

Attachment No. 6  
Contract No. 16-DSR-12626  
Arizona Power Authority

**CONTRACT NO. 16-DSR-12626**

**METERING AND SCHEDULING INSTRUCTIONS**

**BETWEEN**

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

**AND**

**ARIZONA POWER AUTHORITY**

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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

### AUTHORITY POWER AUTHORITY

1. **PARTIES:** The Parties to these Metering and Scheduling Instructions (MSI) are Western Area Power Administration (Western) and the Arizona Power Authority (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-12669 (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on October 1, 2016, for power provided on October 1, 2017, and shall remain in effect through September 30, 2067, until superseded by revised instructions or termination of the Contract and Restated Agreement listed in section 2, herein.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**

**Contractor's Scheduling Entity**

Company Name:

Attn:

Mailing Address:

**Pre-Scheduling Contact Information**

Name:

Linda Sullivan

Position:

Phone:

(602) 368-4265

Fax:

E-mail:

[linda@powerauthority.org](mailto:linda@powerauthority.org)

**Real Time Scheduling Desk Contact**

Primary Phone:

(602) 368-4265

Alternate Phone:

Fax:

E-mail:

[linda@powerauthority.org](mailto:linda@powerauthority.org)

**Settlements Contact Information**

Name:

Linda Sullivan

Position:

Phone:

(602) 368-4265

E-mail:

[linda@powerauthority.org](mailto:linda@powerauthority.org)

**Invoicing Point of Contact**

Name:

Linda Sullivan

Position:

Phone:

(602) 368-4265

E-mail:

[linda@powerauthority.org](mailto:linda@powerauthority.org)

**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](mailto: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.