

UNITED STATES DEPARTMENT OF ENERGY
SOUTHWESTERN POWER ADMINISTRATION

RATE SCHEDULE P-09¹
WHOLESALE RATES FOR
HYDRO PEAKING POWER

Effective:

During the period January 1, 2010, through September 30, 2013, in accordance with Federal Energy Regulatory Commission order issued October 4, 2010, Docket No. EF10-4-000.

Available:

In the marketing area of Southwestern Power Administration (Southwestern), described generally as the States of Arkansas, Kansas, Louisiana, Missouri, Oklahoma, and Texas.

Applicable:

To wholesale Customers which have contractual rights from Southwestern to purchase Hydro Peaking Power and associated energy (Peaking Energy and Supplemental Peaking Energy).

Character and Conditions of Service:

Three-phase, alternating current, delivered at approximately 60 Hertz, at the nominal voltage(s), at the points of delivery, and in such quantities as are specified by contract.

Definitions of Terms:

"*Customer*" is the entity which is utilizing and/or purchasing hydroelectric power and associated energy and services from Southwestern pursuant to this rate schedule.

The "*Demand Period*" used to determine maximum integrated rates of delivery for the purpose of power accounting is the 60-minute period which begins with the change of hour. The term "*peak demand*" means the highest rate of delivery, in kilowatts, for any Demand Period during a particular month, at any particular point of delivery.

For the purposes of this Rate Schedule, the term "*point of delivery*" is used to mean either a single physical point at which electric power and energy are delivered from the System of Southwestern (defined below), or a specified set of delivery points which together form a single, electrically integrated load. "Peak demand" for such set of delivery points is computed as the coincidental highest rate of delivery among the specified points rather than as the sum of peak demands for each individual physical point of delivery.

The term "*Peaking Contract Demand*" means the maximum rate in kilowatts at which Southwestern is, by contract, obligated to deliver Peaking Energy during any Demand Period. Unless otherwise provided by contract, the "*Peaking Billing Demand*" for any month shall be equal to the "Peaking Contract Demand."

¹ Supersedes Rate Schedule P-06A

The term "*Uncontrollable Force*," as used herein, shall mean any force which is not within the control of the party affected, including, but not limited to failure of water supply, failure of facilities, flood, earthquake, storm, lightning, fire, epidemic, war, riot, civil disturbance, labor disturbance, sabotage, or restraint by court of general jurisdiction, which by exercise of due diligence and foresight such party could not reasonably have been expected to avoid.

The term "*System of Southwestern*" means the high-voltage transmission lines and related facilities Southwestern owns and operates, and/or has contractual rights to such transmission facilities owned by others.

"*Ancillary Services*" are those services necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the System of Southwestern in accordance with good utility practice. Definitions of the Ancillary Services are as follows:

"*Scheduling, System Control, and Dispatch Service*" is provided by Southwestern as Balancing Authority Area operator and is in regard to interchange and load-match scheduling and related system control and dispatch functions.

"*Reactive Supply and Voltage Control from Generation Sources Service*" is provided at transmission facilities in the System of Southwestern to produce or absorb reactive power and to maintain transmission voltages within specific limits.

"*Regulation and Frequency Response Service*" is the continuous balancing of generation and interchange resources accomplished by raising or lowering the output of on-line generation as necessary to follow the moment-by-moment changes in load and to maintain frequency within a Balancing Authority Area.

"*Spinning Operating Reserve Service*" maintains generating units on-line, but loaded at less than maximum output, which may be used to service load immediately when disturbance conditions are experienced due to a sudden loss of generation or load.

"*Supplemental Operating Reserve Service*" provides an additional amount of operating reserve sufficient to reduce Area Control Error to zero within 10 minutes following loss of generating capacity which would result from the most severe single contingency.

"*Energy Imbalance Service*" corrects for differences over a period of time between schedules and actual hourly deliveries of energy to a load. Energy delivered or received within the authorized bandwidth (defined below) for this service is accounted for as an inadvertent flow and is returned to the providing party by the receiving party in accordance with standard utility practice.

Energy Associated with Hydro Peaking Power:

PEAKING ENERGY:

1,200 kilowatthours of Peaking Energy per kilowatt of Peaking Contract Demand will be furnished during each contract year.

SUPPLEMENTAL PEAKING ENERGY:

Supplemental Peaking Energy (in addition to Peaking Energy) will be furnished if and when determined by Southwestern to be available, and at rates of delivery which do not exceed the Customer's Peaking Contract Demand.

Monthly Rates for Peaking Contract Demand:**CAPACITY CHARGE FOR HYDRO PEAKING POWER:**

\$4.06 per kilowatt of Peaking Billing Demand

Services Associated with Capacity Charge for Hydro Peaking Power

The capacity charge for Hydro Peaking Power includes such transmission services as are necessary to integrate Southwestern's resources in order to reliably deliver Hydro Peaking Power and associated energy to Customers. This capacity charge also includes two ancillary services charges, Scheduling, System Control and Dispatch Service and Reactive Supply and Voltage Control from Generation Sources Service.

Secondary Transmission Service under Capacity Associated with Hydro Peaking Power

Customers may utilize the capacity associated with Peaking Contract Demand for the transmission of non-Federal energy, on a non-firm, as-available basis, at no additional charge for such transmission service or associated Ancillary Services, under the following terms and conditions:

- (1) the sum of the capacity, for any hour, which is used for Peaking Energy, Supplemental Peaking Energy, and Secondary Transmission Service, may not exceed the Peaking Contract Demand;
- (2) the non-Federal energy transmitted under such secondary service is delivered to the Customer's point of delivery for Hydro Peaking Power;
- (3) the Customer commits to provide Real Power Losses associated with such deliveries of non-Federal energy; and
- (4) Southwestern determines that sufficient transfer capability exists between the point of receipt into the System of Southwestern of such non-Federal energy and the Customer's point of delivery for Hydro Peaking Power for the time period that such secondary transmission service is requested.

Rates for Energy Associated with Hydro Peaking Power:(a) **PEAKING ENERGY CHARGE:**

\$0.0086 per kilowatthour of Peaking Energy delivered; plus (c).

SUPPLEMENTAL ENERGY CHARGE:

\$0.0086 per kilowatthour of Supplemental Peaking Energy delivered

- (b) A purchased power adder of \$0.0067 per kilowatthour of Peaking Energy delivered, as adjusted by the Administrator, Southwestern, in accordance with the procedure within this rate schedule. This adder does not apply to:

Supplemental Peaking Energy, or

Sales to any Customer which, by contract, has assumed the obligation to supply energy to fulfill the minimum of 1,200 kilowatthours of Peaking Energy per kilowatt of Peaking Contract Demand during a contract year (Contract Support Arrangements).

Monthly Rates for Transformation Service:

CAPACITY CHARGES FOR TRANSFORMATION SERVICE: A charge of \$0.42 per kilowatt will be assessed for capacity used to deliver energy at any point of delivery at which Southwestern provides transformation service for deliveries at voltages of 69 kilovolts or less from higher voltage facilities.

Application of Capacity Charges for Transformation Service

For any particular month, charges for transformation service will be assessed on the greater of (1) that month's actual peak demand, or (2) the highest peak demand recorded during the previous 11 months, at any point of delivery. For the purpose of this Rate Schedule, the peak demand will be based on all deliveries, of both Federal and non-Federal energy, from the System of Southwestern, at such point during such month.

Rates for Ancillary Services:

CAPACITY CHARGES FOR ANCILLARY SERVICES:

- (a) Regulation and Frequency Response Service:
Monthly rate of \$0.09 per kilowatt of Peaking Billing Demand
- (b) Spinning Operating Reserve Service:
Monthly rate of \$0.0092 per kilowatt of Peaking Billing Demand
Daily rate of \$0.00042 per kilowatt for non-Federal generation inside Southwestern's Balancing Authority Area.
- (c) Supplemental Operating Reserve Service:
Monthly rate of \$0.0092 per kilowatt of Peaking Billing Demand
Daily rate of \$0.00042 per kilowatt for non-Federal generation inside Southwestern's Balancing Authority Area.
- (d) Energy Imbalance Service:
\$0.0 per kilowatt for all reservation periods.

Availability of Ancillary Services

Regulation and Frequency Response Service and Energy Imbalance Service are available only for deliveries of power and energy to load within Southwestern's Balancing Authority Area. Spinning and Supplement Operating Reserve Services are available only for deliveries of non-Federal power and energy generated by resources located within Southwestern's Balancing Authority Area and for deliveries of all Hydro Peaking Power and associated energy from and within Southwestern's Balancing Authority Area. Where available, such Ancillary Services must be taken from Southwestern; unless, arrangements are made in accordance with the "Provision of Ancillary Services by Others" section of this rate schedule.

Application of Ancillary Services Charges

For any month, the charges for Ancillary Services listed above for deliveries of Hydro Peaking Power shall be based on the Peaking Billing Demand.

The daily charge for Spinning and Supplemental Operating Reserve Services for non-Federal generation inside Southwestern's Balancing Authority Area shall be applied to the greater of Southwestern's previous day's estimate of the peak, or the actual peak, in kilowatts, of the internal non-Federal generation.

Provision of Ancillary Services by Others

Customers for which Ancillary Services are made available as specified above, must inform Southwestern by written notice of the Ancillary Services which they do not intend to take and purchase from Southwestern, and of their election to provide all or part of such Ancillary Services from their own resources or from a third party.

Subject to Southwestern's approval of the ability of such resources or third parties to meet Southwestern's technical and operational requirements for provision of such Ancillary Services, the Customer may change the Ancillary Services which it takes from Southwestern and/or from other sources at the beginning of any month upon the greater of 60 days notice or upon completion of any necessary equipment modifications necessary to accommodate such change;

Provided; that if the Customer chooses not to take Regulation and Frequency Response Service, which includes the associated Regulation Purchased Adder, the Customer must pursue these services from a different host Balancing Authority; thereby moving all metered loads and resources from Southwestern's Balancing Authority Area to the Balancing Authority Area of the new host Balancing Authority. Until such time as that meter reconfiguration is accomplished, the Customer will be charged for the Regulation and Frequency Response Service and Adder then in effect. The Customer must notify Southwestern by July 1 of this choice, to be effective January 1 of the subsequent calendar year. Provided; that such Customers shall be assessed for all costs incurred by Southwestern for the Regulation Purchased Adder for the calendar year in which they give notice. Such assessment will be paid in twelve equal monthly payments during the subsequent calendar year.

Regulation Purchased Adder

From time to time, at Southwestern's sole discretion, Southwestern will make a determination that additional regulation purchases are necessary in order to meet its Balancing Authority Area requirements. With the exception of the initial year of implementation, this Regulation Purchased Adder will be estimated annually before May 1, and Southwestern will provide written notice to Customers of the estimated Regulation Purchased Adder charge to be recovered in the next calendar year. Provided; that should Southwestern incur additional costs beyond the estimate, such cost will be included in the Regulation Purchased Adder for that same calendar year.

The monthly charge will be placed into effect from January 1 through December 31. The cost for such Regulation Purchased Adder shall be recovered by Customers located within Southwestern's Balancing Authority Area on a non-coincident peak load-ratio share (LRS) basis, divided into twelve equal monthly payments. If the Regulation Purchased Adder is determined and applied under rate schedule NFTS-09, then it shall not be applied here.

The Regulation Purchased Adder is based on the following formula rate, calculated to include the costs incurred by Southwestern for regulation purchases for the previous calendar year.

REGULATION PURCHASED ADDER FORMULA

$$RPA = (LRS_{\text{customer}} \times RP) \div 12$$

Where:

$$LRS_{\text{customer}} = \frac{\text{(Net Load + Generation for the Customer Peak Hour)}}{\text{Balancing Area Authority Non-Coincident Peak Load}}$$

$$RP = \frac{\text{(Dollar per MWh of Regulation Purchased - Supplemental Energy Rate)}}{\text{xTotal MWh of Regulation Purchased.}}$$

With factors defined as follows:

RPA = The customer' specific monthly dollar amount of Regulation Purchased Adder.

LRS_{customer} = The ratio of net load and generation for the customer peak hour in the previous calendar year, to the sum of the non-coincident net load and generation for each customer in the Balancing Authority Area for the same period.

RP = The dollar amount per megawatthour of regulation purchased, less the supplemental energy rate times the total megawatthour of regulation purchased.

Limitations on Energy Imbalance Service

Energy Imbalance Service primarily applies to deliveries of power and energy which are required to satisfy a Customer's load. As Hydro Peaking Power and associated energy are limited by contract, the Energy Imbalance Service bandwidth specified for Non-Federal Transmission Service does not apply to deliveries of Hydro Peaking Power, and therefore Energy Imbalance Service is not charged on such deliveries. Customers who consume a capacity of Hydro Peaking Power greater than their Peaking Contract Demand may be subject to a Capacity Overrun Penalty.

Application of Capacity Overrun Penalty

Customers which have loads within Southwestern's Balancing Authority Area are obligated by contract to provide resources, over and above the Hydro Peaking Power and associated energy purchased from Southwestern, sufficient to meet their loads. A Capacity Overrun Penalty shall be applied only when the formulas provided in Customers' contracts indicate an overrun on Hydro Peaking Power, and investigation determines that all resources, both firm and non-firm, which were available at the time of the apparent overrun were insufficient to meet the Customer's load.

CAPACITY OVERRUN PENALTY

For each hour during which Hydro Peaking Power was provided at a rate greater than that to which the Customer is entitled, the Customer will be charged a capacity overrun penalty at the following rates:

Months Associated With Charge	Rate per Kilowatt
March, April, May, October, November, December	\$0.15
January, February, June, July, August, September	\$0.30

Application of Energy Overrun Penalty:

By contract, the Customer is subject to limitations on the maximum amounts of Peaking Energy which may be scheduled during any month or during any four consecutive months. When the Customer schedules an amount in excess of such maximum amounts for any month, or schedules more than 1,200 hours of Peaking Energy per kilowatt of Peaking Contract Demand in any contract year, such Customer is subject to the Energy Overrun Penalty.

ENERGY OVERRUN PENALTY:

For each kilowatthour of overrun: \$0.0902 per kilowatthour

Real Power Losses

Customers are required to self-provide all Real Power Losses for non-Federal energy transmitted by Southwestern on behalf of such Customers under the provisions detailed below.

Real Power Losses are computed as four (4) percent of the total amount of non-Federal energy transmitted by Southwestern. The Customer's Monthly Real Power Losses are computed each month on a megawatthour basis as follows:

$$ML = .04 \times NFE$$

with the factors defined as follows:

ML = The total monthly loss energy, rounded to the nearest megawatthour, to be scheduled by a Customer for receipt by Southwestern for Real Power Losses associated with non-Federal energy transmitted on behalf of such Customer; and

NFE = The amount of non-Federal energy that was transmitted by Southwestern on behalf of a Customer during a particular month.

The Customer must schedule or cause to be scheduled to Southwestern, Real Power Losses for which it is responsible subject to the following conditions:

- (1) The Customer shall schedule and deliver real power losses back to Southwestern during the second month after they were incurred by Southwestern in the transmission of the Customer's non-Federal power and energy over the System of Southwestern.
- (2) On or before the twentieth day of each month, Southwestern shall determine the amount of non-Federal loss energy it provided on behalf of the Customer during the previous month and provide a written schedule to the Customer setting forth hour-by-hour the quantities of non-Federal energy to be delivered to Southwestern as losses during the next month.

- (3) Real Power Losses not delivered to Southwestern by the Customer, according to the schedule provided, during the month in which such losses are due shall be billed by Southwestern to the Customer to adjust the end-of-month loss energy balance to 0 megawatthours and the Customer shall be obliged to purchase such energy at the following rates:

Months Associated with Charge	Rate per Kilowatthour
March, April, May, October, November, December	\$0.15
January, February, June, July, August, September	\$0.30

- (4) Real Power Losses delivered to Southwestern by the Customer in excess of the losses due during the month shall be purchased by Southwestern from the Customer at a rate per megawatthour equal to Southwestern's rate per megawatthour for Supplemental Peaking Energy, as set forth in Southwestern's then-effective Rate Schedule for hydro peaking power to adjust such hourly end-of-month loss energy balance to 0 megawatthours.

Requirements Related to Power Factor:

Any Customer served from facilities owned by or available by contract to Southwestern will be required to maintain a power factor of not less than 95 percent and will be subject to the following provisions.

Determination of Power Factor:

The power factor will be determined for all Demand Periods and shall be calculated under the formula:

$$PF = (kWh) \div \sqrt{(kWh^2 + rkVAh^2)} ,$$

with the factors defined as follows:

PF = the power factor for any Demand Period of the month.

kWh = the total quantity of energy which is delivered during such Demand Period to the point of delivery or interconnection.

rkVAh = the total quantity of reactive kilovolt-ampere-hours (kvars) delivered during such Demand Period to the point of delivery or interconnection.

Power Factor Penalty and Assessment:

The Customer shall be assessed a penalty for all Demand Periods of a month where the power factor is less than 95 percent lagging. For any Demand Period during a particular month such penalty shall be in accordance with the following formula:

$$C = D \times (.95-LPF) \times \$0.10$$

with the factors defined as follows:

- C = The charge in dollars to be assessed for any particular Demand Period of such month that the Determination of Power Factor "PF" is calculated to be less than 95 percent lagging.
- D = The Customer's demand in kilowatts at the point of delivery for such Demand Period in which a low power factor was calculated.
- LPF = The lagging power factor, if any, determined by the formula "PF" for such Demand Period.

If C is negative, then C = zero (0).

Application of Power Factor Penalty:

The Power Factor Penalty is applicable to radial interconnections with the System of Southwestern. The total Power Factor Penalty for any month shall be the sum of all charges "C" for all Demand Periods of such month. No penalty is assessed for leading power factor. Southwestern, in its sole judgment and at its sole option, may determine whether power factor calculations should be applied to a single physical point of delivery or to multiple physical points of delivery where a Customer has a single, electrically integrated load served through multiple points or interconnections. The general criteria for such decision shall be that, given the configuration of the Customer's and Southwestern's systems, Southwestern will determine, in its sole judgment and at its sole option, whether the power factor calculation more accurately assesses the detrimental impact on Southwestern's system when the above formula is calculated for a single physical point of delivery or for a combination of physical points or for an interconnection as specified by an Interconnection Agreement.

Southwestern, at its sole option, may reduce or waive power factor penalties when, in Southwestern's sole judgment, low power factor conditions were not detrimental to the System of Southwestern due to particular loading and voltage conditions at the time the power factor dropped below 95 percent lagging.

Adjustment for Reduction in Service:

If, during any month, the quantity of Peaking Contract Demand of Southwestern's 1200 hour peaking power sales customers that is scheduled by the customer for delivery is reduced by Southwestern for a period or periods of not less than two consecutive hours by reason of an outage caused by either an Uncontrollable Force or by the installation, maintenance, replacement or malfunction of generation, transmission and/or related facilities on the System of Southwestern, or insufficient pool levels, the Customer's capacity charges for such month will be reduced for each such reduction in service by an amount computed under the formula:

$$R = (C \times K \times H) \div S$$

with the factors defined as follows:

- R = the dollar amount of reduction in the monthly total capacity charges for a particular reduction of not less than two consecutive hours during any month, except that the total amount of any such reduction shall not exceed the product of the Customer's capacity charges associated with Hydro Peaking Power times the Peaking Billing Demand.

- C = the Customer's capacity charges associated with Hydro Peaking Power for the Peaking Billing Demand for such month.
- K = the reduction in kilowatts in Peaking Billing Demand for a particular event.
- H = the number of hours duration of such particular reduction.
- S = the number of hours that Peaking Energy is scheduled during such month, but not less than 60 hours times the Peaking Contract Demand.

Such reduction in charges shall fulfill Southwestern's obligation to deliver Peaking Power and Peaking Energy.

Procedure for Determining Southwestern's Net Purchased Power Adder Adjustment

Not more than twice annually, the Purchased Power Adder of \$.0067 (6.7 mills) per kilowatthour of Peaking Energy, as noted in this Rate Schedule, may be adjusted by the Administrator, Southwestern, by an amount up to a total of \pm \$.0067 (6.7 mills) per kilowatthour per year, as calculated by the following formula:

$$\text{ADJ} = (\text{PURCH} - \text{EST} + \text{DIF}) \div \text{SALES}$$

with the factors defined as follows:

- ADJ = the dollar per kilowatthour amount of the total adjustment, plus or minus, to be applied to the Net Purchased Power Adder, rounded to the nearest \$.0001 per kilowatthour, provided that the total ADJ to be applied in any year shall not vary from the then-effective ADJ by more than \$.0067 per kilowatthour;
- PURCH = the actual total dollar cost of Southwestern's System Direct Purchases as accounted for in the financial records of the Southwestern Federal Power System for the period;
- EST = the estimated total dollar cost (\$15,064,500 per year) of Southwestern's System Direct Purchases used as the basis for the Purchased Power Adder of \$.0067 per kilowatthour of Peaking Energy;
- DIF = the accumulated remainder of the difference in the actual and estimated total dollar cost of Southwestern's System Direct Purchases since the effective date of the currently approved Purchased Power Adder set forth in this rate schedule, which remainder is not projected for recovery through the ADJ in any previous periods;
- SALES = the annual Total Peaking Energy sales projected to be delivered (2,241,300,000 KWh per year) from the System of Southwestern, which total was used as the basis for the \$.0067 per kilowatthour Purchased Power Adder.