

UNITED STATES DEPARTMENT OF ENERGY
SOUTHWESTERN POWER ADMINISTRATION
RATE SCHEDULE P-13¹
WHOLESALE RATES FOR HYDRO PEAKING POWER

¹ Supersedes Rate Schedule P-11.

Effective:

During the period October 1, 2013, through September 30, 2017, in accordance with interim approval from Rate Order No. SWPA-66 issued by the Deputy Secretary of Energy on September 30, 2013 and pursuant to final approval by the Federal Energy Regulatory Commission.

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 point(s) of delivery, and in such quantities as are specified by contract.

1. Definitions of Terms

1.1. Ancillary Services

The 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, which include the following:

1.1.1. 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.

1.1.2. 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.

1.1.3. 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.

1.1.4. 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.

1.1.5. 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.

1.1.6. 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 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 or a contractual arrangement between the parties.

1.2. Customer

The entity which is utilizing and/or purchasing Federal Power and Federal Energy and services from Southwestern pursuant to this Rate Schedule.

1.3. Demand Period

The period of time used to determine maximum integrated rates of delivery for the purpose of power accounting which is the 60-minute period that begins with the change of hour.

1.4. Federal Power and Energy

The power and energy provided from the System of Southwestern.

1.5. Hydro Peaking Power

The Federal Power that Southwestern sells and makes available to the Customers through their respective Power Sales Contracts in accordance with this Rate Schedule.

1.6. Peaking Billing Demand

The quantity equal to the Peaking Contract Demand for any month unless otherwise provided by the Customer's Power Sales Contract.

1.7. Peaking Contract Demand

The maximum rate in kilowatts at which Southwestern is obligated to deliver Federal Energy associated with Hydro Peaking Power as set forth in the Customer's Power Sales Contract.

1.8. Peaking Energy

The Federal Energy associated with Hydro Peaking Power that Southwestern sells and makes available to the Customer in accordance with the terms and conditions of the Customer's Power Sales Contract.

1.9. Power Sales Contract

The Customer's contract with Southwestern for the sale of Federal Power and Federal Energy.

1.10. Supplemental Peaking Energy

The Federal Energy associated with Hydro Peaking Power that Southwestern sells and makes available to the Customer if determined by Southwestern to be available and that

is in addition to the quantity of Peaking Energy purchased by the Customer in accordance with the terms and conditions of the Customer's Power Sales Contract.

1.11. System of Southwestern

The transmission and related facilities owned by Southwestern, and/or the generation, transmission, and related facilities owned by others, the capacity of which, by contract, is available to and utilized by Southwestern to satisfy its contractual obligations to the Customer.

1.12. Uncontrollable Force

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, riot, civil disturbance, labor disturbance, sabotage, war, act of war, terrorist acts, 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.

2. Wholesale Rates, Terms, and Conditions for Hydro Peaking Power, Peaking Energy, Supplemental Peaking Energy, and Associated Services

Unless otherwise specified, this Section 2 is applicable to all sales under the Customer's Power Sales Contract.

2.1. Hydro Peaking Power Rates, Terms, and Conditions

2.1.1. Monthly Capacity Charge for Hydro Peaking Power

\$4.50 per kilowatt of Peaking Billing Demand.

2.1.2. 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 the Customer. 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.

2.1.3. Secondary Transmission Service under Capacity Associated with Hydro Peaking Power

Customers may utilize the transmission 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:

2.1.3.1. 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;

2.1.3.2. The non-Federal energy transmitted under such secondary service is delivered to the Customer's point of delivery for Hydro Peaking Power;

2.1.3.3. The Customer commits to provide Real Power Losses associated with such deliveries of non-Federal energy; and

2.1.3.4. 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.

2.1.4. Adjustment for Reduction in Service

If, during any month, the Peaking Contract Demand associated with a Power Sales Contract in which Southwestern has the obligation to provide 1,200

kilowatthours of Peaking Energy per kilowatt of Peaking Contract Demand 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 Hydro Peaking Power and Peaking Energy.

2.2. Peaking Energy and Supplemental Peaking Energy Rates, Terms, and Conditions

2.2.1. Peaking Energy Charge

\$0.0094 per kilowatthour of Peaking Energy delivered plus the Purchased Power Adder as defined in Section 2.2.3 of this Rate Schedule.

2.2.2. Supplemental Energy Charge

\$0.0094 per kilowatthour of Supplemental Peaking Energy delivered.

2.2.3. Purchased Power Adder

A purchased power adder of \$0.0059 per kilowatthour of Peaking Energy delivered, as adjusted by the Administrator, Southwestern, in accordance with the procedure within this Rate Schedule.

2.2.3.1. Applicability of Purchased Power Adder

The Purchased Power Adder shall apply to sales of Peaking Energy. The Purchased Power Adder shall not apply to sales of 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 (hereinafter "Contract Support Arrangements").

2.2.3.2. Procedure for Determining Net Purchased Power Adder Adjustment

Not more than twice annually, the Purchased Power Adder of \$0.0059 (5.9 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 \$0.0059 (5.9 mills) per kilowatthour per year, as calculated by the following formula:

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

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 \$0.0001 per kilowatthour, provided that the total ADJ to be applied in any year shall not vary from the then-effective ADJ by more than \$0.0059 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 (\$13,273,800 per year) of Southwestern's System Direct Purchases used as the basis for the Purchased Power Adder of \$0.0059 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 \$0.0059 per kilowatthour Purchased Power Adder.

2.3. Transformation Service Rates, Terms, and Conditions

2.3.1. Monthly Capacity Charge for Transformation Service

\$0.46 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.

2.3.2. Applicability of Capacity Charge for Transformation Service

Unless otherwise specified by contract, for any particular month, a charge for transformation service will be assessed on the greater of (1) that month's highest metered demand, or (2) the highest metered demand recorded during the previous 11 months, at any point of delivery. For the purpose of this Rate Schedule, the highest metered 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.

2.4. Ancillary Services Rates, Terms, and Conditions

2.4.1. Capacity Charges for Ancillary Services

2.4.1.1. Regulation and Frequency Response Service

Monthly rate of \$0.07 per kilowatt of Peaking Billing Demand plus the Regulation Purchased Adder as defined in Section 2.4.5 of this Rate Schedule.

2.4.1.2. Spinning Operating Reserve Service

Monthly rate of \$0.0146 per kilowatt of Peaking Billing Demand.

Daily rate of \$0.00066 per kilowatt for non-Federal generation inside Southwestern's Balancing Authority Area.

2.4.1.3. Supplemental Operating Reserve Service

Monthly rate of \$0.0146 per kilowatt of Peaking Billing Demand.

Daily rate of \$0.00066 per kilowatt for non-Federal generation inside Southwestern's Balancing Authority Area.

2.4.1.4. Energy Imbalance Service

\$0.0 per kilowatt for all reservation periods.

2.4.2. 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 Operating Reserve Service and Supplemental Operating Reserve Service 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 Section 2.4.4 of this Rate Schedule.

2.4.3. Applicability of Charges for Ancillary Services

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

The daily charge for Spinning Operating Reserve Service and Supplemental Operating Reserve Service 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.

2.4.4. 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 applicable Adder then in effect. The Customer must notify Southwestern by July 1 of this choice, to be effective the subsequent calendar year.

2.4.5. Regulation Purchased Adder

Southwestern has determined the amount of energy used from storage to provide Regulation and Frequency Response Service in order to meet Southwestern's Balancing Authority Area requirements. The replacement value of such energy used shall be recovered through the Regulation Purchased Adder. The Regulation Purchased Adder during the time period of January 1 through December 31 of the current calendar year is based on the average annual use of energy from storage¹ for Regulation and Frequency Response Service and Southwestern's estimated purchased power price for the corresponding year from the most currently approved Power Repayment Studies.

The Regulation Purchased Adder will be phased in over a period of four (4) years as follows:

Year	Regulation Purchased Adder for the Incremental Replacement Value of Energy Used from Storage
2014	¼ of the average annual use of energy from storage × 2014 Purchased Power price
2015	½ of the average annual use of energy from storage × 2015 Purchased Power price
2016	¾ of the average annual use of energy from storage × 2016 Purchased Power price
2017 and thereafter	The total average annual use of energy from storage × the applicable Purchased Power price

¹ The average annual use of energy from storage for Regulation and Frequency Response Service is based on Southwestern studies.

2.4.5.1. Applicability of Regulation Purchased Adder

The replacement value of the estimated annual use of energy from storage for Regulation and Frequency Response Service shall be recovered by Customers located within Southwestern's Balancing Authority Area on a non-coincident peak ratio share basis, divided into twelve equal monthly payments, in accordance with the formula in Section 2.4.5.2.

If the Regulation Purchased Adder is determined and applied under Southwestern's Rate Schedule NFTS-13, then it shall not be applied here.

2.4.5.2. Procedure for Determining Regulation Purchased Adder

Unless otherwise specified by contract, the Regulation Purchased Adder for an individual Customer shall be based on the following formula rate, calculated to include the replacement value of the estimated annual use of energy from storage by Southwestern for Regulation and Frequency Response Service.

RPA = The Regulation Purchased Adder for an individual

Customer per month, which is as follows:

$$[(L_{\text{Customer}} \div L_{\text{Total}}) \times RP_{\text{Total}}] \div 12$$

with the factors defined as follows:

L_{Customer} = The sum in MW of the following three factors:

- (1) The Customer's highest metered load plus generation used to serve the Customer's load that is accounted for through a reduction in the Customer's metered load (referred to as 'generation behind the meter') during the previous calendar year, and
- (2) The Customer's highest rate of Scheduled Exports² during the previous calendar year, and
- (3) The Customer's highest rate of Scheduled Imports² during the previous calendar year.

L_{Total} = The sum of all L_{Customer} factors for all Customers that were inside Southwestern's Balancing Authority Area at the beginning of the previous calendar year in MW.

RP_{Total} = The "net" cost in dollars and cents based on Southwestern's estimated purchased power price for the corresponding year from the most currently approved Power Repayment Studies multiplied by the average annual use of energy from storage, as provided for in the table in Section 2.4.5, to support Southwestern's ability to regulate within its Balancing Authority Area. The "net" cost in dollars and cents shall be adjusted by subtracting the product of the quantity of such average annual use of energy from storage in MWh and Southwestern's highest rate in dollars per MWh for Supplemental Peaking Energy during the previous calendar year.

² Scheduled Exports and Scheduled Imports are transactions, such as sales and purchases respectively, which are in addition to a Customer's metered load that contribute to Southwestern's Balancing Authority Area need for regulation.

For Customers that have aggregated their load, resources, and scheduling into a single node by contract within Southwestern's Balancing Authority Area, the individual Customer's respective Regulation Purchased Adder shall be that Customer's ratio share of the Regulation Purchased Adder established for the node. Such ratio share shall be determined for the Customer on a non-coincident basis and shall be calculated for the Customer from their highest metered load plus generation behind the meter.

2.4.6. Energy Imbalance Service Limitations

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.

3. Hydro Peaking Power Penalties, Terms, and Conditions

3.1. Capacity Overrun Penalty

3.1.1. Penalty Charge for Capacity Overrun

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

3.1.2. Applicability 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' respective Power Sales 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.

3.2. Energy Overrun Penalty

3.2.1. Penalty Charge for Energy Overrun

\$0.1034 per kilowatthour for each kilowatthour of overrun.

3.2.2. Applicability of Energy Overrun Penalty

By contract, the Customer is subject to limitations on the maximum amounts of Peaking Energy which may be scheduled under the Customer's Power Sales Contract. When the Customer schedules an amount in excess of such maximum amounts, such Customer is subject to the Energy Overrun Penalty.

3.3. Power Factor Penalty

3.3.1. 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.

3.3.2. 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 in accordance with Section 3.3.4.
- rkVAh = The total quantity of reactive kilovolt-ampere-hours (kVARs) delivered during such Demand Period to the point of delivery or interconnection in accordance with Section 3.3.4.

3.3.3. Penalty Charge for Power Factor

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:

$$C = D \times (0.95 - LPF) \times \$0.10$$

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).

3.3.4. Applicability 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 (i) a single physical point of delivery, (ii) a combination of physical points of delivery where a Customer has a single, electrically integrated load, (iii) 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, a combination of physical points of delivery, 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.

4. Hydro Peaking Power Miscellaneous Rates, Terms, and Conditions

4.1. 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:

$$ML = 0.04 \times NFE$$

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:

- 4.1.1. 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 unless such Customer has accounted for Real Power Losses as part of a metering arrangement with Southwestern.
- 4.1.2. 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.
- 4.1.3. 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 zero (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

- 4.1.4. 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 zero (0) megawatthours.