the full benefits of pooling do hereby establish an operating energy resource pool to be known as the NCPA Pool, hereinafter referred to as the "Pool"; and

WHEREAS, it is intended that each Participant will receive operating reliability, and economic benefit from participating in the Pool. Such benefit should be greater than, or at least

Date Modified: 9/18/2008 Page 1 of 77

equal to, the benefit which would have been derived from the use of the Participant's own resources if the resources had been scheduled for the Participant's maximum benefit for use on its own loads; and

WHEREAS, each of the Parties intends to observe the provisions of this Agreement in good faith and shall cooperate with all other Parties in order to achieve the full benefits of pooling, and

WHEREAS, the Parties have previously entered in a NCPA Pooling Agreement dated as of September 22, 1993, and amended from time to time and now desire to amend and restate such prior agreement, and

WHEREAS, this Agreement amends, restates and replaces such prior agreement which is hereafter of no further force or effect.

NOW, THEREFORE, in consideration of the covenants of each of the Parties hereto, it is agreed hereby as follows:

Date Modified: 9/18/2008 Page 2 of 77

#### **ARTICLE 1 - Definitions**

Wherever used in this Agreement, in either the singular or plural number, the following terms shall have the following respective meanings:

- 1.1 Assignment Administration Agreement or "AAA agreement" is an agreement between NCPA and certain of its members; whereby NCPA has agreed to accept assignment of assignor's base resource percentage, and will administer the Assignment Contract for the benefit of assignor in order to create a power resource portfolio for the mutual benefit of the members, including the Participants.
- 1.2 **Ancillary Services ("AS")** are services that ensure reliability and supports the transmission of electricity from generation sites to customer loads. Such services may include: load regulation, spinning reserve, non-spinning reserve, and voltage support.
- 1.3 All Resources Bill ("ARB") The All Resource Bill is a single, combined monthly bill from NCPA to a Participant that includes all operating project, plant, and other program costs and revenues contained in the then fiscal year operating Annual Budget at the summary level. The ARB provides year-to-date tracking of budget amounts billed, Third Party revenues collected, prior months' billing adjustments, and various other details supporting information including power generated and purchased.
- 1.4 **Annual Budget** is the Annual Budget of NCPA including an itemized forecast of estimated or expected expenditures and sources of revenue for all the operating activities of NCPA for the then current fiscal year. As such, the Annual Budget includes the cost and expenses of all projects, plants, and other programs, as well as small related capital acquisitions, improvements, and betterments. The operating activities of NCPA provided for in the Annual Budget include, but are not limited to, generation, transmission, distribution, purchased power, management services, administrative & general, and other related activities of whatever kind.
- 1.5 **Balancing Authority** is the responsible entity that integrates resource plans ahead of time, maintains load, interchange, and generation balance within a Balancing Authority Area, and supports the interconnection frequency in real-time. For the purposes of this Agreement, the Balancing Authority is the California Independent System Operator ("CAISO") or its successor.
- 1.6 **Balance of Month ("BOM") Energy Transactions** are power purchases and sales for a term not greater than one month to be performed or delivered within the current or next succeeding calendar month.
- 1.7 Base Resource Assignment Agreement is a multiple agreement between Western and each of the Participants, in which the Participant's Western contract is assigned to NCPA for the benefit of the assigning Participant,

Date Modified: 9/18/2008 Page 3 of 77

- 1.8 California Energy Commission ("CEC") is the State of California's primary energy policy and planning agency established pursuant to California Public Resources Code section 25200 et seq. in 1975. The CEC has five major responsibilities including (1) forecasting future energy needs and keeping historical energy data, (2) licensing thermal power plants 50 megawatts or larger, (3) promoting energy efficiency through appliance and building standards, (4) developing energy technologies and supporting renewable energy, and (5) planning for and directing the State's response to energy emergency.
- 1.9 **Commission** is the governing body of NCPA established pursuant to the NCPA Joint Powers Agreement.
- 1.10 Commissioners are the members of the Commission as defined by the NCPA Joint Powers Agreement.
- 1.11 California Independent System Operator ("CAISO") is a non-profit public benefit corporation responsible for the provision of fair and open transmission access, and maintaining reliable and efficient operation of the grid, within the State of California pursuant to Chapter 2.3, Part 1, Division 1 of the California Public Utilities Commission ("CPUC").
- 1.12 **Days** mean calendar days unless otherwise specified.
- 1.13 **Entitlement** is the portion of the capacity and energy of a Power Supply or transmission facility to which a Participant is entitled as an owner or as a purchaser.
- 1.14 **General Manager** of NCPA is the person designated by the Commission as General Manager pursuant to the NCPA Joint Powers Agreement and NCPA bylaws and who is delegated the responsibility to carry out the day-to-day operation of the Pool pursuant to Article 3.
- 1.15 **Generating Unit** is any facility constructed for the purpose of generating electricity and to which a Participant, or NCPA on behalf of the Participants, is entitled to capacity and/or energy.
- 1.16 Good Utility Practice are any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result of the lowest reasonable cost consistent with Northern American Electric Reliability Corporation ("NERC") or Western Electric Coordinating Council ("WECC") approved business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

Date Modified: 9/18/2008 Page 4 of 77

- 1.17 **Incremental Costs** are those additional costs which are incurred as the result of preparing to start up or starting up, and thereafter operating, or increasing the level of operation of one or more Generating Units or increasing contract purchases.
- 1.18 Interconnection Agreement or "IA" is an agreement dated September 01, 2002 between NCPA and Pacific Gas and Electric Company ("PG&E") to provide terms and conditions of interconnections between the electric systems of the Participants and PG&E; as such agreement now exists or may hereafter be amended; or that certain IA between the Port of Oakland and PG&E dated January 01, 2005 now exists or may hereafter be amended.
- 1.19 **NCPA Capacity Pool** is a voluntary program in which Participant(s) pool and transact capacity in addition to the pooling of other resources pursuant to this Agreement.
- 1.20 NCPA Facilities Agreement is that agreement dated December 15, 1993 between NCPA and certain of its members who are project participants in various NCPA projects, as it now exists or may hereafter be amended, which delineates certain rights and obligations, and provides descriptions, principles and procedures with regard to NCPA Projects; as such agreements now exists or may hereafter be amended.
- 1.21 NCPA Joint Powers Agreement or "the JPA" means the Amended and Restated Northern California Power Agency Joint Powers Agreement dated as of January 31, 2008; as such agreement now exists or may hereafter be amended.
- 1.22 **NCPA Pool Expenses** are those expenses which are incurred pursuant to this Agreement and determined by the Commission to be related to the operation of the Pool.
- 1.23 NCPA Project is any project undertaken by NCPA and any of its members, which has progressed beyond the First Phase (preliminary survey and investigation) pursuant to the NCPA Facilities Agreement.
- 1.24 **Participant** is a member or associate member of NCPA that is a signatory to this Agreement.
- 1.25 **Party** is NCPA or a Participant.
- 1.26 **Peak Demand** (in megawatts) of a Participant during any defined period of time is the maximum demand on the Participant's system.
- 1.27 Planning Reserve Margin is the amount of capacity, measured in megawatts, that is required for the Pool to serve its demand obligation, permit maintenance, provide for planned and forced outages, and provide adequacy reserves to achieve a high degree of reliability.

Date Modified: 9/18/2008 Page 5 of 77

- 1.28 **Pool** is the organization formed under this Agreement.
- 1.29 **Pool Forecast** NCPA, using load forecasts of the Participants, shall annually develop a combined Pool energy and Pool Peak Demand forecast for total of fifteen calendar year period, for the upcoming calendar year and the subsequent fourteen years period.
- 1.30 Pool Load Resource Balance is the optimizing and managing of assets, including gas/fuel and electricity transactions, procurement of transmission, ancillary services and coordinating energy delivery scheduling to meet the physical and financial needs of a group of Participants or a Participant for electric energy.
- 1.31 **Pool Operating Procedures** are procedures to provide guidance with respect to daily Pool operations and for exchanging information between the Parties, which are subject to change from time to time independent of this Agreement. Approved procedures may be attached to this Agreement as Pooling Schedules.
- 1.32 **Pool Peak Demand** is the maximum pool demand in megawatts of all Participants during a defined period of time on a monthly basis, or during a calendar year on an annual basis.
- 1.33 Pooling Schedules are those technical or operating procedures adopted and amended by the Commission, attached to and made part of this Agreement, which are subject to change or amendment from time to time by vote of the Commission, and without the approval of the Participants.
- 1.34 **Power Supply** is a Generating Unit or a contract that provides capacity, energy, or a related service in which a Participant has an Entitlement.
- 1.35 **Qualifying Capacity** is the maximum amount of capacity from a resource that can be applied towards a capacity reserve requirement as defined by the applicable regulatory authority.
- 1.36 **Third Party** is any entity that is not a Party to this Agreement.
- 1.37 Third Phase Agreement is an agreement between NCPA and project participants to enable NCPA on behalf of project participants to carry out plans for the construction, operation, and financing of NCPA Project.

#### **ARTICLE 2 - Commission**

2.1 **Commission.** The Commission is responsible for the administration of this Agreement. Each Participant hereto shall be represented by its duly authorized representative ("Commissioner") or

Date Modified: 9/18/2008 Page 6 of 77

alternate ("Alternate") pursuant to the NCPA Joint Powers Agreement ("JPA"). Each Commissioner shall have authority to act for the Participant represented with respect to matters pertaining to this Agreement.

- Quorum. For purposes of acting upon matters relating to the NCPA Pool, a quorum of the Commission shall consist of those Commissioners, or their designated Alternates, representing a numerical majority of the Participants, or, in the absence of such, those Commissioners representing Participants having a combined participation percentage of greater than 50 percent. "Participation percentage," as used in this Article 2.2, means that fraction (expressed as a percentage) of which the numerator is the number of votes a Participant is entitled to cast under Article 2.3(a) and the denominator is the total number of votes all Participants are entitled to cast under Article 2.3(a).
- Voting. Each Participant shall have the right to cast one vote with respect to matters pertaining to this Agreement and attached Pooling Schedules. Actions of the Commission with respect to matters pertaining to this Agreement shall be effective only upon a majority vote of all Participants subject to the following exceptions:
  - (a) Upon demand of any Participant, at any meeting of the Commission, the vote on any issue relating to this Agreement or attached Pooling Schedules shall be based upon the Participants' contributions to NCPA Pool Expenses for the current fiscal year. Each Participant shall have a number of votes equal to its percentage share of the NCPA Pool Expenses. Actions of the Commission shall be effective only upon an affirmative vote of sixty-five percent (65%) or greater of the total votes to which all Participants are entitled.
  - (b) Any Participant may veto a discretionary action of the Participants relating to this Agreement or attached Pooling Schedules that was not taken by a sixty-five percent (65%) or more participation percentage vote, within ten (10) days following mailing of notice of such Commissioners' action by giving written notice of veto to NCPA, unless at a meeting of the Commissioners or Alternates called for the purpose of considering the veto, held within thirty (30) days after such veto notice, the holders of sixty-five percent (65%) or more participation percentage shall vote to override the veto.
  - (c) The sixty-five percent (65%) affirmative vote required for action pursuant to this Article shall be reduced by the amount that the voting rights of any Participant exceeds thirty-five percent (35%), but such sixty-five percent (65%) shall not be reduced below a majority in interest.
- 2.4 **Adoption and Amendment of Budget**. Annually, the Commission shall adopt a budget for at least the coming fiscal year, giving due consideration to budgetary requests from the General Manager with respect to the planning and operating functions in the Pool.

Date Modified: 9/18/2008 Page 7 of 77

The Commission may approve modifications to the Annual Budget as proposed by the General Manager, as needed to reflect material changes in facts or circumstances related to output, availability, rates, and market prices. Approved modifications to the Annual Budget will be reflected in the monthly All Resources Bill ("ARB") and are also reported in the monthly Business Progress Report, Staff Reports, Treasurer's Report, and General Manager's report to the Commission, as applicable.

The Parties shall cooperatively plan and operate the Pool to supply electricity in the most reliable, economical way to meet the Participants' combined load via exchanges and wholesale transactions among its membership. The costs of NCPA-owned Generating Units, Western Area Power Administration allocations, member resources, market purchases of power, transmission resources and Ancillary Services, and management services involved in the pooling process shall be contained in applicable sections of the NCPA Annual Budget.

- 2.5 **Duties and Authority.** The Commission shall have the following duties and authority with regard to the NCPA Pool:
  - (a) Administer, enforce and interpret the provisions of this Agreement in order to accomplish the objectives of the Pool;
  - (b) Appoint a General Manager, pursuant to the NCPA JPA, who, pursuant to policies established by the Commission, and with other necessary staff personnel, shall have duties and responsibilities as stated in Article 3;
  - (c) The Commission may also establish whatever other reliability standards it deems appropriate from time to time for the Pool and, on an objective, not-unduly-discriminatory basis, for each Participant. Such reliability standards shall conform with Good Utility Practice;
  - (d) Approve annual goals and objectives for the NCPA staff relating to the Pool giving due consideration to the recommendations by the General Manager;
  - (e) Act on behalf of all Parties in carrying out any action properly taken pursuant to the provisions of this Agreement. Without limiting the foregoing, the Commission or its designee shall have the authority on behalf of all Parties to enter into any contract, lease or other instrument which has been properly authorized pursuant to this Agreement, including documents supplementing this Agreement, contracts with Third Parties, and related items.
  - (f) Establish standards, in addition to the authority provided in other sections of this Agreement, with respect to any aspect of arrangements between the Parties and Third-

Date Modified: 9/18/2008 Page 8 of 77

Parties which it determines may adversely affect the reliability of the Pool, and to review such arrangements to determine compliance with such standards;

- (g) To adopt or amend Pooling Schedules in its discretion.
- (h) The Commission shall have such further powers and duties as are conferred or imposed upon it by other articles of this Agreement.
- 2.6 Goals and Objective. Each year, in consultation with the General Manager, the Commission will establish specific goals and objectives for the NCPA staff. NCPA shall provide periodic reports to the Commission regarding progress toward meeting goals and objectives.

#### **ARTICLE 3 - General Manager**

- 3.1 **Reporting Authority**. The General Manager of NCPA reports to the Commission pursuant to the NCPA JPA.
- 3.2 **NCPA Staff.** The General Manager shall hire such staff as necessary to carry out, within the budget established by the Commission, NCPA's obligations pursuant to this Agreement.
- 3.3 **Duties and Authority.** The General Manager and the NCPA staff shall have the duties and authorities as necessary to provide for the day-to-day administration of this Agreement, which include but are not limited to actions to:
  - (a) Carry out directions of the Commission with respect to matters related to this Agreement;
  - (b) Coordinate the operation and maintenance of the facilities of the Pool so as to maintain reliability of service and obtain the maximum overall economies consistent therewith;
  - (c) Coordinate interchanges accounting and maintain records pertaining to the operation of the Pool, including determination for each calendar month of the power delivered to each Participant;
  - (d) Prepare and submit a proposed budget for Pool-related expenditures for at least the coming fiscal year to appropriate committees and the Commission, on such schedule as established by the Commission;
  - (e) Review Commission approved budget and propose any needed modifications to the appropriate committees and the Commission.

Date Modified: 9/18/2008 Page 9 of 77

- (f) Furnish such information and reports as are required to keep the Parties hereto fully informed of the outlook for, the functioning of, and results achieved by the Pool;
- (g) Develop operating principles, practices and procedures as they relate to the achievement of overall reliability and economy of operation of the Pool;
- (h) Propose amendments to the Pooling Agreement and/or Pooling Schedules;
- (h) Calculate costs for NCPA Projects and transactions within the Pool;
- (i) Calculate costs for NCPA transactions with Third Parties;
- (i) Develop a billing system for the Pool for transactions pursuant to this Agreement, including criteria, rules, and standards thereto;
- (j) Bill Pool Participants for Pool-related costs;
- (k) Assist the Participants in making sales and purchases of generation and transmission capacity, energy, and related services and products;
- (I) Consult with Participants' technical staffs regarding the plans of the Participants as they relate to the reliable and economic operation of the Pool;
- (m) Initiate and make long and short-range planning studies. These studies shall be updated annually or at such other times as the Commission may direct;
- (n) Develop, annually, a Pool generation and transmission resource plan;
- (o) Initiate and make studies, as necessary from time to time, to recommend reliability standards;
- (p) Initiate and make operating studies of the facilities of the Pool and make such recommendations and initiate such actions as may be necessary to maintain reliable operation.

#### ARTICLE 4 - Consultation with Participant Staff

4.1 Consultation. The General Manager shall consult with the respective staff of the Participants or may establish ad hoc committees, composed of representatives appointed by the Participants, from time to time, as needed, to advise him or her on a particular matter relevant to this

Date Modified: 9/18/2008 Page 10 of 77

Agreement. Each ad hoc committee shall serve a limited purpose and shall be dissolved once its specific advisory task has been completed.

#### ARTICLE 5 - Load Forecasting & Resource Planning

- Participants' Load Forecasts. Each Participant may submit, annually, to NCPA, a forecast of the Participant's monthly Peak Demand and energy load for a total of fifteen calendar year period, for the upcoming calendar year and the subsequent fourteen-year period. For those Participants who do not submit all such load forecast data, NCPA staff will work cooperatively with Participants' staff to jointly produce such a forecast. The load forecast shall be prepared in accordance with this Agreement and applicable Pooling Schedule(s).
- Participants' Resource Forecasts. Each Participant shall promptly notify NCPA in advance of any new or materially changed plan(s) for additions to, retirements of, or any changes in generation, power supply contracts, or transmission resources which can affect the Participant's energy and/or capacity balance or NCPA's obligation to meet Pool load in the balance of month timeframe.
- Pool Forecast. NCPA, using load forecasts of the Participants, shall annually develop a combined Pool energy and Pool Peak Demand forecast for a total of fifteen calendar year period, for the upcoming calendar year and the subsequent fourteen-year period ("the Pool Forecast"). The Pool Forecast shall be prepared in accordance with this Agreement and applicable Pooling Schedule(s). NCPA shall submit the Pool Forecast to each Participant.
- 5.4 **Capacity Reserve Requirements.** Each Participant is required to comply with capacity reserve requirements established by its applicable regulatory authority. Each Participant shall comply with such requirements by either participating in the NCPA Capacity Pool or by providing an individual compliance demonstration pursuant to the rules and criteria established by the applicable regulatory authority. Each Participant that elects to participate in the NCPA Capacity Pool shall comply with the provisions established in the applicable Pooling Schedules.
  - NCPA will develop a model compliance program to assist the Participants in developing their respective programs. The NCPA model compliance program will be developed and maintained independent of this Agreement.
- 5.5 **Energy Requirement.** If a Participant's applicable Regulatory Authority establishes energy requirements, then the provisions of such requirements will be incorporated within an applicable Pooling Schedule within this Agreement.

Date Modified: 9/18/2008 Page 11 of 77

- 5.6 **Pool Energy/Capacity Balance.** NCPA, using information developed pursuant to Articles 5.3 and 5.4 and the applicable Pooling Schedules, will develop a load/resource energy and/or capacity balance for each of the Participants.
- 5.7 Identification of Need. NCPA, using the information developed in Article 5.5 and 5.6, will determine each the Participants' compliance with the energy and/or capacity requirements established by its applicable regulatory authority. If NCPA and/or the applicable regulatory authority determine that a Participant has failed to meet its energy and/or capacity requirements, NCPA will provide to that Participant an estimate of the need for the Participant to add additional energy and/or capacity to their respective portfolio in order to meet the established requirements.
- 5.8 **Responsibility to Procure Additional Energy or Capacity.** NCPA may assist the Participants in identifying potential energy and/or capacity that can be acquired to fill any deficiencies identified pursuant to Article 5.7. The individual Participants are responsible for procuring any additional energy and/or capacity needed to meet requirements established by their respective regulatory authority. Such additions will be made under a separate agreement.
- Allocation of Costs Resulting from Shortages. Any charges or penalties incurred by NCPA as a result of a Participant(s) not having sufficient energy and/or capacity to meet the requirements established by their respective regulatory authority will be allocated pursuant to the principles of cost causation. Such charges and/or penalties shall be proportionally allocated to the Participant(s) who caused the charges and/or penalties. If the cause of the charges and/or penalties were due to the deficiency of energy and/or capacity, then the Participant(s) who were deficient would bear the cost of such shortfall. If based on the available information NCPA is unable to determine the basis of the charges and/or penalties received, these charges and/or penalties will be allocated based on an alternative method developed and approved by the Commission.

#### ARTICLE 6 - PURCHASES AND SALES

- Balance-of-Month Purchase and Sale Transactions. NCPA shall transact on behalf of each Participant and thereby strive to economically serve the Pool Load through Balance-of-Month, day-ahead, intra-day, and real-time purchases or sales of energy capacity and transmission.
- 6.2 **Long-Term Transactions.** Transactions longer than Balance-of-Month in duration shall be undertaken pursuant to other authorizing agreements between NCPA and those Participants entering into such agreements.
- 6.3 **Transfers of Capacity Between Participants**. NCPA may, as requested by the Participants, assist in coordinating the purchase and sale of capacity among the Participants. Capacity transactions within the NCPA Capacity Pool will be made pursuant to the applicable Pooling

Date Modified: 9/18/2008 Page 12 of 77

Schedules. Capacity transacted outside of the NCPA Capacity Pool will be subject to the terms of the applicable NCPA Project agreements. Such transfers of capacity shall be determined and priced in accordance with the applicable Pooling Schedules or as mutually agreed upon by the purchasing and selling Participants, and upon Participant agreement, shall be binding upon the purchasers and sellers for the duration of the capacity transaction. No energy shall be associated with such capacity transfer unless otherwise specified by the transacting Participants.

#### ARTICLE 7 - Reserved

#### **ARTICLE 8 - Central Dispatch and Scheduling Services**

8.1 **Central Dispatch**. Each Participant shall, to the fullest extent practicable, subject all Power Supplies and all transmission Entitlements to the central dispatch of the Pool. Each Participant shall, however, be the sole judge as to whether or not and to what extent safety requires that a facility owned by that Party be shut down or operated at reduced capacity, with as much notice as is reasonably practicable provided to NCPA. However, at a minimum, notice of resource availability or reduced capacity shall be provided to NCPA to comply with NERC, WECC, and Balancing Authority requirements.

The objectives of the Pool central dispatch operated by NCPA shall be as follows:

- (a) To supply the capacity and energy requirements of the Pool at the lowest practicable cost consistent with reliability standards;
- (b) To accomplish the requirements of (a), above, in a reliable and safe manner while complying with applicable regulations.
- 8.2 **Good Utility Practices**. Each Party shall cause its Generating Units to be designed, constructed, maintained and operated in accordance with Good Utility Practice.
- 8.3 **Scheduling NCPA Projects and Power Supply.** NCPA shall schedule Power Supplies in accordance with Pooling Schedule 6.03 and agreements between Parties and their purchase and sale counterparties.
- 8.4 Scheduling of Western Resource. Each Party's Entitlement to Western Area Power Administration ("Western" or "WAPA") power, which is provided pursuant to the Party's Base Resource Assignment Agreement with Western and shall be scheduled pursuant to the AAA Agreement. To the extent the AAA Agreement does not addresses base resource scheduling this Agreement shall govern scheduling.

Date Modified: 9/18/2008 Page 13 of 77

- 8.5 **Scheduling Other Projects**. NCPA may also schedule power from other projects in which a Participant or Participants are involved, pursuant to agreements between NCPA and such Participants. Such scheduling shall not be undertaken in a fashion that will conflict with the Parties' contractual obligation with a Third Party or will reduce the benefits to the Parties.
- Resource Substitution. NCPA may schedule or dispatch any resource to meet a Participant's load as long as such load is met with no decrease in quality and quantity of service and associated attributes and no increase in cost, including opportunity cost. Resource substitution shall be permitted to provide the most efficient and cost effective use of each Participant and the Pool's generation and transmission resources.
- 8.7 Scheduling Method. Scheduling by NCPA may be provided directly by NCPA, or may be provided pursuant to a contract between NCPA and another entity which will perform that function.
- 8.8 **Energy and Ancillary Service**. Each Participant shall receive energy and/or Ancillary Service as needed to meet its requirements as set forth in this Agreement.
- 8.9 **Procedures.** NCPA shall have the responsibility and requisite authority to set out procedures, criteria, rules, and standards relating to operations, energy, and Ancillary Services not specifically addressed in this Article 8 or in Pooling Schedules.

#### **ARTICLE 9 - Accounting**

9.1 Records and Accounts. NCPA shall keep accurate records and accounts for each Power Supply and for each identifiable service which NCPA supplies to any Participant through this Agreement or through any agreement which may be entered into between NCPA and any Participant. Records and accounts shall be kept in general accordance with the Uniform System of Accounts Prescribed for Public Utilities and Licensees Subject to the Provisions of the Federal Power Act (see 18 CFR 101), as prescribed by the Federal Energy Regulatory Commission and amended from time to time. NCPA shall cause such records and accounts to be audited annually by a firm of independent certified public accountants of national reputation experienced in electric utility accounting. A copy of the annual auditor's report shall be made available to the Participant as soon as practicable after completion of the audit, which is normally not later than four months after the end of NCPA's fiscal year.

All records are subject to inspection or audit at the request of any Participant provided that such audits shall be conducted at any mutually agreed to time and the expense of the Participant requesting them.

Date Modified: 9/18/2008 Page 14 of 77

#### **ARTICLE 10 - Metering**

- 10.1 Installation, Maintenance, and Meter Reading. The quantities of power involved in determination of the amounts of the billing rendered under this Agreement shall be ascertained by means of meters installed, maintained and read either at the expense of the Participant on whose premises the meters are located or as otherwise provided for by an agreement between the Participants affected.
- 10.2 **Individual Member Agreement**. Each Participant shall sign an agreement with NCPA to determine whether:
  - 10.2.1 A Participant will maintain and operate the metering site to meet the Term and Conditions of the LOA 06-SNR-00960 between NCPA and WAPA;
  - 10.2.2 NCPA, on behalf of the Participant will maintain and operate the metering site to meet the Term and Conditions of the LOA 06-SNR-00960 between NCPA and WAPA.
  - 10.2.3 Schedule 11.01 to this Agreement shall list the option exercised by each Participant.
- 10.3 **Accuracy**. Procedures with respect to maintenance, testing, calibrating, correction and registration records, and precision tolerance of all metering equipment shall be in accordance with Good Utility Practice and the applicable requirements of the Balancing Authority.
- 10.4 Units of Measurement. All metering of energy required herein shall be the integration of kilowatt-hours during the appropriate time period, and the quantities thus obtained shall constitute the kilowatt load for such time period. Provided, however, that adjustment shall be made for other contractual obligations of any Party hereto as may be required to determine the quantity to be accounted for hereunder, and for transmission losses, or as otherwise provided by agreement between NCPA and the Participants.

#### **ARTICLE 11 - Billing**

- 11.1 Applicability. Bills from NCPA to Participants shall be rendered and collected by NCPA as a part of the ARB pursuant to requirements and procedures provided in this Agreement, Pooling Schedules, NCPA Project Agreements and all other applicable agreements.
- 11.2 **Procedures**. Specific details regarding NCPA billing procedures are provided in the applicable Pooling Schedule.
- 11.3 **Billing Disputes.** If a Participant questions or disputes the correctness of any billing statement by NCPA, it shall nonetheless pay the full amount billed when due.

Date Modified: 9/18/2008 Page 15 of 77

If a Participant does not question or dispute the correctness of any billing statement in writing, within thirty (30) calendar days, the billing statement shall be deemed to be correct.

If the bill is determined to be incorrect, NCPA will issue a corrected bill and refund any amount that may be due the Participant.

If NCPA and the Participant fail to agree on the correctness of a bill within thirty (30) days after the Participant has formally requested an explanation of the disputed amount of a bill, the Parties shall promptly submit the dispute to the Commission for resolution. If the Commission and the Participant fail to agree on the correctness of a bill within thirty (30) days, the dispute shall then be resolved under the procedures set forth in Article 22 of this Agreement.

11.4 Late Payments. The Commission retains final authority and sole discretion to grant relief in all late payment situations. In the event of extenuating circumstances, a Party making a late payment including accrued interest thereon, may make a written appeal to the Commission for relief from such interest for reasonable cause. Provided, however, that nothing in this Agreement shall be deemed to provide any relief from any payments due pursuant to a Third Phase Agreement, or any other agreement between the Parties other than this Agreement.

#### **ARTICLE 12 - Pooling Schedules**

Pooling Schedules. Detailed principles and/or procedures (including Pool Operating Procedures), adopted by the Commission and which are necessary for implementation of the general provisions stated in the articles of this Agreement, are attached as Pooling Schedules to this Agreement. The Pooling Schedules may be amended by Commission in its discretion.

#### **ARTICLE 13 - Other Agreements**

- 13.1 **Precedence of Agreement**. Where there is any conflict between this Agreement and any Third Phase Agreement or Project Indentures of Trust, the provisions in the Third Phase Agreement and Project Indentures of Trust shall control.
- 13.2 **Special Agreements**. To the extent not provided or available pursuant to this Agreement, any Participant may request special assistance or services from NCPA. The provision of such services may be made by NCPA, in its sole discretion, subject to availability of staff, and Commission approval. All details and arrangements for such services, including reimbursement of NCPA's costs, shall be set forth in a separate written agreement.

#### ARTICLE 14 - Reliability Standards, Requirements, Criteria, and Rules

Date Modified: 9/18/2008 Page 16 of 77

14.1 **Reliability Standards**. The standards, requirements, criteria and rules adopted by NCPA shall meet those adopted by the North American Electric Reliability Corporation ("NERC"), Western Electricity Coordinating Council ("WECC"), and CAISO or their successor organizations.

#### **ARTICLE 15 - Term of Agreement**

- 15.1 **Effective Date**. This Agreement shall become effective on the date on which it has been duly executed and delivered to NCPA by all Parties.
- **Termination**. This Agreement shall continue in effect until terminated by consent of all Participants.
- Withdrawal. Any Participant may withdraw from the Agreement by submitting notice, in writing, to all Parties at least two (2) years in advance of the effective date of such withdrawal; provided that any withdrawal hereunder shall only be effective on the last day of a NCPA fiscal year. The duration of the notice requirement maybe waived or reduced by an affirmative vote of the Commission pursuant to Article 2.3.

Withdrawal by any Participant shall not terminate this Agreement as to the remaining Parties.

No such withdrawal shall relieve any Participant of any obligation arising prior to the effective date of such withdrawal. A withdrawing Participant shall not be obligated to compensate the remaining Parties for loss of any benefits that would have accrued to the remaining Parties if the withdrawing Participant had continued its participation. Nor shall the remaining Parties be obligated to compensate the withdrawing Participant for any benefits that accrue to the remaining Parties because of the withdrawal. Reallocation of the costs and benefits of continuing in the Pool after a Participant has withdrawn shall not give rise to any claim against a Party by the remaining Parties. Nor shall any of the remaining Parties be obligated to compensate the withdrawing Participant for any benefits that accrue to the remaining Parties because of such a reallocation of costs and benefits.

#### **ARTICLE 16 - Notices**

**Notice**. Any notice, demand or request required or authorized by this Agreement to be given to a Party shall be in writing.

In the case of a Participant, the notice, demand, or request shall be: (1) personally delivered to the Commissioner and the Utility Director of the Participant, if different than the Commissioner, whose name and address are identified in writing to the Secretary of the Commission by each Participant; or (2) transmitted to the Commissioner and the Utility Director of the Participant at the address on file with the Secretary of the Commission via U.S. mail, first class postage prepaid.

Date Modified: 9/18/2008 Page 17 of 77

In the case of NCPA, the notice, demand or request shall be: (1) personally delivered to the General Manager; or (2) transmitted to the General Manager of NCPA at the address of its main office via U.S. mail, first class postage prepaid.

All such notices shall be deemed delivered when personally delivered or two (2) business days after deposit in the mail.

NCPA shall maintain a roster of the Participants' Commissioners and Utility Directors and shall distribute the roster to Participants. The designation of the Commissioners' and Utility Directors' name and/or address may be changed at any time by written notice given to the General Manager who shall thereupon give written notice of such change to NCPA and each Participant.

#### ARTICLE 17 - Waiver of Defaults

17.1 **Waiver**. No waiver of the performance by a Party of any obligation under this Agreement with respect to any default or any other matter arising in connection with this Agreement shall be effective unless given by the Commission. Any such waiver by the Commission in any particular instance shall not be deemed a waiver with respect to any subsequent performance, default or matter.

#### **ARTICLE 18 - Uncontrollable Forces**

Uncontrollable Forces. A Party shall not be considered to be in default in respect of any obligation hereunder if it is prevented from fulfilling such obligation by reason of uncontrollable forces. The term "uncontrollable forces" shall be deemed for the purposes hereof to mean storm, flood, lightning, earthquake, tsunami, fire, explosion, failure of facilities not due to lack of proper care or maintenance, civil disturbance, labor dispute, sabotage, war, national emergency, restraint by court or public authority, or other causes beyond the control of the affected Party which such Party could not reasonably have been expected to avoid by exercise of Good Utility Practice, due diligence and foresight. Any Party affected by an uncontrollable force shall use due diligence to place itself in a position to fulfill its obligations hereunder and if unable to fulfill any obligation by reason of an uncontrollable force, such Party shall exercise due diligence to remove such disability with reasonable dispatch. Nothing in this Agreement shall require a Party to settle or compromise a labor dispute.

#### **ARTICLE 19 - Liability**

19.1 **Liability.** All of the privileges and immunities from liabilities, exemptions from laws, ordinances and rules, all pension, relief, disability, workers' compensation, and other benefits which apply to

Date Modified: 9/18/2008 Page 18 of 77

the activity of officers, agents or employees of any public agency which is a Party to this Agreement, while engaged in the performance of any of their functions or duties, shall apply to them in the same degree and extent when performing their respective public duties in connection with this Agreement.

- 19.2 **Division of Responsibility**. Neither the General Manager, the Parties to this Agreement, nor an entity acting on behalf of the Pool or the Parties, shall be responsible for the transmission, control, use, or application of electric capacity and energy provided under the Pooling Schedules attached hereto on the receiving Party's side of such Party's point of interconnection and shall not, in any event, be liable for damage or injury to any person or property whatsoever, arising, accruing, or resulting from, in any manner, the receiving, transmission, control, use, application, or distribution by NCPA, or the Parties, or any Third Party acting on behalf of NCPA or the Parties, of said capacity and energy on the receiving Party's side of such Party's point of interconnection.
- 19.3 Indemnity. NCPA and each of the Parties individually shall indemnify, defend, hold and save each other harmless from any and all loss or damage sustained to any person or property and from any and all liability incurred by the other(s) by reason of any act or performance, or failure to act or perform, on the part of the indemnifying Party or its officers, agents, or employees in constructing, maintaining or operating the indemnifying Party's apparatus, appliances, or other property, or in the transmission, control or application, redistribution, delivery, or sale of said capacity and energy on the indemnifying Party's side of its point of interconnection. Such indemnification shall hold harmless the one indemnified, the members of its governing body, its officers, agents and employees, from and against any and all liability of whatever nature, including strict liability and any and all losses and damages, including consequential damages and injuries, costs, and expenses, including expenses incurred in connection with investigating any claim or defending any action, and reasonable attorney's fees. The provisions of this paragraph shall not apply to the extent that any loss, damage or liability is the result of willful misconduct or gross negligence on the part of an officer, agent or employee of the party that would otherwise be indemnified.
- 19.4 **Counsel Representation**. Pursuant to the provisions of California Civil Code Section 1717 (a), each of the Parties were represented by counsel in the negotiation and execution of this Agreement as indicated below. In light of this representation, those terms of this Agreement which dictate the responsibility for bearing any attorney's fees incurred in litigation or settlement in a manner inconsistent with the provisions of Article 19.3 were intentionally so drafted by the Parties.

#### ARTICLE 20 - Reports and Records

Date Modified: 9/18/2008 Page 19 of 77

- 20.1 **Reports to Participants**. NCPA shall prepare and make available to each Participant the following reports each month:
  - a. Statements of Financial Position and Revenues, Expenses and Changes in Accumulated Net Revenues
  - b. NCPA Annual Budget Status Report
  - c. ARB and associated reports.
  - d. Such additional reports as may be required from time to time as requested by the Participants.
- 20.2 **Records**. Each Party shall keep such records as may be reasonably required by the General Manager and shall furnish to the General Manager such records, reports and other information as he or she may reasonably require.
- 20.3 Reports to Other Agencies. NCPA will submit such reports and records which are required or may be required by the CEC, FERC or other such local, state, regional, federal, or international agencies, as such reports and records are required for NCPA to fulfill its obligations under this Agreement.

#### **ARTICLE 21 - Assignment of Agreement**

- 21.1 **Binding Upon Successors.** This Agreement, including the Pooling Schedules, shall inure to the benefit of and shall be binding upon the respective successors and assignees of the Parties to this Agreement.
- 21.2 No Assignment. Except as provided in the event of a default, and, except for the assignment by NCPA authorized hereby, neither this Agreement nor any interest herein shall be transferred or assigned by a Party hereto except with the consent in writing of the other Parties hereto. Without limiting the foregoing, this Agreement shall not be assigned by Plumas-Sierra Rural Electric Cooperative without the approval in writing of the Administrator of the Rural Utilities Service.

#### **ARTICLE 22 - Settlement of Disputes and Arbitration**

22.1 **Settlement of Disputes**. The Participants agree to make best efforts to settle all disputes among themselves connected with this Agreement as a matter of normal business under this Agreement. The procedures set forth in the remainder of this Article shall apply to all disputes that cannot be settled by the Participants themselves; provided, that the provisions of Article 11.3 shall apply to all disputes involving billing statements prepared by NCPA.

Date Modified: 9/18/2008 Page 20 of 77

22.2 **Informal Dispute Resolution**. All disputes connected with this Agreement that cannot be resolved by the Parties themselves, may be submitted by any Party to an ad hoc committee of Partys' representatives, with each Party selecting its own representative.

If the ad hoc committee cannot resolve a dispute within thirty (30) days, the dispute shall be submitted to the Commission. If the Commission cannot resolve a dispute within thirty (30) days after the first meeting at which the dispute is submitted to it, any Party to the dispute may commence mediation pursuant to Article 22.3.

Both the ad hoc committee and the Commission shall make best efforts to resolve all disputes submitted to them through discussion and negotiations. At any time during this process a Party or the Commission may suggest that a mediator with experience in the utility industry be asked to assist in such negotiations.

#### 22.3 Mediation.

- a. If informal dispute resolution, as described in Article 22.2, fails, then prior to engaging in the arbitration outlined in Article 22.4, the parties shall first attempt to settle any controversy or claim arising out of or relating to this Agreement, or breach thereof, through a mediation process by a disinterested third person, jointly appointed by the Parties. A mediation request may be submitted within ten (10) days of the failure of informal dispute resolution.
- b. Once a mediation request is submitted by any party, unless the Parties otherwise agree upon a mediator, each Party has thirty (30) days to present a list of three disinterested mediators, each of whom shall preferably have experience in the utility industry to the NCPA General Manager. Each Party in turn, in the order in which the lists are received by the General Manager, with NCPA exercising its turn last, may exercise the right to reject one name from the list of mediators until one name is remaining. That person shall act as mediator. Any Party failing to present a list to the General Manager waives its right to mediation.
- c. Each Party participating in the mediation shall bear its own costs in preparing for and conducting the mediation, except that the joint costs, if any, of the actual mediation proceeding, including all cost of the mediator, shall be shared equally by all the Parties participating in the mediation. NCPA's costs in conducting mediation proceedings shall deemed to be a Pool exposure allocated to all Participants.
- 22.4 **Expedited Dispute Resolution Procedure**. At any time any Party believes that any other Party has breached or may breach this Agreement by some disputed action or by the continuation of a dispute between the complaining Party and another Party, which dispute cannot be timely resolved under procedures set forth in Article 22.2, written notice shall be promptly provided by the Party to the General Manager. Such notice shall provide a detailed explanation of the dispute

Date Modified: 9/18/2008 Page 21 of 77

and the position(s) of the parties to the dispute. The notice shall also provide an explanation of why the dispute cannot be timely resolved under the procedures set forth in Article 22.2.

Upon receipt of such notice, the General Manager shall determine what actions are appropriate to effectuate a resolution of the dispute. In the event that the General Manager cannot effectuate a resolution of the dispute satisfactory to all parties within five (5) working days of receipt of such notice, the General Manager shall immediately notify the Chair of the Commission and provide copies of the notice to the Chair together with any comments of the General Manager, concerning the dispute.

Upon receipt of such notice, the Chair of the Commission shall either place the dispute on the agenda of the next regular meeting of the Commission for the purpose of having the Commission mediate the dispute or if deemed necessary by the Chair, due to the need for timely resolution, call a special meeting of the Commission for the purpose of having the Commission mediate the dispute. If the Commission cannot effectuate a resolution of the dispute at such meetings, the parties may immediately invoke the provisions of Article 22.5.

- Arbitration. Any dispute not resolved by mediation or expedited dispute resolution shall be settled by binding arbitration in accordance with the procedures set forth in this Article 22.5.
  - A. **Schedule**. Unless otherwise agreed, if the disputing party fails to commence arbitration within ninety (90) days after the mediation process fails, as provided for in Article 22.3, or the failure of the Expedited Dispute Resolution Process, as provided for in Article 22.4, the disputing party shall be deemed to have waived all present and future claims with respect to such dispute. Notwithstanding any other agreement, the Parties shall not extend the time to commence arbitration more than one hundred eighty (180) days after either: (1) the mediator has deemed the mediation unresolved; or (2) the end of the thirty (30) day period for Commission resolution of the dispute provided in Article 22.4 of the Pooling Agreement, whichever time period is applicable.
  - B. **Arbitration Rules**. Except as otherwise provided in this Pooling Schedule, the arbitration shall be governed by the Commercial Arbitration Rules of the American Arbitration Association ("AAA") from time to time in force. Notwithstanding such rules: (1) discovery shall be permitted and the provisions of California Code of Civil Procedure Section 1283.05 is incorporated by reference herein except that, the Parties shall not use interrogatories as a means of discovery; and (2) if such rules and provisions as herein modified shall conflict with the laws of the State of California then in force, then California law shall govern.
  - C. **Commencement and Notice**. A Party shall commence arbitration ("the Initiating Party") by serving written notice of its intent to commence arbitration upon another Party or Parties (the "Responding Party" or "Responding Parties"). The Initiating Party shall also provide notice to NCPA if NCPA is not the Responding Party.

Date Modified: 9/18/2008 Page 22 of 77

The written notice shall express the Initiating Party's intent to institute arbitration under the Pooling Agreement and this Pooling Schedule, and shall in adequate detail set forth the nature of the dispute, the issue to be arbitrated, the Initiating Party's position thereon, and the remedy sought by such arbitration.

- D. **Response.** Within thirty (30) days of the receipt of the notice commencing arbitration and statement of the dispute and proposed remedy prepared pursuant to Paragraph C above, each Responding Party shall serve a written response upon the Initiating Party stating its understanding of the issues in dispute, its position thereon, the reasons supporting its position and its proposed remedy. The notices and statements required under Paragraph C and this Paragraph shall constitute the "Submittal Statements."
- E. Selection of Arbitrator. Within forty (40) days after delivery of the Initiating Party's written notice to commence arbitration, the Parties shall meet for the purpose of selecting a single impartial arbitrator. Unless otherwise agreed, in the event the Parties are unable to agree on the selection of an arbitrator at such meeting, they shall, within fifteen (15) days of such meeting, request the American Arbitration Association (or a similar organization if the American Arbitration Association should not at that time exist) to provide a list of five impartial arbitrators from which to select the arbitrator. The proposed arbitrators shall be available to serve and shall be skilled and experienced in the field of the dispute. No person shall be eligible for appointment as an arbitrator who is a member of a governing board, an officer or an employee of any of the Parties or is otherwise interested in the matter to be arbitrated. Within thirty (30) days after the date of receipt of such list, the Parties shall take turns striking names from said list until the arbitrator has been selected by being the last name remaining on the list. The order of the Parties striking names will be selected randomly by drawing lots in a manner decided by the NCPA General Manager. After each name is stricken from the list, the next party will have two (2) business days to strike a name from the list. If a Party fails to timely strike a name, the other Party shall choose the arbitrator from among the names then remaining on the list. Within ten (10) days after such selection, the Parties shall submit to the arbitrator their Submittal Statements previously prepared and exchanged.
- F. **Arbitration Schedule**. Within ten (10) days after the submission of the Submittal Statements to the arbitrator, the Parties shall meet with the arbitrator to establish a schedule for discovery, initial hearing, the time for the arbitrator to issue a decision after the close of hearing and any other rules for consideration.

Should a Party fail to comply with any schedule established under this Pooling Schedule in a timely manner, that party shall be deemed to have waived all present and future claims with respect to such dispute. Such schedule may be modified by agreement of the Parties.

Date Modified: 9/18/2008 Page 23 of 77

- G. **Settlement.** The Parties may settle at any time before the issuance of the arbitrator's decision.
- H. Arbitrator's Authority and Decision. The arbitrator may grant any remedy or relief that is just and equitable and within the scope of this Agreement and the Submittal Statements. Thus, the arbitrator may effectuate a compromise among the Parties taking into account each Party's proposal. The arbitrator shall include findings with respect to the issues involved in the dispute. The arbitrator shall make his or her decision in accordance with Good Utility Practice and applicable standards of law. The arbitrator may not grant any remedy or relief which is inconsistent with the Pooling Agreement and all Pooling Schedules. The arbitrator shall specify the time within which the Parties shall comply with the decision. In no event shall the arbitrator's decision contain findings on issues not contained in or grant a remedy beyond that sought in the Submittal Statements. The arbitrator shall have no authority to award punitive damages.

The arbitrator shall have no authority, power or jurisdiction to alter, amend, change, modify, add to, or subtract from any of the provisions of the Pooling Agreement or any Pooling Schedule, nor to consider any issues arising other than from the language in and authority derived from the Pooling Agreement and all Pooling Schedules.

- I. Binding Arbitration. The parties agree that the decision of the arbitrator shall be final and binding upon all Parties and that the Parties shall take whatever action is required to comply with the accepted proposal. The decision of the arbitrator may be enforced by any court or agency having jurisdiction over the Party against whom the decision is rendered. Immediately after the conclusion of arbitration, all affected Parties shall take whatever action is required to comply with the arbitrator's decision.
- J. Arbitration and Enforcement Expenses. Any and all expenses, including attorney's fees and the fees and charges of expert witnesses, associated with the arbitration shall be borne by the nonprevailing party, except that if a resolution of the dispute is reached before the arbitrator issues an award, such expenses shall be borne as agreed by the Parties.

Should any Party fail to abide by the decision of the arbitrator, the other Party may immediately seek relief in law or equity as may be appropriate. In such event, the prevailing Party shall be entitled to damages, if any, caused by the non-prevailing Party's failure to abide by the arbitrator's decision, and expenses caused by the enforcement of the arbitrator's decision, including, but not limited to, attorney's fees and the fees and charges of expert witnesses.

#### **ARTICLE 23 - Amendments**

23.1 **Amendments**. Unless otherwise set forth in this Article, this Agreement may be amended only by written instrument executed by all the Parties with the same formality as this Agreement.

Date Modified: 9/18/2008 Page 24 of 77

23.2 **Approval and Amendment of Pooling Schedules**. Notwithstanding the provisions of Article 23.1, any addition to, amendment to or termination of the Pooling Schedules shall take effect after being approved by the Commission in a manner consistent with the voting procedures set forth in Article 2.3 of this Agreement without the requirement of an approval of the individual Participants.

#### **ARTICLE 24 - Severability**

24.1 Severability. In the event that any of the terms, covenants or conditions of this Agreement or the application of any such term, covenant or condition, shall be held invalid as to any person or circumstance by any court having jurisdiction, all other terms, covenants or conditions of this Agreement and their application shall not be affected thereby, but shall remain in force and effect unless the court holds that such provisions are not severable from all other provisions of this Agreement.

#### **ARTICLE 25 - Governing Law**

- 25.1 **Governing Law.** This Agreement shall be interpreted, governed by, and construed under the laws of the State of California.
- 25.2 **Attorneys Fees.** In any action to enforce the terms of this Agreement, the prevailing party may recover its reasonable attorneys' fees as costs.
- Venue. All action arising out of the Agreement, or seeking to enforce any arbitration proceeding arising out of this Agreement, shall be brought in the Superior Court of Placer County, regardless of where else venue may lie.

#### **ARTICLE 26 - Counterparts and Additional Parties**

- Additional Parties. Subsequent to the initial execution of this Agreement, any signatory to the NCPA JPA may also become a Party to the Agreement, upon the approval of the Commission by an affirmative vote of sixty-five percent (65%) or greater of participation percentage vote under the voting procedures provided for in Articles 2.2 and 2.3 of this Agreement.
- 26.2 **Counterparts**. This Agreement may be executed in any number of counterparts, and each executed counterpart shall have the same force and effect as an original instrument and as if all the Parties to all of the counterparts had signed the same instrument. Any signature page of this Agreement may be detached from any counterpart of this Agreement without impairing the legal

Date Modified: 9/18/2008 Page 25 of 77

effect of any signatures thereon, and may be attached to another counterpart of this Agreement identical in form hereto but having attached to it one or more signature pages.

IN WITNESS WHEREOF, each Participant has executed a counterpart of this Agreement with the approval of its governing body, and represents and warrants that the Participant has all requisite authority, and has duly agreed to be bound by all of the terms and conditions of this Agreement, and NCPA has executed each counterpart of this Agreement in accordance with the authorization of its Commission.

### NORTHERN CALIFORNIA POWER AGENCY Approved as to form: By:\_\_\_\_ By:\_\_\_\_ Title:\_\_\_\_ CITY OF ALAMEDA Approved as to form: By:\_\_\_\_\_ By:\_\_\_\_ Title: Title: CITY OF BIGGS Approved as to form: By: By: Title: \_\_\_\_\_ Title: CITY OF GRIDLEY Approved as to form: Title:\_\_\_\_\_ Title:\_\_\_\_\_

Date Modified: 9/18/2008

Page 26 of 77

#### CITY OF HEALDSBURG

Approved as to form:

By:	Ву:
Title:	Title:
CITY OF LODI	Approved as to form:
Ву:	By:
Title:	Title:
CITY OF LOMPOC	Approved as to form:
Ву:	By:_
Title:Mayor	Title: Cel Celoner
CITY OF PALO ALTO	Approved as to form:
Ву:	Ву:
Title:	Title:
Port of Oakland	Approved as to form:
Ву:	Ву:
Title:	Title:

#### PLUMAS SIERRA RURAL ELECTRIC COOPERATIVE

Approved as to form:

Ву:	Ву:	
Title:	Title:	
CITY OF UKIAH		Approved as to form:
Ву:	Ву:	
Title:	Title:	

Date Modified: 9/18/2008

#### Pooling Schedule 1.00 - Pool Billing Procedures

Pool billing shall be accomplished by means of the ARB. Amounts shown on the ARB are due and payable on the due date listed on the ARB invoice, except that any invoice coming due on a Friday, NCPA-observed holiday, or weekend day shall be adjusted by NCPA to come due on the closest following workday, as applicable.

Any amount due and payable but not paid by the Party on the 'due date' of the invoice shall bear interest at the per annum prime rate (or reference rate) of the Bank of America NT & SA then in effect, plus two percent (2%) per annum computed on a daily basis until paid.

NCPA shall mail all invoices within 24 hours of the invoice date thereon.

NCPA will alert a Participant's Commissioner and Utility Director by telephone of any payment not received within 36 hours after the due date.

The postmark date on the envelope containing payment by check shall be used to determine timeliness of payment, except that payments received later than seven (7) days after the due date shall be declared late without regard to postmark date.

Payment via wire transfer is the preferred method of making payments to NCPA. For wire transfers, the transaction date shall be used to determine the timeliness of payments.

NCPA Credit Memoranda issued to any Party do not bear interest during the period such credits remain outstanding but unapplied. It is each Party's responsibility to apply the credits to subsequent NCPA billings on a timely basis.

- A. **Disputes**. Any dispute in regard to billing shall be handled pursuant to the procedures set forth in Article 11.4
- B. **Billing True-Up**. NCPA billings for all costs will be adjusted or trued-up as provided below.

True-up of billings maybe performed throughout the year, as practicable; but, it shall be performed not less than quarterly.

At the end of each fiscal year, as soon as the annual audit is complete and actual data is available, NCPA shall true-up all billings based on actual cost data and actual billing determinants. True up amounts will be billed or credited to the Parties, as applicable. Credit amounts will be deposited in the appropriate Participant's account in the General Operating Reserve or as the Participant may otherwise formally direct in accordance with the provisions of the General Operating Reserve.

Date Modified: 9/18/2008 Page 29 of 77

NCPA Staff and the Participants' Utility Directors will review the proposed final year-end settlements (true-ups) and recommend acceptance and approval to the Commission.

Date Modified: 9/18/2008 Page 30 of 77

#### Pooling Schedule 2.01 - Pricing Interparty Sales of Capacity

Bilateral capacity transfers among Participants are encouraged as a preferred method of meeting individual Participant capacity needs. Pursuant to Article 6.3, NCPA may, as requested by Participants, assist in coordinating the purchase and sale of capacity among the Participants. Capacity transacted within the NCPA Capacity Pool will be subject to the terms and provisions established in Pooling Schedule 6.03. Capacity transacted outside of the NCPA Capacity Pool will be subject to the terms and provisions of the applicable project agreements. Pursuant to Article 6.3, pricing for interparty sales of capacity, other than capacity transactions within the NCPA Capacity Pool, will be determine per mutual agreement between purchasing and selling Participants, or pursuant to the provision found in Pooling Schedule 2.01.

Pooling Schedule 2.01 is meant to establish a fair market value of capacity by developing a representative alternative market price for capacity. The alternative market price for capacity is intended to represent a comparable product transacted in an organized or bilateral market external to the Pool. No energy shall be associated with capacity transacted and priced in accordance with Pooling Schedule 2.01 unless it is otherwise specified by the transacting Participants.

The general governing principle is that within the Pool, a seller should receive no less than, and a buyer should pay not more than, the cost of comparable capacity which could be purchased from outside of the Pool (i.e. the market value). The alternative market price for capacity will be based on an alternative resource which is external to the Pool, and comparable to the NCPA Pool resource being transferred.

#### A. Responsibilities

Designation of the alternative resource and its attendant costs, or the fair market value of such resource, provides the basis for the pricing of capacity transacted outside of the NCPA Capacity Pool. Based on NCPA staff research and Participants' recommendations triggered by an expressed interest by Participants to transact capacity, the Commission shall designate the alternative resource that is expected to be available in the marketplace during the immediate time period leading up to the capacity transaction. The designated alternative resource will then be used to develop an alternative market price for capacity. This alternative market price for capacity may be used as a proxy to determine the value of capacity for other types of resources per mutual agreement of the transacting Participants, or per approval of the Commission.

#### B. Guidelines

The following principles shall guide the recommendation of the alternative resource and its attendant costs:

1. Comparability should be based on the type, availability, deliverability, magnitude, seasonality and degree of firmness of the capacity resources being compared.

Date Modified: 9/18/2008 Page 31 of 77

- 2. The recommended alternative resource should be selected from the actual supplemental sources of capacity which were purchased, or considered for purchase, or the resources that might have been acquired had additional comparable purchases been required.
- The structure of the alternative resource, including but not limited to any minimum purchase requirements, should be considered and incorporated in the structure of the transfer.
- 4. To the extent that the recommended alternative(s) is (are) not directly comparable to the Pool resource being transferred, adjustments to the alternative capacity cost may be required. For example, adjustments may be made to compensate for either minimum purchase requirements, which cannot be incorporated in the structure of the sale, or the seasonal nature of the required purchase.

#### C. Price for Capacity Transfers

The alternative market price for capacity will be determined based on the projected capacity cost of the designated alternative resource, or based on the fair market value of capacity for the designated alternative resource. The alternative market price for capacity may need to be adjusted for various reasons including the situation that the alternative resource is a firm resource. The alternative market price for capacity may also need to be adjusted to reflect specific unique capacity attributes such as system or local qualification.

Date Modified: 9/18/2008 Page 32 of 77

#### Pooling Schedule 2.02 - Principles for Sale of Pool Excess Energy

There may exist from time to time, situations wherein the NCPA Pool will have energy in amounts that exceeds the load of the Parties. This situation can occur for example, when there are substantial amounts of unregulated flow from hydroelectric projects, take-or-pay power purchase contracts, and/or must-run resources, or when economic circumstances dictate that it is beneficial to operate resources that would otherwise not be required to meet load. The following principles are intended as general guidelines for NCPA to follow in dealing with an "excess energy" condition.

NCPA will operate generating plants, associated facilities and other resources:

- In compliance with the obligations and constraints of governing contracts, the applicable licenses and permits, and the physical requirements of the equipment/facilities;
- To appropriately and reliably interact with Balancing Authority; and
- To maximize the economic value to resource and generating plant owners.

Date Modified: 9/18/2008 Page 33 of 77

#### Pooling Schedule 3.01 - Economic Dispatch

In accordance with Article 8 of the Pooling Agreement, each Party shall subject all of its Generating Units, purchases from Third Parties, and associated transmission to the central dispatch of NCPA to the fullest extent possible. The objective of Pool central dispatch shall be to supply the capacity and energy requirements of the combined Parties at the lowest practicable net cost, and to accomplish this in a reliable and safe manner and in compliance with applicable regulations and agreements.

Resources shall be scheduled and dispatched to meet the combined load for each time period as deemed applicable according to Balancing Authority standards and Good Utility Practice, as appropriate. Schedules may be affected by a variety of factors, including plant outages, changes in available transmission, unanticipated load changes, relative costs, and economic conditions in the marketplace.

NCPA shall be provided with information from the Participants, and appropriate NCPA departments regarding the capability, operating criteria and incremental variable cost for the resources to be dispatched. This information will include heat rate curves and fuel costs for each thermal-electric unit, transmission losses associated with each resource, and variable operation and maintenance costs from which incremental cost rate curves will be developed. NCPA shall utilize this information to optimally schedule the operation of the Pool's resources, with due consideration to overall costs, project limitations and requirements, and Commission policy. Economic considerations should include seasonal, weekly, and hourly operating variations and flexibility as appropriate.

Thermal-electric Resources: In general, the operating cost of thermal-electric units which are in service to supply a specified load level is minimized when the Incremental Costs of all partially-loaded units are equal. Full or partial unit commitments and/or shutdowns shall be undertaken with due consideration to this principle and in compliance with applicable NERC and WECC Reliability Standards, operating criteria, constraints and Pooling and Facilities Schedules.

**Hydroelectric Resources:** Hydroelectric plants shall be operated in coordination with thermal resources to minimize the overall cost to the Pool to the fullest extent possible and to comply with applicable NERC and WECC Reliability Standards, operating criteria, constraints and Pooling Schedules and NCPA Facilities Agreement schedules.

**Reporting:** NCPA shall acquire and maintain data on the operations of the Pool's resources and report monthly to the Participants the actual amount of power scheduled from each of the Parties' resources during each hour or applicable time period of the preceding month.

Date Modified: 9/18/2008 Page 34 of 77

# Pooling Schedule 4.01 - Allocation of Pool Expenses

Expenses incurred in providing services under this Agreement shall be determined annually by the Commission, and allocated to the Participants as part of the Annual Budget process.

Date Modified: 9/18/2008 Page 35 of 77

## Pooling Schedule 5.01 - Forecasting

A. Forecast Overview: Electricity load forecasts are required for a number of reasons by various entities. These entities include but are not limited to, Pacific Gas and Electric Company ("PG&E"), the CAISO, the CEC, and NCPA. For example: section 8.1 of the revised Interconnection Agreement ("IA") states that "NCPA shall provide PG&E with NCPA's electric load planning data by October 15 of each year. Such electric load planning data shall contain the best estimate of NCPA's electric system load for the next five-year period being served at Points of Interconnection." Section 6.1 of NCPA's MSS Aggregator Agreement states that "NCPA shall provide to the CAISO annually its ten-year forecasts of Demand growth ... Such forecast shall be provided on the date that Utility Distribution Companies are required to provide similar forecasts in accordance with the CAISO Tariff, which is currently October 15". Changing regulations may spawn new forecasting requirements such as resource adequacy and NERC reporting and changed deadlines.

Each Participant has its own internal forecast needs that may differ from the due dates established by PG&E, CAISO, CEC, and NCPA. When Participants have a need to update their forecasts, NCPA will incorporate the updates into its database. NCPA will use the Participant's most recent forecast held in its database when a reporting requirement is due.

B. Data Requirements: The CEC, under the California Code of Regulations, Title 20, Section 1306(a)(1) and 1307(a)(1), requires each energy service provider, electric retailer, gas retailer, utility distribution company, and local distribution company that sells electricity or gas to end-use customers in California to report, on a quarterly basis, monthly electricity and natural gas sales data. When submitting this data to the CEC, Participants shall also send a copy of the data to NCPA staff. Instructions and time lines for submitting this data may be found in the CEC publication "Electric/Gas Sales and Electric Generation Data Collection, Forms and Instructions", May 2001. The instructions are also available via the Internet available at: <a href="http://www.energy.ca.gov/electricity/forms.html">http://www.energy.ca.gov/electricity/forms.html</a>

Participants shall submit to NCPA estimated future energy and demand savings resulting from implementation of energy efficiency programs. For Participants that submit their own forecasts to NCPA these savings should be separate from their energy and peak forecasts. If a Participant does not submit energy efficiency program estimates NCPA will assume none are in place.

Participants shall also submit to NCPA estimates of their load management programs. A load management program is generally described as customer load that can be requested (required)to be curtailed during times of system distress. For example, a residential air conditioning cycling program. Participants shall report to NCPA a summary of all of its load management programs by September 15 of each year. Through out the year Participants shall report any changes to these programs and their expectation of use, especially during the peak summer periods. If a Participant does not submit load management estimates, NCPA will assume none are in place.

Date Modified: 9/18/2008 Page 36 of 77

C. Forecasts: In order to meet long-term forecasting requirements Participants may choose to submit their own forecast or provide NCPA the historical data from which it can be produced. Participants submitting their own forecasts shall do so whenever they have an update. NCPA will produce revised forecasts in the early fall of each year. Each fifteen-year forecast shall include monthly energy (i.e., MWh measured at City Meter) and Peak Demand (i.e. MW integrated over the hour as measured at City Meter). The fifteen-year forecasts of monthly energy and peak demand will be allocated to integrated hourly values by NCPA. The allocation should be made so that NCPA can derive monthly coincident Peak Demand and have available a forecast of hourly loads for use in the Plexos Model for use in the budget process and long-term resource planning.

The forecasts and data requirements in this section shall remain sufficiently flexible so that NCPA and Participants can meet the changing due dates and data requirements of an ever-changing regulatory environment. As such, these data requirements, forecasts, and due dates are subject to change.

Each year, NCPA will produce and distribute a table showing the due dates for all data and forecast submittals. This table will summarize the data requirements and due dates for the data, which Participants are required to submit to NCPA under this schedule for the upcoming fiscal year. It will also summarize data and forecast requirements that NCPA must report to state, federal, and other regulatory entities.

Long-Term Forecast Scenarios: If long-term forecast scenarios are required NCPA will develop the scenarios in coordination with Participants.

**Long-Term Forecast Documentation**: For those Participants producing their own forecasts they shall make their staff available to provide documentation and explanations of their forecast methodology to the regulatory authorities.

Short-Term Forecasts: NCPA will develop all short-term forecasts, taking input from Participants when provided. These forecasts include the active day, day-ahead, week-ahead and month-ahead time frames. The active-day forecasts are used to balance pool load, system sales and/or purchases in the CAISO intra-day markets. The day-ahead forecasts are used to balance Pool load, system sales and/or purchases in the day-ahead markets. The rolling week-ahead forecasts are submitted to the CAISO on a daily basis as required by the MSS Aggregator Agreement. The month-ahead forecasts are used for setting up pre-month scheduling plans. Monthly forecasts will be an integration of the long-term and short-term forecasts reflecting the most recent weather, economic and demographic data and, when provided, input from Participants.

Date Modified: 9/18/2008 Page 37 of 77

## Pooling Schedule 6.01 - NCPA Capacity Pool

Pursuant to Article 5.4, each Participant is required to comply with capacity reserve requirements established by its applicable regulatory authority. Each Participant may comply with such requirements by either participating in the NCPA Capacity Pool or by providing an individual compliance demonstration pursuant to the rules and criteria established by the applicable regulatory authority. Pooling Schedule 6.01 establishes the rules and criteria for participating in the NCPA Capacity Pool.

The NCPA Capacity Pool Participants recognize that to achieve a high degree of reliability in the electric service supplied to their customers, an amount of resources sufficient to not only meet the immediate loads of their customer, but to also permit maintenance, to provide for planning and forced generation outages, and to account for load forecast errors is required. In order to achieve a high degree of reliability in the electric service supplied to their customers, the NCPA Capacity Pool Participants have elected to develop a common set of mandatory standards and criteria against which Participants that elect to participate will be measured against to determine if Participants have acquired sufficient capacity to maintain the desired high degree of reliability.

The CAISO Tariff contains provisions that require all Load Serving Entities, which have a peak Demand that exceeds one (1) MW and that serve Demand within the CAISO Balancing Authority Area to demonstrate that they have acquired sufficient capacity to meet both a Planning Reserve Margin established by their applicable regulatory authority, and Local Capacity Area Resource Requirements established by the CAISO. Each of the Participants currently operates within the CAISO Balancing Authority Area as Load Following Metered Subsystem Entities pursuant to the terms of the Amended and Restated NCPA Metered Subsystem Aggregator Agreement ("MSSA Agreement"). Pursuant to the CAISO tariff Load Following Metered Subsystem Entities are required to provide to the CAISO a resource adequacy plan and to comply with Local Capacity Area Resource Requirements established by the CAISO.

As part of the requirements set forth in the CAISO tariff certain authorities have been delegated to the Participant's applicable regulatory authority. As a result, the NCPA Capacity Pool participants have been granted the right to establish the following provisions which are utilized within the overall compliance program:

- Planning Reserve Margin
- Rules and Criteria for Calculating Qualifying Capacity Per Resource Type

The NCPA Capacity Pool has been established to allow Participants to aggregate capacity resources to comply with capacity reserve requirements, and to establish a mechanism to be used to transfer surplus capacity among the NCPA Capacity Pool participants. As further described below, there are a number of rules and criteria that dictate requirements for participating in the NCPA Capacity Pool.

## NCPA Capacity Pool Rules and Criteria

Date Modified: 9/18/2008 Page 38 of 77

#### 1. Participation

Participation in the NCPA Capacity Pool is voluntary. In order to participate in the NCPA Capacity Pool for the applicable compliance period a Participant must inform NCPA, in writing, of its election to participate in the NCPA Capacity Pool two (2) weeks after the later of the:

- a. July NCPA Commission meeting
- b. Date on which the capacity prices for system and local area capacity are developed and approved by the NCPA Commission
- c. Date on which the CAISO publishes the final local area capacity requirements and monthly coincident peak Demand determination information that will be used to calculate each Participant's capacity reserve obligation

Such election must be made prior to the annual system and local area compliance deadline for the next applicable compliance period. Once a Participant has elected to participate in the NCPA Capacity Pool that Participant must continue to participate in the NCPA Capacity Pool, pursuant to the provisions listed in Pooling Schedules 6.01, 6.02 and 6.03, for a minimum of one (1) year before it may elect to withdrawal from the NCPA Capacity Pool. Once a Participant has elected to participate in the NCPA Capacity Pool that Participant will continue to be recognized as a NCPA Capacity Pool participant until a notice of withdrawal has been received by NCPA from the Participant. If a Participant elects to withdrawal from the NCPA Capacity Pool, such notification of withdrawal must be made to NCPA, in writing, on the same date in which Participants are required to elect to participate in the NCPA Capacity Pool for the applicable compliance period. Once a Participant has withdrawn from the NCPA Capacity Pool that Participant may not elect to rejoin the NCPA Capacity Pool until the specified election date for the compliance year following the compliance year from which it has withdrawn (i.e. minimum one (1) year withdrawal).

## 2. Delegation of Authority

NCPA Capacity Pool participants are required to comply with common rules and criteria. These rules and criteria are documented within the NCPA Capacity Pool Resource Adequacy Program established within Pooling Schedule 6.02. Included within the NCPA Capacity Pool Resource Adequacy Program are common standards regarding the development of a Planning Reserve Margin and rules and criteria used to calculate resource adequacy Qualifying Capacity. By electing to become a participant in the NCPA Capacity Pool, and by executing the Pooling Agreement, a Participant, and its applicable regulatory authority, are therefore delegating the authority granted to it, as stated in the CAISO tariff, to establish an applicable Planning Reserve Margin and to develop applicable rules and criteria used to calculate resource adequacy Qualifying Capacity to the NCPA Commission.

#### 3. Establishment of Common Rules and Criteria for Compliance

Date Modified: 9/18/2008 Page 39 of 77

Each of the NCPA Capacity Pool participants shall comply with the common rules and criteria established within the NCPA Capacity Pool Resource Adequacy Program documented within Pooling Schedule 6.02. The NCPA Capacity Pool Resource Adequacy Program establishes common rules and criteria for the following subjects:

- o Compliance Demonstration
- o Demand Forecast Determination
- o Planning Reserve Margin
- o CAISO Authority to Dispatch NCPA Generation Facilities
- o Resource Adequacy Qualifying Capacity Rules and Criteria
- o Compliance and Enforcement

#### 4. System and Local Area Capacity Resource Demonstrations

NCPA, acting as Scheduling Coordinator, on behalf of the NCPA Capacity Pool participants is required to submit an annual and monthly system capacity demonstration, and an annual local area capacity demonstration to the CAISO. These demonstrations will be made using the format, and on a schedule specified within the NCPA Capacity Pool Resource Adequacy Program, as documented within Pooling Schedule 6.02. Each of the individual NCPA Capacity Pool participants will be evaluated separately to determine if they have a surplus quantity of capacity within their portfolio or if they are deficient in meeting either their system and/or local area capacity reserve requirements. This individual assessment will be used by NCPA for the purpose of calculating the transfer of surplus capacity within the NCPA Capacity Pool. NCPA will submit an aggregated system and local area capacity demonstration, on behalf of the NCPA Capacity Pool, to the CAISO. This assessment will be performed in accordance with Pooling Schedules 6.02 and 6.03. The aggregated system and local area capacity demonstrations will reflect all capacity transfers within the NCPA Capacity Pool transacted in accordance with Pooling Schedule 6.03.

#### 5. Transfer of Surplus Capacity

Capacity that is maintained by a Participant within the NCPA Capacity Pool that is surplus to that Participant's individual compliance obligation, as defined in the NCPA Capacity Pool Resource Adequacy Program, will be automatically transferred to any and all Participants within the NCPA Capacity Pool that are deficient in meeting their respective compliance obligation, as defined in the NCPA Capacity Pool Resource Adequacy Program, and will be allocated in accordance with Pooling Schedule 6.03. Only a total amount of surplus capacity equal to or less than the total amount of deficiency within the aggregated NCPA Capacity Pool will be transferred between Participants. Any surplus capacity greater than the aggregate deficiency within the NCPA Capacity Pool will not be transferred between the NCPA Capacity pool participants as part of the NCPA Capacity Pool. The process for transferring surplus capacity within the NCPA Capacity Pool, and for developing the pricing of such transfer, is described in Pooling Schedule 6.03

Date Modified: 9/18/2008 Page 40 of 77

Capacity that is transferred from a NCPA Capacity Pool participant to a Participant, who has not elected to participate in the NCPA Capacity Pool, or a Third Party, will be transacted pursuant to Article 6.3 and will be subject to the terms and provisions of the applicable NCPA Project agreements, if any.

Date Modified: 9/18/2008 Page 41 of 77

## Pooling Schedule 6.02 - NCPA Capacity Pool Resource Adequacy Program

## 1 Resource Adequacy Program

The NCPA Capacity Pool participants recognize that to achieve a high degree of reliability in the electric service supplied to their customers, an amount of resources sufficient to not only meet the immediate loads of their customers, but to also permit maintenance, to provide for planned and forced outages, and to account for load forecast errors is required.

In order to achieve a high degree of reliability in the electric service supplied to their customers, the NCPA Capacity Pool participants have established this resource adequacy program to accomplish this goal, as found in Pooling Schedule 6.02, which includes the following information and requirements:

- Applicability
- Compliance Demonstration
- Demand Forecast
- Planning Reserve Margin
- CAISO Authority to Dispatch Qualifying Capacity
- Qualifying Capacity Rules and Criteria
- Compliance and Enforcement

This NCPA Capacity Pool resource adequacy program has been developed to coordinate with the rules and requirements incorporated within the CAISO Market Redesign and Technology Upgrade FERC Electric Tariff (MRTU Tariff), as applicable to the NCPA Capacity Pool participants, and shall become effective at the time the MRTU Tariff is implemented or when approved by the NCPA Commission, and will remain in effect until terminated by action of the NCPA Commission. This NCPA Capacity Pool resource adequacy program may be modified by vote of the NCPA Commission. Any modifications to the NCPA Capacity Pool resource adequacy program will be developed in accordance with the NCPA Commission approval process.

NCPA acts as Scheduling Coordinator on behalf of the NCPA Capacity Pool participants.

Capitalized terms not otherwise defined within Pooling Schedule 6.02 or Article 1 shall be defined as set forth in the Master Definitions Supplement of the MRTU Tariff.

## 2 Applicability

Pursuant to Section 40 of the MRTU Tariff all Load Serving Entities ("LSE") and their respective Scheduling Coordinators, with limited exemptions, are subject to certain resource adequacy requirements based on its election of LSE status. The Participants currently operates within the CAISO Balancing Authority Area as Load Following Metered Subsystem entities, pursuant to the terms of the Amended and Restated NCPA Metered Subsystem Aggregator Agreement ("MSSA Agreement"), and are recognized as

Date Modified: 9/18/2008 Page 42 of 77

Load Following Metered Subsystem entities regarding the application of resource adequacy requirements. The NCPA Capacity Pool participants are required to comply with the requirements encompassed within this resource adequacy program and the CAISO Tariff, as applicable.

The MRTU Tariff delegates specific authority to the Local Regulatory Authority of each applicable LSE to establish the following resource adequacy criteria:

- Planning Reserve Margin; and
- Qualifying Capacity Rules and Criteria Per Resource Type

Pursuant to Pooling Schedule 6.01 the NCPA Capacity Pool participants, and their respective authority(s) of competent jurisdiction, have delegated authority to establish an effective Planning Reserve Margin and to define rules and criteria for calculating Qualifying Capacity to the NCPA Commission. As a result, the NCPA Commission has established within this NCPA Capacity Pool Resource Adequacy Program both the Planning Reserve Margin and Qualifying Capacity Rules and Criteria that are applicable to each of the NCPA Capacity Pool participants. The Planning Reserve Margin and Qualifying Capacity Rules and Criteria found within Pooling Schedule 6.02 are meant to establish a common baseline set of rules applicable to the NCPA Capacity Pool participants. The adopted Planning Reserve Margin is found in Section 5 of Pooling Schedule 6.02. The adopted Qualifying Capacity Rules and Criteria are found in Section 7 of Pooling Schedule 6.02.

## 3 Compliance Demonstration

Pursuant to the NCPA Capacity Pool Resource Adequacy Program and the MRTU Tariff Section 40, the NCPA Capacity Pool participants are required to provide a system and local area resource adequacy demonstration to the CAISO that sets forth the amount of capacity procured by the NCPA Capacity Pool participants to satisfy the obligations described below. As a result, NCPA will submit, on behalf of the NCPA Capacity participants, the following information to the CAISO:

## 3.1 Submission of Annual System Resource Adequacy Demonstration

NCPA will submit an aggregated annual system resource adequacy demonstration to the CAISO for the applicable compliance period, on behalf of the NCPA Capacity Pool participants acting as Scheduling Coordinator, on a schedule and in a format set forth by the MRTU Tariff and the CAISO Business Practice Manual for Reliability Requirements. The annual system resource adequacy demonstration will include an aggregated monthly coincident peak Demand determination for the NCPA Capacity Pool participants for each of the five summer months, May through September, of the applicable compliance period, established pursuant to Section 4 of Pooling Schedule 6.02, and identify the megawatt ("MW") quantity of Resource Adequacy Qualifying Capacity, established pursuant to Section 7 of Pooling Schedule 6.02, that the NCPA Capacity Pool participants will rely upon to satisfy at least ninety percent (90%) of their respective monthly coincident peak Demand determinations plus the monthly Planning Reserve Margin,

Date Modified: 9/18/2008 Page 43 of 77

established in Section 5 of Pooling Schedule 6.02, for each of the five summer months, May through September, of the applicable compliance period.

#### 3.2 Submission of Monthly System Resource Adequacy Demonstration

NCPA will submit an aggregated monthly system resource adequacy demonstration to the CAISO for the applicable compliance period, on behalf of the NCPA Capacity Pool participants acting as Scheduling Coordinator, on a schedule and in a format set forth by the MRTU Tariff and the CAISO Business Practice Manual for Reliability Requirements. The monthly system resource adequacy demonstration will include an aggregated monthly coincident Demand determination for the NCPA Capacity Pool participants for the relevant reporting month of the applicable compliance period, established pursuant to Section 4 of Pooling Schedule 6.02, and identify the megawatt ("MW") quantity of Resource Adequacy Qualifying Capacity, established pursuant to Section 7 of Pooling Schedule 6.02, that the NCPA Capacity Pool participants will rely upon to satisfy one-hundred percent (100%) of their respective monthly coincident Demand determinations plus the monthly Planning Reserve Margin, established in Section 5 of Pooling Schedule 6.02, for the relevant reporting month of the applicable compliance period.

## 3.3 Submission of Annual Local Area Resource Adequacy Demonstration

NCPA will submit an aggregated annual local area capacity resource adequacy demonstration to the CAISO for the applicable compliance period, on behalf of the NCPA Capacity Pool participants acting as Scheduling Coordinator, on a schedule and in a format set forth by the MRTU Tariff and the CAISO Business Practice Manual for Reliability Requirements. The annual local area resource adequacy demonstration will identify the megawatt ("MW") quantity of Resource Adequacy Qualifying Capacity, established pursuant to Section 7 of Pooling Schedule 6.02, qualified as Local Capacity Area Resources that the NCPA Capacity Pool participants will rely upon to satisfy the NCPA Capacity Pool participants aggregated allocated responsibility for procurement of Local Capacity Area Resources determined pursuant to the MRTU Tariff. The NCPA Capacity Pool participant's allocated responsibility for procurement of Local Capacity Area Resources is based on the NCPA Capacity Pool participant's proportionate share of the Transmission Access Charge ("TAC") Area Load at the time of the CAISO's annual coincident peak Demand set forth in the annual peak demand forecast for the next applicable compliance period, as determined by the California Energy Commission ("CEC"). Those Local Capacity Area Resources identified within the annual local area capacity resource adequacy demonstration will count towards the NCPA Capacity Pool participants overall system capacity requirements in addition to meeting the NCPA Capacity Pool participant's local resource adequacy requirements.

## 3.4 Submission of Annual and Monthly Resource Adequacy Supply Plans

A Load Following Metered Subsystem LSE is not required, pursuant to the CAISO Tariff, to provide the CAISO with annual and monthly resource adequacy Supply Plans for Resource Adequacy Qualifying Capacity that is used to meet its own system and local area resource adequacy compliance obligations. To the extent that a Load Following Metered Subsystem LSE provides Resource Adequacy Qualifying

Date Modified: 9/18/2008 Page 44 of 77

Capacity to a Reserve Sharing Load Serving Entity or a Modified Reserve Sharing Load Serving Entity, its Scheduling Coordinator is required to provide the CAISO with annual and monthly resource adequacy Supply Plans for this quantity of Resource Adequacy Qualifying Capacity. As a result, NCPA will submit annual and monthly resource adequacy Supply Plans to the CAISO on behalf of the NCPA Capacity Pool participants (if required), on a schedule and in a formant set forth in the MRTU Tariff and the CAISO Business Practice Manual for Reliability Requirements. Both the annual and monthly resource adequacy Supply Plans shall include a listing of the NCPA Capacity Pool participant's commitments to provide Resource Adequacy Qualifying Capacity to any Reserve Sharing Load Serving Entity or Modified Reserve Sharing Load Serving Entity for the applicable compliance period.

#### 4 Demand Forecast

Pursuant to the CAISO Tariff, the NCPA Capacity Pool Resource Adequacy Program, as established in Pooling Schedule 6.02, shall utilize the monthly coincident peak Demand determination provided by the CEC for the applicable compliance period, which are based on demand forecast data ("Demand Forecast") submitted to the CEC by the NCPA Capacity Pool participants, or, if the CEC does not produce a monthly coincident peak Demand determination for the NCPA Capacity Pool participants, the monthly coincident peak Demand determination produced by the CAISO for the applicable compliance period for the NCPA Capacity Pool participants in accordance with the MRTU Tariff and the applicable Business Practice Manual, using Demand Forecast data submitted to the CAISO by the NCPA Capacity Pool participants. The monthly coincident peak Demand determination developed and provided by either the CEC or the CAISO are coincident with the CAISO monthly system peak demand forecast for the applicable compliance period. If the CEC or the CAISO fail to produce a monthly coincident peak Demand determination for the NCPA Capacity Pool participants, the monthly coincident peak Demand determination that will be used for resource adequacy compliance in Pooling Schedule 6.02 shall be equal to the sum of each NCPA Capacity Pool participant's share of the NCPA Pool's monthly coincident peak Demand Forecasts for the applicable compliance period irrespective of the CAISO system coincident peak.

## 5 Planning Reserve Margin

Each NCPA Capacity Pool participant shall maintain an amount of Resource Adequacy Qualifying Capacity, as described in Section 7 of Pooling Schedule 6.02, equal to no less than one-hundred fifteen percent (115%) of the NCPA Capacity Pool participant's peak hourly Demand Forecast for the applicable compliance period. The resulting fifteen percent (15%) capacity reserve margin which is in excess of the NCPA Capacity Pool participant's peak hourly Demand Forecast, for the applicable month, is referred to as the Planning Reserve Margin within Pooling Schedule 6.02.

## 6 CAISO Authority to Dispatch Generation Facilities

As a Load Following Metered Subsystem Entity, each NCPA Capacity Pool participant is only required to comply with a limited set of provisions contain within the MRTU Tariff, and is not required to make

Date Modified: 9/18/2008 Page 45 of 77

available its Resource Adequacy Qualifying Capacity used to meet its capacity reserve requirements to the CAISO for Dispatch in the Day-Ahead Market or Real-Time Market. However, the CAISO has authority to dispatch each Participant's Resource Adequacy Qualifying Capacity used to meet its capacity reserve requirements pursuant to the terms of the MSSA Agreement, which is incorporated by reference as it now exists or may thereafter be amended.

## 7 Resource Adequacy Qualifying Capacity Rules and Criteria

## 7.1 Resource Adequacy Qualifying Capacity

Resource Adequacy Qualifying Capacity shall be the quantity of capacity from a resource, stated in megawatts ("MW"), which is listed within the resource adequacy system and local area capacity demonstration. Resource Adequacy Qualifying Capacity is the megawatt quantity of capacity from resources, as calculated using the Qualifying Capacity Rules and Criteria, that is used for resource adequacy compliance. The rules and criteria for determining the type of resources that may be eligible to provide Resource Adequacy Qualifying Capacity and for calculating the quantity of Resource Adequacy Qualifying Capacity provided from eligible resource types is documented within Section 7.2 of Pooling Schedule 6.02. Once calculated, the Resource Adequacy Qualifying Capacity will be provided to the CAISO to be used to verify compliance against submitted resource adequacy compliance demonstrations.

## 7.2 Qualifying Capacity Rules and Criteria – Eligible Resource Types

The types of resources specified in Section 7.2 of Pooling Schedule 6.02 will be eligible to provide Resource Adequacy Qualifying Capacity to the extent that they meet the criteria for each type of resource set forth in this Section 7.2. Net Dependable Capacity ("NDC") defined by North American Electric Reliability Corporation ("NERC") Generating Availability Data System ("GADS") information will be used to determine the Resource Adequacy Qualifying Capacity of some of the resource types identified in this Section 7.2. For the purpose of this Section 7.2, NDC is equal to Gross Dependable Capacity ("GDC") less the unit capacity utilized for unit station service or auxiliaries. GDC is equal to Gross Maximum Capacity ("GMC") modified for seasonal limitations over a specified period of time. GMC is the maximum capacity a unit can sustain over a specified period of time when not restricted by seasonal or other deratings.

#### A. NCPA System

As defined in the MSSA Agreement, the NCPA System means all transmission and distribution facilities owned or controlled by the NCPA Capacity Pool participants, and all Generating Units within the CAISO Balancing Authority Area owned or controlled by the NCPA Capacity Pool participants or any individual NCPA Capacity Pool participant or combination of NCPA Capacity Pool participants.

#### B. Jointly-Owned Facilities

Date Modified: 9/18/2008 Page 46 of 77

A jointly-owned facility must either be identified in Schedule 14 of the MSSA Agreement, located within the NCPA System, a Participating Generator, a System Resource, or a Qualified Facility to be considered Resource Adequacy Qualifying Capacity. The Resource Adequacy Qualifying Capacity for the entire facility will be determined based on the type of resource as described below in this Section 7.2. The NCPA Capacity Pool participant's entitlement to the Resource Adequacy Qualifying Capacity of the facility may encompass the entire Resource Adequacy Qualifying Capacity of the facility, or may be limited to a portion of the Resource Adequacy Qualifying Capacity of the facility. The total amount of Resource Adequacy Qualifying Capacity that may be identified in the system and/or local area capacity compliance demonstration is limited to the total jointly-owned facility Resource Adequacy Qualifying Capacity determined in this Section 7.2.

## C. Thermal Resources

Thermal generating facilities must either be identified in Schedule 14 of the MSSA Agreement, located within the NCPA System, a Participating Generator, a System Resource, or a Qualified Facility to be considered Resource Adequacy Qualifying Capacity. The Resource Adequacy Qualifying Capacity of thermal facilities will be based on Net Dependable Capacity as defined in Section 7.2 of Pooling Schedule 6.02.

#### D. Hydro Electric Resources

Hydro electric generating facilities must either be identified in Schedule 14 of the MSSA Agreement, located within the NCPA System, a Participating Generator, a System Resource, or a Qualified Facility to be considered Resource Adequacy Qualifying Capacity. The Resource Adequacy Qualifying Capacity of a pond or pumped storage hydro electric facility will be based on Net Dependable Capacity as defined in Section 7.2 of Pooling Schedule 6.02, minus variable head de-rate based on current reservoir levels with average year forecasted inflows. The Resource Adequacy Qualifying Capacity of a run-of-river hydro electric facility will be based on Net Dependable Capacity as defined in Section 7.2 of Pooling Schedule 6.02, minus actual or forecasted conveyance flow, stream flow, or canal head de-rate.

#### E. Unit-Specific Contracts

Unit-specific contracts will fully qualify as Resource Adequacy Qualifying Capacity. The generating facility identified in the contract must either be identified in Schedule 14 of the MSSA Agreement, located within the NCPA System, a Participating Generator, a System Resource, or a Qualified Facility to be considered Resource Adequacy Qualifying Capacity.

#### F. Firm Energy Contracts

Firm energy contracts which contain provisions to ensure reliable physical delivery of Energy and that contain provisions identifying non-delivery as a default condition subject to contract suspension and/or

Date Modified: 9/18/2008 Page 47 of 77

termination, and that does not require the seller to source the Energy from a particular unit, but specifies a delivery point internal to the CAISO Balancing Authority Area will fully qualify as Resource Adequacy Qualifying Capacity.

#### G. Wind and Solar Resources

The Resource Adequacy Qualifying Capacity of wind and solar generating facilities, with backup sources of generation, will be based on Net Dependable Capacity as defined in Section 7.2 of Pooling Schedule 6.02.

The Resource Adequacy Qualifying Capacity of wind and solar facilities, without backup sources of generation, will be based on their monthly historic noon to 6:00 p.m. capacity factor, using a three-year rolling average.

Wind and solar generating facilities without backup sources of generation which do not have three years of historic performance data will be assigned a default Resource Adequacy Qualifying Capacity value for each year of missing historical performance as follows:

- The Resource Adequacy Qualifying Capacity of a solar or wind generator with historic data located in the same weather regime with similar technology adjusted for the nameplate capacity ratio of a new generator and the similarly situated proxy generator.
- If historical data of a solar or wind generator located in the same weather regime with similar technology is not available, then historic performance data from the monthly average production factors of all units (wind or solar) within the TAC Area in which the generator is located will be utilized.

The default Resource Adequacy Qualifying Capacity values will be replaced on a year-by-year basis with actual performance data as the data becomes available to form a three year rolling average.

#### H. Geothermal Resources

Geothermal generating facilities must either be identified in Schedule 14 of the MSSA Agreement, located within the NCPA System, a Participating Generator, a System Resource or a Qualified Facility to be considered Resource Adequacy Qualifying Capacity. The Resource Adequacy Qualifying Capacity of a geothermal facility will be based on Net Dependable Capacity as defined in Section 7.2 of Pooling Schedule 6.02, adjusted for steam field degradation.

#### I. Participating Loads

Participating Loads must either be identified in Schedule 14 of the MSSA Agreement or located within the NCPA System to be considered Resource Adequacy Qualifying Capacity. Participating Loads must be

Date Modified: 9/18/2008 Page 48 of 77

available at least 48 hours during the five summer months (May – September) to be counted in a system and/or local area resource adequacy compliance demonstration as Resource Adequacy Qualifying Capacity. If Participating Loads are available for the minimum requirement, the stipulated megawatt ("MW") quantity reduction in Demand will be treated as supply and be eligible to be listed as Resource Adequacy Qualifying Capacity.

#### J. Dispatchable Demand Resources

Dispatchable Demand resources must either be identified in Schedule 10B of the MSSA Agreement or located within the NCPA System to be considered Resource Adequacy Qualifying Capacity.

Dispatchable Demand resources must be available at least 48 hours during the five summer months (May – September) to be counted in a system and/or local area Resource Adequacy compliance demonstration as Resource Adequacy Qualifying Capacity. If a Dispatchable Demand resource is available for the minimum requirement, the megawatt ("MW") quantity reduction stipulated in the contract or program will be treated as supply and be eligible to be listed as Resource Adequacy Qualifying Capacity.

#### K. Facilities Under Construction

Resource Adequacy Qualifying Capacity for facilities under construction will be determined based on the type of resource as described elsewhere in this Section 7.2. The facility will be eligible to be identified as Resource Adequacy Qualifying Capacity in a system and/or local area capacity compliance demonstration of the NCPA Capacity Pool participants pursuant to the anticipated operational date of the facility.

#### L. Non-Dynamically Scheduled System Resources (Imports)

The Resource Adequacy Qualifying Capacity of Non-Dynamically Scheduled System Resources to which the NCPA Capacity Pool participants have an entitlement shall be the amount of the NCPA Capacity Pool participant's entitlement, measured in megawatts ("MW").

## M. Dynamically Scheduled System Resources (Imports)

The Resource Adequacy Qualifying Capacity of a Dynamically Scheduled System Resource to which the NCPA Capacity Pool participants have an entitlement shall be the amount of the NCPA Capacity Pool participant's entitlement. Eligibility as Resource Adequacy Qualifying Capacity is contingent upon the NCPA Capacity Pool participants securing transmission through any intervening Balancing Authority Areas for the resource entitlement that cannot be curtailed for economic reasons or trumped by higher priority transmission.

#### 8 Compliance and Enforcement

Date Modified: 9/18/2008 Page 49 of 77

Once the CAISO has received the system and/or local area capacity compliance demonstrations submitted by NCPA on behalf of the NCPA Capacity Pool participants, acting as Scheduling Coordinator ("SC"), the CAISO will verify that the NCPA Capacity Pool participants have procured sufficient Resource Adequacy Qualifying Capacity to comply with the Planning Reserve Margin established in Section 5 of Pooling Schedule 6.02, and any requirements established by the applicable authority(s) of competent jurisdiction. To the extent the system and/or local area capacity demonstrations do not include sufficient Resource Adequacy Qualifying Capacity to satisfy the Planning Reserve Margin and/or local area capacity requirements, or in the case of a mismatch between information included in the compliance demonstration and the resource adequacy Supply Plan submitted by the SC of a resource identified in the NCPA Capacity Pool participant's compliance demonstration, the CAISO will notify NCPA and attempt to resolve the issue. In the event that NCPA is unable to resolve the identified issue, the CAISO will notify the NCPA Capacity Pool participant's applicable authority(s) of competent jurisdiction and/or the NCPA Commission of the potential deficiency.

Once the NCPA Capacity Pool participant's applicable authority(s) of competent jurisdiction and/or the NCPA Commission is informed of the identified deficiency and confirms that the NCPA Capacity Pool participant's system and/or local area capacity compliance demonstration is deficient, then the NCPA Capacity Pool participant's applicable authority(s) of competent jurisdiction and/or the NCPA Commission may determine if and how the deficiency will be resolved. If the CAISO identifies a mismatch between the information included in the NCPA Capacity Pool participant's system and/or local area capacity compliance demonstration and a resource adequacy Supply Plan submitted by the SC of a resource identified in a compliance demonstration, and the identified mismatch is not resolved prior to the 10<sup>th</sup> day before the effective month during the applicable compliance period, then the CAISO will accept the value contained in the Supply Plan to set the Resource Adequacy Qualifying Capacity value for the applicable compliance period.

If the NCPA Capacity Pool participant's applicable authority(s) of competent jurisdiction and/or the NCPA Commission requires the NCPA Capacity Pool participant to resolve an identified deficiency in the system and/or local area capacity compliance demonstration, and the NCPA Capacity Pool participant has not resolved the identified deficiency, then the NCPA Capacity Pool participant must provide an explanation as to why the identified deficiency has not be resolved to its applicable authority(s) of competent jurisdiction and/or the NCPA Commission. The NCPA Capacity Pool participant may incur penalties or other sanctions adopted by the applicable authority(s) of competent jurisdiction and/or the NCPA Commission for failure to cure the deficiency. NCPA, acting as SC, is required to report to the CAISO within thirty (30) days of any action taken by the applicable authority(s) of competent jurisdiction and/or the NCPA Commission in response to the deficiency notification if the applicable authority(s) of competent jurisdiction and/or the NCPA Commission does not provide public access to records or information regarding action taken for violations of the NCPA Capacity Pool resource adequacy policies or rules.

Date Modified: 9/18/2008 Page 50 of 77

## Pooling Schedule 6.03 - NCPA Capacity Pool Capacity Transfer Process

One of the objectives of developing a NCPA Capacity Pool was to create a process in which capacity maintained by NCPA Capacity Pool participants could be transacted in an efficient manner. As stated in Pooling Schedule 6.01, once a Participant has voluntarily elected to participate in the NCPA Capacity Pool, a Participant will be required to participate in the automatic capacity transfer mechanism described below. The NCPA Capacity Pool process will evaluate each NCPA Capacity Pool participant's capacity portfolio to determine if that participant is in a state of surplus or deficient capacity in complying with its applicable capacity reserve requirements. To the extent there are NCPA Capacity Pool participants who are in a state of deficiency in capacity and NCPA Capacity Pool participants who are in a state of surplus capacity, NCPA, through the ARB, will automatically transact capacity among the surplus and deficient NCPA Capacity Pool participants. This capacity transfer process is described in detail in Pooling Schedule 6.03.

#### **Capacity Transfer Process**

#### 1. System and Local Area Capacity Transfer Timing

System and local area capacity will be transferred in accordance with the schedule described in this section.

- a. Local area capacity will be transferred once annually, five (5) business days after the date on which Participants are required to submit an election to participate within the NCPA Capacity Pool, regardless of a Participant's current participation status, for the applicable compliance period. This transfer process will be conducted prior to any system capacity transfers because local area capacity is equally effective at meeting both local area and system capacity requirements.
- System capacity will be transferred once annually and monthly during the applicable compliance period.
  - System capacity will first be transferred once annually, five (5) business days after the date on which Participants are required to submit an election to participate within the NCPA Capacity Pool, regardless of a Participant's current participation status, for the applicable compliance period. This transfer process will be conducted after any local area transfers are conducted. Section 3.1 of Pooling Schedule 6.02 describes the annual system capacity requirement and demonstration process, in which participants will demonstrate an amount of Qualifying Capacity that is equal to or greater than ninety percent (90%) of their respective monthly coincident peak Demand determination plus the monthly Planning Reserve Margin, established in Section 5 of Pooling Schedule 6.02, for each of the five summer months, May

Date Modified: 9/18/2008 Page 51 of 77

through September, of the applicable compliance period. Unless otherwise notified by a participant, only to the extent that a participant's system capacity position is greater than one-hundred percent (100%) of their respective monthly coincident peak Demand determination plus the monthly Planning Reserve Margin for each of the five summer months, established in Section 5 of the Pooling Schedule 6.02, for the applicable compliance period, will system capacity be transferred from a surplus participant's portfolio to a deficient participant through the NCPA Capacity Pool capacity transfer process. If a participant provides notice to NCPA, in writing, on the day on which Participants are required to submit an election to participate within the NCPA Capacity Pool for the applicable compliance period, that it would like to transfer system capacity that is maintained within its capacity portfolio that is in excess of its ninety percent (90%) annually system capacity requirement for each of the five summer months, as specified in Section 3.1 of Pooling Schedule 6.02, then NCPA will transfer any capacity that is greater than a participant's annual system requirement to deficient participants for the duration of the applicable compliance period.

• System capacity will be transferred monthly, two (2) months prior to the applicable compliance period (example: January 1 for compliance month March). Section 3.2 of Pooling Schedule 6.02 describes the monthly system capacity requirement and demonstration process, in which participants will demonstrate an amount of Qualifying Capacity that is equal to or greater than one-hundred percent (100%) of their respective monthly coincident peak Demand determination plus the monthly Planning Reserve Margin, established in Section 5 of the Pooling Schedule 6.02, for the applicable compliance period.

#### 2. System and Local Area Capacity Transfer Billing Process

The payment for or receipt of payment resulting from the transfer of system or local area capacity among NCPA Capacity Pool participants, pursuant to Pooling Schedule 6.03, for the applicable compliance year will be included within the NCPA ARB. The total amount of funds transacted for the annual transfer of system and local area capacity within the NCPA Capacity Pool will be distributed to or charged to the appropriate participants within the NCPA ARB in twelve (12) equal monthly payments over the duration of the applicable compliance year. The total amount of funds transacted for the monthly transfer of system capacity within the NCPA Capacity Pool will be distributed to or charged to the appropriate participants within the NCPA ARB the month following the transfer of capacity.

# 3. Development of Demand/Capacity Balance for Capacity Transfer Process and Compliance Demonstrations

For each applicable compliance period, NCPA will develop two demand/capacity balances for the NCPA Capacity Pool participants. The first demand/capacity balance will be distributed to the NCPA Capacity

Date Modified: 9/18/2008 Page 52 of 77

Pool participants prior to the system and/or local area capacity transfer process, as described in Section 1 of Pooling Schedule 6.03, and the second demand/capacity balance will be distributed to the NCPA Capacity Pool participants prior to the system and/or local area capacity demonstration deadlines, as described in Pooling Schedule 6.02. The timing and process for distributing each of these demand/capacity balances is described below:

## a. Demand/Capacity Balance - System and Local Area Capacity Transfer Process

Approximately thirty days (30) prior to the system and/or local area capacity transfer date, NCPA, in collaboration with the NCPA Capacity Pool participants, will develop a demand/capacity balance for each of the NCPA Capacity Pool participants. Within this balance NCPA will measure the annual/monthly system capacity reserve requirement (Demand determination plus Planning Reserve Margin) and/or annual local area capacity reserve requirement (as defined by the CAISO) against the total amount of Qualifying Capacity reserves maintained by each NCPA Capacity Pool participant, as determined pursuant to Section 7 of Pooling Schedule 6.02, to determine if each participant has surplus capacity in excess of their compliance requirements, or if each participant is deficient in meeting its compliance requirements. All capacity previously transacted within the NCPA Capacity Pool using the capacity transfer process, described in Pooling Schedule 6.03, will be accounted for in this analysis for the relevant term of the transaction. NCPA will provide the results of this analysis to each of the NCPA Capacity Pool participants for verification. Approximately two (2) weeks prior to the applicable system and/or local area capacity transfer date, each of the NCPA Capacity Pool participants must provide written confirmation, in the form of letter or e-mail, that the demand/capacity demonstration developed by NCPA is accurate. To the extent that a NCPA Capacity Pool participant identifies a discrepancy in the information provided by NCPA, NCPA and the Capacity Pool participant will collectively evaluate the discrepancy and make any corrections deemed necessary. If NCPA has not received a written confirmation that the information developed by NCPA is accurate within seven (7) days prior to the applicable transfer date, the information developed and provided by NCPA will be deemed accurate and will be made final, and will be used within the applicable capacity transfer process.

#### b. Demand/Capacity Balance – System and Local Area Capacity Demonstration

Approximately fourteen (14) days prior to the system and/or local area capacity reserve requirement demonstration deadline, NCPA, in collaboration with the NCPA Capacity Pool participants, will develop a demand/capacity balance for each of the NCPA Capacity Pool participants. Within this balance NCPA will measure the annual/monthly system capacity reserve requirement (Demand determination plus Planning Reserve Margin) and annual local area capacity reserve requirement (as defined by the CAISO) against the total amount of Qualifying Capacity reserves maintained by each NCPA Capacity Pool participant, as determined pursuant to Section 7 of Pooling Schedule 6.02, to determine if each participant has surplus capacity in excess of their compliance requirements, or if each participant is deficient in meeting its compliance requirements. All capacity previously transacted within the NCPA Capacity Pool using the capacity transfer process, described in Pooling Schedule 6.03, will be accounted for in this analysis for the relevant term of the transaction. NCPA will provide the results of this analysis to

Date Modified: 9/18/2008 Page 53 of 77

each of the NCPA Capacity Pool participants for verification. Approximately seven (7) days prior to the system and/or local area capacity reserve requirement demonstrations, each of the NCPA Capacity Pool participants must provide written confirmation, in the form of letter or e-mail, that the demand/capacity demonstration developed by NCPA is accurate. To the extent that a NCPA Capacity Pool participant identifies a discrepancy in the information provided by NCPA, NCPA and the Capacity Pool participant will collectively evaluate the discrepancy and make any corrections deemed necessary. If NCPA has not received a written confirmation that the information developed by NCPA is accurate within three (3) days prior to the applicable compliance demonstration deadline, the information developed and provided by NCPA will be deemed accurate and will be made final, and will be incorporated within the applicable demonstration.

## 4. Identification of Surplus/Deficient Capacity Positions for Capacity Transfer Process

Once the demand/capacity balance has been certified and deemed final, NCPA will evaluate each NCPA Capacity Pool participant's resulting system and/or local area surplus/deficient capacity position for the applicable compliance period. NCPA will evaluate the demand/capacity balance of each participant to determine if any NCPA Capacity Pool participants are deficient in meeting the applicable system and/or local area compliance requirements. If a single or a collection of NCPA Capacity Pool participants are deficient in meeting the applicable system and/or local area compliance requirements, NCPA will calculate the total amount of system and/or local area deficiency within the NCPA Capacity Pool. Once any deficiency has been confirmed, NCPA will determine if any NCPA Capacity Pool participants maintain surplus system and/or local area capacity within the NCPA Capacity Pool that would either partially or fully offset the identified deficiency. If the total amount of surplus system and/or local area capacity within the NCPA Capacity Pool is equal to or less than the total system and/or local area deficiency, all surplus system and/or local area capacity will be transferred between the surplus and deficient NCPA Capacity Pool participants. If the total amount of surplus system and/or local area capacity within the NCPA Capacity Pool is greater than the total system and/or local area deficiency, then only an amount of surplus system and/or local area capacity equal to the total system and/or local area capacity deficiency will be transferred within the NCPA Capacity Pool.

#### 5. NCPA Capacity Pool Transfer

Local area capacity transfers will be identified and completed using the capacity transfer process prior to system capacity transfers. System capacity transfers will be identified and completed using the capacity transfer process only after local area capacity transfers have been completed. If a NCPA Capacity Pool participant has been found to be deficient in meeting an applicable system and/or local area compliance requirement, and a lesser or equal amount of system and/or local area capacity has been identified to be surplus to a NCPA Capacity Pool participant's applicable system and/or local area compliance requirements, then NCPA, acting as administrator, will transfer the identified surplus system and/or local area capacity to the NCPA Capacity Pool participants that are deficient in meeting an applicable compliance requirement. The amount of surplus system and/or local area capacity that will be transferred between surplus and deficient participants will be equal to or lesser than the amount of deficiency

Date Modified: 9/18/2008 Page 54 of 77

identified. Any surplus system and/or local area capacity that is in excess of the total identified system and/or local area deficiencies will not be allocated within the NCPA Capacity Pool. The following steps will be used to transfer surplus system and/or local area capacity within the NCPA Capacity Pool:

- a. Using the information developed in Section 4 of Pooling Schedule 6.03, NCPA will identify the MW quantity of capacity deficiency for each NCPA Capacity Pool participant who has been determined to be deficient
- b. NCPA will calculate the total amount of MW deficiency within the NCPA Capacity Pool
- NCPA will calculate each deficient participant's proportionate share of the total NCPA Capacity Pool deficiency
- d. Using the information developed in Section 4 of Pooling Schedule 6.03, NCPA will identify the MW quantity of capacity surplus for each NCPA Capacity Pool participant who has been determined to be surplus
- e. NCPA will calculate the total amount of MW surplus within the NCPA Capacity Pool
- f. NCPA will calculate each surplus participant's proportionate share of the total NCPA Capacity Pool surplus
- g. An amount of surplus capacity MW equal to or less than the total amount of NCPA Capacity Pool MW deficiency will be allocated to the deficient participants based on their proportionate share of the NCPA Capacity Pool deficiency
- h. The total amount paid for the surplus capacity MW transferred to deficient participants will be allocated to the surplus participants based on their proportionate share of the NCPA Capacity Pool surplus.

The results of the capacity transfers will be accounted for in the applicable capacity demonstration for the term of the transfer.

## 6. Assignment of Charges or Penalties for Disqualified System and Local Area Capacity

Once system and local area capacity demonstrations are submitted to the CAISO, the CAISO will evaluate the demonstration to determine if it is in compliance with the applicable capacity reserve requirements. Pursuant to this review, if the CAISO disqualifies an amount of capacity that is maintained within a NCPA Capacity Pool participant's portfolio, and the disqualification of such capacity results in NCPA incurring a penalty or charge from the CAISO, the penalty or charge incurred by NCPA will be allocated to Participant(s) that maintained such capacity within its portfolio prior to any system and/or local area capacity transfers. This allocation methodology will ensure that any capacity that is transacted within the NCPA Capacity Pool transfer process that is disqualified by the CAISO, and which results in the assessment of charges or penalties, will not result in harm to the procuring party, but instead will be directly linked to the obligation of the selling party to offer fully qualified capacity within the NCPA Capacity Pool transfer process.

#### 7. Development of Capacity Transfer Pricing

Date Modified: 9/18/2008 Page 55 of 77

All capacity transferred between participants within the NCPA Capacity Pool will be priced in accordance with the provisions found within this section. Capacity pricing for both system and local area capacity will be develop for use by the NCPA Capacity Pool participants, and will not be effective for other non NCPA Capacity Pool capacity transfers that NCPA may administer. Capacity pricing for both system and local area capacity will be developed annually, and will be established pursuant to NCPA Commission adoption and approval that will take place at the July NCPA Commission meeting. If capacity prices for both system and local area capacity are not adopted and approved by the NCPA Commission at the July NCPA Commission meeting, capacity prices for both system and local area capacity will be adopted and approved by the NCPA Commission during the next available Commission session.

## a. System & Local Area Capacity Pricing Alternatives

The following alternatives or methodologies, or a combination of such, may be utilized to develop a system and local area capacity price that will be used within the NCPA Capacity Pool transaction process described in Pooling Schedule 6.03:

- 1. Negotiated Price
- 2. Market Price Survey Formal or Informal Request for Proposal ("RFP")
- 3. CAISO Backstop Procurement proxy value of capacity

An ad hoc group of NCPA Capacity Pool participants will be organized to develop and propose a system and local area capacity price to the NCPA Commission for adoption and approval, in a timeframe consistent with the approval process described in Section 7 of Pooling Schedule 6.03. If the established ad hoc group of NCPA Capacity Pool participants is unable to collectively develop and propose a system and local area capacity price to the NCPA Commission for adoption and approval, in a timeframe consistent with the approval process described in Section 7 of Pooling Schedule 6.03, a default price will be established for system and local area capacity as described in subsection b of Section 7 of Pooling Schedule 6.03.

## b. Default System and Local Area Capacity Price

In the event an established ad hoc group of NCPA Capacity Pool participants is unable to collectively develop and propose a system and/or local area capacity price to the NCPA Commission for adoption and approval, in a timeframe consistent with the approval process described in Section 7 of Pooling Schedule 6.03, the following default system and local area capacity pricing methodologies will be used to derive prices that will be used within the NCPA Capacity Pool transaction process described in Pooling Schedule 6.03:

a. The system capacity price that will be used for capacity transfers within the NCPA Capacity Pool will be equal to the CAISO proxy value of capacity, established within the CAISO Tariff, for backstop procurement multiplied by fifty percent (50%); the system capacity price, expressed as a formula, is:

Date Modified: 9/18/2008 Page 56 of 77

## System Capacity Price = CAISO Proxy Value of Backstop Capacity \* 0.50

b. The local area capacity price that will be used for capacity transfers within the NCPA Capacity Pool will be equal to the CAISO proxy value of capacity, established within the CAISO Tariff, for backstop procurement; expressed as a formula:

Local Capacity Price = CAISO Proxy Value of Backstop Capacity

Date Modified: 9/18/2008 Page 57 of 77

# Pooling Schedule 6.04 - Calendar Year 2007 Intraparty Capacity Transaction

Pooling Schedule 6.04, including the rules and allocation in the table listed below, is only applicable for calendar year 2008.

- Article 6 of the Pooling Agreement sets forth each Party's rights and obligations, and procedures regarding Capacity Transactions under Pool operations. Pursuant to Article 6.3, NCPA shall assist the Parties in transacting sales of capacity from Parties with surplus capacity to Parties with projected capacity deficiencies.
- 2. The Parties will revise or replace this Pooling Schedule prior to calendar year 2009.
- 3. The Parties have agreed to make the following transfers of capacity for resource adequacy purposes during the Binding Period:

Project	1st Right from Geo	Level of	40,000.00
Participants	Projects 1 & 2 (MW)	Interest	\$/MW-YR
Alameda	0	0	\$0
Biggs	0.07	0	\$0
Gridley	0.08	0	\$0
Healdsburg	0.92	0	\$0
Lodi	2.25	2.3	\$92,000
Lompoc	0.92	0.92	\$36,800
Plumas	0.17	2.5	\$100,000
Ukiah	1.41	0	\$0
Santa Clara	10.18	0	\$0
Roseville	2.14	0	\$0
Turlock	1.85	0	\$0
Total	20	5.72	\$228,800
Pooling			
Participant			
Palo Alto		14.28	\$571,200
<b>Grand Total</b>		20	\$800,000.00

Date Modified: 9/18/2008 Page 58 of 77

## Pooling Schedule 6.05 - Pool Accounting Method

The Pool Accounting Method uses hourly Market Clearing Prices ("MCPs") to account for energy interchange payments among Participants. The MCPs are intended to provide a fair transaction price consistent with the general power market while providing each Participant with an equitable share of the savings derived from pooled operations.

- A. **Billing Calculations.** The billing process consists of four principal steps:
  - Base Information: The billing procedure determines Participant hourly energy deficits or surpluses from each Participant's net energy transactions, shares of Pool resources, and native metered loads.

A Participants resource consists of any solely or jointly owned Generating Units and energy transactions purchased by the Participant, either directly or through NCPA.

- 2. **Resource Energy Costs**: Each Participant pays its share of the actual monthly energy cost for each resource it owns.
- Calculating Intra-Pool Energy Purchase Costs: Each Participant will meet its net hourly energy deficit through purchases of energy from the Pool at the Pool's Market Clearing Price ("MCP") as determined in Section B.
- 4. Calculating Intra-Pool Energy Sales Revenues: Each Party will sell its net hourly energy surplus through sales of energy to the Pool at the Pool's MCP as determined in Section B.
- B. Procedure for Determining the Pool Market Clearing Price. This section outlines the procedure for determining and reporting the value of the hourly MCPs used in the Pool. The MCP is the price at which hourly Intra-Pool energy transactions are priced and is intended to accurately represent the value of market energy prices in the CAISO's NP15 congestion zone. The value of the MCP is based on the daily Dow Jones NP15 On-peak or Off-peak price index multiplied by an hourly market shaping factor that applies to the scheduling hour.

In addition to the NP15 MCPs, the hourly value of market energy at the California-Oregon Border ("COB") will be tracked using the daily Dow Jones COB price index to establish the hourly value of COB-NP15 transmission service.

Steps in Determining the Intra-Pool MCP:

Date Modified: 9/18/2008 Page 59 of 77

The hourly Intra-Pool MCP will be the product of Hourly Base Price Index and the Hourly Market Price Shaping Factor in each hour (as defined below):

- Hourly Market Price Shaping Factor: The Hourly Market Price Shaping Factor
  will be the Megawatt hour ("MWh") of CAISO NP15 load for each hour divided by
  the average MWh of CAISO NP15 load for all hours during the time period (onpeak or off-peak) applicable to that hour for that day.
- Hourly Base Price Index: The Hourly Base Price Index will equal the value of the daily Dow Jones NP15 Firm Energy index for the time period (on-peak or offpeak) applicable to that hour for that day.
- Market Clearing Price At Intertie Hubs: The hourly clearing price of firm energy at the California-Oregon Border ("COB") hub will equal the Dow Jones Firm COB index price multiplied by the Hourly Market Price Shaping Factor.

For reference purposes, the Dow Jones Firm COB index value will be reported in the Pool bill.

## C. Procedure for Allocating NCPA Pool/3<sup>rd</sup> Party Transactions

This section outlines the procedure for allocating among the Participants power transactions with Third Parties. This section also outlines the procedure for allocating transmission use among Participants. This procedure is intended to cover all Pool energy and capacity transactions. It will be amended and revised in the future in response to new types of transactions that are not covered by this document.

## **Energy and Capacity Transaction allocations**

Energy and capacity transactions from sources outside of the Pool will be categorized as either "Pre-month" or "In-month" transactions.

Pre-month transactions are defined to be sales or purchases scheduled prior to the calendar month covered by the transaction. All other transactions are defined to be Inmonth transactions.

The Pool will execute Pre-month power transactions only as explicitly authorized and directed by one or more Participant. Each Pre-month transaction will be formally communicated to each Participant as specified by NCPA's procedures and policies.

In-month transactions, including daily and hourly pre-scheduled and real-time energy purchases and sales, are executed by NCPA based solely on its judgment. In-month

Date Modified: 9/18/2008 Page 60 of 77

transactions that do not require the California-Oregon-Transmission-Project ("COTP") or South-of-Tesla ("SOT") transmission capacity to consummate, or do not have preestablished ownership rights or other rationale for direct allocation, will be allocated in proportion to each Participant's share of the budgeted annual NCPA Dispatch Cost (formerly called SCALD).

In-month transactions that require COTP or SOT capacity will be allocated in proportion to each Participant's hourly ownership of unused transmission capacity on the COTP or SOT, respectively. Unused transmission capacity shall be determined by subtracting pre-allocated transactions only from the Participant's share of available transmission.

In-month transaction that require buy-back of COTP capacity from the TANC OASIS will be based upon Participant share of uncommitted use as a function of the line rating at the time of the transaction. In-month transactions the used committed use load following transmission capacity will be based upon monthly capacity shares.

COTP Capacity Shares -- Monthly, Weekly, Daily, and Hourly Time Frames (T) = Participant Remaining Capacity  $(MW)_T / \Sigma$  (Participants Remaining Capacity  $(MW)_T$ 

Participant resource commitments that require transmission capacity to be completed will be deducted from the Participant's hourly unused transmission capacity only if the transmission is actually used by the resource in real-time. For example, the full Participant Entitlements of the Seattle City Light Exchange agreement will count against a Participant's unused COTP transmission capacity only if energy actually is transmitted over the COTP.

#### Allocation of Balance of Month ("BOM") Energy Transactions

Balance of Month ("BOM") energy transactions are typically purchases or sales contracts where the term of the transaction extends from the next scheduling day until the end of the current or next succeeding calendar month. For the purpose of this Agreement, the definition of BOM will include all transactions with terms that are longer than the normal daily pre-schedule transactions and are completely contained within the current or next succeeding calendar month.

NCPA will monitor Participant energy balances within the current month to identify significant energy imbalances that, in the sole judgment of NCPA, need to be corrected with the execution of a BOM energy transaction. Energy balances may change significantly within a month due to unexpected developments in hydrologic conditions or resource availability, for example. NCPA will fully consider projections of prospective energy market and resource conditions in determining the need to execute a BOM transaction.

Date Modified: 9/18/2008 Page 61 of 77

NCPA will allocate each BOM energy transaction fully at the time the transaction is executed on the basis of need to reduce energy imbalances for the current month. NCPA will execute BOM energy transactions only for the purpose of reducing energy cost risk represented by energy imbalances.

Whenever possible, NCPA will consult each Participant prior to implementing BOM energy transactions. NCPA staff may execute a transaction without such consultation if, in the sole judgment of NCPA staff, there is a compelling reason to act immediately. Participants will be notified of their participation shares in BOM transactions without delay.

An individual Participant may execute its own BOM energy transactions to be scheduled by the Pool only with the express prior review and consent of NCPA. NCPA shall review the proposed transaction to determine its utility towards balancing the Participant's energy balance for the month. Such consent shall be withheld only if NCPA staff determines that the BOM transaction proposed by the Participant is unlikely to reduce a significant energy imbalance. NCPA staff will consult the requesting Participant as soon as possible after a determination is made so that the Participant may execute the BOM energy transaction if consent is granted, or take corrective action if consent was withheld by NCPA staff.

#### Transactions Using Buy Back of Pool Posted COTP Transmission

In the day-ahead ("DA") and real-time ("RT") scheduling time frame NCPA will buy back Pool Posted COTP to effect transactions that will provide net value to the owners of the COTP. The costs and benefits of the transaction and the COTP buy back will be allocated using COTP Capacity Shares as derived above.

#### **Hourly Transmission Allocations and Transfers**

The Pool will automatically implement hourly transfers of transmission capacity for Participants whose resource commitments over a transmission path exceed their transmission Entitlements. The price of these transmission transfers, which will be determined after-the-fact during the preparation of the monthly ARB, will equal the positive difference between the hourly MCP's for the points of delivery and receipt of the transmission path. The transfer price will equal zero if the difference is less than zero. The hourly transmission balance (deficits and surpluses) will be computed based on the actual energy flow on the line. Participants with surplus transmission capacity will sell their unused/surplus transmission on an hourly basis in proportion to the surplus amounts.

Participants anticipating transmission capacity deficits or surpluses may enter bilateral transmission capacity transactions at any time and for any duration. These transactions may be completed with another Participant or a Third Party. It is the sole responsibility of each Participant entering a transmission transaction to negotiate the terms of the sale or purchase including price.

Date Modified: 9/18/2008 Page 62 of 77

These bilateral transmission transactions will be reported in the monthly ARB. The Pool will administer the costs and revenues associated with the transfers unless the transacting parties make alternative arrangements.

Date Modified: 9/18/2008 Page 63 of 77

## Pooling Schedule 7.01 Load Following Costs and Allocations

#### A. Overview

Load following capacity is needed to balance the Meter Subsystem Aggregator ("MSSA") total load in each ten-minute settlement period. To enable load following in real-time, generation capacity must be withheld from the day-ahead energy and/or ancillary services ("AS") markets. The amount of capacity withheld from the day-ahead markets to balance real-time ten-minute loads, after submission of all final schedules, will be referred to as total load following capacity. Total load following capacity can be divided into two types. Type 1 allows dispatch to follow the 10-minute deviations in load from their integrated hour values. Type 2 allows for adjustments to integrated hourly deviation in load from its final schedule (i.e., forecast error). Pooling Schedule 7.01 deals with total load following capacity, its optimal amount, its allocation, and pricing of its opportunity costs.

Much of this schedule is devoted to Collierville because it is the MSSA main load following resource. But load following also includes uses of resource capacity in real time where that capacity was not scheduled in the day-ahead market. These resources include but are not limited to the combustion turbines and COTP. Whenever any resource is used to following load, it will incur a forgone revenue stream and/or additional energy costs for which the owners of the resources must be compensated.

## B. Optimal Load Following Amount

Statistical analysis of the MSSA's load has identified that the amount of load following capacity varies by month and hour of the day. However, due to the dynamics of the market a more fluid approach in deriving load following capacity will be used. This approach will use a load following capacity baseline derived from statistical analysis of MSSA operations. Then at the beginning of each week, or more often if needed, Power Management will decide on the optimal amount of load following capacity based on current market conditions, weather variability and resource reliability. Reasons for deviating from the baseline will be identified. The optimal amount of load following capacity will then be allocated between the Participants being balanced in real time and Silicon Valley Power ("SVP") based upon historically derived shares. Since SVP is a MSS balancing entity, its load/resource balance will be monitored in real time and any deviations that cause MSSA penalties will be directly assigned to SVP. The Pool is also a balancing entity and any resource/load deviations that cause MSSA penalties will be directly attributed to the Pool.

#### C. Allocation of the Pool's Load Following Capacity

Every Participant needs load following capacity. There is not a single Participant that has a perfectly flat load or one that can predict its load on a day-ahead or hour-ahead basis with absolute certainty. Moreover, the pool's load following need will always be equal to or less than

Date Modified: 9/18/2008 Page 64 of 77

the sum of the Participant's load following need because of off setting load characteristics. These offsets occur when the maximum and/or minimum ten-minute ramp periods within an hour are different for Participants within the Pool and when their load forecast deviations offset. The offsets are analogous to coincident versus non-coincident peaks, creating, for the purpose of load following, economies of scope (i.e., the broader and more diverse load the greater the offsets). The amount of load following capacity will, however, vary both in absolute and relative terms by Participant. Given these characteristics, the Pool's share of Power Management's weekly load following capacity will be allocated between the Participants based upon their hourly load characteristics. The hourly allocation of the optimal load following capacity will be based upon the following equations using actual data.

```
Load Volatility Index For Each Hour _{(Participant i)} = \max(0, Highest Ten Minute Meter Value _{(Participant i)} - Hour Ahead Forecast _{(Participant i)}) + \max(0, Hour Ahead Forecast _{(Participant i)} - Lowest Ten Minute Meter Value _{(Participant i)})

Load Capacity Share _{(Participant i)} = \max(0, Hour Ahead Forecast _{(Participant i)}) = \max(0, Hour Ahead Forecast _{(Participant i)}) = \sum_{(i = 1 \text{ to } n)} (Load Volatility Index For Each Hour _{(Participant i)})

Allocated Load Following Capacity _{(Participant i)} = Pool's Weekly/Hourly Optimal Load Following Capacity * Load Capacity Share_{(Participant i)})
```

#### D. Opportunity Cost Of Load Following

Whenever generating capacity is used to load follow it cannot be provided into the CAISO's day-ahead ancillary services ("AS") market or sold in the pre-scheduling energy market. These are the opportunity costs of load following and they consist of two components. The first is the net price of forgone AS/Energy sales in the pre-scheduling day-ahead markets (e.g., Regulation Up Price – GMC). The second is the energy adjustment component when the unit is actually used for load following versus it being used when called upon by the CAISO.

## Forgone Capacity Price Component

The forgone capacity price is derived as the weighted average net price of the capacity and energy markets that the generation unit was pre-scheduled into. The Collierville Generating Units, for example, can be bid into the following markets: regulation up, regulation down, spin, energy, and none. The following table provides an example as to how the weighted average net AS price will be found for a given hour. This example could well have been for a gas turbine, for which the forgone markets would have been only non-spin and energy.

Weighted Average net AS Price Example For August 1, 2003, Hour Ending 14

Date Modified: 9/18/2008 Page 65 of 77

Market	MW		Price	Share
Energy	27	\$	-	13.5%
Spin	106	\$	12.03	53.1%
Reg Down	18	\$	13.97	8.8%
Reg Up	27	\$	16.01	13.5%
None	22	\$	-	11.1%
	======	=:	=====	======
	200	\$	9.78	100.0%
GMC		\$	0.80	
		==	=====	
		\$	8.98	

#### **Energy Adjustment Component**

An energy cost adjustment component is needed because after the fact energy settlements will result with the generator being paid the pool market clearing price ("MCP") for all energy. The energy adjustment accounts for the difference between: 1) the use of energy under load following and that in the market alternative(s), and 2) difference between the MCP for energy and variable cost of the energy. Since the variable cost of a hydro unit is different from that of a gas unit the energy adjustment component will be unit specific.

## **Hydro Energy Cost**

The variable cost component of a hydro unit consists of two components, its value of storage and capacity. Whether the energy adjustment is positive or negative depends upon whether the MCP is greater than or less than the hydro unit's energy costs and whether load following will use more or less energy than that of the foregone sales in the AS/Energy markets. Hydro energy cost is defined as:  $StoragePcnt^*(VOS+VOC)$ , where StoragePcnt is the percent of energy pulled from its reservoir, VOS is the value of storage and VOC is the value of capacity. If natural flows are sufficient to allow for load following then the storage percent would be zero and the resulting energy adjustment cost of hydro generation would be zero dollars. If natural flows were low and releases from storage were needed to load follow then the storage percent would be one and the resulting energy cost would be the value of storage plus the value of capacity. For the purpose of Pooling Schedule 7.01 the storage percent is found by reviewing the pre-scheduled energy to meet load to determine if sufficient generation was scheduled to be able to load follow down. If the pre-schedule can support load following down then the storage percent will be zero; if not, the storage percent will be somewhere between zero and one.

Energy Cost = Storage Percent (Hour i) \* (Value of Storage + Value Of Capacity)

#### Turbine Energy Costs

The energy costs of a combustion turbine are simply its variable costs. That is, the plant's heat rate times the price of natural gas plus its variable operation and maintenance costs (VOM).

Date Modified: 9/18/2008 Page 66 of 77

Energy Cost = Heat Rate \* Natural Gas Price (Day d) + (VOM)

If however, the combustion turbine is energy limited, then its energy cost characteristics will include an element similar to that of a hydro unit's VOS and VOC.

## **COTP Energy Costs**

The energy cost of COTP is the pool market clearing price for COB plus losses and associated scheduling fees.

 Energy Cost = pool market clearing price at COB (Hour hd) + losses and associated scheduling fees.

#### **Energy Adjustment**

The formula for the energy adjustment component of the opportunity cost of load following on a per MW basis for each hour of the day is:

```
Energy Adjustment (Hour h) = { (EnergyCost - MCP) * (LF_Energy_Load_Factor - ISO_Energy_Load_Factor) } (Hour h)
where: Energy Cost = Energy Cost (Resource r) MCP = Pool Market Clearing Price LF_Energy_Load_Factor = the load factor associated with using energy to load
follow.
ISO_Energy_Load_Factor = the weighted average load factor associated with being in the AS/Energy markets
```

If the energy cost is greater than the MCP and the energy used for load following is less than what would have been used in the AS/Energy markets, then by load following there is a net energy benefit to the owner of the load-following resource and thus the energy adjustment subtracts from the average net AS/Energy price. If more energy is use to load follow than what would have been used in the AS/Energy market when the energy cost is greater than the MCP then the energy adjustment adds to the average net price. On the other hand if the MCP is greater than the energy price and load following energy is less than what would have been used in the AS/Energy markets, the energy adjustment will be added to average net price. But, if more following energy is used than what would have been used in the AS/Energy markets when the MCP is greater than energy costs then the energy adjustment will be subtracted from the average net price.

Even if a resource incurs no opportunity costs, that is, it does not qualify for ancillary service or it had idle capacity in the day-ahead markets, an energy adjustment will be calculated if two

Date Modified: 9/18/2008 Page 67 of 77

conditions exist. First, the resource was not scheduled in the day-ahead market, and second, the Pool MCP is less than its energy costs.

## Load Following Opportunity Cost

The total opportunity cost per MW of load following for a generating resource for each hour of the day is the net AS/Energy price plus the energy adjustment.

```
LF_Opp_Cost_MW<sub>(Hour h)</sub> = Avg_Net_Price +
{ (EnergyCost - MCP) * (LF_Energy_Load_Factor - ISO_Energy_Load_Factor) }
} (Hour h)
where: Avg_Net_Price = Weighted Average AS/Energy Market Prices minus GMC
Energy Cost = Storage Percent times (Value of Storage + Value Of Capacity)
MCP = Pool Market Clearing Price
LF_Energy_Load_Factor = the load factor associated with using energy to load
follow.
ISO_Energy_Load_Factor = the weighted average load factor associated with being in the AS/Energy markets.
```

The monthly opportunity cost of load following will be allocated to each Participant as the product of the load following opportunity cost per MW for hour i and the Participant's allocated load following capacity for that hour, summed across all the hours of the month. The load following opportunity cost payments will then be distributed to the resource owners based on ownership shares.

## E. Choice of Load Following Unit

A running daily average of the opportunity cost per MW will be used to determine which Generating Unit will be used to load follow. As the value of storage and/or natural gas prices change the relative energy costs of a hydro unit versus a combustion turbine will also change. As a result, the opportunity cost per MW of the hydro unit will change vis-à-vis the combustion turbine. If, for example, natural gas prices fall during a dry hydro year, then the opportunity cost of load following with hydro will increase and that of the combustion turbine will fall. The changes in relative opportunity costs my now make load following with the combustion turbine less expensive than load following with the hydro unit.

Date Modified: 9/18/2008 Page 68 of 77

# Pooling Schedule 9.01 - Ancillary Services

NCPA shall allocate the costs and benefits of procuring Ancillary Services in accordance with the provisions of the Scheduling Coordinator Program Agreement.

Date Modified: 9/18/2008 Page 69 of 77

## Pooling Schedule 9.02 - Transmission

## A. Interconnection Agreements

Interconnection of Participants' Electric Systems to the Regional Transmission grid is provided for under the terms of the applicable Interconnection Agreement(s) with Pacific Gas & Electric Company.

#### B. Transmission Service

Regional (High Voltage) and Local (Low Voltage) transmission service is provided under the CAISO Tariff. Charges for Regional and Local transmission services by the CAISO shall be allocated to Participants under the provision of the NCPA Scheduling Coordination Program Agreement.

#### C. Transmission Resources.

- California Oregon Transmission Project ("COTP").
   COTP is the third leg of an intertie system connecting California with the Pacific Northwest. The Participant's ownership participation percentages in the project are contained in Appendix A to this Pooling Schedule. Current Participant Entitlements may be modified by layoff agreements between Participants, or between Participant(s) and Third Parties.
- 2. South of Tesla Transmission Service ("SOT").
  SOT is long-term firm transmission service, provided by contract between PG&E and Transmission Agency of Northern California ("TANC"), through which Participants can access the Southern California Edison system. The Participant's ownership participation percentages for the contracted service are contained in Appendix B to this Pooling Schedule. Current Participant Entitlements may be modified by layoff agreements between Participants, or between Participant(s) and Third Parties.
- Other Transmission Resource Transactions.
   NCPA shall assist the Parties in transacting bi-lateral agreements for the transfer of transmission resources. Participants who separately enter into bi-lateral transmission agreements shall notify NCPA Operations prior to the time that the Agreement is effective.

#### D. Schedule of Transmission Use.

NCPA shall provide a schedule of transmission resources Entitlements and transfers, and the cost of each in the monthly resource billings.

## E. Other Rights.

Date Modified: 9/18/2008 Page 70 of 77

Transmission access does not preempt rights to generating resource or contract Entitlements or ownership or any other rights, except to the extent authorized by the Party with such rights.

Date Modified: 9/18/2008

# Pooling Schedule 9.02 - Appendix A

COTP Ownership Participation Percentages

	COTP	COTP		Short-	Long-
Project	Capacity	Ownership	Pool	Term	Term
Participants	MW (N-S)	Normalized %	Percentages	Transfer	Transfer
Alameda	17.053	1.2272%	16.1402%	0.000	17.053
Healdsburg	3.413	0.2456%	3.2304%	3.413	3.413
Lodi	26.682	1.9201%	25.2532%	26.682	26.682
Lompoc	2.591	0.1865%	2.4524%	2.591	2.591
Palo Alto	51.159	3.6815%	48.4205%	51.159	0.000
Plumas	2.056	0.1479%	1.9455%	2.056	2.056
Ukiah	2.703	0.1945%	2.5579%	2.703	2.703
Total	105.657	7.603%	100%	88.604	54.497

Date Modified: 9/18/2008 Page 72 of 77

# Pooling Schedule 9.02 - Appendix B

South of Tesla Transmission Service Entitlements

Project	SOT Capacity	SOT Ownership	Pool
Participants	MW	Normalized %	Percentages
Alameda	6.309	2.103%	40.3415%
Healdsburg	0.711	0.237%	4.5463%
Lodi	6.210	2.070%	39.7084%
Lompoc	0.801	0.267%	5.1218%
Plumas			
Sierra	0.699	0.233%	4.4696%
Ukiah	0.909	0.303%	5.8124%
Total	15.639	5.213%	100%

<sup>\*</sup>At the Midway Substation

Date Modified: 9/18/2008

# Pooling Schedule 10.01 - Western Area Power Administration Allocations to Pool Participants

Allocations of Western Area Power Administration capacity and energy assigned to NCPA shall be administered in accordance with the Assignment Administration Agreement are treated as any other Third Party resources procured solely by such Participant.

Date Modified: 9/18/2008 Page 74 of 77

## Pooling Schedule 11.01 - Member Meter Project

The table below shows the Participants' election of responsibility for maintaining and operating of its meter and other peripheral equipment, including current transformer ("CT") and power transformer ("PT"), to either be performed internally or to be assign to NCPA, as pursuant to Article 10 of this Agreement:

Meter	Responsible Party for Operation and	
Participants	Maintenance of metering equipment	
Alameda	NCPA on behalf of Alameda	
Biggs	NCPA on behalf of Biggs	
Gridley	NCPA on behalf of Gridley	
Healdsburg	NCPA on behalf of Healdsburg	
Lodi	NCPA on behalf of Lodi	
Lompoc	NCPA on behalf of Lompoc	
Palo Alto	Palo Alto	
Port of		
Oakland	Port of Oakland	
Plumas Sierra	Plumas Sierra	
Ukiah	Ukiah	

Date Modified: 9/18/2008 Page 75 of 77