



**United States  
Department of Energy**

**WESTERN AREA  
POWER ADMINISTRATION**

**Desert Southwest  
Regional Office**

# CONTRACT

**CONTRACT NO. 16-DSR-12649**

**BETWEEN**

**UNITED STATES  
DEPARTMENT OF ENERGY  
WESTERN AREA POWER ADMINISTRATION  
Desert Southwest Customer Service Region  
Boulder Canyon Project**

**AND**

**CITY OF RIVERSIDE**

**FOR**

**ELECTRIC SERVICE**

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1. **PREAMBLE:** This Contract is made this \_\_\_\_ day of \_\_\_\_\_, 2016 (Contract), in accordance with the following Acts of Congress: Reclamation Act of June 17, 1902 (32 Stat. 388, 43 U.S.C. 391); the Boulder Canyon Project Act of December 21, 1928 (45 Stat. 1057, 43 U.S.C. 617); the Boulder Canyon Project Adjustment Act of July 19, 1940 (54 Stat. 774, 43 U.S.C. 618); the Colorado River Basin Project Act of September 30, 1968 (82 Stat. 885, 43 U.S.C. 1501); the Department of Energy Organization Act of August 4, 1977 (91 Stat. 565, 42 U.S.C. 7101); the Hoover Power Plant Act of August 17, 1984 (98 Stat. 1333, 43 U.S.C. 619); the Hoover Power Allocation Act of December 20, 2011 (125 Stat. 777, 43 U.S.C. 619a), hereinafter called the Hoover Power Allocation Act of 2011; and acts amendatory or supplementary to the foregoing acts as of the date of execution of this Contract, between THE UNITED STATES OF AMERICA, Department of Energy, acting by and through the Administrator, Western Area Power Administration, hereinafter called Western, represented by the officer executing this Contract, and with the concurrence of the Secretary of the Interior through the Commissioner, Bureau of Reclamation, represented

by the Regional Director, Lower Colorado Region insofar as their responsibilities and authority under the Boulder Canyon Project Act (45 Stat. 1057, 43 U.S.C. 617), the Boulder Canyon Project Adjustment Act (54 Stat. 774, 43 U.S.C. 618), the Hoover Power Plant Act of 1984 (98 Stat. 1333, 43 U.S.C. 619), and the Hoover Power Allocation Act of 2011 (125 Stat. 777, 43 U.S.C. 619a) as provided in section 30 of this Contract, and CITY OF RIVERSIDE, organized and existing under and by virtue of the laws of the State of California, or a duly authorized representative, hereinafter called the Contractor or City of Riverside, its successors and assignees; each sometimes individually called Party, and collectively called Parties.

2. **EXPLANATORY RECITALS:**

- 2.1 The Hoover Power Allocation Act of 2011 established allocations of Schedule A and Schedule B power to existing Contractors, excess energy provisions under Schedule C, and a resource pool defined as Schedule D.
- 2.2 Western's Administrator published Conformed General Consolidated Power Marketing Criteria or Regulations for Boulder City Area Projects in Federal Register Notice 77 FR 35671, dated June 14, 2012, as required by the Hoover Power Allocation Act of 2011, collectively hereinafter called "Conformed Criteria" which serve as the regulations for the sale of electric service from the Boulder Canyon Project (BCP).
- 2.3 In accordance with the Hoover Power Allocation Act of 2011 and the Conformed Criteria, Western marketed 66.7 percent of the Schedule D capacity and energy to new eligible allottees within the Boulder City Area Projects marketing area. Western further marketed 11.1 percent of the Schedule D capacity and energy each to the Arizona Power Authority for new allottees within Arizona, and to the Colorado River Commission of Nevada for new allottees within Nevada, and to

new allottees within the State of California. The Arizona Power Authority (APA) marketed 11.1 percent of the Schedule D capacity and energy to new allottees within the State of Arizona and the Colorado River Commission of Nevada (CRC) marketed 11.1 percent of the Schedule D capacity and energy to new allottees within the State of Nevada.

- 2.4 Western's Energy Planning and Management Program (EPAMP), dated October 20, 1995, in Federal Register Notice 60 FR 54151 requires all BCP electric service contractors to prepare Integrated Resource Plans (IRP). In accordance with Federal Register Notice 76 FR 81487, dated December 28, 2011, only the IRP portion of the EPAMP Power Marketing Initiative is applicable to BCP Contractors. EPAMP was revised in 65 FR 16789, dated March 30, 2000, to allow customers more alternatives in meeting the IRP requirements, such as the small customer plan and other acceptable plans.
- 2.5 In Federal Register Notice 77 FR 65681, dated October 30, 2012, Western proposed additional marketing criteria, for public comment.
- 2.6 Western announced in Federal Register Notice 78 FR 79436, dated December 30, 2013, its final marketing criteria and a call for applications.
- 2.7 Western announced in Federal Register Notice 78 FR 79436, dated December 30, 2013, eligible Schedule D Contractors, with the exception of Native American Tribes, must be ready, willing and able to receive and distribute or use power from Western by October 1, 2016.
- 2.8 Western announced in Federal Register Notice 78 FR 79443, dated December 30, 2013, the general marketing criteria stating that any allocated Schedule D power not under contract by October 1, 2016, shall be redistributed

on a pro-rata basis to the remaining Schedule D allottees. Any power not allocated and under contract by October 1, 2017, shall be distributed in accordance with the 2012 Conformed Criteria.

- 2.9 Western announced in Federal Register Notice 79 FR 46432, dated August 8, 2014, proposed allocations for BCP Schedule D resource pool.
- 2.10 Western provided the public opportunities to discuss and comment on the proposed allocations for the BCP Schedule D resource pool and after evaluation of the comments received, Western published notice of final allocations of power from the BCP Schedule D resource pool in Federal Register Notice 79 FR 75544, dated December 18, 2014.
- 2.11 In the Federal Register Notice 79 FR 75544, dated December 18, 2014, Western approved allocations of electric service to Schedule D Contractors subject to the execution of a definitive contract. The Hoover Power Allocation Act of 2011 further provides that in the case of Arizona and Nevada, Schedule D Contingent Capacity and Firm Energy allocated by Western for new allottees other than federally recognized Indian tribes shall be offered in contracts through the Arizona Power Authority and the Colorado River Commission of Nevada, respectively.
- 2.12 The Boulder Canyon Project Act sets forth the Hoover-specific preference to be applied in allocation and marketing of power generated at Hoover Dam; section 18 of the Reclamation Project Act of 1939 (53 Stat. 1187) states that “[n]othing in this Act shall be construed to amend the Boulder Canyon Project Act (45 Stat. 1057), as amended”; and Congress has consistently exempted the Boulder Canyon Project Act from preference granted under the Reclamation Project Act subsequent to 1939.

- 2.13 The Hoover Power Allocation Act of 2011 provides for contract offers to existing Contractors of Schedule A and Schedule B Contingent Capacity and Firm Energy, and Schedule C Excess Energy, and Schedule D resource pool for new allottees. Western herein offers such Schedule A and Schedule B Contingent Capacity and Firm Energy, and also offers such Schedule C Excess Energy, and Schedule D Contingent Capacity and Firm Energy for new allottees, and this Contract evidences such offers and the acceptance of such offers.
3. **AGREEMENT:** The Parties agree to the terms and conditions set forth herein.
4. **TERM OF CONTRACT:**
- 4.1 This Contract shall become effective on October 1, 2016, to provide for obligations required to initiate service in advance of the date of initial service, including, but not limited to, advance funding obligations defined under the Restated Agreement. This Contract shall remain in effect through September 30, 2067, without prejudice to any rights to extension hereof which the Contractor may have under the Boulder Canyon Project Act, provided that this Contract is not terminated prior to September 30, 2067, and the Contractor is not in default hereunder as of September 30, 2067.
- 4.2 The date of initial service hereunder shall be October 1, 2017.
- 4.3 Western reserves the right to terminate this Contract in the event the Contractor does not meet the requirements of this Contract as specified in section 17.
- 4.4 If the Contractor's Allocation is reallocated in accordance with section 16, this Contract shall terminate on the effective date of the reallocation specified in the written notice from Western.
5. **DEFINITIONS:** The following terms, when used herein and in the Exhibits and Attachments as attached, shall have the meanings specified:



- 5.1 Actual Expenses: The amount equal to the expenses, authorized by applicable laws or regulations, actually incurred by or for the benefit of the BCP each Fiscal Year by Western and Reclamation excluding any expenses for Firming Energy purchases.
- 5.2 Administrator: The Administrator of the Western Area Power Administration.
- 5.3 Ancillary Services: Those generation services that are necessary to support the transmission of capacity and scheduled energy from resources to loads. Ancillary Services provided under this Contract deemed delivered from Hoover Powerplant are those described in subsection 6.11 and listed in Attachment No. 3.
- 5.4 Annual Revenue Requirement: The estimated BCP expenses for the Rate Year less any carryover of funds from prior Fiscal Year(s) and revenues from other sources as provided under subsection 7.4.
- 5.5 Arizona: The State of Arizona, represented, for purposes of this Contract, by the Arizona Power Authority.
- 5.6 Authorized Representative: A representative of a Party designated in accordance with section 23.
- 5.7 Available Capacity: Hoover Powerplant generating capacity which is available to the Contractors at any given time, taking into account the unit capability and Outages at that time.
- 5.8 Balancing Authority (BA): The responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a balancing authority area, and supports interconnection frequency in real time.
- 5.9 Base Charge: The total charge paid by the Contractors for their allocated Contingent Capacity and Firm Energy based on the Annual Revenue

Requirement, in accordance with section 7. The Base Charge shall be composed of a capacity component and an energy component.

- 5.10 Billing Period: The service period beginning on the first Day and extending through the last Day of any calendar month.
- 5.11 Boulder Canyon Project (BCP): All works and the real property associated with such works authorized by the Boulder Canyon Project Act, as amended, the Hoover Power Plant Act of 1984, as amended, and any future additions authorized by Congress, to be constructed and owned by the United States, but exclusive of the main canal and its related appurtenances authorized by the Boulder Canyon Project Act, known as the All-American Canal.
- 5.12 Boulder Canyon Project Act: The Act of Congress approved December 21, 1928 (45 Stat. 1057, 43 U.S.C. 617), as amended and supplemented.
- 5.13 Boulder Canyon Project Adjustment Act: The Act of Congress approved July 19, 1940 (54 Stat. 774, 43 U.S.C 618), as amended and supplemented.
- 5.14 Boulder Canyon Project Ten Year Operating Plan (BCP Ten Year Operating Plan): The written product of the annual budget planning process for the on-going operation of the BCP, developed by Reclamation in consultation with Western and the Contractors. A preliminary and final plan will be developed each year. The final plan will include, but is not limited to, information regarding proposed budget and revenues, staffing projections, hydrology and generation projections, and historical data.
- 5.15 Capacity Dollar: The amount of revenue to be billed for BCP capacity allocation for each Fiscal Year. Such amount shall be fifty (50) percent of the Annual Revenue Requirement.

- 5.16 Change In Law: Any of the following events occurring after the execution date of this Contract: (a) a material change in or repeal of any applicable act, statute or regulation, or (b) an enactment or making of a new applicable act, statute or regulation.
- 5.17 Colorado River Dam Fund: The special fund in the United States Treasury established by Section 2(a) of the Boulder Canyon Project Act and available for carrying out the provisions of said Act, the Boulder Canyon Project Adjustment Act, the Hoover Power Plant Act of 1984, the Hoover Dam Miscellaneous Sales Act, and the Hoover Power Allocation Act of 2011.
- 5.18 Conformed Criteria: The Conformed General Consolidated Power Marketing Criteria or Regulations for Boulder City Area Projects, published in Federal Register Notice 49 FR 50582, dated December 28, 1984, as amended by 77 FR 35671, dated June 14, 2012.
- 5.19 Contingent Capacity: The aggregate of Schedule A Contingent Capacity, Schedule B Contingent Capacity, and Schedule D Contingent Capacity provided to all Contractors as set forth in Attachment No. 1, subject to reduction as provided in section 6.
- 5.20 Contractor(s): The parties specified in Attachment No. 4 that have a fully executed contract with Western for BCP electric service.
- 5.21 Contractor's Allocation: The Contractor's Contingent Capacity and Firm Energy provided for under this Contract as set forth in Exhibit A and inclusive of Excess Energy that may be available to the Contractor.
- 5.22 Contractor's Available Capacity: The Contractor's share of Available Capacity in accordance with section 6 and Exhibit C.

- 5.23 Contractor's Available Energy: The amounts of energy available to the Contractor for each Fiscal Year and Billing Period in accordance with section 6 and Exhibit C.
- 5.24 Contractor's Contingent Capacity: The aggregate of Contractor's Schedule A Contingent Capacity, Schedule B Contingent Capacity, and Schedule D Contingent Capacity provided to the Contractor as set forth in Exhibit A, subject to reduction as provided in section 6.
- 5.25 Contractor's Energy Dollar: The amount equal to the Energy Dollar for each Fiscal Year multiplied by each Contractor's Firm Energy percentage in Attachment No. 2.
- 5.26 Day: A calendar day.
- 5.27 Energy Deemed Delivered: The amount of energy scheduled, metered, and determined to be delivered to each Contractor, including Motoring Losses ( $M_L$ ) and Unloaded Synchronized Generation Losses ( $S_L$ ) as defined in Exhibit D attached hereto, all determined in accordance with the Metering and Scheduling Instructions (MSI) developed and agreed upon in accordance with subsection 6.12.2. Such energy amount shall exclude energy purchased by Western, at the request of a Contractor in accordance with subsection 6.9.4.
- 5.28 Energy Dollar: The amount of revenue to be billed for BCP energy allocation for each Fiscal Year. Such amount shall be fifty (50) percent of the Annual Revenue Requirement.
- 5.29 Environmental Attributes: The environmental characteristics that are attributable to a renewable energy resource, or to renewable energy from such a renewable energy resource, which shall include, but not be limited to, renewable energy or

tax credits, offsets and benefits; green tags (regardless of how any present or future law or regulation attributes or allocates such characteristics); credits towards achieving renewable portfolio standard or emissions standards, and any reporting rights associated with any of the foregoing. Where practicable, such Environmental Attributes (such as renewable energy credits) shall be expressed in MWh, with one (1) MWh of Environmental Attributes produced for each one (1) MWh of energy generated by the renewable energy resource.

- 5.30 Excess Capacity: Capacity in excess of 2074 MW from Hoover Powerplant provided under this Contract.
- 5.31 Excess Energy: Energy in excess of 4,501.001 million kilowatt hours in any Fiscal Year obligated from the Hoover Powerplant in accordance with section 105 (a) (1) (C) of the Hoover Power Plant Act of 1984, as amended by the Hoover Power Allocation Act of 2011.
- 5.32 Federal Projects: The Boulder Canyon Project and the Parker-Davis Project.
- 5.33 Firm Energy: Energy obligated from Hoover Powerplant in accordance with section 2 of the Hoover Power Allocation Act of 2011 and the Conformed Criteria.
- 5.34 Firming Energy: Supplemental energy (with or without capacity) purchased by Western at the request of a Contractor to meet any deficiency in Firm Energy under Section 105 (a) (3) of the Hoover Power Plant Act of 1984, as amended by the Hoover Power Allocation Act of 2011.
- 5.35 Fiscal Year: The twelve (12) month period so designated by Federal law. Until changed by Federal law, Fiscal Year means the period commencing October 1 of each year, immediately after midnight of September 30, and ending at midnight of September 30 of the following year.

- 5.36 Hoover Power Allocation Act of 2011: The Act of Congress approved December 20, 2011 (125 Stat. 777, 43 U.S.C. 619a) that amends the Hoover Power Plant Act of 1984, for certain statutory schedules governing contracts for delivery commencing October 1, 2017, of hydroelectric power generated at the Hoover Powerplant to the BCP marketing area within Arizona, California, and Nevada.
- 5.37 Hoover Power Plant Act of 1984: The Act of Congress approved August 17, 1984 (98 Stat. 1333, 43 U.S.C. 619) and amended by the Hoover Power Allocation Act of 2011.
- 5.38 Hoover Powerplant: The power houses included in the Hoover Dam facilities, consisting of the existing seventeen (17) main generating units and their associated equipment used to produce the power and ancillary services related to the Contractors' Contingent Capacity and Firm Energy, as may be improved, replaced, renovated, or expanded during the term of this Contract.
- 5.39 Lay Off Power: Power made available from a Contractor that is unable to receive and make use of its allocated capacity and energy.
- 5.40 Loaded Synchronized Generation: The quantity of Synchronized Generation that is supplying energy.
- 5.41 Lower Colorado River Basin Development Fund Contribution Charge (LCRBDF Charge): Charge assessed on Energy Deemed Delivered and purchased by Contractors in Arizona, California and Nevada, developed in accordance with Title I, Section 102(c) of the Hoover Power Plant Act of 1984, as amended.
- 5.42 Lower Colorado River Multi-Species Conservation Program (MSCP): As defined in Section 9401 of the Omnibus Public Land Management Act of 2009 (Public Law 111-11; 123 Stat.1327).

- 5.43 Master Schedule: The schedule, described in subsection 6.10, prepared by Western each year and furnished to the Contractors setting forth Western's estimate of power available by months from the BCP for the sixteen (16) month period beginning on June 1 of any year and extending through September 30 of the next year for each of the Contractors.
- 5.44 Monthly Energy Ratio: The estimated amount of energy each Contractor is to receive each month in accordance with the Master Schedule divided by the total energy that Contractor is to receive in that Fiscal Year under the Master Schedule. The annual sum of the Monthly Energy Ratios for each Fiscal Year shall equal one (1) for each Contractor.
- 5.45 Native American Tribes: Federally recognized Indian tribes.
- 5.46 North American Electric Reliability Corporation (NERC): The North American Electric Reliability Corporation, or successor(s) organization. A not-for-profit international regulatory authority whose mission is to assure the reliability of the bulk power system in North America.
- 5.47 Nevada: The State of Nevada, represented, for purposes of this Contract, by the Colorado River Commission of Nevada.
- 5.48 Off-Peak Hours: As defined in Exhibit C.
- 5.49 Outage: Removal from service of a generating unit, transmission line, or other facility equipment.
- 5.50 Overruns: The use of capacity or energy in amounts greater than Contractor's Available Capacity and/or Available Energy provided for in this Contract.
- 5.51 Point(s) of Delivery: The point(s) at which Western delivers capacity and energy to the Contractor, as set forth in Exhibit B.

- 5.52 Power Repayment Study (PRS): The Power Repayment Study used by Western to calculate the Base Charge and capacity and energy rates for the BCP.
- 5.53 Rate Year: The Fiscal Year for which the Annual Revenue Requirement is forecast for annual rate determination purposes in the PRS.
- 5.54 Reclamation: Department of the Interior, Bureau of Reclamation.
- 5.55 Repayable Advances: The repayable capital investments determined in accordance with the Restated Agreement and Hoover Power Allocation Act of 2011.
- 5.56 Resource Integration Exchange Program (RIE Program): A voluntary program for exchange of energy facilitated by Western among BCP Contractors and between BCP Contractors and Parker-Davis Project contractors.
- 5.57 Restated Agreement: The Amended and Restated Boulder Canyon Project Implementation Agreement No. 95-PAO-10616 (Western) and No. 5-CU-30-P1128 (Reclamation), including all Attachments and any future exhibit(s).
- 5.58 Schedule A Contingent Capacity: The capacity shown in Attachment No. 1, as established by the Hoover Power Allocation Act of 2011 and the Conformed Criteria.
- 5.59 Schedule A Contractor: An entity listed in Attachment No. 4 that has entered into a contract with Western in accordance with Section 105 (a) (1) (A) of the Hoover Power Plant Act of 1984, as amended by the Hoover Power Allocation Act of 2011, and the Conformed Criteria.
- 5.60 Schedule A Firm Energy: The energy shown in Attachment No. 2, as established by the Hoover Power Allocation Act of 2011 and the Conformed Criteria.



- 5.61 Schedule B Contingent Capacity: The capacity shown in Attachment No. 1, as established by the Hoover Power Allocation Act of 2011 and the Conformed Criteria.
- 5.62 Schedule B Contractor: An entity listed in Attachment No. 4 that has entered into a contract with Western in accordance with Section 105 (a) (1) (B) of the Hoover Power Plant Act of 1984, as amended by the Hoover Power Allocation Act of 2011, and the Conformed Criteria.
- 5.63 Schedule B Firm Energy: The energy shown in Attachment No. 2, as established by the Hoover Power Allocation Act of 2011 and the Conformed Criteria.
- 5.64 Schedule C: The schedule so captioned appearing in Section 2(c) of the Hoover Power Allocation Act of 2011 and adopted by the Conformed Criteria, reproduced in Exhibit A.
- 5.65 Schedule D Contingent Capacity: The capacity shown in Attachment No. 1, as established by the Hoover Power Allocation Act of 2011 and the Conformed Criteria.
- 5.66 Schedule D Contractor: An entity listed in Attachment No. 4 that has entered into a contract with Western in accordance with Section 2(d) of the Hoover Power Allocation Act of 2011 and the Conformed Criteria.
- 5.67 Schedule D Firm Energy: The energy shown in Attachment No. 2, as established by the Hoover Power Allocation Act of 2011 and the Conformed Criteria.
- 5.68 Scheduling Entity(ies): Western or an entity(ies) designated by the Contractor to schedule the Contractor's power with Western at the BCP Point of Delivery in accordance with subsection 6.11.5.

- 5.69 Summer: For the purpose of purchasing Firm Energy, the seven (7) month period beginning on the first (1<sup>st</sup>) Day of the March Billing Period of any year, extending through the last Day of the September Billing Period of that year.
- 5.70 Supplemental Firming Purchases: Supplemental purchases of capacity and/or energy to increase the Contractor's energy deliveries up to one-hundred (100) percent capacity factor of the Contractor's Contingent Capacity.
- 5.71 Synchronized Generation: Contingent Capacity available from any of the Hoover Powerplant generating units synchronized to Western's power system.
- 5.72 Tribal Contractors: Contractors that are Native American Tribes including an entity, enterprise, or authority of a Native American Tribe(s) that is formed by such tribe(s) to lawfully use the Contractor's Allocation.
- 5.73 Unloaded Synchronized Generation: The difference between scheduled Synchronized Generation and Loaded Synchronized Generation. Exhibit D documents the formula for energy used to supply Unloaded Synchronized Generation.
- 5.74 Winter: For the purpose of purchasing Firm Energy, the five (5) month period beginning on the first (1<sup>st</sup>) Day of the October Billing Period of any year and extending through the last Day of the February Billing Period in the next year.
- 5.75 Western Electricity Coordinating Council (WECC): The Western Electricity Coordinating Council, or successor(s) organization.
- 5.76 Working Capital: Funds advanced by the Contractors to meet BCP cash flow needs. Such funds will be adjusted, if needed, through the Annual Revenue Requirement in accordance with Section 15 and Attachment 3.IA of the Restated Agreement.

6. **ELECTRIC SERVICE TO BE FURNISHED:**

6.1 **Water Operations, Power Generation and Delivery Responsibilities:**

Nothing in this Contract shall impede or inhibit the statutory requirement that Hoover Dam and Lake Mead shall be used: first, for river regulation, improvement of navigation and flood control; second, for irrigation and domestic uses and satisfaction of present perfected rights in pursuance of Article VIII of the Colorado River Compact; and third, for power.

6.1.1 **Responsibilities of Reclamation:** Reclamation has the responsibilities for: water operations, power generation, development of the BCP Ten Year Operating Plan, financial integrity, repayment of the BCP and the administration of the Colorado River Dam Fund and MSCP.

6.1.1.1 Reclamation shall schedule the release of water to meet statutory requirements as specified in subsection 6.1.

6.1.1.2 In scheduling the release of water in subsection 6.1.1.1, Reclamation shall release water through the Hoover Powerplant so that energy is generated; bypass and spills will be avoided unless necessary to meet flood control, dam safety, operations and maintenance requirements, or other critical hydrologic or operational reasons to be determined.

6.1.1.3 Reclamation shall accept the real-time scheduling by Western in accordance with the monthly and sub-monthly period schedules (including revisions to the monthly and sub-monthly period schedules) provided by Reclamation.

6.1.1.4 Reclamation is responsible for the operation, maintenance, repairs, and replacements, and for investigations and inspections necessary to keep Hoover Dam and powerplant operational in accordance with regulatory, safety, and security requirements, and Reclamation practices and standards. Reclamation will make every effort to schedule and complete all inspections, maintenance, repairs and replacements in a manner that is timely and efficient and coordinate with Western as appropriate.

6.1.1.5 Reclamation shall, except in case of emergency, give Western reasonable notice in advance of any change in delivery of water in accordance with subsection 6.10.7, and Western shall promptly forward such notice to the Contractors.

6.1.2 Responsibilities of Western: Western shall operate, maintain, replace and repair the Federal electric delivery system and coordinate the scheduling of the deliveries of the Contractor's Contingent Capacity, Firm Energy, and Excess Energy allocations from the Hoover Powerplant to the BCP Point of Delivery as set forth in Exhibit B. Western shall calculate the Base Charge and set rates and charges which will recover costs as set forth in 10 CFR Part 903 and 10 CFR Part 904. Western shall measure and account for power deliveries, render bills, and maintain books of account to ensure the financial integrity of the BCP.

6.1.2.1 Western shall accept power from Reclamation and, subject to the terms and conditions stated in this Contract, schedule, deliver, and measure said power to the Contractor from and after the date

of initial service, as provided in subsection 4.2, at the Point(s) of Delivery and voltage set forth in Exhibit B.

6.1.2.2 Western shall be permitted to satisfy its obligations under this Contract by use of generation from Hoover Powerplant, the Parker-Davis Project, or other sources of generation available to Western; provided, that the measure of the Contractor's rights to power hereunder shall be the quantity of capacity and energy available from Hoover Powerplant. Western will satisfy its obligations under this Contract by use of generation from sources other than Hoover Powerplant and the Parker-Davis Project (i) as required to meet the statutory requirements for water releases as specified in subsection 6.1 and (ii) only in quantities that do not exceed fifteen (15) percent of the forecast energy production of the Hoover Powerplant over the term of the Contract. Western will use best efforts to minimize use of generation from sources other than Federal Projects to satisfy its obligations under this Contract. Power made available to the Contractor, exclusive of Firming Energy purchases under subsection 6.9.4 which are scheduled and accounted for separately from the above power deliveries, shall be deemed to be from Hoover Powerplant. Subject to the Contract rights of all Contractors being preserved, except as provided in subsection 6.11.2, Western will utilize the BCP to optimize the operation of Federal Projects in coordination with Western's BA requirements. Western shall be obligated to provide Ancillary Services to the Contractor in

quantities that can be provided by Hoover Powerplant, except as provided in subsection 6.11.2; provided, that Western may provide Ancillary Services from other resources, if such Ancillary Services can be made available from such other resources in the same quantity and quality as if such Ancillary Services were provided by Hoover Powerplant, subject to the limitations of subsection 6.11.2.

6.1.2.3 If integrated operation of the BCP with other Federal Projects confers a substantive power benefit upon such other Federal Projects, or if a substantive power benefit is conferred by other Federal Projects upon the BCP, Western shall equitably apportion such benefits and appropriate charges among the Federal Projects following consultation among the affected projects' contractors. Western shall provide the Contractor an opportunity to review, discuss, and comment on any integration agreement prior to execution of such agreement.

6.1.2.4 Western shall provide annual reports on integration of the projects assessing the impacts of integration. Western shall also report annually revenues collected from other Western customers into the BCP and losses assessed to Western for use of capacity. Western shall meet and confer with the Contractors regarding resource integration and revenues collected from other Western customers when requested.

6.1.2.5 Western will provide contractors of the Federal Projects the opportunity to review, discuss, and comment on the specific

guidelines Western will use for project integration in advance.

Western will publish, maintain, and follow these guidelines for project integration and will submit proposed changes to contractors of the Federal Projects in advance to provide the same opportunity to review, discuss, and comment.

6.2 Undertaking of Western to Provide Contingent Capacity: Western shall provide, and the Contractor shall accept and schedule directly or through one (1) or more Scheduling Entities designated as provided for in this Contract, the Contractor's Contingent Capacity as set forth in this Contract.

6.3 Determination of Reductions in Contingent Capacity: Reductions to Contingent Capacity may result due to Outages, river operation, or reservoir drawdown. Notice of reductions in Contingent Capacity shall be provided in accordance with the MSI.

6.3.1 Any reduction in Contingent Capacity due to a reduction in generating capacity or in the availability of capacity of the Hoover Powerplant, whether scheduled or unscheduled, shall be determined by Reclamation.

6.3.2 Any reduction in Contingent Capacity due to a reduction in transmission capability, whether scheduled or unscheduled, of the BCP transmission or delivery system, shall be determined by Western.

6.4 Allocation of Reductions in Contingent Capacity: Reductions in Contingent Capacity shall be borne pro rata among Schedule A, Schedule B, and Schedule D Contingent Capacity, and each Contractor's reduction in Contingent Capacity shall be based on the Contractors' Contingent Capacity allocation percentages in Attachment No. 1.

- 6.5 Availability of Excess Capacity: If Excess Capacity exists, Western shall make available such capacity on a pro rata basis to Schedule A, Schedule B, and Schedule D Contractors based on the allocation percentages in Attachment No. 1.
- 6.6 Limitations on Energy Deliveries: Electric energy shall be delivered to the Contractor in quantities which the Contractor may schedule or have scheduled, up to the Contractor's Available Capacity. The simultaneous rate of delivery of Firm Energy and Excess Energy at the Point of Delivery shall not exceed the Contractor's Available Capacity. Contractor's Available Capacity shall be available in any hour within the Billing Period except for reductions in accordance with subsection 6.11.
- 6.7 Contractor's Firm Energy Allocations and Excess Energy Priority:  
Western shall allocate and deliver, and the Contractor shall schedule Firm Energy and Excess Energy, as follows:
- 6.7.1 Schedule A Firm Energy: The allocation of Schedule A Firm Energy as listed in Exhibit A.
- 6.7.2 Schedule B Firm Energy: The allocation of Schedule B Firm Energy as listed in Exhibit A.
- 6.7.3 Schedule D Firm Energy: The allocation of Schedule D Firm Energy as listed in Exhibit A.
- 6.7.4 Total of Schedule A, Schedule B, and Schedule D, Firm Energy: The quantity of Firm Energy allocated to the Contractor expressed as a percentage of the aggregate of Schedule A, Schedule B, and Schedule D, Firm Energy allocated to all Contractors as listed in Exhibit A.
- 6.7.5 Schedule C Excess Energy: The allocation for First, Second, and Third priority Excess Energy as set forth in Exhibit A.



6.7.6 Contractor's Available Energy: Established annually in accordance with subsections 6.8, 6.9, and Exhibit C.

6.8 Annual Energy:

6.8.1 Master Schedule: The Contractor's Available Energy, including any Excess Energy for the Summer and the Winter, and for each Billing Period of the ensuing sixteen (16) month period shall be set forth in the final Master Schedule. The Contractor's Available Energy, including any Excess Energy available, shall be determined in accordance with Exhibit C utilizing the gross energy that would have been produced at the Hoover Powerplant adjusted for energy exchanged with the Parker-Davis Project, without any loss of efficiency for providing Ancillary Services less station service use (exclusive of motoring energy) less transformer and transmission line losses to the Point(s) of Delivery at the Mead 230-kV Bus, shown in Exhibit B.

6.8.2 Allocation of Excess Energy: Whenever Excess Energy is available, Western shall deliver Excess Energy in accordance with the allocation and the order of priority set forth in Schedule C, shown in Exhibit A.

6.9 Deficiencies in Firm Energy:

6.9.1 The difference between 4,527.001 million kilowatt hours and 4,501.001 million kilowatt hours of energy generation during any Fiscal Year is deemed to be a deficiency in Firm Energy. To the extent that the actual generation at Hoover Powerplant in any Fiscal Year (less deliveries thereof to Arizona required by its first priority under Schedule C, whenever actual generation in any Fiscal Year is in excess of 4,501.001 million kilowatt hours) is less than 4,527.001 million kilowatt hours, such

deficiency shall be borne by each Contractor according to the percentages shown in Exhibit A.

- 6.9.2 Change in Characterization of Energy: When Excess Energy is forecast, scheduled, and delivered during any Fiscal Year, and later during such period it is forecast that only Firm Energy or a reduced quantity of Excess Energy deliveries can be made, the amount of over-delivered Excess Energy shall be accounted for and deducted from the Contractor's Available Energy in future months or as otherwise agreed upon, in accordance with the MSI provided for in subsection 6.12.2.
- 6.9.3 Minimum Schedules: The Contractor may be required to schedule or have scheduled a minimum amount of energy at times to meet minimum power system or water delivery requirements. Western may also require the Contractor to schedule energy up to ten (10) percent of the Contractor's Available Capacity for the current hour and next hour, if necessary, during low load hours when system frequency is high to meet power system minimum requirements. Western may require the Contractor to schedule a minimum amount of energy during Off-Peak Hours in order to allow Reclamation to comply with required minimum water releases. The number of kilowatt-hours to be taken during the Off-Peak Hours to meet minimum requirements will not exceed twenty-five (25) percent of the Contractor's monthly energy allocation, subject to critical conditions pertaining to reservoir drawdown, Outages, or river operations.
- 6.9.4 Firming Purchases: At the request of the Contractor and at the Contractor's expense, Western shall purchase Firming Energy to meet that Contractor's Firm Energy deficiency. Such firming purchases shall be

subject to a prior written agreement between the Parties that requires the Contractor to advance fund firming purchases and contains terms acceptable to both Parties. Under such agreements, Western shall make other purchases of capacity and/or energy to increase the Contractor's energy deliveries up to one-hundred (100) percent capacity factor of the Contractor's Contingent Capacity (Supplemental Firming Purchases) if requested by the Contractor. The price to the Contractor for Firming Energy and Supplemental Firming Purchases shall not include the LCRBDF Charge.

6.9.5 Lay Off of Energy: In the event a Contractor is unable to receive and make use of all or part of the Contractor's Available Energy in any month and declares an amount of energy to be available for lay off (Lay Off Energy), the Contractor may request Western to offer Lay Off Energy: first to other Contractors in the same schedule from which the Contractor's Allocation originates; second to all other Contractors; and third to any potential purchaser. No other Contractor shall be obligated to accept any Lay Off Energy. The charge to be paid by a purchaser agreeing to accept Lay Off Energy shall be the charge that would have been paid by the Contractor requesting the lay off of such energy including the LCRBDF Charge applicable to Firm Energy. A Contractor requesting Western to lay off the Contractor's Available Energy shall not be relieved of its obligation to pay for the Contractor's Available Energy. Any revenues received by Western under this subsection shall be credited against the requesting Contractor's obligation.

6.9.6 Lay Off Power: In the event a Contractor is temporarily unable to receive and make use of its Contractor's Allocation, the Contractor may request Western to offer Lay Off Power: first to Contractors within the same schedule from which the allocation originates; second to all other Contractors; and third to any potential purchaser. No other Contractor shall be obligated to accept any Lay Off Power. All Lay Off Power offers and resulting capacity and energy adjustments shall be made a minimum of one (1) full calendar month preceding such time as the Contractor is unable to receive and make use of its Contractor's Allocation. The charge to be paid by a purchaser agreeing to Lay Off Power shall be the charge that would have been paid by the Contractor requesting the lay off of such power including the LCRBDF Charge applicable to Firm Energy. Payments for the MSCP are a continuing obligation of the Contractor which are not collected under this Contract and therefore not paid by the purchaser of Lay Off Power. A Contractor unable to receive and make use of its Contractor's Allocation shall not be relieved of its obligation to make payments for the Contractor's Allocation. Any revenues received by Western under this subsection shall be credited against the requesting Contractor's obligation. Lay off of less than the full Contractor's Allocation will be allowed if Western develops the technical capability to do so in a practical manner.

6.10 Procedure for Developing the Master Schedule:

6.10.1 Integration of BCP: Western will use the BCP with other resources available in order to make the deliveries of power from the BCP more useful to the Contractors in accordance with subsection 6.1. Such

integration shall not impair the rights of any Contractor. Western will provide an annual integration plan with other Federal Projects for Contractor review and comment prior to development of the Master Schedule for that year.

6.10.2 Preparation of Draft Master Schedule: On or around March 1 of each year, Western shall furnish to the Contractor for review the first draft Master Schedule. The first draft of the Master Schedule shall contain the following by month for the BCP: (i) Reclamation's Hoover Dam 17-Month Operating Schedule showing estimated capacity and planned Outages; and (ii) a draft power generation schedule showing the best available forecast of energy, including projected integration with other Federal Projects, and a tabulation of forecasted Available Capacity to the Contractors during the ensuing sixteen (16) month period beginning on the 1<sup>st</sup> Day of the month subsequent to the month the draft Master Schedule is issued. On or around May 1 of each year, Western shall furnish to the Contractor for review the second draft Master Schedule. The second draft of the Master Schedule shall contain everything that the first draft of the Master Schedule contained plus the results of any BCP Contractor's participation in the RIE Program.

6.10.3 Contractor's Proposed Delivery Schedule: Within fifteen (15) Days after receipt of the information listed in subsection 6.10.2, the Contractor may submit to Western comments on the draft Master Schedules.

6.10.4 Review of Draft Schedule: Western shall meet with all interested Contractors to review the draft Master Schedule including any proposed integration schedule and alternative schedules. Western shall provide

written notice to each Contractor thirty (30) Days prior to the date and location of such meeting.

6.10.5 Issuance of Final Master Schedule: After Western has considered any Contractor(s) comments provided for in subsections 6.10.3 and 6.10.4, it shall issue the final Master Schedule. Prior to September 1 of each year, Western shall furnish to the Contractor the final Master Schedule containing by month for the BCP: (i) Hoover Dam 17-Month Operating Schedule for the Hoover Powerplant showing estimated capacity and Outages; (ii) a power generation schedule showing the best available forecast of energy, including projected integration with the Parker-Davis Project, and a tabulation of forecasted Available Capacity to the Contractors; and (iii) the results of any Contractor's participation in the RIE Program during the ensuing sixteen (16) month period beginning on June 1 of the current year and extending through September 30 of the next year for each of the Contractors. The RIE Program in no way limits Western's integration of the BCP with Parker-Davis Project and other sources available to Western.

6.10.6 Revisions of Master Schedule: In the event of forced Outages, a change in forecasted river operations, or in scheduled Outages that necessitates a revision of the then effective Master Schedule, a revised Master Schedule shall be furnished to the Contractors as soon as possible after the data becomes available.

6.10.7 Reclamation's Right to Change Schedules: Reclamation reserves the right to reschedule, temporarily discontinue, reduce, or increase the delivery of water for the generation of electrical energy at any time in coordination

with Western to allow for changing reservoir and river conditions;  
maintenance, repairs, replacements and for investigations or inspections;  
or by reason of compliance with the statutory requirement referred to in  
subsection 6.1.

6.11 Use of Generation:

6.11.1 Scheduling Generation: Within the constraints of Outages, river operations, or reservoir drawdown, and to the extent the Contractor does not exceed its energy allocation, emergencies excepted, the Contractor shall have the right to schedule or have scheduled Loaded Synchronized Generation and Unloaded Synchronized Generation, the sum of which shall not exceed the Contractor's Available Capacity. Synchronized Generation shall be scheduled in advance following the NERC and WECC prescheduling calendars, emergencies excepted, and accounted for on the basis of such advance schedules, all in accordance with the MSI agreed upon in accordance with subsection 6.12.2. The MSI will provide for modifying such schedules to the needs of day-to-day or hour-by-hour operation.

6.11.2 Ancillary Services: Subject to subsection 6.11.1, the Contractor, through use of a dynamic signal from the Contractor or a Scheduling Entity to a control center designated by Western, or through other methods and procedures agreed upon by the Contractor and Western, shall have the right to use previously scheduled Synchronized Generation from zero (0) to full scheduled Synchronized Generation and the reverse; provided, that a Contractor's use of capacity for Ancillary Services shall not (i) have a detrimental effect on power system equipment at Hoover Powerplant or on river operations, as determined by Reclamation in accordance with

subsection 6.1.1; (ii) impair the rights of other Contractors to use capacity for Ancillary Services; or (iii) have a detrimental effect on Western's ability to utilize the BCP to optimize the operation of the Federal Projects. If the Contractor's use of Ancillary Services does impair such rights or have such detrimental effect, the Contractor's use of capacity for Ancillary Services will be restricted to the extent necessary and for as long as the condition continues to exist or until the impairment or detrimental effect is corrected. Western shall promptly consult with the Contractors and determine with the Contractors how such impairment or detrimental effect may be corrected. If restriction on the use of the Contractor's capacity is due to the impairment of Western's ability to utilize the BCP to optimize the operation of the Federal Projects, Western shall not reduce the Contractor's use of capacity for Ancillary Services by more than ten (10) percent of the Contractor's Available Capacity for Ancillary Services.

6.11.2.1 For Contractors receiving delivery of their Contractor's

Available Energy deemed to be from Hoover Powerplant through static schedules, Western will provide ramping and hold reserves for such deliveries in accordance with regulatory standards.

6.11.3 Scheduling Under Emergency Conditions: During emergencies, the Contractor shall have the right for up to twelve (12) hours to schedule or have scheduled capacity in excess of previously scheduled amounts, up to its Contingent Capacity to the extent capacity is available. For purposes of this subsection and subsection 6.11.1, an emergency will be determined by the Contractor based upon standard utility practice.



6.11.4 Accounting for Use of Unloaded Synchronized Generation: The

Contractor's use of energy to support the use of Unloaded Synchronized Generation for Ancillary Services in any Billing Period shall be accounted for by a reduction in the Contractor's Available Energy in the following Billing Period. The amount of the reduction in the Contractor's monthly Available Energy shall be the Contractor's proportional share of the energy used to support Unloaded Synchronized Generation for the benefit of all Contractors, and shall be determined in accordance with Exhibit D. The procedure for reducing the Contractor's Available Energy shall be as set forth in the MSI or as otherwise agreed to.

6.11.5 Scheduling Entity(ies): In addition to the Authorized Representative(s) designated in section 23, the Contractor shall designate, by written notice to Western, a Scheduling Entity(ies) responsible for scheduling the Contractor's Allocation. Additional Scheduling Entities may be permitted subject to limits by Western in consideration of the additional cost and resources required. Any Contractor with deliveries in more than one (1) balancing area may at a minimum designate one (1) Scheduling Entity for each Balancing Authority. A Scheduling Entity must be designated at least sixty (60) Days prior to energy deliveries to said Scheduling Entity on behalf of the Contractor. The Contractor may change its Scheduling Entity upon sixty (60) Days written notice to Western, and the said change shall become effective at the beginning of the Billing Period immediately following the end of such notice period, provided that any necessary arrangements required to implement a Scheduling Entity change are in

place. In the event that the Contractor designates a Scheduling Entity which is also designated by other Contractors, energy deliveries shall be prorated by Western among, and charged and collected from, the Contractors for whom the same Scheduling Entity schedules generation, unless otherwise agreed to in writing by the Contractor(s) and such Scheduling Entity with written notice to and written agreement from Western. Said prorations shall be for a Billing Period and in the proportions that their respective Firm Energy and Excess Energy allocations bear to the aggregate Firm Energy and Excess Energy allocations of the Contractors for whom the Scheduling Entity schedules generation. In the event that the Contractor dynamically schedules generation through a Scheduling Entity that is a Contractor, energy reductions as provided in subsection 6.11.4 shall be borne by the Scheduling Entity in the absence of other written agreement between the Contractor(s) and such Scheduling Entity with written notice to and written agreement from Western. In the event that the Contractor dynamically schedules generation through a Scheduling Entity that is not a Contractor, energy reductions shall be borne by the Contractor. The procedures for metering and scheduling shall be included in the MSI.

- 6.11.6 Environmental Attributes: The Contractor shall have the right to utilize any Environmental Attributes associated with the Contractor's Allocation for compliance with any environmental laws, regulations, or standards applicable to the Contractor; provided, that any sale, transfer, or award of Environmental Attributes by the Contractor to third parties shall be subject to approval by Western, not to be unreasonably withheld. Western agrees

to undertake any reasonable actions necessary to effectuate the Contractor's use of the Environmental Attributes. Western makes no representation or warranty as to whether the Environmental Attributes associated with the Contractor's Allocation are compliance instruments that qualify for or meet any particular environmental laws, regulations, or standards applicable to the Contractor. The Contractor shall be responsible for all costs arising from or directly relating to the Contractor's use of Environmental Attributes. Any Environmental Attribute not utilized by the Contractor may be utilized by Western or Reclamation for the benefit of the Contractor or the BCP as appropriate and feasible; provided, that Western and Reclamation shall consult with the Contractor prior to utilization of any Environmental Attribute.

6.12 Coordination of Power System:

6.12.1 Operating Reserves: Each Party shall provide or cause to be provided applicable operating reserve requirements; provided, that such reserves shall meet or exceed the minimum reserve criteria established by the NERC, WECC, or successor organizations.

6.12.2 Metering and Scheduling Instructions (MSI): Scheduling of capacity and deliveries of energy shall be in accordance with the written MSI developed and agreed upon by the Authorized Representatives, detailing the operating arrangements and scheduling and accounting procedures to be used. The MSI shall be developed in conformity with the following principles:

6.12.2.1 The MSI are intended to implement the terms of this Contract, but not to modify or amend it and are, therefore, subordinate to this Contract.

6.12.2.2 It is the Contractor's responsibility to effectuate agreement(s) with Western and any third party or parties which may be necessary to enable the Contractor to accept deliveries hereunder, including arrangements necessary for dynamic scheduling if desired by the Contractor.

6.12.2.3 In the event that the Contractor's Authorized Representative does not execute the initial metering and scheduling instructions or any revised instructions which Western determines to be necessary, Western shall develop and temporarily implement revised instructions until mutually acceptable instructions have been developed and executed by Western, and the Authorized Representative of the Contractor.

7. **BILLINGS, PAYMENTS, AND SCHEDULE OF RATES:**

7.1 General: The Contractor shall pay monthly for electric service hereunder in accordance with the Base Charge and rates developed in accordance with the public process requirements required under 10 CFR Part 903, 10 CFR Part 904, and, to the extent applicable, Department of Energy Order RA 6120.2, as each may hereafter be amended or supplemented, and included in a rate schedule to be developed. The initial rate schedule is attached hereto as Attachment No. 5. Changes to the Base Charge or rates shall likewise be developed in accordance with the foregoing regulations and order.

- 7.2 Payment for Annual Base Charge: The Contractor shall pay for all of its proportionate share of the annual Base Charge as calculated below. Each monthly bill will include both a capacity charge and a charge for the associated Firm Energy. In addition to the proportionate share of the annual Base Charge, the Contractor shall pay the LCRBDF Charge on all Energy Deemed Delivered during the Billing Period, which excludes purchases of Firming Energy. Western shall continue to bill the Contractor for its portion of the annual Base Charge, regardless of the actual output of Hoover Powerplant, for reasons including but not limited to, low reservoir elevation or other uncontrollable forces.
- 7.3 Base Charge Calculation: The Base Charge shall be so calculated as to provide the dollar amount of the estimated Annual Revenue Requirement of the BCP during each of the next five (5) Fiscal Years. Prior to October 1 of each Rate Year, Western shall determine the Base Charge through the Rate Year Power Repayment Study (PRS) and an estimate for the four (4) Fiscal Years following the Rate Year. Each Fiscal Year may have a different Base Charge.
- 7.4 Annual Revenue Requirement Formula: The Annual Revenue Requirement (C) for the BCP shall be established in accordance with the following formula:
- $$C = O\&M + DS + PR + MC + WC + P - (W + VF + B + CO + O), \text{ where}$$
- 7.4.1 O&M is the cost associated with Reclamation's and Western's projected BCP operation and maintenance costs, which include costs for the operation and maintenance of the visitor facilities.
- 7.4.2 DS is the debt service cost associated with the BCP debt owed to the United States Treasury, which includes annual interest, capital costs of investments and repayment of the remaining balance on twenty-five (25) million dollars that was allocated to flood control, as defined in

10 CFR Part 904 Section 904.5(b)(2), (5), (6) and (7). Debt associated with the visitor facilities and air slots incurred prior to October 1, 2017, is no longer an obligation owed to the United States. The United States Treasury debt associated with general maintenance and equipment (GM&E) and dam appurtenances (D&A) are repaid as of October 1, 2017. DS is determined by the uniform debt service over its full allowable remaining amortization period; provided, however, that the cumulative amount of principal to be paid by the Contractors over the term of the Contract shall be no greater than the sum of the principal amounts over such period which would result from uniform annual annuity payments for each debt item issued over its allowable repayment period shown in 10 CFR Part 904 Section 904.5 (c).

- 7.4.3 PR is the cost associated with Reclamation's and Western's projected replacement costs for the BCP, which include costs for visitor facilities replacements.
- 7.4.4 MC is BCP related costs to be recovered by the Base Charge, not defined in any other category within the formula of the Annual Revenue Requirement, in an amount determined after consultation among Western, Reclamation, and the Contractors.
- 7.4.5 WC is the Working Capital adjustment (increase or decrease).
- 7.4.6 P is the payments to the States of Arizona and Nevada, in accordance with 10 CFR Part 904 Section 904.5(b) (4).
- 7.4.7 W is the annual water diversion revenue received by Reclamation in accordance with its water contracts as authorized by the Boulder Canyon Project Act.

- 7.4.8 VF is the revenue associated with the visitor facilities.
- 7.4.9 B is the benefits paid to (-) or benefits received from (+) the Parker-Davis Project.
- 7.4.10 CO is the carryover of revenue surplus (+) or deficit (-) from the previous Fiscal Year as shown in the PRS excluding the funds for the working capital balance.
- 7.4.11 O is revenue and funds from any other source as properly allocated to the BCP in accordance with published regulations.
- 7.5 Forecast Rates: One-half of the estimated Annual Revenue Requirement shall be provided by revenues from the sale of capacity (Capacity Dollar) and one-half by revenue from the sale of energy (Energy Dollar). Once the Annual Revenue Requirement is determined for each Rate Year, Western shall calculate a Forecast Capacity Rate and a Forecast Energy Rate. The Forecast Capacity Rate shall be equal to the Capacity Dollar divided by 2,074,000 kilowatts. The Forecast Energy Rate shall be equal to the Energy Dollar divided by the lesser of the total Master Schedule energy or 4,501.001 million kilowatt-hours.
- 7.6 Capacity Charge: For each month in the Rate Year, Western shall bill each Contractor for a capacity charge equal to one-twelfth (1/12) of the Capacity Dollar multiplied by each Contractor's Contingent Capacity percentage as set forth in Attachment No. 1.
- 7.7 Energy Charge: For each month in the Rate Year, Western shall bill each Contractor for an energy charge equal to that period's Monthly Energy Ratio, multiplied by the Contractor's Energy Dollar.
- 7.8 Calculated Energy Rate: Within ninety (90) Days after the end of the Fiscal Year and the Energy Deemed Delivered has been determined, Western shall determine

the Calculated Energy Rate by dividing fifty (50) percent of the Annual Revenue Requirement by the Energy Deemed Delivered. For any Rate Year in which Energy Deemed Delivered is greater than 4,501.001 million kilowatt hours, Western shall apply the Calculated Energy Rate to each Contractor's Energy Deemed Delivered to determine the Contractor's actual energy charge. Western shall then establish a credit or debit for each Contractor based on the difference between the Contractor's Energy Dollar and the Contractor's actual energy charge, to be applied in the month following the calculation or as soon as possible thereafter. The sum of all such credits due the Contractors shall equal the sum of all debits paid by the Contractors in each Fiscal Year.

- 7.9 Carryovers: In any Fiscal Year when a carryover exists due to Actual Expenses being less than the Annual Revenue Requirement and/or actual revenues being more than the estimated revenues on which capacity and energy payments were based, such carryover shall reduce the next Fiscal Year Annual Revenue Requirement.
- 7.10 Overruns: Overruns will be as provided for in accordance with subsection 7.5 of the MSI and Attachment No. 5 using the Forecast Capacity Rate and the Forecast Energy Rate applicable for each month for each Contractor that incurs Overruns. Such amounts shall be considered other revenue (O) in the Annual Revenue Requirement calculation and shall be carried over to the next Fiscal Year. Additionally, such amounts shall not be used in the calculation cited in subsection 7.8.
- 7.11 Review of Base Charge: The Base Charge shall be reviewed annually with the Contractors. The Base Charge shall be adjusted either upward or downward annually if necessary to assure sufficient revenues to effectuate payment of all



costs and financial obligations associated with the BCP in accordance with 10 CFR Part 904.5. The Administrator shall provide all Contractors an opportunity to comment on any proposed adjustment to the Base Charge in accordance with the Department of Energy's power rate adjustment procedures then in effect.

7.12 Rates: The rate methodology and the calculated rates established in accordance with this section 7 for the first Rate Year, and established each fifth (5<sup>th</sup>) Fiscal Year thereafter, shall become effective provisionally upon approval by the Deputy Secretary of Energy subject to final approval by the Federal Energy Regulatory Commission. For all other Fiscal Years, the rate shall become effective upon approval by the Deputy Secretary of Energy.

7.13 Billing and Transfer of Funds: Bills will be issued for the preceding month within three (3) working Days after the end of the Billing Period. Payments of bills issued by Western are due and payable by the Contractor before the close of business on the twentieth (20th) Day after issuance of the bill, or the next business Day thereafter, if said Day is Saturday, Sunday, or a Federal holiday. Western shall transfer the revenue collected from the Contractor to Reclamation's account on the next to last business Day of each month, except for the month of September when the transfer shall be made on the last business Day of the month.

8. **HOOVER POWERPLANT REPLACEMENTS, MODIFICATIONS, OR**

**ADDITIONS**: Funding provided under this Contract for replacements, modifications, or additions relating to Hoover Powerplant may result in an increase of the generation capacity, energy efficiency, or a change in Ancillary Services from Hoover Powerplant. The increased capacity, energy, or other power attributes resulting from such replacements, modifications, or additions shall be made available to the Contractors on a

pro rata basis in accordance with section 6. Other power development not included in the BCP Ten Year Operating Plan shall be implemented in accordance with Section 11 of the Restated Agreement. Agreements for such other power development under Section 11 of the Restated Agreement shall require payments to the BCP as appropriate.

9. **RESALE OF ELECTRIC ENERGY:**

- 9.1 Distribution Principles: The purpose of making low-cost, Federally-generated power available is to encourage the most widespread use thereof, and therefore for entities which resell power purchased under this Contract the benefits of electric service supplied under this Contract shall be made available to its consumers at rates or charges that are established at the lowest possible level consistent with sound business principles. These rates or charges must be established in an open and public manner. The Contractor further agrees that it will identify the costs of electric service supplied under this Contract to its consumers upon request. The Contractor will demonstrate compliance with the requirements of this subsection to Western upon request.
- 9.2 Sales to Resale Customers: No Contractor shall sell for profit any of the power contracted for hereunder to any Contractor or to any resale customer of the Contractor for resale by that resale customer, provided, that Contractor transactions utilizing capacity and/or energy under this Contract with an entity or entities that coordinate, control, monitor, or support operation of the bulk electric system, or act as a marketplace operator in wholesale power, or procure products or service on behalf of any such entity, including but not limited to independent system operators, regional transmission organizations, Balancing Authorities, or successor organizations associated with the Contractor's load shall not be considered a sale for resale. Contractor transactions utilizing capacity and/or

energy purchased under this Contract with their designated Scheduling Entity shall also be permitted subject to Western's review that such transactions result in delivery of electric service to the Contractor or the Contractor's customers consistent with subsection 9.1.

- 9.3 Delivery Arrangements for Native American Tribes: Delivery arrangements for Native American Tribes published in the Federal Register Notice 78 FR 79443, dated December 30, 2013, may be made with other Western electric service customers within the BCP marketing area. Such delivery arrangements, which may include benefit or bill crediting to allow Native American Tribes to receive the economic benefit of their allocations, shall not be considered a sale for resale. MSCP payments and LCRBDF Charges for Tribal Contractors shall be determined based on the location of the Tribal Contractors irrespective of the delivery arrangements.

10. **INTEGRATED RESOURCE PLANS AND SMALL CUSTOMER PLANS:**

- 10.1 The Contractor shall comply with the IRP, Small Customer Plan, or other acceptable plan, as applicable, in accordance with the EPAMP, dated March 30, 2000, in Federal Register Notice 65 FR 16789.
- 10.2 Western shall administer the IRP or other acceptable plan requirements, as applicable, in accordance with the EPAMP. Subject to approval by Western, plans submitted to state authorities, with any needed supplements or modifications, may also meet the IRP requirements. Allocations for Native American Tribes delivered to other Western customers, as provided for in the Federal Register Notice 78 FR 79443, dated December 30, 2013, may be reported by the entity receiving the allocation in accordance with a benefit or bill crediting arrangement. Contractors that subcontract their Contractor's Allocations may

meet the IRP requirements through submission of the proper IRP's or other acceptable plans by each of the Contractor's subcontractors.

10.3 The Contractor's failure to comply with the IRP or acceptable plan requirements, after exhaustion of all appeals, will result in the application of penalties in accordance with the EPAMP Federal Register Notice 65 FR 16801, dated March 30, 2000. These penalties shall not be applied to Tribal Contractors who have allocations delivered to other Western customers in accordance with benefit crediting arrangements.

11. **LOWER COLORADO RIVER MULTI-SPECIES CONSERVATION PROGRAM:**

In accordance with the Hoover Power Allocation Act of 2011 and the Conformed Criteria, each Schedule D Contractor shall pay its proportionate share of its State's respective contribution to the cost of the MSCP. The billing and collection of MSCP payments will be in accordance with the Restated Agreement. These costs will not be billed or collected under this Contract.

12. **CREDITWORTHINESS:** Due to the distinctive funding aspects and advance working capital funding requirements of the BCP, Western's Creditworthiness Procedures do not apply to this Contract. Section 17 addresses the manner in which Contractors who are in default due to non-payment may provide financial assurance to restore electric service.

13. **REPAYABLE ADVANCES:** In accordance with the Hoover Power Allocation Act of 2011, Reclamation, on behalf of Western, shall collect from Schedule D Contractors a pro rata share of Repayable Advances for distribution to Schedule A and Schedule B Contractors as specified in the Restated Agreement. Collection and distribution of Repayable Advances at the end of the term of this Contract are provided for under the Restated Agreement.

14. **OBLIGATION TO EXECUTE RESTATED AGREEMENT:** The Parties shall complete and execute the Restated Agreement, consistent with this Contract and in accordance with the Hoover Power Allocation Act of 2011. The Restated Agreement is intended to implement the terms of this Contract, but not to modify or amend this Contract.
15. **REALLOCATION OF SCHEDULE D POWER NOT UNDER CONTRACT BY OCTOBER 1, 2016:** As prescribed by the Federal Register Notice 78 FR 79443, dated December 30, 2013, any Schedule D power allocated by Western not under contract by October 1, 2016, shall be made available for redistribution on a pro-rata basis to remaining Schedule D allottees. If Western has determined that any Schedule D power will not be under contract on October 1, 2016, Western will provide written notice to all Schedule D Contractors. Schedule D Contractors will have sixty (60) Days to accept by written notice any such additional Schedule D power that may become available from reallocation. Once a reallocation of Schedule D power is completed, Western shall issue a new Exhibit A to affected Schedule D Contractors to reflect the revised allocations and revised Attachments Nos. 1 and 2 to all Contractors. No Contractor's Contingent Capacity or Firm Energy allocation will be reduced by a reallocation of Schedule D power. Any Schedule D power not under contract by October 1, 2017, shall be distributed to Schedule A and Schedule B Contractors as prescribed by the Hoover Power Allocation Act of 2011.
16. **RELINQUISHMENT AND REALLOCATION OF CONTRACTOR'S ALLOCATION:**
- 16.1 At any time the Contractor may make a written request to Western to relinquish all of the Contractor's Allocation for the remaining duration of this Contract.
- Upon receiving a written request for relinquishment, Western shall provide notice

to other Contractors within thirty (30) Days and seek to reallocate the Contractor's Allocation as provided for in subsections 16.2 through 16.8. Western may consider reallocation of less than all of the Contractor's Allocation if requested. Western reserves the right, however, to not provide for any reallocation to an entity that it deems a financial risk to the BCP so long as reallocation is not withheld from a Contractor with a timely payment history. The Contractor shall remain responsible for all payments under this Contract unless and until a reallocation of the Contractor's Allocation is implemented.

16.2 For Schedule D power allocated to entities in California, Western shall first offer the Contingent Capacity and Firm Energy to all other Schedule D Contractors in California, next to all other Schedule D Contractors, and last to all other Contractors.

16.3 For Schedule D power allocated by Western and offered through the Arizona Power Authority (APA) or the Colorado River Commission (CRC), Western shall first offer, pro rata, the Contingent Capacity and Firm Energy to other Schedule D subcontractors that are Western allottees in their respective State. If any Schedule D power allocated by Western and offered through APA or CRC remains, Western shall then offer to Tribal Contractors in Arizona and Nevada, next to all other Schedule D Contractors, and last to all other Contractors.

16.4 For Schedule D power allocated to Tribal Contractors in Arizona and Nevada, Western shall first offer the Contingent Capacity and Firm Energy first to all other Tribal Contractors in Arizona and Nevada. If any remains, Western shall offer next to APA and CRC to be offered to Schedule D subcontractors in their respective State, then to all other Schedule D Contractors, and last to all other Contractors.

- 16.5 For Schedule B power, Western shall offer the Contingent Capacity and Firm Energy first to other Schedule B Contractors in the same state, next to all other Schedule B Contractors, and if any remains, to all other Contractors.
- 16.6 For Schedule A power, Western shall offer the Contingent Capacity and Firm Energy first to other Schedule A Contractors in the same state, next to all other Schedule A Contractors, and if any remains, to all other Contractors.
- 16.7 In offering a reallocation of a Contractor's Allocation, Western shall provide a reasonable period, based on factors such as the size of the allocation and urgency, for Contractors to evaluate and respond to whether they will accept such a reallocation. Offers for reallocation will be made on a pro rata basis except if Western determines there is evidence of financial risk in offering a reallocation to a Contractor or if that reallocation would result in Federal allocation for the Contractor in excess of load. Any Contractor accepting a reallocation shall be responsible for payment of its pro rata share of the Repayable Advances, Working Capital, and reconciling items associated with the relinquishing Contractor's current balance for these items at the time of the reallocation, as provided for under section 21 of the Restated Agreement, unless reimbursement for these items is waived by written notice to Western from the Contractor requesting the reallocation of their Contractor's Allocation.
- 16.8 In the event that existing Contractors do not accept reallocation of all of a Contractor's Allocation, Western may attempt to reallocate the remaining Contingent Capacity and Firm Energy to other entities eligible under section 5 of the Boulder Canyon Project Act.
- 16.9 Prior to reallocation of the Contractor's Allocation, the Contractor may utilize the Lay Off Energy and Lay Off Power provisions in subsections 6.9.5 and 6.9.6.

Further, the Contractor may request that any of the Contractor's power not accepted as Lay Off Energy or Lay Off Power be sold by Western to any entity at best available price. Revenues received by Western under this subsection shall be credited against the requesting Contractor's obligation provided that the credit to the Contractor does not exceed the rate that would have been paid by the Contractor for the power.

16.10 If the Contractor's Allocation is reallocated, this Contract shall terminate under subsection 4.4 and the Contractor shall have no further payment obligations after termination except for outstanding Contract payment obligations incurred prior to the effective date of the reallocation.

16.11 Hypothecation of Contract by Contractor: The Contractor may hypothecate, pledge, or encumber this Contract as collateral for the faithful performance under any debt obligation incurred by the Contractor directly or through a joint powers agency of which the Contractor is a member in furtherance of serving the Contractor's public utility customers, administering the Contractor's load, or performing the Contractor's legal obligation to furnish electric power and energy to the extent the terms of such hypothecation or encumbrance are not inconsistent with the terms and conditions of the Contract.

17. **DEFAULT BY THE CONTRACTOR AND TERMINATION BY WESTERN:**

17.1 Western shall issue a written notice to the Contractor if the Contractor fails to make any payment required under section 7 of this Contract or payment required under sections 16 and 20 of the Restated Agreement within thirty (30) Days after the due date. The Contractor shall be in default under this Contract if the failure to make payment is not cured within thirty (30) Days after such notice is given. Notice of default shall be provided to all other Contractors. In the event of failure



to make payment by a crediting partner of a Tribal Contractor, both the crediting partner and Tribal Contractor shall be notified and the payment shall be due from the Tribal Contractor within thirty (30) Days after such notice. The Tribal Contractor shall be in default under this Contract if the failure is not cured within sixty (60) Days after such notice is given and notice of default shall be provided to all other Contractors.

17.2 Upon the occurrence of a Contractor default under subsection 17.1, Western shall immediately: (a) treat the defaulting Contractor's Allocation as Lay Off Power and utilize revenues from sales to offset unpaid amounts from the defaulting Contractor; and (b) pursue all reasonable remedies to recover unpaid amounts from the defaulting Contractor and/or from sales of the Contractor's Allocation.

17.3 In the event of a default by a Contractor under subsection 17.1 and Western's implementation of the actions set forth in subsection 17.2, Contractor may cure its default and restore electric service at any time prior to termination of this Contract in accordance with subsection 17.4 by paying Western the full amount in arrears and: (a) providing collateral reasonably satisfactory to Western (e.g., an irrevocable and unconditional corporate guaranty or an unconditional and irrevocable letter of credit as security to meet the Contractor's responsibilities and obligations that complies with Uniform Customs and Practice for Documentary Credits requirements), or (b) advance payment of three (3) months electric service. A Contractor that cures a default and makes timely and full payments to Western for at least twelve (12) consecutive months may petition Western to release the collateral previously provided under subsection (a) above, or return any unused portions of advance payment made under subsection (b) above. Western will consider any such requests in good faith.

- 17.4 If any required payment cited in subsection 17.1 is delinquent by ninety (90) Days or more beyond the payment due date, Western may at its discretion terminate this Contract, provided that the Contractor's obligation to make payment for electric service herein shall survive termination of this Contract unless and until Western reallocates the Contractor's Allocation to other entities. The terminated Contractor shall remain obligated for outstanding payments for electric service prior to the effective date of such reallocation.
- 17.5 Upon termination of this Contract, Attachment No. 1 and Attachment No. 2 shall be revised to reflect changes in allocation percentages on a pro rata basis for the remaining Contractors until the terminated Contractor's Allocation is permanently reallocated. Western will offer the terminated Contractor's Contract Allocation to potential transferees in accordance with the procedures set forth in subsections 16.2 through 16.8. The Contractor whose Contractor's Allocation has been terminated shall not receive any reimbursement as set forth in subsection 21.2 of the Restated Agreement.
- 17.6 Any amounts received from the terminated Contractor shall be considered other revenue (O) in the Annual Revenue Requirement calculation and shall be carried over to the next Fiscal Year.
18. **ATTACHMENTS**: Certain terms of this Contract that may change during the term of this Contract are set forth in attachments as formulated and modified from time to time. The initial Attachments 1 through 6 are attached hereto, and each is incorporated into this Contract in accordance with its respective terms until superseded by a subsequent attachment. Western shall provide to the Contractors written notice of, and opportunity to comment on, any change, modification, or addition of an attachment at least thirty (30) Days prior to the effective date of such revised attachment and at least ninety (90) Days

for an additional attachment. Changes, additions, or modifications to the attachments shall be reflected in new or revised attachments and will be distributed in accordance with Provision 40 of the General Power Contract Provisions. This section does not permit and shall not be interpreted to allow Western to distribute or issue any attachment on a subject matter not addressed in an initial attachment without the prior written consent of the Contractor.

19. **GENERAL POWER CONTRACT PROVISIONS:** The General Power Contract Provisions effective September 1, 2007, attached hereto as Exhibit E, are hereby made a part of this Contract with the same force and effect as if expressly set forth herein; Provided, that Provisions 4, 11, 13, 14.2, 15 through 30, shall not apply to this Contract. Future revisions to the General Power Contract Provisions shall not be applicable to this Contract except as may be provided for in a new exhibit executed by the Authorized Representatives.

20. **DISPUTES:**

20.1 **Western Actions Reviewable:** All decisions, directions, and determinations of Western under this Contract, including those decisions, directions, or determinations which call for the exercise of discretion, are subject to review as provided in this section. However, the Contractor shall comply with any such decision, direction, or determination unless and until it is reversed or modified by the Administrator, or by a court or by arbitration, in accordance with subsection 20.3. Unless the Contractor exercises its rights under subsection 20.3, such decisions, directions, and determinations are binding on the Contractor.

20.2 **Reclamation Actions Reviewable:** All decisions, directions, and determinations of Reclamation under this Contract, including those decisions, directions, or determinations which call for the exercise of discretion, are subject to review as

provided in this section. However, the Contractor shall comply with any such decision, direction, or determination unless and until it is reversed or modified by the Secretary of the Interior, or by a court or by arbitration, in accordance with subsection 20.3. Unless the Contractor exercises its rights under subsection 20.3, such decisions, directions, and determinations are binding on the Contractor.

- 20.3 Disputes and Disagreements: The Parties agree to discuss in good faith any dispute or disagreement as to interpretation of or performance pursuant to the Hoover Power Plant Act of 1984, the Hoover Power Allocation Act of 2011, and applicable regulations or this Contract. The Parties also agree to consider the use of arbitration to resolve disputes or disagreements prior to filing suit in Federal court. Any dispute or disagreement to be addressed in arbitration that falls under the responsibility of the Secretary of Energy, shall be resolved in accordance with 10 C.F.R. Section 904.13 in effect as of the date of execution of this Contract. Any dispute or disagreement to be addressed in arbitration that falls under the responsibility of the Secretary of the Interior shall be resolved in accordance with 43 C.F.R. Section 431.8 in effect as of the date of execution of this Contract.
- 20.4 Tribal Contractor agrees to a limited waiver of sovereign immunity solely to allow the federal Parties to enforce Tribal Contractor's obligations under this Contract through arbitration as set forth in 10 C.F.R. Section 904.13 or 43 C.F.R. Section 431.8, and through litigation in Federal courts of competent jurisdiction. Aside from this limited waiver, nothing in this Contract, or in any current or future schedules, attachments, exhibits, amendments, or addenda, is intended to be or shall be construed as a waiver of Tribal Contractor's sovereign immunity. Except as otherwise provided in this subsection 20.4, the Parties understand and agree that neither this Contract nor any underlying law or

procedure abrogates or waives Tribal Contractor's sovereign immunity from suit in any state or federal court or confers jurisdiction on any such court.

21. **AMENDMENTS AND MODIFICATIONS:** This Contract may be amended or modified only by an amendment or modification duly executed by the Parties.
22. **EXHIBITS:** Certain requirements or provisions of this Contract that may change during the term hereof are set forth in respective Exhibits A through E. The initial Exhibits A through E are attached hereto and made a part hereof, and each shall be in force and effect in accordance with its respective provisions until superseded by a subsequent exhibit executed by the Authorized Representative(s). The initial Exhibit A may be reissued by Western prior to October 1, 2017, for reallocation of Schedule D power, if applicable to the Contractor, in accordance with section 15. On or after October 1, 2017, exhibits may only be added or revised by execution by the Authorized Representative(s). Each superseding exhibit shall be attached to and become part of this Contract.
23. **AUTHORIZED REPRESENTATIVES:** Each Party, by written notice to the other, shall designate the representative(s) who is (are) authorized to act on its behalf with respect to those matters contained herein which are the functions and responsibilities of its Authorized Representative(s). In case a Party designates more than one (1) representative, the notice shall state the particular matter(s) upon which each designated representative is authorized to act. Either Party may change the designation of its Authorized Representative(s) upon oral notice given to the other and confirmed promptly by written notice.
24. **APPLICABLE LAWS, MODIFICATIONS, EXTENSIONS, AND WAIVERS:**
  - 24.1 **Applicable Laws:** Any reference in this Contract to any Federal act, statute, or regulation, shall be deemed to be a reference to such act, statute, or regulation and all amendments and supplements thereto in existence on the date of execution of this Contract, unless specifically noted otherwise; provided, that nothing in this

Contract is intended to limit the sovereign authority of Congress. The charges for electric service under this Contract are currently established to recover the costs and financial obligations associated with the BCP as specified by law. In the event that a Change in Law materially impairs any right, benefit or interest of Contractor under this Contract, or imposes any material increase in cost, or reduction in allocation of capacity or energy, or otherwise materially changes an obligation on Contractor hereunder, the Parties shall promptly meet and discuss in good faith regarding possible changes to this Contract to mitigate the impact of the Change in Law. The rights and remedies under this section 24 are cumulative and in addition to, not exclusive of or in substitution for, any other rights and remedies available under law or equity.

- 24.2 Modifications, Extensions, and Waivers: Any modification, extension, or waiver of any provision or requirement of this Contract granted for the benefit of Contractor(s) in connection with electric service from the BCP shall not be denied to any other Contractor; provided, that any Federal obligations due to the unique constitutional and political status of Native American Tribes shall remain exclusive to Tribal Contractors.
25. CONTINUED COOPERATION: Western and Reclamation will coordinate with the Contractors and work together in a collaborative manner to accommodate changes in circumstances during the term of this Contract including, but not limited to, evolving wholesale energy markets and transmission services, modifications to the BCP, and changes in technology and hydrology. Nothing in this Contract limits the United States or Tribal Contractors from government-to-government relations.
26. FORWARD CONTRACT: The Parties acknowledge and agree that all transactions under this Contract constitute a “forward contract,” and Western acknowledges it is a

“forward contract merchant” within the meaning of the United States Bankruptcy Code (11 U.S.C. §101 et seq., as amended).

27. **PRIORITY OF CLAIMS OF THE UNITED STATES**: Claims of the United States arising out of this Contract shall have priority over all others, secured or unsecured.
28. **ACCESS TO BOOKS AND RECORDS**: The Authorized Representative(s) of the Contractor may request applicable portions of all Western and Reclamation books and records related to transactions associated with this Contract subject to federal laws, regulations, and Western’s and Reclamation’s retention policies.
29. **REFERENCE TO SECTION OR SUBSECTION**: A reference to a section or subsection shall include all the subparts of such referenced section or subsection.
30. **EFFECT OF CONCURRENCE OF RECLAMATION**: The concurrence in this Contract by Reclamation signifies its contractual commitment to discharge the obligations of the United States, acting through Reclamation, as provided in subsections 6.1.1, 6.3.1, 6.10.7, 20.2, and section 11. Reclamation’s concurrence further signifies that it shares contractual commitment to discharge the obligations of the United States, with Western, as provided for in subsections 4.1, 6.11.6, 20.3, and sections 13, 25, and 28. The execution of this Contract by Western signifies its contractual commitment to discharge the obligations of the United States, acting through Western, as provided for in all other sections and subsections of this Contract.
31. **EXECUTION IN COUNTERPART**: This Contract may be executed in any number of counterparts and, upon execution and delivery by each Party, the executed and delivered counterparts together shall have the same force and effect as an original instrument as if all Parties had signed the same instrument. Any signature page of this Contract may be detached without impairing the legal effect

of any signatures thereon, and may be attached to another counterpart of this Contract identical in form hereto, by having attached to it one (1) or more signature pages.

32. **AUTHORITY TO EXECUTE**: Each individual signing this Contract certifies that the Party represented has duly authorized such individual to execute this Contract that binds and obligates the Party.

[Remainder of Page Intentionally Blank]



The Parties agree this Contract No. 16-DSR-12649 has been executed by duly authorized representatives of the Contractor, Western, and Reclamation and is to be effective in accordance with section 4, herein.

THE UNITED STATES OF AMERICA  
DEPARTMENT OF ENERGY  
WESTERN AREA POWER ADMINISTRATION

Date\_\_\_\_\_ By\_\_\_\_\_

Jack D. Murray

Title\_\_\_\_\_ Vice President of Power Marketing\_\_\_\_\_

Address\_\_\_\_\_ for Desert Southwest Region\_\_\_\_\_

\_\_\_\_\_ P.O. Box 6457\_\_\_\_\_

\_\_\_\_\_ Phoenix, AZ 85005-6457\_\_\_\_\_

CONCURRENCE OF  
THE UNITED STATES OF AMERICA  
DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION

Date\_\_\_\_\_ By\_\_\_\_\_

Terrance J. Fulp, Ph.D.

Title\_\_\_\_\_ Regional Director\_\_\_\_\_

Address\_\_\_\_\_ Bureau of Reclamation\_\_\_\_\_

\_\_\_\_\_ Lower Colorado Region\_\_\_\_\_

\_\_\_\_\_ P.O. Box 61470\_\_\_\_\_

\_\_\_\_\_ Boulder City, NV 89006-1470\_\_\_\_\_

The Parties agree this Contract No. 16-DSR-12649 has been executed by duly authorized representatives of the Contractor and is to be effective in accordance with section 4, herein.

(SEAL)

CITY OF RIVERSIDE, CALIFORNIA

ATTEST

By\_\_\_\_\_

By\_\_\_\_\_

Title\_\_\_\_\_

John A. Russo  
Title\_\_\_\_\_City Manager

Date\_\_\_\_\_

Address\_\_\_\_\_City of Riverside

\_\_\_\_\_3900 Main Street

\_\_\_\_\_Riverside, CA 92522

CERTIFICATE

I, \_\_\_\_\_, certify that I am the \_\_\_\_\_,  
the state named as Contractor herein; that who signed the above Contract No. \_\_\_\_\_  
on behalf of said Contractor was then its General Manager; and that said Contract was duly signed  
for and in behalf of said Contractor by authority of its governing body and is within the scope of the  
powers conferred by the laws of the State of \_\_\_\_\_.

\_\_\_\_\_  
(Title)

Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date \_\_\_\_\_

**CONTRACTOR'S SCHEDULE A, SCHEDULE B, AND SCHEDULE D  
CONTINGENT CAPACITY**

1. This Exhibit A, under and as part of Contract No. 16-DSR-12649 (Contract), shall become effective October 1, 2017, and shall remain in effect until superseded by another Exhibit A as approved by the Authorized Representative(s); provided, that this Exhibit A or any superseding Exhibit A shall be terminated upon expiration of this Contract.

2. Schedule A Contingent Capacity expressed as a percentage of total Schedule A Contingent Capacity is documented below.

<u>Contractor</u>	<u>Schedule A Contingent Capacity</u>	
	(kW)	(%)
City of Riverside	000	0.0000

3. Schedule B Contingent Capacity expressed as a percentage of total Schedule B Contingent Capacity is documented below.

<u>Contractor</u>	<u>Schedule B Contingent Capacity</u>	
	(kW)	(%)
City of Riverside	30,296	5.9640

4. Schedule D Contingent Capacity expressed as a percentage of total Schedule D Contingent Capacity is documented below.

<u>Contractor</u>	<u>Schedule D Contingent Capacity</u>	
	(kW)	(%)
City of Riverside	000	0.0000

5. Schedule A, B, and D Total Contingent Capacity is documented below.

<u>Contractor</u>	<u>Schedule D Contingent Capacity</u>	
	(kW)	(%)
City of Riverside Contingent Capacity Totals Schedule A, B, and D	<b><u>30,296</u></b>	<b><u>1.4608</u></b> <sup>1</sup>

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<sup>1</sup> Percentage is based upon 2074 MW

**SCHEDULE A, SCHEDULE B, AND SCHEDULE D FIRM ENERGY**

1. Schedule A Firm Energy is documented below.

<u>Contractor</u>	Firm Energy (Thousands of kWh)		<u>Total</u>
	<u>Summer</u>	<u>Winter</u>	
City of Riverside	000	000	000

2. Schedule B Firm Energy is documented below.

<u>Contractor</u>	Firm Energy (Thousands of kWh)		<u>Total</u>
	<u>Summer</u>	<u>Winter</u>	
City of Riverside	25,831	11,219	37,050

3. Schedule D Firm Energy is documented below.

<u>Contractor</u>	Firm Energy (Thousands of kWh)		<u>Total</u>
	<u>Summer</u>	<u>Winter</u>	
City of Riverside	000	000	000

4. Schedule A, B, and D Total Firm Energy is documented below.

<u>Contractor</u>	Firm Energy	
	<u>Thousands of kWh</u>	<u>Percent</u>
City of Riverside		
Firm Energy Totals Schedule A, B, and D	<b><u>37,050</u></b>	<b><u>0.8184</u></b>

**SCHEDULE C EXCESS ENERGY**

1. Schedule C excess energy is defined by the Priority of Entitlement to Excess Energy.

Priority of Entitlement to Excess Energy

- First: The first 200 million kWh for use within the State of Arizona; provided, that in the event Excess Energy in the amount of 200 million kWh is not generated during any year of operation, Arizona shall accumulate a first right to delivery of Excess Energy subsequently generated in an amount not to exceed 600 million kWh, inclusive of the current year's 200 million kWh. Said first right of delivery shall accrue at a rate of 200 million kWh per year for each year Excess Energy in the amount of 200 million kWh is not generated, less amounts of Excess Energy delivered.
- Second: Meeting Hoover Dam contractual obligations under the States of Arizona, California, and Nevada for; Schedule A (Schedule A), Schedule B (Schedule B), and Schedule D (Schedule D), not to exceed 26 million kWh hours in each year of operation.
- Third: Meeting the energy requirements of the States of Arizona, California, and Nevada; such available Excess Energy to be divided equally among the three States.

2. Third Priority Excess Energy for California is documented below.

<u>Contractor</u>	<u>Percent</u>
City of Riverside	1.9785

3. This Exhibit A to Contract No. 16-DSR-12649 may be modified in accordance with section 22 of this Contract.

**DELIVERY CONDITIONS**

1. This Exhibit B, under and as part of Contract No. 16-DSR-12649 (Contract), shall become effective October 1, 2017, and shall remain in effect until superseded by another Exhibit B as approved by the Authorized Representative(s); provided, that this Exhibit B or any superseding Exhibit B shall be terminated upon the expiration of this Contract.
2. **POINT(S) OF DELIVERY:** Western shall deliver power to the Contractor at the Mead 230-kV Bus.
3. This Exhibit B to Contract No. 16-DSR-12649 may be modified in accordance with section 22 of this Contract.



**AVAILABLE ENERGY, AVAILABLE CAPACITY, AND OTHER TERMS**

1. This Exhibit C, under and as part of Contract No. 16-DSR-12649 (Contract), shall become effective October 1, 2017, and shall remain in effect until superseded by another Exhibit C as approved by the Authorized Representative(s); provided, that this Exhibit C or any superseding Exhibit C shall be terminated upon the expiration of this Contract.
2. **CONTRACTOR'S AVAILABLE ENERGY:** The Contractor's Available Energy, in accordance with this Contract shall be determined by the following formula utilizing the gross energy that would have been produced at the Hoover Powerplant adjusted for energy exchanged with the Parker-Davis Project, without any loss of efficiency for providing Ancillary Services, less station service use (exclusive of motoring energy) less transformer and transmission line losses to the Point(s) of Delivery at the Mead 230-kV Bus:

2.1  $CAE = (P \times B) - A + M + C + D$

Where (values deemed to be in thousands of kWh),

CAE = Contractor's Available Energy for the applicable period

P = Contractor's percentage of total Schedule A, Schedule B, and Schedule D Firm Energy

B = Projected Hoover Firm Energy generation for the applicable period, including transformer and transmission line losses and projected integration with Parker-Davis Project

A = Adjustments from previous month's accounting process including schedule deviation and  $M_L$  and  $S_L$  assessments

M =  $M_L$  and  $S_L$  return energy

C = Excess Energy for the applicable period available to the Contractor, in accordance with Schedule C Excess Energy in Exhibit A, herein

D = Contractor's requested Firming Energy purchases in accordance with subsection 6.9.4, of this Contract which are scheduled and accounted for separately from energy deemed to be from Hoover Powerplant

2.2 Contractor's Available Energy will then be rounded to the nearest whole megawatt hour for scheduling purposes.

3. **CONTRACTOR'S AVAILABLE CAPACITY:** The Contractor's portion of Available Capacity, in accordance with the Contract shall be determined by the following formula:

3.1  $CAC = (P \times B)$

Where (Values deemed to be kW),

CAC = Contractor's Available Capacity for the respective period

P = Contractor's percentage of total Schedule A, Schedule B, and Schedule D Contingent Capacity

B = Available Capacity

3.2 Contractor's portion of Available Capacity will then be rounded to the nearest whole megawatt for scheduling purposes.

4. The following terms, when used in the Contract or Exhibits, shall have the meanings specified:

4.1 **NERC Holidays:** New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day.

4.2 **Normal Business Day:** Monday through Friday inclusive, except for NERC Holidays.

- 4.3 Off-Peak Hours: All day on Sundays and NERC Holidays, and the following hours on Mondays through Saturdays:
  - 4.3.1 Hour ending one (1) through hour ending eight (8) Central Prevailing Time.
- 4.4 On-Peak Hours: All other times.
- 5. This Exhibit C to Contract No. 16-DSR-12649 may be modified in accordance with section 22 of this Contract.

**ACCOUNTING FOR  
UNLOADED SYNCHRONIZED GENERATION**

1. This Exhibit D, under and as part of Contract No. 16-DSR-12649 (Contract), shall become effective October 1, 2017, and shall remain in effect until superseded by another Exhibit D as approved by the Authorized Representative(s); provided, that this Exhibit D or any superseding Exhibit D shall be terminated upon the expiration of this Contract.
2. Energy used to supply Unloaded Synchronized Generation to the Contractor for Ancillary Services in accordance with subsection 6.11.4 of this Contract shall be accounted for in accordance with the following formulas:

$$(M_L)_C = (M_L) \times (R_C) / (R_T)$$

$$(S_L)_C = (S_L) \times (R_C) / (R_T)$$

Where,

$(M_L)_C$	=	Cumulative sum, expressed in megawatt hours, of the Contractor's share of the $M_L$ during the Billing Period
$M_L$	=	Megawatt hours used for operation of generating units in a motoring mode for all Contractors that schedule Unloaded Synchronized Generation during the Billing Period
$R_C$	=	Cumulative sum, expressed in megawatt hours, of the Contractor's Unloaded Synchronized Generation during the Billing Period
$R_T$	=	Cumulative sum, expressed in megawatt hours, of all Unloaded Synchronized Generation during the Billing Period
$(S_L)_C$	=	Cumulative sum, expressed in megawatt hours, of the Contractor's share of the $S_L$ during the Billing Period

Exhibit D  
Contract No. 16-DSR-12649  
City of Riverside

$S_L$  = Computed energy, expressed in megawatt hours, lost due to reduced plant efficiency caused by operation of generating units in a partially loaded spinning mode for all Contractors that schedule Unloaded Synchronized Generation during the Billing Period

- 2.1 The value of  $M_L$  will be determined by metering total energy used for motoring units during the Billing Period.
- 2.2 The value of  $S_L$  will be determined by comparing actual generation to a statically scheduled baseline equivalent during the Billing Period.
3. Western, in coordination with Reclamation and the Contractors, will periodically review the methodology that determines the Hoover Powerplant  $S_L$  to ensure that the most equitable methodology is used. Supporting data justifying any methodology revision will be provided upon written request to the Contractor.
4. Scheduling of such energy shall be in accordance with the metering and scheduling instructions agreed upon in accordance with subsection 6.12.2 of this Contract.
5. This Exhibit D to Contract No. 16-DSR-12649 may be modified in accordance with section 22 of this Contract.

**WESTERN AREA POWER ADMINISTRATION  
GENERAL POWER CONTRACT PROVISIONS**

**I. APPLICABILITY.**

1. Applicability.

1.1 These General Power Contract Provisions (Provisions) shall be a part of the contract to which they are attached. In the event these Provisions differ from requirements of the contract, specific terms set forth in the contract shall prevail.

1.2 If the Contractor has member utilities which are either directly or indirectly receiving benefits from the contract, then the Contractor shall require such members to comply with Provisions 10, 17, 18, 19, 29, 30, 36, 43, 44, and 45 of these General Power Contract Provisions.

**II. DELIVERY OF SERVICE PROVISIONS.**

2. Character of Service.

Electric energy supplied or transmitted under the contract will be three-phase, alternating current, at a nominal frequency of sixty (60) hertz (cycles per second).

3. Use of Capacity or Energy in Excess of Contract Obligation.

The Contractor is not entitled to use Federal power, energy, or capacity in amounts greater than the Western contract delivery obligation in effect for each type of service provided for in the contract except with the approval of Western. Unauthorized overruns of contract delivery obligations shall be subject to charges specified in the contract or the applicable rate schedules. Overruns shall not establish any continuing right thereto and the Contractor shall cease any overruns when requested by Western, or in the case of authorized overruns, when the approval expires, whichever occurs first. Nothing in the contract shall obligate Western to increase any delivery obligation. If additional power, energy, or capacity is not available from Western, the responsibility for securing additional power, energy, or capacity shall rest wholly with the Contractor.

4. Continuity of Service.

Electric service will be supplied or transmitted continuously except for: (1) fluctuations, interruptions, or reductions due to uncontrollable forces, as defined in Provision 34 (Uncontrollable Forces) herein, (2) fluctuations, interruptions, or reductions due to operation of devices installed for power system protection; and (3) temporary fluctuations, interruptions, or reductions, which, in the opinion of the party supplying the service, are necessary or desirable for the purposes of maintenance, repairs, replacements, installation of equipment, or investigation and inspection. The party supplying service, except in case of emergency, will give the party to whom service is being provided reasonable advance notice of such temporary interruptions or reductions and will remove the cause thereof with diligence.

5. Multiple Points of Delivery.

When electric service is supplied at or transmitted to two or more points of delivery under the same rate schedule, said rate schedule shall apply separately to the service supplied at or transmitted to each point of delivery; Provided, That where the meter readings are considered separately, and during abnormal conditions, the Contractors system is interconnected between points of delivery such that duplication of metered power is possible, the meter readings at each affected point of delivery will be adjusted to compensate for duplication of power demand recorded by meters at alternate points of delivery due to abnormal conditions which are beyond the Contractors control or temporary conditions caused by scheduled outages.

6. Metering.

6.1 The total electric power and energy supplied or transmitted under the contract will be measured by metering equipment to be furnished and maintained by Western, a designated representative of Western, or where situations deem it appropriate as determined by Western, by the Contractor or its agent(s). In the event metering equipment is furnished and maintained by the Contractor or its agent(s) and the equipment is used for billing and other accounting purposes by Western, the Contractor shall ensure that the metering equipment complies with applicable metering policies established by Western.

6.2 Meters shall be secured by appropriate security measures and meters shall not be accessed except when the meters are to be inspected, tested, adjusted, or repaired. Representatives of affected parties shall be afforded reasonable opportunity to be present upon such occasions. Metering equipment shall be inspected and tested each year by the party responsible for meter maintenance, unless a different test interval is determined in accordance with good utility practices by an applicable regional metering policy, or as agreed upon by the parties. Meters shall also be tested at any reasonable time upon request by a party hereto, or by an affected supplemental power supplier, transmission agent, or control area operator. Any metering equipment found to be damaged, defective, or inaccurate shall be repaired and readjusted or replaced by the party responsible for meter maintenance as soon as practicable. Meters found with security breaches shall be tested for tampering and, if appropriate, meter readings shall be adjusted by Western Provision 6.3 below.

6.3 Except as otherwise provided in Provision 6.4 hereof, should any meter that is used by Western for billing or other accounting purposes fail to register accurately, the electric power and energy supplied or transmitted during the period of failure to register accurately, shall, for billing purposes, be estimated by Western from the best available information.

6.4 If inspections and tests of a meter used by Western for billing or other accounting purposes disclose an error exceeding two (2) percent, or a lesser range in error as agreed upon by the parties, then a correction based upon the inaccuracy found shall be made to the service records for the period of inaccuracy as determined by Western. If the period of inaccuracy cannot be determined, the inaccuracy shall be assumed to have existed during the entire monthly billing period immediately preceding the billing period in which the inspection or test was made and the resulting correction shall be made accordingly.

6.5 Any correction in billing or other accounting information that results from a correction in meter records shall be made in a subsequent monthly bill rendered by Western to the Contractor. Payment of such bill shall constitute full adjustment of any claim between the parties arising out of inaccurate metering equipment.

7. Existence of Transmission Service Contract.

If the contract provides for Western to furnish services using the facilities of a third party, the obligation of Western shall be subject to and contingent upon the existence of a transmission service contract granting Western rights to use such facilities. If Western acquires or constructs facilities which would enable it to furnish direct service to the Contractor, Western, at its option, may furnish service over its own facilities.

8. Conditions of Transmission Service.

8.1 When the electric service under the contract is furnished by Western over the facilities of others by virtue of a transmission service arrangement, the power and energy will be furnished at the voltage available and under the conditions which exist from time to time on the transmission system over which the service is supplied.

8.2 Unless otherwise provided in the contract or applicable rate schedule, the Contractor shall maintain a power factor at each point of delivery from Western's transmission agent as required by the transmission agent.

8.3 Western will endeavor to inform the Contractor from time to time of any changes planned or proposed on the system over which the service is supplied, but the costs of any changes made necessary in the Contractor's system, because of changes or conditions on the system over which the service is supplied, shall not be a charge against or a liability of Western.

8.4 If the Contractor, because of changes or conditions on the system over which service under the contract is supplied, is required to make changes on its system at its own expense in order to continue receiving service under the contract, then the Contractor may terminate service under the contract upon not less than sixty (60) Days written notice given to Western prior to making such changes, but not thereafter.

8.5 If Western notifies the Contractor that electric service provided for under the contract cannot be delivered to the Contractor because of an insufficiency of capacity available to Western in the facilities of others over which service under the contract is supplied, then the Contractor may terminate service under the contract upon not less than sixty (60) Days written notice given to Western prior to the date on which said capacity ceases to be available to Western, but not thereafter.

9. Multiple Points of Delivery Involving Direct and Indirect Deliveries.

When Western has provided line and substation capacity under the contract for the purpose of delivering electric service directly to the Contractor at specified direct points of delivery and also has agreed to absorb transmission service allowance or discounts for deliveries of energy over other system(s) to indirect points of delivery and the Contractor shifts any of its load served under the contract from direct delivery to indirect delivery, Western will not absorb the transmission service costs on such shifted load until the unused capacity, as determined solely by Western, available at the direct delivery points affected is fully utilized.

10. Construction, Operation, and Maintenance of Contractor's Power System.

The Contractor shall, and, if applicable, shall require each of its members or transmission agents to construct, operate, and maintain its power system in a manner which, as determined by Western, will not interfere with the operation of the system of Western or its transmission agents over which electric services are furnished to the Contractor under the contract, and in a manner which will coordinate with the protective relaying and other protective arrangements of the system(s) of Western or Western's transmission agents. Western may reduce or discontinue furnishing services to the Contractor if, after notice by Western,



the Contractor fails or refuses to make such changes as may be necessary to eliminate an unsatisfactory condition on the Contractors power system which is determined by Western to interfere significantly under current or probable conditions with any service supplied from the power system of Western or from the power system of a transmission agent of Western. Such a reduction or discontinuance of service will not relieve the Contractor of liability for any minimum charges provided for in the contract during the time said services are reduced or discontinued. Nothing in this Provision shall be construed to render Western liable in any manner for any claims, demands, costs, losses, causes of action, damages, or liability of any kind or nature arising out of or resulting from the construction, operation, or maintenance of the Contractors power system.

### **III. RATES, BILLING, AND PAYMENT PROVISIONS.**

#### **11. Change of Rates.**

Rates applicable under the contract shall be subject to change by Western in accordance with appropriate rate adjustment procedures. If at any time the United States promulgates a rate changing a rate then in effect under the contract, it will promptly notify the Contractor thereof. Rates shall become effective as to the contract as of the effective date of such rate. The Contractor, by written notice to Western within ninety (90) Days after the effective date of a rate change, may elect to terminate the service billed by Western under the new rate. Said termination shall be effective on the last day of the billing period requested by the Contractor not later than two (2) years after the effective date of the new rate. Service provided by Western shall be paid for at the new rate regardless of whether the Contractor exercises the option to terminate service.

#### **12. Minimum Seasonal or Annual Capacity Charge.**

When the rate in effect under the contract provides for a minimum seasonal or annual capacity charge, a statement of the minimum capacity charge due, if any, shall be included in the bill rendered for service for the last billing period of the service season or contract year as appropriate, adjusted for increases or decreases in the contract rate of delivery and for the number of billing periods during the year or season in which service is not provided. Where multiple points of delivery are involved and the contract rate of delivery is stated to be a maximum aggregate rate of delivery for all points, in determining the minimum seasonal or annual capacity charge due, if any, the monthly capacity charges at the individual points of delivery shall be added together.

#### **13. Billing and Payment.**

13.1 Western will normally issue bills to the Contractor for services furnished during the preceding month within ten (10) Days after the end of the billing period.

13.2 If Western is unable to issue timely monthly bill(s), Western may elect to render estimated bill(s). Such estimated bill(s) shall be subject to the same payment provisions as final bill(s), and any applicable adjustments will be shown on a subsequent monthly bill.

13.3 Payments of bills issued by Western are due and payable by the Contractor before the close of business on the twentieth (20th) calendar day after the date of issuance of each bill or the next business day thereafter if said day is a Saturday, Sunday, or Federal holiday. Bills shall be considered paid when payment is received by Western. Bills will be paid electronically or via the Automated Clearing House method of payment unless a written request to make payments by mail is submitted by the Contractor and approved by Western. Should Western agree to accept payments by mail, these payments will be accepted as timely and without assessment of the charge provided for in Provision 14 (Nonpayment of Bills in Full When Due) if a United States Post Office first class mail postmark indicates the payment was mailed at least three (3) calendar days before the due date.

13.4 The parties agree that net billing procedures will be used for payments due Western by the Contractor and for payments due the Contractor by Western for the sale or exchange of electric power and energy, use of transmission facilities, operation and maintenance of electric facilities, and other services. Payments due one party in any month shall be offset against payments due the other party in such month, and the resulting net balance shall be paid to the party in whose favor such balance exists. The parties shall exchange such reports and information that either party requires for billing purposes. Net billing shall not be used for any amounts due which are in dispute.

14. Nonpayment of Bills in Full When Due.

14.1 Bills not paid in full by the Contractor by the due date specified in Provision 13 (Billing and Payment) hereof shall bear a charge of five hundredths percent (0.05%) of the principal sum unpaid for each day payment is delinquent, to be added until the amount due is paid in full. Western will also assess a fee of twenty-five dollars (\$25.00) for processing a late payment. Payments received will first be applied to the charges for late payment assessed on the principal and then to payment of the principal.

14.2 Western shall have the right, upon not less than fifteen (15) Days advance written notice, to discontinue furnishing the services specified in the contract for nonpayment of bills in full when due, and to refuse to resume such services so long as any part of the amount due remains unpaid. Such a discontinuance of service will not relieve the Contractor of liability for minimum charges during the time service is so discontinued. The rights reserved to Western herein shall be in addition to all other remedies available to Western either by law or in equity, for the breach of any of the terms hereof.

15. Adjustments for Fractional Billing Period.

The demand or capacity charge and minimum charges shall each be proportionately adjusted when fractional billing periods are applicable under this contract. A fractional billing period can occur: 1) at the beginning or end of electric service; 2) at the beginning or end of irrigation pumping service each year; 3) for a fractional billing period under a new rate schedule; or 4) for fractional periods due to withdrawals of electric services. The adjustment will be made based on the ratio of the number of hours that electric service is available to the Contractor in such fractional billing period, to the total number of hours in the billing period involved. Energy billing shall not be affected by fractional billing periods.

16. Adjustments for Curtailments to Firm Service.

16.1 Billing adjustments will be made if firm electric service is interrupted or reduced because of conditions on the power system of the United States for periods of one (1) hour or longer in duration each. Billing adjustments will not be made when such curtailment of electric service is due to a request by the Contractor or a discontinuance of electric service by Western pursuant to Provision 14 (Nonpayment of Bills In Full When Due). For purposes of billing adjustments under this Provision, the term power system of the United States shall include transmission facilities used under contract but not owned by the United States.

16.2 The total number of hours of curtailed firm electric service in any billing period shall be determined by adding: (1) the sum of the number of hours of interrupted electric service to (2) the product, of each reduction, of: the number of hours reduced electric service and the percentage by which electric service was reduced below the delivery obligation of Western at the time of each said reduction of electric service. The demand or capacity charge and applicable minimum charges shall each be proportionately adjusted in the ratio that the total number of hours of electric service determined to have been curtailed bears to the total number of hours in the billing period involved.

16.3 The Contractor shall make written claim within thirty (30) Days after receiving the monthly bill, for adjustment on account of any curtailment of firm electric service, for periods of one (1) hour or longer in duration each, alleged to have occurred that is not reflected in said bill. Failure to make such written claim, within said thirty-day (30-day) period, shall constitute a waiver of said claim. All curtailments of electric service, which are due to conditions on the power system of the United States, shall be subject to the terms of this Provision; Provided, That withdrawal of power and energy under the contract shall not be considered a curtailment of electric service.

#### **IV. POWER SALES PROVISIONS.**

##### **17. Resale of Firm Electric Service (Wholesale Sales for Resale).**

The Contractor shall not sell any firm electric power or energy supplied under the contract to any electric utility customer of the Contractor for resale by that utility customer; Provided, That the Contractor may sell the electric power and energy supplied under the contract to its members on condition that said members not sell any of said power and energy to any customer of the member for resale by that customer.

##### **18. Distribution Principles.**

The Contractor agrees that the benefits of firm electric power or energy supplied under the contract shall be made available to its consumers at rates that are established at the lowest possible level consistent with sound business principles, and that these rates will be established in an open and public manner. The Contractor further agrees that it will identify the costs of firm electric power or energy supplied under the contract and power from other sources to its consumers upon request. The Contractor will demonstrate compliance with the requirements of this Provision to Western upon request.

##### **19. Contract Subject to Colorado River Compact.**

Where the energy sold under the contract is generated from waters of the Colorado River system, the contract is made upon the express condition and with the express covenant that all rights under the contract shall be subject to and controlled by the Colorado River Compact approved by Section 13 (a) of the Boulder Canyon Project Act of December 21, 1928, 43 U.S.C. §§ 617a-e, and the parties to the contract shall observe and be subject to and controlled by said Colorado River Compact in the construction, management, and operation of the dams, reservoirs, and powerplants from which electrical energy is to be furnished by Western to the Contractor under the contract, and in the storage, diversion, delivery, and use of water for the generation of electrical energy to be delivered by Western to the Contractor under the contract.

#### **V. FACILITIES PROVISIONS.**

##### **20. Design Approval.**

All facilities, construction, and installation by the Contractor pursuant to the contract shall be subject to the approval of Western. Facilities interconnections shall normally conform to Western's current "General Requirements for Interconnection," in effect upon the signing of the contract document providing for each interconnection, copies of which are available from Western. At least ninety (90) Days, unless otherwise agreed, prior to the date the Contractor proposes to commence construction or to incur an obligation to purchase facilities to be installed pursuant to the contract, whichever date is the earlier, the Contractor shall submit, for the approval of Western, detailed designs, drawings, and specifications of the facilities the Contractor proposes to purchase, construct, and install. The Contractor assumes all risks for construction commenced or obligations to purchase facilities incurred prior to receipt of approval from

Western. Western review and approval of designs and construction work in no way implies that Western is certifying that the designs meet the Contractors needs.

21. Inspection and Acceptance.

Western shall have the right to inspect the materials and work furnished by the Contractor, its agents, employees, and subcontractors pursuant to the contract. Such inspections shall be at reasonable times at the work site. Any materials or work that Western determines is defective or not in accordance with designs, drawings, and specifications, as approved by Western, shall be replaced or modified, as directed by Western, at the sole expense of the Contractor before the new facilities are energized.

22. As-Built Drawings.

Within a reasonable time, as determined by Western, after the completion of construction and installation of facilities pursuant to the contract, the Contractor shall submit to Western marked as-built prints of all Western drawings affected by changes made pursuant to the contract and reproducible drawings the Contractor has prepared showing facilities of Western. The Contractors drawings of Western facilities shall use drawing title blocks, drawing numbers, and shall be prepared in accordance with drafting standards all as approved by Western. Western may prepare, revise, or complete said drawings and bill the Contractor if the Contractor fails to provide such drawings to Western within a reasonable time as determined by Western.

23. Equipment Ownership Markers.

23.1 The Contractor shall identify all movable equipment and, to the extent agreed upon by the parties, all other salvageable facilities constructed or installed on the United States right-of-way or in Western substations pursuant to the contract which are owned by the Contractor, by permanently affixing thereto suitable markers clearly identifying the Contractor as the owner of said equipment and facilities.

23.2 If requested by the Contractor, Western shall identify all movable equipment and, to the extent agreed upon by the parties, all other salvageable facilities constructed or installed on the Contractors right-of-way or in the Contractors substations pursuant to the contract which are owned by the United States, by permanently affixing thereto suitable markers clearly identifying the United States as the owner of said equipment and facilities.

24. Third-Party Use of Facilities.

The Contractor shall notify Western of any proposed system change relating to the facilities governed by the contract or allowing third-party use of the facilities governed by the contract. If Western notifies the Contractor that said system change will, as solely determined by Western, adversely affect the operation of Western's system the Contractor shall, at no cost to Western, provide a solution to said adverse effect acceptable to Western.

25. Changes to Western Control Facilities.

If at any time during the term of the contract, Western determines that changes or additions to control, relay, or communications facilities are necessary to maintain the reliability or control of Western's transmission system, and said changes or additions are entirely or partially required because of the Contractors equipment installed under the contract, such changes or additions shall, after consultation with the Contractor, be made by Western with all costs or a proportionate share of all costs, as determined by Western, to be paid by the Contractor. Western shall notify the Contractor in writing of the necessary changes or additions and the estimated costs to be paid by the Contractor. If the Contractor fails to pay its share of said estimated costs, Western shall have the right, after giving sixty (60) days' written notice to the

Contractor, to terminate the applicable facility installation provisions to the contract and require the removal of the Contractors facilities.

26. Modification of Western Facilities.

Western reserves the right, at any time, to modify its facilities. Western shall keep the Contractor informed of all planned modifications to Western facilities which impact the facilities installation pursuant to the contract. Western shall permit the Contractor to change or modify its facilities, in a manner satisfactory to and at no cost or expense to Western, to retain the facilities interconnection pursuant to the contract. At the Contractors option, Western shall cooperate with the Contractor in planning alternate arrangements for service which shall be implemented at no cost or expense to Western. The Contractor and Western shall modify the contract, as necessary, to conform to the new facilities arrangements.

27. Transmission Rights.

If the contract involves an installation which sectionalizes a Western transmission line, the Contractor hereby agrees to provide a transmission path to Western across such sectionalizing facilities at no cost or expense to Western. Said transmission path shall be at least equal, in terms of capacity and reliability, to the path in the Western transmission line prior to the installation pursuant to the contract.

28. Construction and Safety Procedures.

28.1 The Contractor hereby acknowledges that it is aware of the hazards inherent in high-voltage electric lines and substations, and hereby assumes full responsibility at all times for the adoption and use of necessary safety measures required to prevent accidental harm to personnel engaged in the construction, inspection, testing, operation, maintenance, replacement, or removal activities of the Contractor pursuant to the contract. The Contractor and the authorized employees, agents, and subcontractors of the Contractor shall comply with all applicable safety laws and building and construction codes, including the provisions of Chapter 1 of the Power System Operations Manual, entitled Power System Switching Procedure, and the Occupational Safety and Health Administration regulations, Title 29 C.F.R. §§ 1910 and 1926, as amended or supplemented. In addition to the safety program required herein, upon request of the United States, the Contractor shall provide sufficient information to demonstrate that the Contractors safety program is satisfactory to the United States.

28.2 The Contractor and its authorized employees, agents, and subcontractors shall familiarize themselves with the location and character of all the transmission facilities of Western and interconnections of others relating to the work performed by the Contractor under the contract. Prior to starting any construction, installation, or removal work, the Contractor shall submit a plan of procedure to Western which shall indicate the sequence and method of performing the work in a safe manner. No work shall be performed by the Contractor, its employees, agents, or subcontractors until written authorization to proceed is obtained from Western.

28.3 At all times when the Contractor, its employees, agents, or subcontractors are performing activities of any type pursuant to the contract, such activities shall be under supervision of a qualified employee, agent, or subcontractor of the Contractor who shall be authorized to represent the Contractor in all matters pertaining to the activity being performed. The Contractor and Western will keep each other informed of the names of their designated representatives at the site.

28.4 Upon completion of its work, the Contractor shall remove from the vicinity of the right-of-way of the United States all buildings, rubbish, used materials, concrete forms, and other like material belonging to the Contractor or used under the Contractors direction, and in the event of failure to do so the same may be removed by Western at the expense of the Contractor.

28.5 In the event the Contractor, its employees, agents, or subcontractors fail to comply with any requirement of this Provision, or Provision 21 (Inspection and Acceptance) herein, Western or an authorized representative may issue an order to stop all or any part of the work until such time as the Contractor demonstrates compliance with the provision at issue. The Contractor, its employees, agents, or subcontractors shall make no claim for compensation or damages resulting from such work stoppage.

29. Environmental Compliance.

Facilities installed under the contract by any party shall be constructed, operated, maintained, replaced, transported, and removed subject to compliance with all applicable laws, including but not limited to the National Historic Preservation Act of 1966, 16 U.S.C. §§ 470x-6, the National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321-4347, the Endangered Species Act of 1973, 16 U.S.C. §§ 1531-1544, and the Archaeological Resources Protection Act of 1979, 16 U.S.C. §§ 470aa-470mm, and the regulations and executive orders implementing these laws, as they may be amended or supplemented, as well as any other existing or subsequent applicable laws, regulations, and executive orders.

30. Responsibility for Regulated Materials.

When either party owns equipment containing regulated material located on the other party's substation, switchyard, right-of-way, or other property, the equipment owner shall be responsible for all activities related to regulated materials in such equipment that are necessary to meet the requirements of the Toxic Substances Control Act, 15 U.S.C. §§ 2601-2692, the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901-6992k, the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9601-9675, the Oil Pollution Act of 1990, 33 U.S.C. §§ 2702-2761, the Clean Water Act, 33 U.S.C. §§ 1251-1387, the Safe Drinking Water Act, 42 U.S.C. §§ 300f-j26, and the regulations and executive orders implementing these laws, as they may be amended or supplemented, and any other existing or subsequent applicable laws, regulations, and executive orders. Each party shall label its equipment containing regulated material in accordance with appropriate laws and regulations. If the party owning the equipment does not perform activities required under appropriate laws and regulations within the time frame specified therein, the other party may perform or cause to be performed the required activities after notice to and at the sole expense of the party owning the equipment.

**VI. OTHER PROVISIONS.**

31. Authorized Representatives of the Parties.

Each party to the contract, by written notice to the other, shall designate the representative(s) who is (are) authorized to act in its behalf with respect to those matters contained in the contract which are the functions and responsibilities of the authorized representatives of the parties. Each party may change the designation of its authorized representative(s) upon oral notice given to the other, confirmed promptly by written notice.

32. Effect of Section Headings.

Section headings or Provision titles appearing in the contract or these General Power Contract Provisions are inserted for convenience only and shall not be construed as interpretations of text.

33. Operating Guidelines and Procedures.

The parties to the contract may agree upon and put into effect from time to time, such other written guidelines and procedures as may be required in order to establish the methods of operation of the power system to be followed in the performance of the contract.

34. Uncontrollable Forces.

Neither party to the contract shall be considered to be in default in performance of any of its obligations under the contract, except to make payment as specified in Provision 13 (Billing and Payment) herein, when a failure of performance shall be due to an uncontrollable force. The term "uncontrollable force" means any cause beyond the control of the party affected, including but not restricted to, failure of or threat of failure of facilities, flood, earthquake, storm, fire, lightning, epidemic, war, riot, civil disturbance or disobedience, labor dispute, labor or material shortage, sabotage, restraint by court order or public authority and action or nonaction by, or failure to obtain the necessary authorizations or approvals from, any governmental agency or authority, which by exercise of due diligence such party could not reasonably have been expected to avoid and which by exercise of due diligence it shall be unable to overcome. Nothing contained herein shall be construed to require a party to settle any strike or labor dispute in which it may be involved. Either party rendered unable to fulfill any of its obligations under the contract by reason of an uncontrollable force shall give prompt written notice of such fact to the other party and shall exercise due diligence to remove such inability with all reasonable dispatch.

35. Liability.

35.1 The Contractor hereby agrees to indemnify and hold harmless the United States, its employees, agents, or contractors from any loss or damage and from any liability on account of personal injury, death, or property damage, or claims for personal injury, death, or property damage of any nature whatsoever and by whomsoever made arising out of the Contractors', its employees', agents', or subcontractors' construction, operation, maintenance, or replacement activities under the contract.

35.2 The United States is liable only for negligence on the part of its officers and employees in accordance with the Federal Tort Claims Act, 28 U.S.C. §§ 1346(b), 1346(c), 2401(b), 2402, 2671, 2672, 2674-2680, as amended or supplemented.

36. Cooperation of Contracting Parties.

If, in the operation and maintenance of their respective power systems or electrical equipment and the utilization thereof for the purposes of the contract, it becomes necessary by reason of any emergency or extraordinary condition for either party to request the other to furnish personnel, materials, tools, and equipment for the accomplishment thereof, the party so requested shall cooperate with the other and render such assistance as the party so requested may determine to be available. The party making such request, upon receipt of properly itemized bills from the other party, shall reimburse the party rendering such assistance for all costs properly and reasonably incurred by it in such performance, including administrative and general expenses, such costs to be determined on the basis of current charges or rates used in its own operations by the party rendering assistance. Issuance and payment of bills for services provided by Western shall be in accordance with Provisions 13 (Billing and Payment) and 14 (Nonpayment of Bills in Full When Due) herein. Western shall pay bills issued by the Contractor for services provided as soon as the necessary vouchers can be prepared which shall normally be within twenty (20) Days.

37. Transfer of Interest in Contract or Change in Preference Status.

37.1 No voluntary transfer of the contract or of the rights of the Contractor under the contract shall be made without the prior written approval of the Administrator of Western. Any voluntary transfer of the contract or of the rights of the Contractor under the contract made without the prior written approval of the Administrator of Western may result in the termination of the contract; Provided, That the written approval of the Administrator shall not be unreasonably withheld; Provided further, That if the Contractor operates a project financed in whole or in part by the Rural Utilities Service, the Contractor may transfer or assign its interest in the contract to the Rural Utilities Service or any other department or agency of the Federal Government without such prior written approval; Provided further, That any successor to or assignee of the rights of the Contractor, whether by voluntary transfer, judicial sale, foreclosure sale, or otherwise, shall be subject to all the provisions and conditions of the contract to the same extent as though such successor or assignee were the original Contractor under the contract; and, Provided further, That the execution of a mortgage or trust deed, or judicial or foreclosure sales made thereunder, shall not be deemed voluntary transfers within the meaning of this Provision.

37.2 The Contractor shall maintain its status as an entity eligible for preference in Western's sale of Federal power pursuant to Reclamation law, as amended and supplemented.

37.3 Western shall give the Contractor written notice of Western's proposed determination that the Contractor has violated Provision 37.1 and Western's proposed action in response to the violation.

37.4 The Contractor shall have 120 Days after receipt of Western's notice provided under Provision 37.3 to submit a written response to Western. The Contractor may also make an oral presentation to the Administrator during this 120-day period.

37.5 At any time during this process, the Contractor and Western may agree upon corrective action to resolve Western's proposed determination that the Contractor is in violation of Provision 37.1.

37.6 Within 30 days of receipt of the Contractors written response provided under Provision 37.4, Western will notify the Contractor in writing of its final decision. The Administrator's written notice will include the intended action, the effective date thereof, and the reasons for taking the intended action. Implementation of the Administrator's action shall take place no earlier than 60 Days from the Contractors receipt of such notice.

37.7 Any successor to Western shall be subject to all the provisions and conditions of the contract to the same extent as though such successor were an original signatory to the contract.

37.8 Nothing in this Provision shall preclude any right to judicial review available to the Contractor under Federal law.



38. Choice of Law and Forum.

Federal law shall control the obligations and procedures established by this contract and the performance and enforcement thereof. The forum for litigation arising from this contract shall exclusively be a Federal court of the United States, unless the parties agree to pursue alternative dispute resolution.

39. Waivers.

Any waivers at any time by either party to the contract of its rights with respect to a default or any other matter arising under or in connection with the contract shall not be deemed a waiver with respect to any subsequent default or matter.

40. Notices.

Any notice, demand, or request specifically required by the contract or these Provisions to be in writing shall be considered properly given when delivered in person or sent by postage prepaid registered or certified mail, commercial delivery service, facsimile, electronic, prepaid telegram, or by other means with prior agreement of the parties, to each party's authorized representative at the principal offices of the party. The designation of the person to be notified may be changed at any time by similar notice. Where facsimile or electronic means are utilized for any communication covered by this Provision, the sending party shall keep a contemporaneous record of such communications and shall verify receipt by the other party.

41. Contingent Upon Appropriations and Authorization.

41.1 Where activities provided for in the contract extend beyond the current fiscal year, continued expenditures by the United States are contingent upon Congress making the necessary appropriations required for the continued performance of the United States' obligations under the contract. In case such appropriation is not made, the Contractor hereby releases the United States from its contractual obligations and from all liability due to the failure of Congress to make such appropriation.

41.2 In order to receive and expend funds advanced from the Contractor necessary for the continued performance of the obligations of the United States under the contract, additional authorization may be required. In case such authorization is not received, the Contractor hereby releases the United States from those contractual obligations and from all liability due to the lack of such authorization.

42. Covenant Against Contingent Fees.

The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure the contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty, Western shall have the right to annul the contract without liability or in its discretion to deduct from the contract price or consideration the full amount of such commission, percentage, brokerage, or contingent fee.

43. Contract Work Hours and Safety Standards.

The contract, to the extent that it is of a character specified in Section 103 of the Contract Work Hours and Safety Standards Act (Act), 40 U.S.C. § 3701, as amended or supplemented, is subject to the provisions of the Act, 40 U.S.C. §§ 3701-3708, as amended or supplemented, and to regulations promulgated by the Secretary of Labor pursuant to the Act.

44. Equal Opportunity Employment Practices.

Section 202 of Executive Order No. 11246, 30 Fed. Reg. 12319 (1965), as amended by Executive Order No. 12086, 43 Fed. Reg. 46501 (1978), as amended or supplemented, which provides, among other things, that the Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin, is incorporated herein by reference the same as if the specific language had been written into the contract, except that Indian Tribes and tribal organizations may apply Indian preference to the extent permitted by Federal law.

45. Use of Convict Labor.

The Contractor agrees not to employ any person undergoing sentence of imprisonment in performing the contract except as provided by 18 U.S.C. § 3622(c), as amended or supplemented, and Executive Order No. 11755, 39 Fed. Reg. 779 (1973), as amended or supplemented.

**SCHEDULE A, SCHEDULE B, AND SCHEDULE D**  
**CONTINGENT CAPACITY ALLOCATIONS**

1. Schedule A Contingent Capacity expressed as a percentage of total Schedule A

Contingent Capacity is documented below.

<u>Schedule A Contractor</u>	<u>Schedule A Contingent Capacity</u>	
	(kW)	(%) <sup>1</sup>
Metropolitan Water District of Southern California	249,948	17.0925
City of Los Angeles	495,732	33.9003
Southern California Edison Company	280,245	19.1644
City of Glendale	18,178	1.2431
City of Pasadena	11,108	0.7596
City of Burbank	5,176	0.3540
Arizona Power Authority	190,869	13.0525
Colorado River Commission of Nevada	190,869	13.0525
United States, for Boulder City	<u>20,198</u>	<u>1.3812</u>
<b>Total Schedule A Contingent Capacity</b>	<b><u>1,462,323</u></b>	<b><u>100.0000</u></b>

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<sup>1</sup> Percentages are calculated by rounding to the nearest ten thousandths decimal place.

2. Schedule B Contingent Capacity expressed as a percentage of total Schedule B

Contingent Capacity is documented below.

<u>Schedule B Contractor</u>	<u>Schedule B Contingent Capacity</u> (kW)	<u>Schedule B Contingent Capacity</u> (%) <sup>2</sup>
<u>Arizona:</u>		
Arizona Power Authority	189,860	37.3757
<u>Nevada:</u>		
Colorado River Commission	189,860	37.3757
<u>California:</u>		
City of Anaheim	40,396	7.9523
City of Azusa	4,039	0.7951
City of Banning	2,020	0.3977
City of Burbank	15,149	2.9822
City of Colton	3,030	0.5965
City of Glendale	2,020	0.3977
City of Pasadena	9,089	1.7893
City of Riverside	30,296	5.9640
City of Vernon	<u>22,218</u>	<u>4.3738</u>
<b>Total Schedule B Contingent Capacity</b>	<b><u>507,977</u></b>	<b><u>100.0000</u></b>

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<sup>2</sup> Percentages are calculated by rounding to the nearest ten thousandths decimal place.

3. Schedule D Contingent Capacity expressed as a percentage of total Schedule D

Contingent Capacity is documented below.

<u>Schedule D Contractor</u>	<u>Schedule D Contingent Capacity</u> (kW)	<u>(%)</u> <sup>3</sup>
<u>Arizona:</u>		
Arizona Power Authority (APA)	11,510	11.0993
City of Chandler, AZ Municipal Utility Department	676	0.6519
City of Flagstaff	201	0.1938
City of Glendale	426	0.4108
City of Globe	115	0.1109
City of Payson	119	0.1148
City of Peoria	691	0.6663
City of Phoenix	3,000	2.8930
City of Scottsdale	2,366	2.2816
City of Tempe, AZ Public Works Department	241	0.2324
City of Tucson, AZ Water Department	1,248	1.2035
Graham County Electric Cooperative, Inc.	312	0.3009
Metropolitan Domestic Water Improvement District	179	0.1726
Mohave Electric Cooperative, Inc.	1,145	1.1041
Navopache Electric Cooperative, Inc.	888	0.8563
Northern Arizona Irrigation District Power Pool	246	0.2372

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<sup>3</sup> Percentages are calculated by rounding to the nearest ten thousandths decimal place.

<u>Schedule D Contractor (cont.)</u>	<u>Schedule D Contingent Capacity</u>	
	(kW)	(%) <sup>4</sup>
<u>Arizona:</u>		
Sulphur Springs Valley Electric Cooperative, Inc.	2,731	2.6336
Trico Electric Cooperative, Inc.	<u>3,000</u>	<u>2.8930</u>
<b>APA Subtotals</b>	<b>29,094</b>	<b>28.0559</b>
<u>Arizona Tribes:</u>		
Fort McDowell Yavapai Nation	338	0.3259
Gila River Indian Community	3,000	2.8930
Hualapai Indian Tribe	381	0.3674
Kaibab Band of Paiute Indians	124	0.1196
Navajo Tribal Utility Authority	3,000	2.8930
Pascua Yaqui Tribe	437	0.4214
Salt River Pima-Maricopa Indian Community	3,000	2.8930
Tohono O'odham Nation	2,709	2.6123
Tonto Apache Tribe	<u>250</u>	<u>0.2411</u>
<b>Arizona Tribes Subtotals</b>	<b>13,239</b>	<b>12.7666</b>
<u>Nevada:</u>		
Colorado River Commission (CRC)	11,510	11.0993
City of Henderson	906	0.8737
City of Las Vegas	1,054	1.0164
City of North Las Vegas	763	0.7358
Clark County School District	3,000	2.8930

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<sup>4</sup> Percentages are calculated by rounding to the nearest ten thousandths decimal place.

<u>Schedule D Contractor (cont.)</u>	<u>Schedule D Contingent Capacity</u>	
	(kW)	(%) <sup>5</sup>
<u>Nevada:</u>		
Clark County Water Reclamation District	680	0.6557
College of Southern Nevada	281	0.2710
Las Vegas Valley Water District	3,000	2.8930
State of Nevada Department of Administration	109	0.1051
State of Nevada Department of Corrections	281	0.2710
State of Nevada Department of Transportation	116	0.1119
University of Nevada, Las Vegas	<u>305</u>	<u>0.2941</u>
<b>CRC Subtotals</b>	<b>22,005</b>	<b>21.2199</b>
<u>Nevada Tribes:</u>		
Las Vegas Paiute Tribe	<u>688</u>	<u>0.6635</u>
<b>Nevada Tribe Subtotals</b>	<b>688</b>	<b>0.6635</b>
<u>California:</u>		
Anza Electric Cooperative, Inc.	1,596	1.5391
California Department of Water Resources	3,000	2.8930
City of Cerritos	3,000	2.8930
City of Corona	2,988	2.8814
City of Rancho Cucamonga	3,000	2.8930
City of Victorville	2,625	2.5313
Imperial Irrigation District	3,000	2.8930
San Diego County Water Authority	<u>1,619</u>	<u>1.5612</u>
<b>California Subtotals</b>	<b>20,828</b>	<b>20.0849</b>

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<sup>5</sup> Percentages are calculated by rounding to the nearest ten thousandths decimal place.

<u>Schedule D Contractor (cont.)</u>	<u>Schedule D Contingent Capacity</u>	
	(kW)	(%) <sup>6</sup>
<u>California Tribes:</u>		
Agua Caliente Band of Cahuilla Indians	1,449	1.3973
Augustine Band of Cahuilla Indians	479	0.4619
Bishop Paiute Tribe	380	0.3664
Cabazon Band of Mission Indians	1,003	0.9672
Chemehuevi Indian Tribe	1,397	1.3472
Morongo Band of Mission Indians	1,098	1.0588
Pechanga Band of Luiseno Mission Indians	2,000	1.9286
San Luis Rey River Indian Water Authority	3,000	2.8930
San Manuel Band of Mission Indians	2,554	2.4629
Timbisha Shoshone Tribe	119	0.1148
Torres Martinez Desert Cahuilla Indians	1,659	1.5998
Twenty-Nine Palms Band of Mission Indians	1,320	1.2729
Viejas Band of Kumeyaay Indians	<u>1,388</u>	<u>1.3385</u>
<b>California Tribes Subtotals</b>	<b>17,846</b>	<b>17.2093</b>
<b>Total Schedule D Contingent Capacity</b>	<b><u>103,700</u></b>	<b><u>100.0000</u></b>

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<sup>6</sup> Percentages are calculated by rounding to the nearest ten thousandths decimal place.



**SCHEDULE A, SCHEDULE B, AND SCHEDULE D,  
CONTINGENT CAPACITY ALLOCATIONS**

4. Schedule A, B, and D, Contingent Capacity expressed as a percentage of total Schedule A, B, and D, Contingent Capacity is documented below.

<u>State</u>	<u>Contractor</u>	<u>Schedule A,B, and D Contingent Capacity (kW)</u>	<u>Schedule A,B, and D Contingent Capacity (%)<sup>7</sup></u>
Arizona (APA)			
	Arizona Power Authority	<u>409,823</u>	<u>19.7600</u>
	Subtotals, Arizona (APA)	<b><u>409,823</u></b>	<b><u>19.7600</u></b>
Arizona (Tribes)			
	Fort McDowell Yavapai Nation	338	0.0163
	Gila River Indian Community	3,000	0.1446
	Hualapai Indian Tribe	381	0.0184
	Kaibab Band of Paiute Indians	124	0.0060
	Navajo Tribal Utility Authority	3,000	0.1446
	Pascua Yaqui Tribe	437	0.0211
	Salt River Pima- Maricopa Indian Community	3,000	0.1446
	Tohono O'odham Nation	2,709	0.1306
	Tonto Apache Tribe	<u>250</u>	<u>0.0121</u>
	Subtotals, Arizona (Tribes)	<b><u>13,239</u></b>	<b><u>0.6383</u></b>
	<b>Subtotals, Arizona (APA and Tribes)</b>	<b><u>423,062</u></b>	<b><u>20.3984</u></b>

<sup>7</sup> Percentages are calculated by rounding to the nearest ten thousandths decimal place.

<u>State</u>	<u>Contractor</u>	<u>Schedule A,B, and D Contingent Capacity (kW)</u>	<u>Schedule A,B, and D Contingent Capacity (%)<sup>8</sup></u>
<u>Nevada</u> (CRC)			
	Colorado River Commission of Nevada	<u>402,734</u>	<u>19.4182</u>
	Subtotals, Nevada (CRC)	<b><u>402,734</u></b>	<b><u>19.4182</u></b>
 Nevada (Tribes)			
	Las Vegas Paiute Tribe	<u>688</u>	<u>0.0332</u>
	Subtotals, Nevada (Tribes)	<b><u>688</u></b>	<b><u>0.0332</u></b>
 Nevada (BC)			
	United States, for Boulder City	<u>20,198</u>	<u>0.9739</u>
	Subtotals, Nevada (BC)	<b><u>20,198</u></b>	<b><u>0.9739</u></b>
	<b>Subtotals, Nevada (CRC, Tribes, and BC)</b>	<b><u>423,620</u></b>	<b><u>20.4253</u></b>
 California (Tribes)			
	Agua Caliente Band of Cahuilla Indians	1,449	0.0699
	Augustine Band of Cahuilla Indians	479	0.0231
	Bishop Paiute Tribe	380	0.0183
	Cabazon Band of Mission Indians	1,003	0.0484

<sup>8</sup> Percentages are calculated by rounding to the nearest ten thousandths decimal place.

<u>State</u>	<u>Contractor</u>	<u>Schedule A,B, and D Contingent Capacity</u>	<u>Schedule A,B, and D Contingent Capacity</u>
		(kW)	(%) <sup>9</sup>
California (Tribes)			
	Chemehuevi Indian Tribe	1,397	0.0674
	Morongo Band of Mission Indians	1,098	0.0529
	Pechanga Band of Luiseno Mission Indians	2,000	0.0964
	San Luis Rey River Indian Water Authority	3,000	0.1446
	San Manuel Band of Mission Indians	2,554	0.1231
	Timbisha Shoshone Tribe	119	0.0057
	Torres Martinez Desert Cahuilla Indians	1,659	0.0800
	Twenty-Nine Palms Band of Mission Indians	1,320	0.0636
	Viejas Band of Kumeyaay Indians	<u>1,388</u>	<u>0.0669</u>
	Subtotals, California (Tribes)	<b><u>17,846</u></b>	<b><u>0.8605</u></b>
California			
	Anza Electric Cooperative, Inc.	1,596	0.0770
	California Department of Water Resources	3,000	0.1446

<sup>9</sup> Percentages are calculated by rounding to the nearest ten thousandths decimal place.

<u>State</u>	<u>Contractor</u>	<u>Schedule A,B, and D Contingent Capacity (kW)</u>	<u>Schedule A,B, and D Contingent Capacity (%)<sup>10</sup></u>
California			
	City of Anaheim	40,396	1.9477
	City of Azusa	4,039	0.1947
	City of Banning	2,020	0.0974
	City of Burbank	20,325	0.9800
	City of Cerritos	3,000	0.1446
	City of Colton	3,030	0.1461
	City of Corona	2,988	0.1441
	City of Glendale	20,198	0.9739
	City of Los Angeles	495,732	23.9022
	City of Pasadena	20,197	0.9738
	City of Rancho Cucamonga	3,000	0.1446
	City of Riverside	30,296	1.4608
	City of Vernon	22,218	1.0713
	City of Victorville	2,625	0.1266
	Imperial Irrigation District	3,000	0.1446

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<sup>10</sup> Percentages are calculated by rounding to the nearest ten thousandths decimal place.

<u>State</u>	<u>Contractor</u>	<u>Schedule A,B, and D Contingent Capacity (kW)</u>	<u>Schedule A,B, and D Contingent Capacity (%)<sup>11</sup></u>
California			
	Metropolitan Water District of Southern California	249,948	12.0515
	Southern California Edison	280,245	13.5123
	San Diego County Water Authority	<u>1,619</u>	<u>0.0781</u>
	Subtotals, California	<b><u>1,209,472</u></b>	<b><u>58.3159</u></b>
	<b>Subtotals, California (Tribes and Non-Tribes)</b>	<b><u>1,227,318</u></b>	<b><u>59.1764</u></b>
	<b>Total Schedule A, B, and D Contingent Capacity</b>	<b><u>2,074,000</u></b>	<b><u>100.0000</u></b>

5. Changes, additions, or modifications to the attachment shall be reflected in new or revised attachments and will be distributed in accordance with section 18 of this Contract.

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<sup>11</sup> Percentages are calculated by rounding to the nearest ten thousandths decimal place.

**SCHEDULE A, SCHEDULE B, AND SCHEDULE D**  
**FIRM ENERGY ALLOCATIONS**

1. Schedule A Firm Energy is documented below.

<u>Contractor</u>	Firm Energy (Thousands of kWh)		<u>Total</u>
	<u>Summer</u>	<u>Winter</u>	
Metropolitan Water District of Southern California	859,163	368,212	1,227,375
City of Los Angeles	464,108	199,175	663,283
Southern California Edison Company	166,712	71,448	238,160
City of Glendale	45,028	19,297	64,325
City of Pasadena	38,622	16,553	55,175
City of Burbank	14,070	6,030	20,100
Arizona Power Authority	429,582	184,107	613,689
Colorado River Commission of Nevada	429,582	184,107	613,689
United States, for Boulder City	<u>53,200</u>	<u>22,800</u>	<u>76,000</u>
<b>Totals</b>	<b><u>2,500,067</u></b>	<b><u>1,071,729</u></b>	<b><u>3,571,796</u></b>

2. Schedule B Firm Energy is documented below.

<u>Contractor</u>	Firm Energy (Thousands of kWh)		
	<u>Summer</u>	<u>Winter</u>	<u>Total</u>
<u>Arizona:</u>			
Arizona Power Authority (APA)	140,600	60,800	201,400
<u>Nevada:</u>			
Colorado River Commission (CRC)	<u>273,600</u>	<u>117,800</u>	<u>391,400</u>
<b>APA and CRC Subtotals</b>	<b><u>414,200</u></b>	<b><u>178,600</u></b>	<b><u>592,800</u></b>
<u>California:</u>			
City of Anaheim	34,442	14,958	49,400
City of Azusa	3,312	1,438	4,750
City of Banning	1,324	576	1,900
City of Burbank	3,604	1,566	5,170
City of Colton	2,650	1,150	3,800
City of Glendale	2,749	1,194	3,943
City of Pasadena	2,399	1,041	3,440
City of Riverside	25,831	11,219	37,050
City of Vernon	<u>18,546</u>	<u>8,054</u>	<u>26,600</u>
<b>California Subtotals</b>	<b><u>94,857</u></b>	<b><u>41,196</u></b>	<b><u>136,053</u></b>
<b>Schedule B, Firm Energy Totals</b>	<b><u>509,057</u></b>	<b><u>219,796</u></b>	<b><u>728,853</u></b>

3. Schedule D Firm Energy is documented below.

<u>Contractor</u>	Firm Energy (Thousands of kWh)		
	Summer	Winter	Total
<u>Arizona:</u>			
Arizona Power Authority (APA)	17,580	7,533	25,113
City of Chandler AZ Municipal Utilities Department	1,032	444	1,476
City of Flagstaff	307	132	439
City of Glendale	651	279	930
City of Globe	176	75	251
City of Payson	182	78	260
City of Peoria	1,055	453	1,508
City of Phoenix	4,582	1,968	6,550
City of Scottsdale	3,613	1,552	5,165
City of Tempe AZ Public Works Department	368	158	526
City of Tucson AZ Water Department	1,906	819	2,725
Graham County Electric Cooperative, Inc.	476	205	681
Metropolitan Domestic Water Improvement District	273	117	390
Mohave Electric Cooperative, Inc.	1,749	751	2,500



<u>Contractor</u>	Firm Energy (Thousands of kWh)		
	<u>Summer</u>	<u>Winter</u>	<u>Total</u>
<u>Arizona:</u>			
Navopache Electric Cooperative, Inc.	1,356	583	1,939
Northern Arizona Irrigation District Power Pool	376	161	537
Sulphur Springs Valley Electric Cooperative, Inc.	4,171	1,792	5,962
Trico Electric Cooperative, Inc.	<u>4,582</u>	<u>1,968</u>	<u>6,550</u>
<b>APA Subtotals</b>	<b>44,434</b>	<b>19,068</b>	<b>63,502</b>
<u>Arizona Tribes:</u>			
Fort McDowell Yavapai Nation	516	222	738
Gila River Indian Community	4,582	1,968	6,550
Hualapai Indian Tribe	582	250	832
Kaibab Band of Paiute Indians	189	81	270
Navajo Tribal Utility Authority	4,582	1,968	6,550
Pascua Yaqui Tribe	667	287	954
Salt River Pima-Maricopa Indian Community	4,582	1,968	6,550
Tohono O'odham Nation	4,137	1,777	5,914
Tonto Apache Tribe	<u>382</u>	<u>164</u>	<u>546</u>
<b>Arizona Tribes Subtotals</b>	<b>20,219</b>	<b>8,685</b>	<b>28,904</b>
<b>APA and Arizona Tribes Subtotal</b>	<b><u>64,653</u></b>	<b><u>27,753</u></b>	<b><u>92,405</u></b>
<u>Nevada:</u>			
Colorado River Commission (CRC)	17,580	7,533	25,113
City of Henderson	1,384	594	1,978

Attachment No. 2  
Contract No. 16-DSR-12649  
City of Riverside

<u>Contractor (cont.)</u>	Firm Energy (Thousands of kWh)		
	Summer	Winter	Total
City of Las Vegas	1,610	692	2,301
City of North Las Vegas	1,165	501	1,666
Clark County School District	4,582	1,968	6,550
Clark County Water Reclamation District	1,038	446	1,485
College of Southern Nevada	429	184	613
Las Vegas Valley Water District	4,582	1,968	6,550
State of Nevada Department of Administration	166	72	238
State of Nevada Department of Corrections	429	184	613
State of Nevada Department of Transportation	177	76	253
University of Nevada, Las Vegas	<u>466</u>	<u>200</u>	<u>666</u>
<b>CRC Subtotals</b>	<b>33,608</b>	<b>14,418</b>	<b>48,026</b>
<u>Nevada Tribes:</u>			
Las Vegas Paiute Tribe	<u>1,051</u>	<u>451</u>	<u>1,502</u>
<b>Nevada Tribes Subtotals</b>	<b>1,051</b>	<b>451</b>	<b>1,502</b>
<b>CRC and Nevada Tribes Subtotals</b>	<b>34,659</b>	<b>14,869</b>	<b>49,528</b>

Contractor (cont.)	Firm Energy (Thousands of kWh)		Total
	Summer	Winter	
<u>California:</u>			
Anza Electric Cooperative, Inc.	2,438	1,045	3,482
California Department of Water Resources	4,581	1,968	6,550
City of Cerritos	4,582	1,965	6,547
City of Corona	4,564	1,956	6,519
City of Rancho Cucamonga	4,582	1,965	6,547
City of Victorville	4,009	1,719	5,728
Imperial Irrigation District	4,582	1,968	6,550
San Diego County Water Authority	<u>2,473</u>	<u>1,060</u>	<u>3,533</u>
<b>California Subtotals</b>	<b>31,811</b>	<b>13,646</b>	<b>45,456</b>
<u>California Tribes:</u>			
Agua Caliente Band of Cahuilla Indians	2,213	951	3,163
Augustine Band of Cahuilla Indians	731	314	1,046
Bishop Paiute Tribe	580	249	830
Cabazon Band of Mission Indians	1,532	658	2,190
Chemehuevi Indian Tribe	2,133	917	3,050
Morongo Band of Mission Indians	1,677	720	2,397
Pechanga Band of Luiseno Mission Indians	3,054	1,312	4,366

<u>Contractor (cont.)</u>	Firm Energy (Thousands of kWh)		
	<u>Summer</u>	<u>Winter</u>	<u>Total</u>
San Luis Rey River Indian Water Authority	4,582	1,968	6,550
San Manuel Band of Mission Indians	3,900	1,675	5,575
Timbisha Shoshone Tribe	182	78	260
Torres Martinez Desert Cahuilla Indians	2,534	1,088	3,622
Twenty-Nine Palms Band of Mission Indians	2,016	866	2,882
Viejas Band of Kumeyaay Indians	<u>2,120</u>	<u>911</u>	<u>3,031</u>
<b>California Tribes Subtotals</b>	<b><u>27,255</u></b>	<b><u>11,707</u></b>	<b><u>38,962</u></b>
<b>California and California Tribes Subtotals</b>	<b><u>59,065</u></b>	<b><u>25,353</u></b>	<b><u>84,418</u></b>
<b>Schedule D, Firm Energy Totals</b>	<b><u>158,377</u></b>	<b><u>67,975</u></b>	<b><u>226,352</u></b>

4. Schedule A, B, and D, Total Firm Energy is documented below.

<u>Contractor</u>	<u>Firm Energy</u>	
	<u>Thousands of kWh</u>	<u>Percent<sup>1</sup></u>
Arizona:		
Arizona Power Authority (APA)	<u>878,592</u>	<u>19.4078</u>
<b>APA Subtotals</b>	<b><u>878,592</u></b>	<b><u>19.4078</u></b>
Arizona Tribes:		
Fort McDowell Yavapai Nation	738	0.0163
Gila River Indian Community	6,550	0.1447
Hualapai Indian Tribe	832	0.0184
Kaibab Band of Paiute Indians	271	0.0060
Navajo Tribal Utility Authority	6,550	0.1447
Pascua Yaqui Tribe	954	0.0211
Salt River Pima-Maricopa Indian Community	6,550	0.1447
Tohono O'odham Nation	5,914	0.1306
Tonto Apache Tribe	<u>546</u>	<u>0.0120</u>
<b>Tribes Subtotals</b>	<b><u>28,904</u></b>	<b><u>0.6385</u></b>
<b>APA and Tribes Subtotals, Arizona</b>	<b><u>907,495</u></b>	<b><u>20.0463</u></b>

<sup>1</sup> Percentages are calculated by rounding to the nearest ten thousandths decimal place.

<u>Contractor</u>	<u>Firm Energy</u>	
	<u>Thousands of kWh</u>	<u>Percent<sup>2</sup></u>
<u>Nevada:</u>		
Colorado River Commission (CRC)	<u>1,053,115</u>	<u>23.2630</u>
<b>CRC Subtotals</b>	<b><u>1,053,115</u></b>	<b><u>23.2630</u></b>
<u>Nevada Tribes:</u>		
Las Vegas Paiute Tribe	<u>1,502</u>	<u>0.0332</u>
<b>Tribes Subtotals</b>	<b><u>1,502</u></b>	<b><u>0.0332</u></b>
<u>Nevada:</u>		
U.S. for Boulder City (BC)	<u>76,000</u>	<u>1.6788</u>
<b>U.S. for BC Subtotals</b>	<b><u>76,000</u></b>	<b><u>1.6788</u></b>
<b>CRC, Tribes, and BC Subtotals, Nevada</b>	<b><u>1,130,617</u></b>	<b><u>24.9750</u></b>
<u>California:</u>		
Anza Electric Cooperative, Inc.	3,482	0.0769
California Department of Water Resources	6,550	0.1447
City of Anaheim	49,400	1.0912
City of Azusa	4,750	0.1049
City of Banning	1,900	0.0420
City of Burbank	25,270	0.5582
City of Cerritos	6,547	0.1446
City of Colton	3,800	0.0839
City of Corona	6,519	0.1440
City of Glendale	68,268	1.5080
City of Los Angeles	663,283	14.6517

<sup>2</sup> Percentages are calculated by rounding to the nearest ten thousandths decimal place.

<u>Contractor</u>	<u>Firm Energy</u>	
	<u>Thousands of kWh</u>	<u>Percent<sup>3</sup></u>
City of Pasadena	58,615	1.2948
City of Rancho Cucamonga	6,547	0.1446
City of Riverside	37,050	0.8184
City of Vernon	26,600	0.5876
City of Victorville	5,728	0.1265
Imperial Irrigation District	6,550	0.1447
Metropolitan Water District of Southern California	1,227,375	27.1123
Southern California Edison Company	238,160	5.2609
San Diego County Water Authority	<u>3,533</u>	<u>0.0780</u>
<b>Subtotals, California</b>	<b><u>2,449,927</u></b>	<b><u>54.1181</u></b>

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<sup>3</sup> Percentages are calculated by rounding to the nearest ten thousandths decimal place.

<u>Contractor</u>	<u>Firm Energy</u>	
	Thousands of kWh	Percent <sup>4</sup>
<u>California Tribes:</u>		
Agua Caliente Band of Cahuilla Indians	3,163	0.0699
Augustine Band of Cahuilla Indians	1,046	0.0231
Bishop Paiute Tribe	830	0.0183
Cabazon Band of Mission Indians	2,190	0.0484
Chemehuevi Indian Tribe	3,050	0.0674
Morongo Band of Mission Indians	2,397	0.0530
Pechanga Band of Luiseno Mission Indians	4,366	0.0965
San Luis Rey River Indian Water Authority	6,550	0.1447
San Manuel Band of Mission Indians	5,576	0.1232
Timbisha Shoshone Tribe	260	0.0057
Torres Martinez Desert Cahuilla Indians	3,622	0.0800
Twenty-Nine Palms Band of Mission Indians	2,882	0.0637
Viejas Band of Kumeyaay Indians	<u>3,030</u>	<u>0.0669</u>
<b>Tribes Subtotals, California</b>	<b><u>38,962</u></b>	<b><u>0.8607</u></b>
<b>Totals Schedule A, B, and D Firm Energy</b>	<b><u>4,527,001</u></b>	<b><u>100.0000</u></b>

<sup>4</sup> Percentages are calculated by rounding to the nearest ten thousandths decimal place.



**SCHEDULE A, SCHEDULE B, AND SCHEDULE D  
EXCESS ENERGY ALLOCATIONS**

1. Schedule A, Schedule, B, and Schedule D excess energy is defined by the Priority of Entitlement to Excess Energy.

Priority of Entitlement to Excess Energy

- First: The first 200 million kWh for use within the State of Arizona; Provided, That in the event excess energy in the amount of 200 million kWh is not generated during any year of operation, Arizona shall accumulate a first right to delivery of excess energy subsequently generated in an amount not to exceed 600 million kWh, inclusive of the current year's 200 million kWh. Said first right of delivery shall accrue at a rate of 200 million kWh per year for each year excess energy in the amount of 200 million kWh is not generated, less amounts of excess energy delivered.
- Second: Meeting Hoover Dam contractual obligations under the States of Arizona, California, and Nevada for; Schedule A (Schedule A), Schedule B (Schedule B), and Schedule D (Schedule D), not to exceed 26 million kWh hours in each year of operation.
- Third: Meeting the energy requirements of the States of Arizona, California, and Nevada; such available excess energy to be divided equally among the three States.
2. Percentage Allocations is defined for third priority excess energy for use in Arizona, California, and Nevada.

2.1. Third Priority Excess Energy for Arizona is documented below.

<u>Contractor</u>	<u>Percent</u> <sup>5</sup>
Arizona Power Authority (APA)	100.0000
<b>Total</b>	<b><u>100.0000</u></b>

2.2 Third Priority Excess Energy for Nevada is documented below.

<u>Contractor</u>	<u>Percent</u> <sup>6</sup>
Colorado River Commission (CRC)	100.0000
<b>Total</b>	<b><u>100.0000</u></b>

2.3 Third Priority Excess Energy for California is documented below.

<u>Contractor</u>	<u>Percent</u> <sup>7</sup>
Anza Electric Cooperative, Inc.	0.1350
California Department of Water Resources	0.2538
City of Anaheim	2.6381
City of Azusa	0.2600
City of Banning	0.1205
City of Burbank	1.3357
City of Cerritos	0.2537
City of Colton	0.1998
City of Corona	0.2527
City of Glendale	2.1943
City of Los Angeles	33.5206

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<sup>5</sup> Percentages are calculated by rounding to the nearest ten thousandths decimal place.

<sup>6</sup> Percentages are calculated by rounding to the nearest ten thousandths decimal place.

<sup>7</sup> Percentages are calculated by rounding to the nearest ten thousandths decimal place.

<u>Contractor (cont.)</u>	<u>Percent<sup>8</sup></u>
City of Pasadena	2.0003
City of Rancho Cucamonga	0.2537
City of Riverside	1.9785
City of Vernon	1.4395
City of Victorville	0.2220
Imperial Irrigation District	0.2538
Metropolitan Water District of Southern California	34.8398
San Diego County Water Authority	0.1369
Southern California Edison Company	16.2014
Agua Caliente Band of Cahuilla Indians	0.1226
Augustine Band of Cahuilla Indians	0.0405
Bishop Paiute Tribe	0.0321
Cabazon Band of Mission Indians	0.0849
Chemehuevi Indian Tribe	0.1182
Morongo Band of Mission Indians	0.0929
Pechanga Band of Luiseno Mission Indians	0.1692
San Luis Rey River Indian Water Authority	0.2538
San Manuel Band of Mission Indians	0.2161
Timbisha Shoshone Tribe	0.0101
Torres Martinez Desert Cahuilla Indians	0.1403
Twenty-Nine Palms Band of Mission Indians	0.1117
Viejas Band of Kumeyaay Indians	0.1174
<b>Total</b>	<b><u>100.0000</u></b>

3. Changes, additions, or modifications to the attachment shall be reflected in new or revised attachments and will be distributed in accordance with section 18 of this Contract.

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<sup>8</sup> Percentages are calculated by rounding to the nearest ten thousandths decimal place.

**ANCILLARY SERVICES**

**1. Operating Reserve – Spinning**

Generation that is synchronized to the system and fully available to respond in accordance with applicable regulatory standards and requirements. Capacity scheduling requirements for Operating Reserves – Spinning are provided in the metering and scheduling instructions pursuant to subsection 6.12.2 of this Contract.

**2. Operating Reserve – Supplemental**

Generation capable of being synchronized to the system that is fully available to respond in accordance with applicable regulatory standards and requirements. Capacity scheduling requirements for Operating Reserves – Supplemental are provided in metering and scheduling instructions pursuant to subsection 6.12.2 of this Contract.

**3. Regulation**

Regulation service, including ramping up or ramping down, is provided dynamically by Western in response to a digital control signal from the Contractor or a Scheduling Entity, consistent with established NERC and WECC reliability standards or reliability standards of their successor organizations, and any requirements of Western.

4. Changes, additions, or modifications to the attachment shall be reflected in new or revised attachments and will be distributed in accordance with section 18 of this Contract.

**SCHEDULE A, SCHEDULE B, AND SCHEDULE D**  
**ELECTRIC SERVICE CONTRACTORS**

Agua Caliente Band of Cahuilla Indians  
Anza Electric Cooperative, Inc.  
Arizona Power Authority  
Augustine Band of Cahuilla Indians  
Bishop Paiute Tribe  
Cabazon Band of Mission Indians  
California Department of Water Resources  
Chemehuevi Indian Tribe  
City of Anaheim, California  
City of Azusa, California  
City of Banning, California  
City of Boulder City, Nevada  
City of Burbank, California  
City of Cerritos, California  
City of Colton, California  
City of Corona, California  
City of Glendale, California  
City of Los Angeles, California  
City of Pasadena, California  
City of Rancho Cucamonga, California  
City of Riverside, California  
City of Vernon, California  
City of Victorville, California  
Colorado River Commission of Nevada  
Fort McDowell Yavapai Nation  
Gila River Indian Community  
Hualapai Indian Tribe  
Imperial Irrigation District  
Kaibab Band of Paiute Indians  
Las Vegas Paiute Tribe  
Metropolitan Water District of Southern California  
Morongo Band of Mission Indians  
Navajo Tribal Utility Authority  
Pascua Yaqui Tribe  
Pechanga Band of Luiseno Mission Indians  
Salt River Pima-Maricopa Indian Community  
San Diego County Water Authority  
San Luis Rey River Indian Water Authority  
Southern California Edison Company  
San Manuel Band of Mission Indians  
Timbisha Shoshone Tribe

**SCHEDULE A, SCHEDULE B, AND SCHEDULE D**  
**ELECTRIC SERVICE CONTRACTORS**

Tohono O'odham Nation  
Tonto Apache Tribe  
Torres Martinez Desert Cahuilla Indians  
Twenty-Nine Palms Band of Mission Indians  
Viejas Band of Kumeyaay Indians

**UNITED STATES DEPARTMENT OF ENERGY  
WESTERN AREA POWER ADMINISTRATION**

**Boulder Canyon Project  
Desert Southwest Customer Service Region**

**SCHEDULE OF RATES FOR ELECTRIC SERVICE**

Effective:

The first day of the first full Billing Period beginning on or after October 1, 2018, and extending through September 30, 2023, or until superseded by another rate schedule, whichever occurs earlier.

Available:

In the marketing area serviced by the Boulder Canyon Project.

Applicable:

To power Contractors served by the Boulder Canyon Project supplied through one meter, at one point of delivery, unless otherwise provided by Contract.

Character and Conditions of Service:

Alternating current at 60 hertz, three-phase, delivered and metered at the voltages and points established by contract.

Base Charge:

The total charge paid by the Contractors for their allocated capacity and firm energy based on the Annual Revenue Requirement. The Base Charge shall be composed of a capacity component and an energy component:

ENERGY CHARGE: For each month in the Rate Year, Western shall bill each Contractor for an energy charge equal to that period's Monthly Energy Ratio, multiplied by the Contractor's Energy Dollar as provided by the Contract.

CAPACITY CHARGE: For each month in the Rate Year, Western shall bill each Contractor for a capacity charge equal to one-twelfth ( $1/12$ ) of the Capacity Dollar multiplied by each Contractor's Contingent Capacity percentage as provided by the Contract.

Forecast Rates:

ENERGY: Shall be equal to the Rate Year Energy Dollar divided by the lesser of the total Master Schedule energy or 4,501,001 million kWhs. This rate is to be applied for use of excess energy, unauthorized overruns, and water pump energy.

CAPACITY: Shall be equal to the Rate Year Capacity Dollar divided by 2,074,000 kW, to be applied for use of unauthorized overruns.

Calculated Energy Rate:

Within ninety (90) Days after the end of the Fiscal Year, after the Energy Deemed Delivered has been determined, the Calculated Energy Rate shall be determined by dividing fifty (50) percent of the Annual Revenue Requirement by the Energy Deemed Delivered. For any Rate Year in which Energy Deemed Delivered is greater than 4,501,001 million kilowatt hours, Western shall apply the Calculated Energy Rate to each Contractor's Energy Deemed Delivered to determine the Contractor's actual energy charge. A credit or debit shall be established for each Contractor based on the difference between the Contractor's Energy Dollar and the Contractor's actual energy charge, to be applied in the month following the calculation or as soon as possible thereafter.



Lower Basin Development Fund Contribution Charge:

The contribution charge is 4.5 mills/kWh for each kWh measured or scheduled to an Arizona purchaser and 2.5 mills/kWh for each kWh measured or scheduled to a California or Nevada purchaser, except for purchased power.

Billing for Unauthorized Overruns:

For each Billing Period in which there is a Contract violation involving an unauthorized overrun of the contractual power obligations, such overrun shall be billed at 10 times the forecast energy rate and forecast capacity rate. The contribution charge shall also be applied to each kWh of overrun.

Adjustments:

None.



Attachment No. 6  
Contract No. 16-DSR-12649  
City of Riverside

**CONTRACT NO. 16-DSR-12649**

**METERING AND SCHEDULING INSTRUCTIONS**

**BETWEEN**

**THE UNITED STATES  
DEPARTMENT OF ENERGY  
WESTERN AREA POWER ADMINISTRATION  
Desert Southwest Customer Service Region  
Boulder Canyon Project**

**AND**

**CITY OF RIVERSIDE**

**CONTRACT NO. 16-DSR-12649**

**METERING AND SCHEDULING INSTRUCTIONS**

**BETWEEN**

**THE UNITED STATES  
WESTERN AREA POWER ADMINISTRATION  
Desert Southwest Customer Service Region  
Boulder Canyon Project**

**AND**

**CITY OF RIVERSIDE**

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## METERING AND SCHEDULING INSTRUCTIONS

### BETWEEN

THE UNITED STATES  
WESTERN AREA POWER ADMINISTRATION  
Desert Southwest Customer Service Region Office  
Boulder Canyon Project

### AND

CITY OF RIVERSIDE

1. **PARTIES**: The Parties to these Metering and Scheduling Instructions (MSI) are Western Area Power Administration (Western) and City of Riverside (Contractor) or their Authorized Representative, each sometimes individually called Party and collectively called Parties.
2. **PURPOSE**: This MSI is written to implement the metering, scheduling, and accounting contractual requirements in accordance with subsection 6.12.2 of Contractor's Boulder Canyon Project (BCP) Electric Service Contract No. 16-DSR-12649 (Contract), as well as Implementation Agreement No. 95-PAO-10616, as amended and restated (Restated Agreement), associated with the BCP. If there are any conflicts between the terms of the Contract and the terms of this MSI, the terms of the Contract shall prevail. If there are conflicts between the terms of the Restated Agreement and the terms of this MSI, the terms of the Restated Agreement shall prevail.
3. **TERM**: This MSI shall become effective on October 1, 2016, for power provided on October 1, 2017, and shall remain in effect through September 30, 2067, until superseded by revised instructions or termination of the Contract and Restated Agreement listed in section 2, herein.
4. **REVISION**: The Parties intend that this MSI shall be reviewed periodically, and revised as necessary by agreement of the Parties, or as determined necessary by Western.
5. **POINT(S) OF DELIVERY**: Western shall deliver capacity and energy to the Contractor through the Contractor's authorized Scheduling Entity(ies) at the Mead 230-kV Bus listed in Exhibit B to the Contract.

6. **DEFINITIONS:** Terms, when used herein and in the Attachments, hereto, whether in singular or plural, shall have the meanings set forth in section 5 (Definitions) of the Contract.

7. **GENERATION SCHEDULING:**

7.1 **Scheduling:** Schedules associated with capacity and energy deliveries will be established and confirmed on Mountain Standard Time (MST) in advance as outlined in this MSI.

7.1.1 The Scheduling Entity is designated to implement schedules with Western on behalf of Contractor. Each Party shall provide its scheduling point(s) of contact and other information for this MSI as indicated on Attachment Nos. 1 and 2, attached hereto. In accordance with subsection 6.11.5 of the Contract, each Party agrees to provide the other Party, at least sixty (60) Days advance written notification, of any modifications to contact information or Scheduling Entity. Western will provide a revised Attachment No. 1 as confirmation of the change.

7.1.2 The Scheduling Entity will schedule and Western will deliver Contractor's Schedule A, Schedule B, and Schedule D Contingent Capacity and associated Firm Energy; and will schedule and deliver Excess Energy in accordance with the Contract and subsection 7.7 and 7.8, herein.

7.1.3 Contingent Capacity is based on Hoover Powerplant generating capacity which may be changed to the extent the output capability of the designated unit(s) has been changed due to a new unit rating or outage of the designated unit(s) in accordance with section 6 of the Contract.

7.1.4 Changes in Available Capacity shall be shared pro rata among Schedule A, Schedule B, and Schedule D Contingent Capacity and each Contractor's change in Available Capacity shall be based upon the Contractor's allocation percentages in Attachment No. 1 of the Contract. Notifications of changes in Available Capacity will be made as soon as practicable after unit capacity ratings have been determined by the Bureau of Reclamation (Reclamation).

7.1.5 Notice of changes in Available Capacity will be made in accordance with North American Electric Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) outage reporting requirements and in accordance with the coordination procedure with the Western Area Lower Colorado Balancing Authority (WALC) and Reclamation. The WALC-Reclamation coordination procedure includes:

7.1.5.1 Planned Outage Scheduling: Planned removal of equipment from service currently requires four (4) business days minimum advance notice with no bulk electric system (BES) impact, and ten (10) business days if the BES is impacted or as required by NERC and WECC.

7.1.5.2 Emergencies: Unplanned outages requiring emergency restoration response do not require any advance minimum outage notification period.

7.1.5.3 Emerging Actions: Emerging or pressing equipment issues requiring an outage or preventive action by either Reclamation or WALC, are to be responded to as determined by the WALC system operator, the Reclamation generator operator, or the WECC Reliability Coordinator to avoid an imminent adverse impact to the BES, to prevent generator or transmission damage, or to avoid injury.

7.1.6 Scheduling practices will comply with current North American Electric Standards Board, (NAESB), NERC, WECC, and applicable Federal Energy Regulatory Commission (FERC), or successor(s) requirements. Contractor shall have the option to schedule statically in accordance with subsection 7.7, herein or to schedule dynamically in accordance with subsection 7.8, herein. All scheduling shall follow the electronic interchange transaction information (e-Tag) requirements in accordance with subsection 7.7, 7.8, and 7.9, herein.

7.1.7 The Contractor may request a change in schedule type (static or dynamic). Any changes will be in effect for a minimum twelve (12) month period, unless a more expedient change is agreed to by Western and the Contractor. Preference for schedule type will be made by submitting a written request to Western to evaluate implementation of the change in schedule type. Attachment No. 6, herein describes steps for establishing dynamic scheduling with Western.

7.2 Master Schedule: Western will use MST as the timing basis for the determination of the monthly breakdown of estimated energy and capacity allocation as shown in the annual Master Schedule and any revisions. As stated in subsection 6.8.1 of the Contract, the Master Schedule shall be for a sixteen (16) month period, beginning on June 1 of the current year and extending through September 30 of the next year for each of the Contractors. An example of a Master Schedule showing Schedule A, Schedule B, Schedule D Contingent Capacity and Firm Energy, and Schedule C, Excess Energy are shown in Attachment No. 3, herein.

- 7.3 Energy Allocations (Target Schedule): The Target Schedule is a report that documents the energy allocations that may be scheduled by the Scheduling Entity for the current or next month including sub-monthly period schedules within a month. The Target Schedule is comprised of the following components:
- 7.3.1 Contractor's Energy Percentage: Contractor's percentage of Schedule A, Schedule B, and Schedule D Firm Energy.
- 7.3.2 Transformer and Transmission Losses: Transformer and transmission line losses to the point of delivery at the Mead 230-kV Substation. The current value is 0.9355%.
- 7.3.3 Adjustment: Adjustment represents the energy deviations as well as Motoring Losses ( $M_L$ ) and Unloaded Synchronized Generation Losses ( $S_L$ ) assessments less  $M_L$  and  $S_L$  returns from the previous month's accounting as calculated in the monthly energy accounting process. These adjustments are intended to minimize over and under deliveries of energy during the Fiscal Year.
- 7.3.4 Interchange: Interchange represents the Resource Integration Exchange programs values either between Contractors or between Western resources. The monthly and yearly net value between Contractors will be zero (0).
- 7.3.5 Returned Energy for use of  $M_L$  and  $S_L$ : Energy to be scheduled as repayment of assessments from previous month's accounting process.
- 7.3.6 Miscellaneous Energy: Miscellaneous energy may be used for a return or delivery of energy associated with a Contractor's energy usage, past month's power accounting, or the reconciliation of the deviations from the prior Fiscal Year. A notation describing the application will be communicated to the Scheduling Entity upon issuance of the Target Schedule.
- 7.3.7 Firming Energy: Supplemental energy purchased by Western at the request of a Contractor to meet any deficiency in Firm Energy in accordance with subsection 6.9.4 of the Contract. At the request of the Contractor and at the Contractor's expense, Western shall purchase, schedule, and account for requested Firming Energy separately from energy deemed to be from the Hoover Powerplant in order to meet that Contractor's Firm Energy deficiency.



- 7.3.8 Excess Energy: As defined in section 5 of the Contract.
- 7.3.9 Contractor's Available Energy: As defined in section 5 of the Contract.
- 7.4 Notification of Target Schedule: The Scheduling Entity shall be notified of its original monthly and sub-monthly period Target Schedule no later than one (1) week before the beginning of such period unless a shorter notification period is deemed necessary to meet urgent water conditions. Routine changes in Target Schedules shall be electronically communicated to Scheduling Entities on a pre-scheduling basis. The modification of the Target Schedule and the implementation or removal of energy restrictions due to special circumstances shall be communicated via voice or electronic means.
- 7.5 Monthly Energy Excursions: The Scheduling Entity or Contractor, when in need of a monthly energy excursion of more than +/- two (2) percent, but within +/- five (5) percent of Contractor's Available Energy from the Target Schedule, must request approval from the Western Scheduling Point of Contact (POC). The Western Scheduling POC will communicate to the Scheduling Entity approval or disapproval of the excursion requested based on power and hydro system conditions at the time of request and record the request. Contractor will forfeit energy for under-runs on unapproved excursions beyond the two (2) percent monthly window and five (5) percent Western approved window. Overruns in excess of two (2) percent that are not pre-approved or any overrun in excess of five (5) percent shall be assessed a penalty in accordance with Attachment No. 5, Schedule of Rates for Power Service, of the Contract.
- 7.6 Sub-Monthly Energy Requirement: The Scheduling Entity or Contractor is required to schedule within +/- two (2) percent of the Contractor's Available Energy for the first sub-monthly period identified on the Target Schedule each month. For each subsequent sub-monthly period, the Scheduling Entity or Contractor is required to schedule within +/- five (5) percent of the Contractor's Available Energy identified on the Target Schedule each month. Deviations outside of the applicable percentage requirements will be calculated for each period and are subject to forfeiture of energy and/or penalties in accordance with Attachment No. 5, Schedule of Rates for Electric Service, of the Contract.

7.7 Static Scheduling:

7.7.1 Capacity: Western will notify Scheduling Entities of hourly Contractor's Available Capacity according to the normal pre-scheduling calendar.

7.7.2 Energy: The Scheduling Entity will pre-schedule anticipated energy on a daily and hourly basis as follows:

7.7.2.1 Electronic-Tagging (e-Tag): Contractor will submit normal type e-Tags for its static schedule and adhere to NAESB, NERC, WECC, and FERC Interchange Standards and Requirements for normal type interchange schedules. Specific Western e-Tag requirements are provided in subsection 7.9, herein.

7.7.2.2 Sub-hourly Static Schedules: Contractor will submit sub-hourly normal type e-Tags as defined in subsection 7.7.2.1, herein and must include a separate capacity schedule. The Contractor will confirm the pre-scheduled hourly capacity schedule with Western's Scheduling POC by 1400 hours MST on the business day prior to execution, unless a later time is agreed to by Western and Contractor.

By 2300 hours MST each day, Contractor's Scheduling Entity Real Time Scheduling Desk will confirm the next day's hourly capacity schedule with Western's Real Time Marketer Desk.

Changes to any hourly capacity schedule must be communicated to Western thirty (30) minutes prior to the hour, excluding emergencies.

7.7.2.3 Inefficiencies for sub-hourly Static Schedules will be assessed for losses as described in subsection 7.8.9, herein.

7.7.2.4 The daily sum of tagged energy for Static Schedules in MST will be used by Western to assure that energy deliveries conform to monthly Contractor's Available Energy.

7.7.2.5 The daily sum of tagged energy for Static Schedules in MST will be the basis to establish energy deviation between Contractor and Western in section 10, herein.

7.8            Dynamic Scheduling:

- 7.8.1    Capacity: Western will notify Scheduling Entities of hourly Contractor's Available Capacity according to the normal pre-scheduling calendar. Scheduling Entities will pre-schedule required on-line capacity with Western on a daily and hourly basis as follows:
- 7.8.2    Daily: Contractor will communicate the pre-schedule hourly on-line capacity to Western's Scheduling POC by 1400 hours MST on the business day prior to execution, unless a later time is agreed to by Western and Contractor.

By 2300 hours MST each day, Contractor's Scheduling Entity Real Time Marketer Desk will confirm the next day's hourly capacity schedule with the WALC Dispatch POC.

- 7.8.3    Hourly Scheduled Capacity: Changes to capacity schedules will be communicated to the WALC Dispatch POC. Changes to any hourly schedule must normally be communicated (30) minutes prior to the hour.
- 7.8.4    Hourly Unscheduled Capacity: A Scheduling Entity may increase its capacity schedule and request up to its full Contractor's Available Capacity four (4) times per month outside of the hourly requirement of subsection 7.8.3. Western and Reclamation, at their determination, will make their best effort to supply Contractor's full capacity request within ten (10) minutes of the request. Western or Reclamation shall not be liable for costs incurred by Contractor if the capacity cannot be supplied or ramped to full load to meet reserve requirements as may be defined in a reserve sharing group or by WECC or NERC. Western may alter the number of unscheduled capacity changes per month allowed under this Section by written notice to Contractor.

- 7.8.5 Emergency Capacity Request: Following an emergency, determined by the Contractor based on standard utility practice, Contractor is entitled to increase the capacity schedule with the WALC Dispatch POC by verbal communication, up to the Contractor's Available Capacity and to the extent capacity is available, for up to twelve (12) consecutive hours, in accordance with subsection 6.11.3 of the Contract.

Western and Reclamation will make their best effort to supply energy associated with the requested Emergency Capacity, but shall not be liable for costs incurred by Contractor if the capacity cannot be supplied or ramped to full load to meet reserve requirements as may be defined in a reserve sharing group or by WECC or NERC.

- 7.8.6 Energy: Contractor will schedule energy on a daily and hourly basis as follows:

7.8.6.1 Energy Forecast: Contractor shall provide Western's scheduling POC by 1500 hours each day with an hourly forecast of dynamic energy to be scheduled for the following day.

7.8.6.2 Dynamic Schedules (Real Time): Contractor shall transmit an electronic signal of its Dynamic Schedule request to Western, within pre-scheduled Contractor's Available Capacity limits, once each Automatic Generation Control (AGC) cycle. Western will receive Contractor's Dynamic Schedule request and will reply with Western's electronic signal indicating that Contractor's schedule is accepted and confirmed. When either Party is unable to transmit or receive an electronic signal with the other Party, the Parties will voice request changes in hourly Hoover Powerplant generation.

7.8.6.3 Dynamic Schedules (Integrated): The hourly integral of Western's dynamic energy schedule signal, as provided by Western, is the Dynamic Schedule representing Contractor's energy delivery. The energy profile of the Dynamic Schedule e-Tag must be updated with this energy integration in accordance with WECC, NERC, FERC, and NAESB Dynamic Schedule e-Tagging Requirements.

7.8.6.4 Electronic-Tagging (e-Tag): The Scheduling Entity will submit e-Tags for its dynamic schedule and adhere to NAESB, NERC, WECC, and FERC Interchange Standards and Requirements for Dynamic Interchange Schedules. Specific Western e-Tag requirements are provided in subsection 7.9, herein.

- 7.8.7 The daily sum of integrated energy for Dynamic Schedules in MST will be used by Western to assure that energy deliveries conform to monthly Contractor's Available Energy.
- 7.8.8 The daily sum of integrated energy for Dynamic Schedules in MST will be the basis to establish energy deviation between Contractor and Western in section 10, herein.
- 7.8.9 Inefficiency:  $M_L$  and  $S_L$  as defined in Exhibit D of the Contract will accumulate hourly each month. The total inefficiency accumulated monthly shall be assessed monthly as part of the Energy Deemed Delivered which is billed the applicable LCRBDF rate and used to reduce the Target Schedule two (2) months after occurrence. Contractors may also select to return such energy from sources available to the Contractor other than the Hoover Powerplant during On-Peak Hours in the following Billing Period, or as soon thereafter as practicable.
- 7.8.10 Western will provide Ancillary Services in accordance with Attachment No. 3 of the Contract to Contractor as the Scheduling Entity schedules the energy dynamically.
- 7.8.11 Operating Reserves: Operating Reserves-Spinning, and Operating Reserves-Supplemental will be provided through hourly scheduled capacity. Western is not responsible for immediate full load response, such as from partial to full load increases without consideration for ramping in the requested energy component. The Contractor and Western will coordinate to establish acceptable ramp rates.
- 7.9 e-Tag Requirements:
- 7.9.1 The Scheduling Entity will submit requests for interchange (e-Tags) for its schedules and adhere to NAESB, NERC, WECC, and FERC Interchange Standards and Requirements for Interchange Schedules. Per e-Tag specifications, all e-Tags will have whole megawatt values and contain the following:
- 7.9.1.1 DSWM01 shall be the first Purchasing Selling Entity (PSE) listed in the Market Path.
- 7.9.1.2 WALC shall be the Source Balancing Authority (BA) with DSWM01 as the source PSE, and Hoover Powerplant as the Generating Source in the Physical Path.

7.9.1.3 The first Physical Segment (1) shall have the Point of Receipt (POR) and Point of Delivery (POD) as MEAD230 with DSWM01 as the PSE and WALC as the Transmission Provider.

7.9.1.4 The Scheduling Entity shall be the second PSE listed in the Physical Path with MEAD230 as the POR on the second Physical Segment (2).

7.9.2 All e-Tags submitted shall comply with NAESB Timing Requirements. Due to Western not having adequate time to perform a reliability assessment, all late requested e-Tags will not be approved.

7.9.3 If an Emergency type e-Tag is submitted and the Sink BA approves the e-Tag, Western will approve the transaction as the Source BA.

7.9.4 Sufficient firm transmission shall be required to schedule from MEAD230 to the Sink/Load. In addition, Dynamic and Sub-hourly Static Schedules normal type e-Tags must have sufficient firm transmission to transfer the maximum instantaneous generation for any hour.

8. **METERING:** Deliveries of capacity and energy are based upon scheduled quantities, therefore no meters are necessary for billing and accounting purposes.

9. **ENERGY AND CAPACITY CALCULATIONS:**

9.1 **Hourly Minimum Rate of Delivery of Energy:** Minimum power system and water release requirements are in accordance with subsection 6.9.3 of the Contract.

9.1.1 Contractor's hourly power system minimum schedule will be up to ten (10) percent of the Contractor's Available Capacity for current hour energy deliveries and next hour if requested by the WALC Dispatch POC.

9.1.2 Contractors hourly water minimum energy schedule will not exceed twenty-five (25) percent of Contractor's monthly energy allocation.

9.1.3 Contractor's Proportional share of total Firm Energy and Excess Energy for the Billing Period	X	Overall minimum rate of delivery of energy for required minimum water releases
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9.2 Contractor's Available Energy: The Contractor's Available Energy is in accordance with Exhibit C of the Contract and shall be determined by the following formula:

9.2.1  $CAE = (P \times B) - A + M + C + D$

Where (values deemed to be in thousands of kWh),

CAE = Contractor's Available Energy for the applicable period.

P = Contractor's percentage of total Schedule A, Schedule B, and Schedule D Firm Energy

B = Projected Hoover Firm Energy generation for the applicable period, including transformer and transmission line losses and projected integration with the Parker-Davis Project

A = Adjustments from previous month's accounting process including schedule deviation and  $M_L$  and  $S_L$  assessments

M =  $M_L$  and  $S_L$  return energy

C = Excess Energy for the applicable period available to the Contractor in accordance with Schedule C of the Contract

D = Contractor's requested Firming Energy purchase in accordance with subsection 6.9.4 of the Contract which are scheduled and accounted for separately from energy deemed to be from Hoover Powerplant

9.2.2 Contractor's Available Energy will then be rounded to the nearest whole megawatt hour for scheduling purposes.

9.3 Contractor's Energy Deemed Delivered: The Contractor's Energy Deemed Delivered shall be determined by the following formula:

9.3.1  $CEDD = S + (M_L)_C + (S_L)_C - (M_L)_C \text{ return} - (S_L)_C \text{ return}$

Where (values deemed to be in thousands of kWh),

$CEDD$  = Contractor's Energy Deemed Delivered for the applicable period

$S$  = Contractor's actual energy scheduled, delivered, calculated, and received for the applicable period

$(M_L)_C$  = Contractor's share of the Motoring Loss for the applicable period

$(S_L)_C$  = Contractor's share of the Unloaded Synchronized Generation Loss for the applicable period

$(M_L)_C \text{ return}$  =  $(M_L)_C$  from two (2) months previous

$(S_L)_C \text{ return}$  =  $(S_L)_C$  from two (2) months previous

9.3.2 Contractor's Energy Deemed Delivered will then be rounded to the nearest whole megawatt hour for energy accounting purposes.

9.4 Contractor's Available Capacity: Contractor's Available Capacity is in accordance with Exhibit C of the Contract and shall be determined by the following formula:

9.4.1  $CAC = (P \times B)$

Where (values deemed to be kW),

$CAC$  = Contractor's Available Capacity for the applicable period

$P$  = Contractor's percentage of total Schedule A, Schedule B, and Schedule D Contingent Capacity

$B$  = Available Capacity

9.4.2 Contractor's Available Capacity will then be rounded to the nearest whole megawatt for scheduling purposes.



10. **POWER ACCOUNTING:**

10.1 Excess Energy Allocation and Accounting Process:

- 10.1.1 Prior to the start of the Fiscal Year or after receiving the latest Reclamation Hoover forecast energy availability above 4,501,001 MWh for the Fiscal Year, Western will compute the total estimated energy for the BCP and determine the amount of total estimated energy, including Excess Energy, if any, available in the coming or current Fiscal Year. Reclamation may update such studies on a frequent basis and will provide such information to Western. Western may recalculate the total estimated energy as deemed appropriate.
- 10.1.2 The total estimated Excess Energy declared for a Fiscal Year will be equally distributed over the number of months remaining in such Fiscal Year based on the following principles:
  - 10.1.2.1 The priority rights of Schedule C entitlement will be determined based on Exhibit A of the Contract and an equal division of estimated Excess Energy will be added to the applicable Contractor's monthly Target Schedule, with adjustments for transformer and transmission line losses. The Excess Energy entitlement in the Target Schedule, once provided by Western to the Contractors prior to each month, will not be adjusted during the month of delivery unless: a water emergency is declared by Reclamation; a significant change in Colorado River regulating conditions occurs; an uncontrollable force impacts the Hoover Powerplant generation capability; or in order to deliver each Contractor's total entitlement.
- 10.1.3 During the Fiscal Year, estimated Excess Energy entitlement, based on the best available information, will be adjusted for actual deliveries and for changes in Reclamation's projected availability of Hoover Powerplant energy as determined by Western. The adjustment in energy will occur to the Target Schedule provided by Western prior to the month of delivery in an attempt to minimize over/under deliveries of energy.

- 10.1.4 During the Annual Energy Reconciliation process, the actual values of Schedule A, Schedule B, Schedule C, and Schedule D will be computed. Any deviations in Schedule A, Schedule B, Schedule C, and Schedule D between what was scheduled and received to the actual values will be returned or delivered the following Fiscal Year. A proposed schedule for return or delivery of deviation will be sent to each Contractor with the draft Annual Energy Reconciliation. The Contractor can provide written comments on the proposed schedule. These comments will be used to determine the schedule for returns or deliveries of deviation as adjustments to the Target Schedules during the current Fiscal Year.
- 10.1.5 Once the Annual Energy Reconciliation Report is final, the Annual Energy Reconciliation results will be used for the development of the Calculated Energy Rate. The Total Energy Delivered value (column K of Attachment No. 5, herein) in the Annual Energy Reconciliation Report will be used as the Energy Deemed Delivered value for the purposes of calculating the Calculated Energy Rate in accordance with section 7.8 of the Contract.
- 10.2 Capacity and Energy Delivery Verification: The data to be exchanged between Western and Scheduling Entity(ies) during and following each month is in MST as follows:
- 10.2.1 Daily Schedule Checkout – For Contractors who schedule dynamically, Western will verify the hourly scheduled totals equal Western’s totals of hourly integrated energy delivered. Any required adjustments will be requested by Western to the Scheduling Entity.
- 10.2.2 Sub-monthly Period Schedule Checkouts – Western will provide to the Scheduling Entity on a weekly basis the total energy and capacity used by Contractor cumulative for the month-to-date and by sub-monthly period.
- 10.2.3 Previous Month Data – Western will provide to the Scheduling Entity, by the first working day of each month, the following data for the previous month:
- 10.2.3.1 Actual hourly energy delivered for the entire month.
  - 10.2.3.2 Hourly capacity for the entire month.
  - 10.2.3.3 Sub-monthly period(s) energy total.

10.2.4 Concurrence of Monthly Schedules – The Scheduling Entity and Western will concur to the amount of energy and capacity scheduled by the fifth (5<sup>th</sup>) business day in accordance with subsection 10.2.3 (10.2.3.1 - 10.2.3.3).

10.3 Monthly Accounting: Monthly accounting reports will be distributed to the Contractor by the twenty-fifth (25<sup>th</sup>) day of the following month. These reports will include a monthly accounting report; a summary of schedules, losses and loss apportionment; Energy Deemed Delivered calculations per Contractor; Target Schedules for current and the next month; forecasted capacity entitlement for the next month; updated Master Schedule for the current Fiscal Year; and the projected operating schedule.

10.4 Deviation Accounting: Deviation accounting will be maintained between Contractor and Western to accommodate energy accounting adjustments. Monthly deviations are applied as adjustments in the Target Schedule two (2) months after occurrence. Any accumulated deviation remaining at the end of the Fiscal Year will be determined in the Annual Energy Reconciliation Report. Example provided in Attachment No. 5, herein.

Deviation accounts may include:

10.4.1 Delivery Concurrence: Agreed to under/over deliveries from energy

10.4.2 Losses: Transformer and transmission line losses

10.4.3 Any adjustments or reallocations of M<sub>L</sub> and S<sub>L</sub>

10.4.4 Other Deviation: Any additional deviation accounting will be mutually agreed upon

10.5 Annual Energy Reconciliation: The Annual Energy Reconciliation for each Fiscal Year will account for the accumulated deviation for each Contractor on an annual basis. This accounting confirms that each MWh of energy generated at BCP for each month in the Fiscal Year is allocated to the Contractors.

10.5.1 Monthly Accumulated Deviation: The components and calculation for the Monthly Accumulated Deviation will be printed on each Contractor's BCP Reconciliation sheet.

10.5.2 End Notes: Billing discrepancies or special adjustments will be listed, as needed, in the Annual Energy Reconciliation document.

10.5.3 Distribution: Within six (6) weeks after the end of the Fiscal Year, a draft Annual Energy Reconciliation Report (Report) will be distributed by Western to the Contractors. The Contractors shall make every effort to review and provide comments to Western's draft Report no later than four (4) weeks of receipt. Western shall address, resolve comments, and issue the final Report within four (4) weeks after the Contractors' comment period.

**CONTRACTOR'S SCHEDULING ENTITY AND  
POINT OF CONTACTS**

Contractor agrees to designate and provide contact information, identified herein, of its Scheduling Entity for scheduling Contractor's Contract capacity and energy. Modifications to Contractor's Scheduling Entity contact information shall provide notification to the other Party, in accordance with subsection 7.1.1, herein by submitting a revised Attachment No. 1.

**Contractor's Balancing Authority for  
Energy Deliveries**

California Independent System Operator

**Contractor's Scheduling Entity**

Company Name:

City of Riverside

Attn:

Reiko Kerr

Mailing Address:

3435 14<sup>th</sup> Street, Suite 100  
Riverside, CA 92501

**Pre-Scheduling Contact Information**

Name:

Jesus Martinez

Position:

Utilities Principal Resource Analyst

Phone:

(951) 715-3542

Fax:

(951) 715-3562

E-mail:

marketops@riversideca.gov

**Real Time Scheduling Desk Contact**

Primary Phone:

(951) 715-3519

Alternate Phone:

(951) 826-8519

Fax:

(951) 715-3404

E-mail:

marketops@riversideca.gov

**Settlements Contact Information**

Name:

Cindi Leinenkugel

Position:

Utilities Principal Resource Analyst

Phone:

(951) 826-8514

E-mail:

settlements@riversideca.gov

**Invoicing Point of Contact**

Name:

Cindi Leinenkugel

Phone:

(951) 826-8514

E-mail:

settlements@riversideca.gov

**WESTERN'S POINT OF CONTACTS**

Western agrees to designate and provide scheduling Point of Contact (POC) information, identified herein, for scheduling the Contractor's Contract capacity and energy. Modifications to Western's scheduling POC information shall be immediately communicated to the other Party by a revised Attachment No. 2.

**Western's Scheduling POC**

Company Name:	Western Area Power Administration
Attn:	G0200 Desert Southwest Region (DSW) Energy Management and Marketing Office
Mailing Address:	P.O. Box 6457 Phoenix, AZ 85005-6457
Street Address:	615 South 43rd Avenue Phoenix, AZ 85009
Scheduling Desk:	(602) 605-2712
Real Time Marketer Desk:	(602) 605-2666
Scheduling Fax:	(602) 605-2831
Target Excursion Requests:	(602) 605-2666

**WALC Dispatch POC**

Name:	J4900 Operations Reliability & Balancing Authority
Real Time Desk Phone:	(602) 605-2512

**Western's Settlements POC**

Name:	G6300 Settlements Staff
Phone:	(602) 605-2947
E-Mail:	walcpostschedule@wapa.gov

**Invoicing Point of Contact**

**For billing inquiries and address changes refer to the contact information printed on Western's invoice.**

**EXAMPLE MASTER SCHEDULE**

Pending insertion of  
example Master Schedule.

**EXAMPLE TARGET SCHEDULE**

Pending insertion of  
example Target Schedule.



**EXAMPLE ANNUAL ENERGY RECONCILIATION REPORT**

Pending insertion of  
example annual energy  
reconciliation report.

### **ESTABLISHING A DYNAMIC SCHEDULE**

The Contractor may request to establish a dynamic schedule, or request to change from a static to a dynamic schedule type as provided in subsection 7.1.7. This option is also available to Tribal Benefit Crediting Partners. The following steps describe the work necessary to establish a dynamic schedule with WALC.

1. The Contractor must send a written request to evaluate establishing a dynamic schedule to Western's Vice President of Power Marketing for DSW.
2. Western will respond with instructions to advance fund the costs to evaluate the project.
3. Once the project has been funded, Western will coordinate with the Contractor and/or its Scheduling Entity and the sink balancing authority to evaluate the labor hours and equipment required to implement a dynamic schedule, including but not limited to:
  - 3.1 Western Power Marketing contract or letter agreement coordination and development
  - 3.2 Communications, network, firewall equipment or software installations, configuration, and testing
  - 3.3 Inter-Control Center Communication Protocol (ICCP) servers, data associations, objects, and testing
  - 3.4 Supervisory Control and Data Acquisition (SCADA) development, programming, testing, and implementation
  - 3.5 SCADA historian modifications
  - 3.6 Energy accounting and reporting modifications
  - 3.7 Capacity allocation and scheduling program modifications
  - 3.8 Procedure updates and training
  - 3.9 Program and test dispatch phone contacts
  - 3.10 e-Tag coordination and testing
  - 3.11 Project coordination
4. Western will send a letter agreement that describes responsibilities for work to be completed, a timeline for completion, and instructions to advance fund costs of the project if the Contractor decides to implement the dynamic schedule.
5. Once funds are received and the project is established, Western will assign a project manager and commence coordination of the project to implement the dynamic schedule.