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HOOVER POWER POOLING PROGRAM(S)

Arizona Power Authority (Authority) customers may elect to work directly with the Authority staff when scheduling their Hoover Power entitlement or they may elect to participate in pooling activities.

This document sets forth the principles, terms and conditions of participation in a Hoover Power Pooling Program(s) (“Program(s)”) aligning with the post-2017 Electric Service Contract with Western Area Power Administration and the Power Sales Contract between the Authority and the Authority customers including an established program known as the Resource Exchange Program (the “REP Program”). Additional Post-2017 power pooling programs may surface from time-to-time during the term of this Program (See, Section 8.1).

The Resource Exchange Program (REP) was established by the Arizona Power Authority Commission in 1993, initially as an experiment, to provide a mechanism for the layoff of Hoover capacity and/or energy and subsequent purchase of the resultant layoff capacity and/or energy by other APA customers participating in the REP. The REP continues to follow the terms and conditions included in this Hoover Power Pooling Program(s) document.

Preamble

The Participants implement individual power and water conservation programs under federal and state laws and regulations. For example, the Energy Policy Act of 1992 requires integrated resource planning. The Cooperative Scheduling provided for in this Program will improve efficiencies and economics of dispatch and will further the goals of, and compliance with, the Energy Policy Act by increasing efficient use of federal power resources.

The eligible Participants are party to an Authority Power Sales Contract with an allocation of Hoover A Power, Hoover B Power, and Hoover D-1 and/or D-2 Power. The Cooperative Scheduling provided for in this Program shall comply with the Participants’ contractual obligations to the Authority, state and federal law and the Authority’s rules.

Principles

- A. Authority customers participating in the development and operation of a Power Pool will identify the Participants in the Power Pool and the Administrative Agent for the Power Pool.
- B. Participants in a Power Pool will provide written authorization to the Authority for the Administrative Agent to act on behalf of the Participants with respect to the Power Pool.

- C. The Participants' planning, scheduling, accounting, and other arrangements prepared by them or for their purposes shall remain the property of the Participant. Information, such as monthly capacity and energy entitlements including layoff, exchange, and/or banking activities will likely appear on Authority and Western reports and will not be proprietary and confidential.
- D. Each Administrative Agent will receive a copy of Hoover Power allocations and entitlements for each month for all of the Authority's customers. The Authority will provide information in advance when it is available from Western.
- E. The Participants' modifications to the Hoover Dam entitlements will be limited to monthly adjustments. Adjustments of any kind will require Authority oversight and approval; such approval shall not be unreasonably withheld. The Administrative Agent will communicate any proposed adjustments with the Authority staff, who will coordinate these adjustments with the Scheduling Entity (ies) and other Administrative Agents as necessary.
- F. An Administrative Agent may attend operations, scheduling, and accounting coordination sessions on behalf of its Power Pool Participants.
- G. An Administrative Agent, in coordination with other Power Pools, may participate in monthly entitlement adjustments between these pools with Authority oversight and approval; such approval shall not be unreasonably withheld.
- H. An Administrative Agent, with Authority oversight and approval, may coordinate the purchase of supplemental capacity and energy for its Power Pool Participants. These purchases will be in accordance with agreements already in place between the Authority and the party providing the capacity and energy.
- I. The Authority's Scheduling Entity (ies) will confirm hourly and daily schedules with the associated Balancing Authorities.
- J. The Authority will not be involved in planning and scheduling activities for generating resources that do not involve Hoover Dam capacity and energy. Managing Participants' loads and other resources will be the responsibility of the Participants. The Authority will be informed and part of any activity involving Hoover Power schedules.
- K. It is the intent of the Authority that schedule modifications will not interfere with deliveries of Hoover Power to utility bill crediting customers or other Authority customers. The Authority will prepare billings for Hoover Power for all Authority customers participating in the Program and for those Authority customers that do not participate.

1. **DEFINITIONS**

For the purpose of this Program, the terms set forth below have the following meanings:

- 1.1 **Administrative Agent**: The entity or entities whom the Participants in a Power Pool designate from time to time pursuant to paragraph 4.1 hereof.
- 1.2 **Authority**: The Arizona Power Authority.

- 1.3 Authority Power Sales Contract: A power sales contract between the Authority and a Participant relating to Hoover A, Hoover B, Hoover C, Hoover D-1, and or Hoover D-2 capacity and energy.
- 1.4 Contract Year: October 1 of any year through September 30 of the subsequent year.
- 1.5 Cooperative Scheduling: Cooperative scheduling and voluntary exchanging of the Participants' Hoover Power and any additional resources that the Participants in a Power Pool wish to cooperatively schedule and/or exchange.
- 1.6 Effective Date: The date on which the Authority approves operation of a Power Pool under this Program.
- 1.7 Hoover A: The capacity and energy offered to the Authority pursuant to Section 2. (a) of the Hoover Power Allocation Act of 2011 and purchased by the Authority pursuant to the Boulder Canyon Project Agreement.
- 1.8 Hoover B: The capacity and energy offered to the Authority pursuant to Section 2. (b) of the Hoover Power Allocation Act of 2011 and purchased by the Authority pursuant to the Boulder Canyon Project Agreement.
- 1.9 Hoover C: The capacity and energy offered to the Authority pursuant to Section 2. (c) of the Hoover Power Allocation Act of 2011 and purchased by the Authority pursuant to the Boulder Canyon Project Agreement.
- 1.10 Hoover D-1: The capacity and energy offered to the Authority pursuant to Section 2. (d) of the Hoover Power Allocation Act of 2011 and purchased by the Authority pursuant to the Boulder Canyon Project Agreement.
- 1.11 Hoover D-2: The capacity and energy offered to the Authority pursuant to Section 2. (d) of the Hoover Power Allocation Act of 2011 and purchased by the Authority pursuant to the Boulder Canyon Project Agreement.
- 1.12 Hoover Power: Hoover A, Hoover B, Hoover C, Hoover D-1, and Hoover D-2 capacity and/or energy. As used herein, Hoover Power shall mean Monthly Capacity, Monthly Energy and Hoover C, unless the context otherwise requires.
- 1.13 Management Committee: The committee created pursuant to Section 7 hereof to facilitate the operation of this Program.
- 1.14 Monthly Capacity: The quantity of entitlement capacity expressed in kilowatts (kW) that each Participant is entitled to receive each month pursuant to that Participant's Authority Power Sales Contract.
- 1.15 Monthly Energy: The quantity of available energy expressed in kilowatt-hours (kWh) that the Authority is committed to supply and each Participant is entitled to receive each month pursuant to that Participant's Authority Power Sales Contract.

- 1.16 Participants: Authority customers who have executed a Program Agreement and have not been terminated pursuant to Section 10.1.c. hereof.
- 1.17 Power Pool(s): Any group of two or more Authority customers that chose to work together as a pool in the Cooperative Scheduling of Hoover Capacity and Hoover Energy pursuant to the Program.
- 1.18 Program Agreement: A contract in substantially the form set forth in Exhibit A hereto, obligating each Participant, the Authority and the Administrative Agent to be bound by the terms and conditions of this Program while identifying specific attributes of each Authority approved Power Pool.

Terms in initial capitalization and not defined in this document shall have the meanings given them in the Authority Power Sales Contract.

2. OBJECTIVE

- 2.1 The Parties agree that the objective of the Program is to use Cooperative Scheduling to utilize the load and resource diversity among the Participants of each Power Pool, for the optimum scheduling of Hoover Power and the various additional resources available to each Participant. The Parties expect full utilization of Hoover Power and wish to maximize efficient use of all resources at reduced costs to such Participants while, at the same time, enabling the Authority to retain the ultimate control of Hoover Power as required in the Boulder Canyon Project Agreement for the benefit of the sovereign State of Arizona.

3. THE PROGRAM, POWER POOLS AND REP

- 3.1 At present, the only Program overseen by the Authority is an established Program known as the Resource Exchange Program (“REP”). This Program document is intended to provide specific guidelines for any proposed or existing Power Pool and to impose certain additional requirements on the Participants and the Administrative Agents.

4. ADMINISTRATIVE AGENT

- 4.1 The Participants of each Power Pool shall select an Administrative Agent. Each Power Pool Participant shall contract with its Administrative Agent, as necessary, to fulfill the scheduling and accounting functions required for the operation of this Program, which contract may be an extension of an existing contract. Each Participant shall execute such documentation as is necessary to authorize the Administrative Agent to act as that Participant’s representative for purposes of scheduling Hoover Power, and any additional resources that are Cooperatively Scheduled, and for such other purposes as are necessary or convenient to carry out this Program, including, but not limited to, obtaining copies of power bills and schedules. Each Participant shall provide written notice to the Authority of such

authorization. Any Participant that does not notify the Authority that it has selected an Administrative Agent may act on its own behalf in performance of the Program.

- 4.2 Each Administrative Agent shall use its reasonable best efforts to propose schedules that fully utilize Hoover Power, and other resources, as directed and requested by its Power Pool Participants, in accordance with the intent and purpose of the Program. An Administrative Agent is authorized to rely upon information provided by the Participants and shall not be responsible for the accuracy of such information or the results or consequences of Cooperative Scheduling undertaken in reliance on such information.
- 4.3 Each Administrative Agent shall execute a Program Agreement in a form substantially similar to the form set forth in Exhibit A hereto. This exhibit outlines specifics for the operation of the REP. Additional exhibits will cover other Power Pools that may be created under this Program Agreement.

5. **COOPERATIVE SCHEDULING, REPORTING, BILLING AND PAYMENT PROCEDURES**

- 5.1 This Program allows the Participants in a Power Pool to Cooperatively Schedule.
- 5.2 Prior to the tender or relinquishment of Hoover Power to the Authority pursuant to Section 29(b) of the Authority Power Sales Contract, but subject to the provisions of the Authority Power Sales Contract, Cooperative Scheduling may be undertaken within a single Contract Year for not less than a one-month period by the Administrative Agent on behalf of those Participants which have so directed, or such other period as requested by the Administrative Agent and approved by the Authority.
- 5.3 Participants taking part in Cooperative Scheduling shall provide, or cause to be provided to the Authority, a monthly schedule stating each Participant's Hoover Power entitlement before the Cooperative Schedule for such month, the amounts of Hoover Power Cooperatively Scheduled to, from or with each Participant, and the net resulting schedule of each Participant. Each Participant's resulting net Hoover Power schedule will be the schedule the Authority employs for the month pursuant to the terms and conditions of this Program and the Authority's customary procedures.
- 5.4 As soon as practicable after monthly schedules are finalized, each Administrative Agent shall prepare a report describing the Cooperative Scheduling undertaken by that Administrative Agent for its Power Pool Participants for that scheduling period. Any Participant acting on its own behalf in the performance of the Program shall cause a similar report to be provided for its activities under the Program. The form of the report may be modified from time to time at the direction of the Management Committee. A copy of the report shall be made available to the Authority.

- 5.5 Each Participant who Cooperatively Schedules Hoover Power agrees to assume the financial obligation for the additional amount of Hoover Power scheduled for it, which exceeds such Participant's monthly Hoover Power entitlements.
- a. The Authority shall bill each Participant for all additional amounts of Hoover Power in a manner consistent with the then current Authority monthly billing process.
 - b. Each Participant agrees to pay the Authority for such additional amount of Hoover Power scheduled for it in a manner consistent with the payment process required for Hoover Power. Should a Participant fail to pay for such additional amount of Hoover Power, the Authority may elect to employ the collection process for such amount in a manner consistent with collection of unpaid bills for Hoover Power.
- 5.6 Each Participant (Disposing Participant) agrees that the Cooperative Scheduling of any of its Monthly Capacity and Monthly Energy entitlement to another Participant (Acquiring Participant) pursuant to this Program shall not relieve the Disposing Participant of its underlying obligation to pay for its Monthly Capacity and Monthly Energy pursuant to the Authority Power Sales Contracts. Each Disposing Participant having part or all of its Monthly Capacity and Monthly Energy Cooperatively Scheduled to another Participant agrees (i) that the Authority bill rendered to such other-Acquiring Participant shall constitute legally sufficient billing by the Authority in compliance with the Authority Power Sales Contract to the Disposing Participant whose Monthly Capacity and Monthly Energy is scheduled to another, should the Authority exercise its rights to collect payment in full from any such Disposing Participant; and (ii) that the administration of this Program shall not, in any manner, affect the Authority's right to collect payment from any Participant for its Monthly Capacity and Monthly Energy pursuant to the Authority Power Sales Contract.
- 5.7 Hoover A shall be purchased and scheduled under this Program only by Participants having a Hoover A allocation and shall be used within the area covered by the power purchase certificate of the Hoover A Participant receiving and paying for the Cooperatively Scheduled Hoover A. Hoover B shall be purchased and scheduled under this Program only by (i) Participants having a Hoover B allocation, subject to the terms and conditions of the Authority Power Sales Contract. Hoover C shall be purchased and scheduled under this Program only by Participants legally entitled to receive Hoover C. Hoover D-1 shall be purchased and scheduled under this Program only by (i) Participants having a Hoover D-1 allocation, subject to the terms and conditions of the Authority Power Sales Contract. Hoover D-2 shall be purchased and scheduled under this Program only by (i) Participants having a Hoover D-2 allocation, subject to the terms and conditions of the Authority Power Sales Contract.
- 5.8 No Participant may demand more resource than another Participant is willing to make available to the requesting Participant. No Participant may demand that another Participant accept more of the offering Participant's resource than the other

Participant is willing to accept. Notwithstanding this Program, each Participant is responsible for providing for its own power supply.

5.9 This Program does not create any separate rights to Hoover Power, and this Program shall not cause the Authority to be in violation of any of its obligations under the Boulder Canyon Project Agreement.

5.10 Cooperative Scheduling may include any resources available to any of the Participants. If additional resources can be Cooperatively Scheduled or exchanged, the Participants may individually or collectively request its Administrative Agent to cooperatively schedule or exchange such additional resources.

6. MONTHLY SCHEDULING

6.1 Each Administrative Agent or the Participant shall submit the schedules to the Authority at least four working days before the end of the month, to the extent practicable.

6.2 Each Administrative Agent will attempt to accommodate changes reasonably requested by other Administrative Agents or the Authority if it is reasonably possible to do so without adversely affecting the Participants for whom the Administrative Agent is authorized to act.

7. PARTICIPANTS

7.1 In order to be eligible to become a Participant, an entity must, at the time of delivering the Program Agreement, be one of the following: (i) a party to an Authority Power Sales Contract with an allocation of Hoover A Power, (ii) a party to an Authority Power Sales Contract with an allocation of Hoover B Power, (iii) a party to an Authority Power Sales Contract with an allocation of Hoover C energy, a party to an Authority Power Sales Contract with an allocation of Hoover D-1 Power or a party to an Authority Power Sales Contract with an allocation of Hoover D-2 Power.

7.2 Eligible entities may become Participants by executing a Program Agreement, including an Exhibit to this Program that includes those eligible entities participating and the specific attributes of its power pooling arrangement, and delivering it to the person(s) designated by the Management Committee and the Authority. Exhibit A covers attributes of the REP and will be known as Power Pool Group A. Exhibit B includes the participants and attributes of Power Pool Group B. This Program Agreement provides for additional Power Pool Groups as may be formed and listed as an Exhibit.

8. MANAGEMENT COMMITTEE

- 8.1 All Participants shall be members of the Management Committee. Upon execution and delivery of a Program Agreement, the Authority shall be a member of the Management Committee.
- 8.2 The Authority Commission shall designate an Authority employee to act as chairman of the Management Committee, who will be responsible for providing notice to the Participants of all Management Committee meetings and for preparing minutes of all Management Committee meetings.
- 8.3 The Management Committee is authorized to make decisions facilitating the operation of this Program regarding the following matters:
- a. Determining the form of report to be prepared by the Administrative Agent pursuant to Section 5.4 hereof;
 - b. Addressing and attempting to resolve issues between or among the Participants, Power Pools, Administrative Agents and other Authority customers;
 - c. Coordination or consultation with the Authority;
 - d. Discussion of Cooperative Scheduling, and related issues with the Administrative Agents;
 - e. Approval of outside assistance (legal or technical) which may be necessary to facilitate this Program; and
 - f. Such other matters as may appropriately come before the Management Committee.
- 8.4 When a decision within the scope of the Management Committee's authority must be made, reasonable notice shall be provided by the Authority to each Management Committee member regarding the issues to be addressed and setting a time, date and location for the Management Committee to meet to take action on the issues. Management Committee members unable to have a representative attend a meeting in person may participate and be present via telephone, webinar or by written proxy. The Authority, at the request of the Administrative Agent, any Participant, or on its own behalf, may call a meeting of the Management Committee. Management Committee meetings may also be held by conference call.
- 8.5 In the event that a unanimous consensus cannot be reached by members of the Management Committee regarding any issue, the decision shall be made by the vote of a simple majority of the Management Committee members present. The presence of one-third of the members of the Management Committee shall constitute a quorum and no action may be taken unless a quorum is present. The decision of the requisite majority of the members of the Management Committee present shall be binding on

all Participants, provided that adequate notice has been provided pursuant to Section 8.4 hereof.

9. TERM

9.1 The term of this Program shall begin October 1, 2017 and shall continue unless terminated pursuant to Section 9 hereof, or September 30, 2026, until the earlier of such time as all Participants have terminated their status as Participants. The Authority commission may extend the Program(s) with input from the Management Committee.

10. TERMINATION OF PARTICIPANT STATUS

10.1 Termination of a Participant's status as a Participant may occur in any of the following ways:

- a. Any Participant may terminate its status as a Participant to this Program at any time by giving written notice of termination to the Authority.
- b. If a Participant no longer meets the eligibility requirements set forth in Section 7 hereof, its status as a Participant is automatically terminated.

10.2 Upon termination of a Participant's status as a Participant, all obligations previously incurred by the terminated Participant and the remaining Participants pursuant to this Program shall survive until satisfied.

11. ACKNOWLEDGMENTS

11.1 Each of the Participants and the Authority agree that it is their several and joint intention that all the terms, covenants and conditions of Authority Power Sales Contracts shall remain in full force and effect, without change, and that the terms and provisions of this Program shall not alter the terms, covenants and conditions of the Authority Power Sales Contracts in any way and that if a dispute arises concerning the rights of the parties under this Program(s) and the rights of the parties under the Authority Power Sales Contract, the provisions of the Authority Power Sales Contract shall control.

11.2 Each of the Participants and the Authority agree that participation in the Program shall not be considered (a) a tender or relinquishment of Hoover Capacity or Hoover Energy for purposes of Section 7 of the Authority Power Sales Contract, or (b) standing alone, as justification for any determination pursuant to Section 27 of the Authority Power Sales Contract and/or R12-14-40I.D. of the Authority's rules that a Participant's Hoover Power entitlement has exceeded, for a period of three consecutive Contract Years, the electric load of the Participant or that the Participant's Hoover Power entitlement can reasonably be expected to exceed, in whole or part, the Participant's loads in the future or future needs; provided, however,

the load information provided to the Authority pursuant to this Program may be used by the Authority in any such determination.

11.3 Participation in Cooperative Scheduling pursuant to this Program does not preclude participation in other Cooperative Scheduling, pooling or exchange arrangements.

Unanimously adopted by the Arizona Power Authority Commission this _____ day of _____, 2017.

Attest:

Dalton H. Cole, Jr., Chairman

Heather J. Cole, Executive Secretary

DRAFT

Power Pool Group A

Identifying Name:

Resource Exchange Program

Administrative Agent:

K. R. Saline and Associates, PLC

Group A Participants:

- 1) a
- 2) a
- 3) a
- 4) a
- 5) a
- 6) a
- 7) a
- 8) a
- 9) a
- 10) a

Group A Description:

The Resource Exchange Program (REP) was established by the Arizona Power Authority Commission in 1993, initially as an experiment, to provide a mechanism for the layoff of Hoover capacity and/or energy and subsequent purchase of the resultant layoff capacity and/or energy by other APA customers participating in the REP. Although the REP originally simply dealt with a Hoover product, it has since expanded to include resources and loads that are not a part of Hoover Dam. This Group A is established to provide all of the existing REP attributes but is limited only to the coordinated use of Hoover Power by the Group A participants.

Group A Operations:

The Administrative Agent will consult with the Group A participants each month to determine the most efficient and cost-effective strategy for each participant, after receiving from the APA the monthly entitlements for each entity. K.R. Saline and Associates will administer the Group A operations subject to Authority oversight consistent with contracts with the Authority. Operations will take advantage of every tool available by contract to manage Hoover Dam entitlements without involving other loads and resources under the purview of K. R. Saline & Associates.

Power Pool Group B - EXAMPLE

Identifying Name: XYZ

Program Agreement Effective Date: October 1, 2017

Administrative Agent: TBD

Group B Participants:

- 1) a
- 2) a
- 3) a
- 4) a
- 5) a
- 6) a
- 7) a
- 8) a
- 9) a
- 10) a

Group B Description:

EXAMPLE ONLY: Group B was established by _____ to provide the Group B participants the opportunity to coordinate as a group the use of each participants Hoover Power allocation. The goal is for each Group B participant, and the group as a whole, to optimize the benefits and reduce overall operating costs through the use of efficient scheduling and the tools provided in the Hoover Power contracts.

The purpose of the pool is to schedule participant's Hoover Power to the benefit of all pool participants, operating within the confines of the APA power sales contract, regulations, and each participant's bill credit contract with the host utility.

The Group B Administrative Agent will submit power schedules to the APA for each of the Group B participants on a monthly basis using contractual mechanisms such as layoff, banking (if allowable), and firming purchases.

Group B Operations:

The Administrative Agent will consult with the Group B participants each month to determine the most efficient and cost-effective strategy for each participant, after receiving from the APA the monthly entitlements for each entity. The Administrative Agent will then submit a report to the APA listing the Hoover capacity and/or energy for each entity to be scheduled. At that time, the Administrative Agent will also consult with the APA if any firming purchases are desired for any entity and to determine the costs for such firming power. Subsequent to those discussions the Administrative Agent will arrange for those purchases through the APA. Each Group B participant will be billed accordingly for Hoover capacity and energy scheduled as well as for any firming purchases. The Administrative Agent will provide energy accounting and check out services for

each participant and will make that information available to the host utilities (APS, SRP, etc.). The Administrative Agent will also be responsible for ensuring that each participant is scheduling resources appropriately considering the contract requirements laid out in each entities' power sales contracts with APA as well as the bill crediting agreements with host utilities.

DRAFT

Power Pool Group C

Identifying Name:

APA Power Pool C

Program Agreement Effective Date:

October 1, 2017

Administrative Agent:

APA

Group C Participants:

- 1) a
- 2) a
- 3) a
- 4) a
- 5) a
- 6) a
- 7) a
- 8) a
- 9) a
- 10) a

Group C Description:

Group C was established by the Power Sales Agreement to provide an option, consistent with the Authority's regulations, for the APA customer to participate in programs designed to maximize the value of its Hoover Power allocation. With respect to Group C, the Authority will assist customers in preparing all relevant agreements.

Group C participants, with APA approval, will enter into agreements that provide the participants a mechanism to aggregate or commingle the Group C participants Hoover capacity and energy. With the Authority's approval, not to be unreasonably withheld, the Group C Pooling Program provides for banking of Hoover Power, displacements, exchange of banked Hoover Energy (if applicable) among the Group C participants, and exchanges of Hoover Capacity or Hoover Energy among Customers.