**Department of Energy**
Southwestern Power Administration
One West Third Street
Tulsa, Oklahoma 74103-3502

April 22, 2010

Mr. Robert P. Jackman
8131 South Lakewood Place, Apt. #7
Tulsa, OK 74137

Re: FOIA Request dated March 26, FOIA #2010-7

Dear Mr. Jackman:

I received your E-FOIA request dated March 26, 2010, to Southwestern Power Administration.

You requested a copy of Southwestern's Rate Schedules and notification to customers for Distribution Cooperatives, Generation and Transmission Cooperatives, Military Installations and Municipalities.

You requested that the format be pdf for these documents in your request. They are being provided in pdf format so there will not be a charge for these documents since no copying was required. They are attached to this letter. If you have any problems opening these documents please give me a call.

I am the person responsible for your request. If you have questions, please call me at 918-595-6609.

Sincerely,

Martha F. Ayers

Martha Ayers
Freedom of Information Officer

**Department of Energy**
Southwestern Power Administration
Post Office Box 1619
Tulsa, Oklahoma 74101

MAY 0 6 1998

NOTICE OF ORDER CONFIRMING AND APPROVING
INTEGRATED SYSTEM POWER RATES ON A FINAL BASIS

You are hereby notified, in accordance with the terms and conditions of our power sales contract, that the Federal Energy Regulatory Commission (FERC), pursuant to the authority under U.S. Department of Energy Delegation Order No. 0204-108, as amended November 10, 1993 (58 FR 59717), has confirmed and approved the following Integrated System Rate Schedules on a final basis for the period January 1, 1998 through September 30, 2001:

Rate Schedule P-98A, Wholesale Rates for Hydro Peaking Power

Rate Schedule NFTS-98, Wholesale Rates for Non-Federal Transmission Service

Rate Schedule EE-98, Wholesale Rate for Excess Energy

The Integrated System Rate Schedules were confirmed, approved and placed in effect on an interim basis by the Deputy Secretary of Energy in Rate Order No. SWPA-37. The FERC approved the Integrated System Rate Schedules, as submitted by the Deputy Secretary, by Order issued April 29, 1998, under Docket No. EF98-4011-000.

Enclosed is a copy of the FERC Order. Copies of the approved Integrated System Rate Schedules were previously furnished. If you would like additional copies, please contact Barbara Otte at 918-595-6674 or Tracey Hannon at 918-595-6677.

Michael A. Deihl
Administrator

Enclosure

UNITED STATES DEPARTMENT OF ENERGY
SOUTHWESTERN POWER ADMINISTRATION

# RATE SCHEDULE P-98A[1]
# WHOLESALE RATES FOR
# HYDRO PEAKING POWER

**Effective:**

During the period January 1, 1998, through September 30, 2001, in accordance with the Order of the Federal Energy Regulatory Commission issued April 29, 1998, (EF98-4011-000).

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

**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:**

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 P-98, 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, or a specified set of delivery points which together form a single, electrically integrated load. "Peak demand" for such set of 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."

*"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.

[1]Supersedes Rate Schedules P-90A, P-90B, and F-90B

*"Scheduling, System Control, and Dispatch Service"* (an Ancillary Service) is provided by Southwestern as Control 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"* (an Ancillary 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"* (an Ancillary 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 Control Area.

*"Spinning Operating Reserve Service"* (an Ancillary 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"* (an Ancillary 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"* (an Ancillary 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, to be provided at rates of delivery which do not exceed the Power Customer's Peaking Contract Demand.

**Monthly Rates for Peaking Contract Demand:**

CAPACITY CHARGE FOR HYDRO PEAKING POWER:

$2.56 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 Power Customers. This capacity charge also includes 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**

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 Power Customer's point of delivery for Hydro Peaking Power;

(3) the Power Customer pays for 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 Southwestern's system of such non-Federal energy and the Power 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:**

ENERGY CHARGE:

(a) $0.0048 per kilowatthour of Peaking Energy and Supplemental Peaking Energy delivered; plus (b).

(b) A purchased power adder of $0.0011 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 Power 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).

**Energy Credit**

During the six-month period from January 1, 1998 through June 30, 1998, a Power Customer-specific credit, as listed at the end of this rate schedule, will be applied to the monthly amounts due Southwestern by the listed Power Customers, in six approximately equal segments. However, the maximum applicable credit in any billing period, for any Power Customer, including any deferred credits, shall be limited to the total charges for all invoiced services to such customer during such billing period, with any excess to be deferred for application in succeeding billing periods.

**Monthly Rates for Transformation Service:**

CAPACITY CHARGES FOR TRANSFORMATION SERVICE:

A charge of $0.25 per kilowatt will be assessed for capacity used to deliver energy at any point of delivery at which Southwestern provides transformation 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 P-98, 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.

**Monthly Rates for Ancillary Services:**

CAPACITY CHARGES FOR ANCILLARY SERVICES:

(a) Regulation and Frequency Response Service
$0.04 per kilowatt of Peaking Billing Demand

(b) Operating Reserves Service: Spinning Reserve
$0.03 per kilowatt of Peaking Billing Demand

(c) Operating Reserves Service: Supplementary Reserve
$0.03 per kilowatt of Peaking Billing Demand

(d) Energy Imbalance Service:
no monthly charge

**Availability of Ancillary Services**

Services (a) through (d) listed above are available only for deliveries of power and energy to load centers within Southwestern's Control Area. All deliveries from the System of Southwestern to such load centers must have all four Ancillary Services available for such deliveries, provided either by Southwestern or from other resources.

**Application of Ancillary Services Charges**

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

**Determination of Ancillary Services to Be Charged to a Power Customer**

Power Customers located in Southwestern's Control Area must inform Southwestern by written notice of the Ancillary Services which they intend to take from Southwestern, or 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 requirements for delivery.

Such written notice shall specify the Ancillary Services to be provided by Southwestern, or from other resources, for each point of delivery. The sources for the Ancillary Services which a Power Customer has elected to take in association with any particular point of delivery may not be changed during any calendar month. Power Customers may change the Ancillary Services which they take from Southwestern, and/or the sources from which they receive such services, by written notice provided at least 15 days prior to the first day of the month in which such changes are to be effected.

**Limitations on Energy Imbalance Service**

Energy Imbalance Service is authorized for use only within a bandwidth of ± 1.5 percent of the actual requirements of the load at a particular point of delivery, for any hour, compared to the resources scheduled to meet such load during such hour. Deviations which are greater than ± 1.5 percent, but which are less than ±2,000 kilowatts, are considered to be within the authorized bandwidth. Deviations outside the authorized bandwidth which involve the delivery of Hydro Peaking Power, and which occur because the Power Customer has underscheduled resources to meet load, are subject to a Capacity Overrun Penalty.

**Application of Capacity Overrun Penalty**

Power Customers which receive deliveries within Southwestern's Control 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. Such Power Customers are subject to a Capacity Overrun Penalty only when the formulas provided in their 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 load within the authorized bandwidth for Energy Imbalance Service.

CAPACITY OVERRUN PENALTY

For each hour in which energy flows outside the authorized bandwidth, the Power Customer will be obliged to purchase such energy at the following rates:

| Range of Deviation Outside of Authorized Bandwidth | Rate per Kilowatthour |
|---|---|
| From 1 to 2,000 kilowatts: | $0.05 |
| For 2,001 kilowatts and greater: | $0.10 |

**Unauthorized Use of Energy Imbalance Service by Overscheduling of Resources**

When a Power Customer schedules greater resources than are needed to meet its load, and energy flows at rates beyond the authorized bandwidth for the use of Energy Imbalance Service, Southwestern retains such energy at no cost to Southwestern and with no obligation to return such energy. Power Customers whose resources are scheduled by Southwestern are not subject to this provision.

**Application of Energy Overrun Penalty:**

By contract, the Power 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 Power Customer schedules 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 Power Customer is subject to the Energy Overrun Penalty.

ENERGY OVERRUN PENALTY:

For each kilowatthour of overrun: $0.053 per kilowatthour

**Rates for Real Power Losses**

Real Power Losses are computed as 4 percent of the total amount of non-Federal energy transmitted under a particular Power Customer's Peaking Contract Demand. The monthly charge for such Real Power Losses will be computed as follows:

$$MC = .04 \times NFE \times PPUC$$

with the factors defined as follows:

MC = The monthly charge by Southwestern for Real Power Losses of non-Federal energy transmitted under the capacity associated with Hydro Peaking Power;

NFE = The amount of non-Federal energy transmitted under a Power Customer's Peaking Contract Demand during a particular month; and

PPUC = Purchased Power Unit Cost for Real Power Losses during the applicable Fiscal Year (October 1 through September 30) in mills per kilowatthour in accordance with the following formula:

$$PPUC = PFY \times \left(\sqrt[n]{(FUT/PFY)^{1/n}}\right) \times GDP \times 1.1$$

with the factors defined as follows:

PFY = cost for energy during the previous Fiscal Year, as set forth in the most recently available Energy Information Administration (EIA) Publication for the previous Fiscal Year, for Southwestern's marketing area;

FUT = cost for energy projected "n" years into the future from the previous Fiscal Year as set forth in the EIA Publication for that previous Fiscal Year, for Southwestern's marketing area;

*n* = number of years from the previous Fiscal Year that the EIA Publication for the previous Fiscal Year projects FUT;

GDP = The Administrations' Gross Domestic Product Price Index, as cited in the most recent Presidential Budget of the United States.; and

1.1 = a factor representing power suppliers' administrative costs

The PPUC rate is adjusted at the beginning of each Fiscal Year, and will be published on Southwestern's Open Access Same-Time Information Service. For Fiscal Year 1998, the PPUC rate of 20.8 mills per kilowatthour ($0.0208) has been established.

**Requirements Related to Power Factor**

Any Power 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 lagging for each electrically integrated load except where point(s) are point(s) of system integration for mutual system support.

**Determination of Power Factor**

The power factor may be determined at intervals or continuously, at the option of Southwestern, and shall be computed under the formula:

$$PF = (kWh \times 100) \div \sqrt{(kWh^2 + rkVAh^2)} \quad ,$$

with the factors defined as follows:

PF = the power factor (in percentage) for any Demand Period of the month.

kWh = the total quantity of energy which is delivered during such Demand Period to the Power Customer's electrically integrated load, through all Southwestern points of delivery other than those points which are points of system integration for mutual system support.

rkVAh = the total quantity of reactive kilovolt-ampere-hours (kvars) delivered during such Demand Period to the Power Customer's electrically integrated load through all Southwestern points of delivery other than those points which are points of system integration for mutual system support.

**Power Factor Penalty**

Power factor penalties may be assessed for any month in which the formula above, when calculated for any Demand Period during such month, yields a power factor of less than 95 percent lagging. The penalty is assessed for such month in accordance with the following formula:

$$PENALTY = PD \times PFP \times \$1.00$$

with the factors defined as follows:

PENALTY = The amount in dollars to be assessed on the monthly invoice to the Power Customer as the Power Factor Penalty.

PD = The Power Customer's peak demand in kilowatts at the point or points of delivery for the month in which a low power factor was calculated.

PFP = The percentage equal to the difference, rounded to the nearest 1 percent, between 95 percent lagging and the computed power factor.

**Application of Power Factor Penalty**

No penalty is assessed for leading power factor. Southwestern, 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 where a Power Customer has a single, electrically integrated load served through multiple points. The general criteria for such decision shall be that, given the configuration of the Power Customer's and Southwestern's systems, Southwestern will determine, in its sole judgment, whether the power factor computation 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.

Southwestern, at its sole option, may 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 power factor dropped below 95 percent lagging.

**Adjustment for Reduction in Service:**

If, during any month, the quantity of Peaking Contract Demand 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 transmission and/or related facilities on the system of Southwestern, the Power 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 Power Customer's capacity charges associated with Hydro Peaking Power times the Peaking Billing Demand.

C = the Power 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.

**Procedure for Determining Southwestern's Net Purchased Power Adder Adjustment**

On the effective date of this Rate Schedule P-98, the cumulative discretionary adjustment of -$0.0031 (a credit) per kilowatthour will be applied to the Purchased Power Adder referenced above under part (b) of the Energy Charge. This initial adjustment reflects the existing Purchased Power Deferral Account balance, and will be applied to each kilowatthour of Peaking Energy purchased by the Power Customer for service received after the said effective date. The Purchased Power Deferral Account balance is the result of Purchased Power Adder receipts collected under previous rate schedules.

Subsequently, no oftener than once annually, the Purchased Power Adder may be adjusted by the Administrator, Southwestern, by an amount up to ±$.0011 per kilowatthour, as calculated by the following formula:

ADJ = (PURCH - EST - DIF) ÷ SALES

with the factors defined as follows:

ADJ = the dollar 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 Net Purchased Power Adder by more than $.0011 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 ($2,563,300 per year) of Southwestern's System Direct Purchases used as the basis for the Purchased Power Adder of $.0011 per kilowatthour of Peaking Energy;

DIF = the accumulated remainder of the difference in the actual and estimated (PURCH - EST) 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 Purchased Power Adder Adjustment in any previous periods;

SALES = the annual Total Peaking Energy sales projected to be delivered (2,240,300,000 KWh per year) from the Southwestern System, which total was used as the basis for the $.0011 per kilowatthour Purchased Power Adder.

**Power Customer-Specific Purchased Power Adder Credit:**

| Customer | Total Credit ($) |
|---|---|
| Anthony, Kansas | 809 |
| Arkansas Electric Cooperative Corporation | 228,933 |
| Augusta, Arkansas | 3,838 |
| Bentonville, Arkansas | 21,847 |
| Brazos Electric Power Cooperative | 180,112 |
| Cajun Electric Power Cooperative | 60,194 |
| Carthage, Missouri | 8,518 |
| Clarksville, Arkansas | 23,117 |
| Coffeyville, Kansas | 1,915 |
| Comanche, Oklahoma | 5,689 |
| Copan, Oklahoma | 3,818 |
| Duncan, Oklahoma | 49,527 |
| Eldorado, Oklahoma | 2,421 |
| Fort Sill, Oklahoma | 31,931 |
| Fulton, Missouri | 22,727 |

| Customer | Total Credit ($) |
|---|---|
| Goltry, Oklahoma | 1,816 |
| Granite, Oklahoma | 3,894 |
| Hermann, Missouri | 7,008 |
| Higginsville, Missouri | 3,646 |
| Hominy, Oklahoma | 15,240 |
| Jonesboro, Arkansas | 425,049 |
| Kansas City, Kansas | 39,805 |
| Kansas Electric Power Cooperative | 0 |
| Kansas Municipal Energy Agency | 11,305 |
| Kaw Valley Electric Cooperative | 846 |
| Kennett, Missouri | 21,481 |
| Lafayette, Louisiana | 8,820 |
| Lamar, Missouri | 106,342 |
| Lexington, Oklahoma | 6,194 |
| Louisiana Energy and Power Authority | 9,442 |
| Malden, Missouri | 4,233 |
| Manitou, Oklahoma | 1,399 |
| McAlester Army Ammunition Plant | 1,871 |
| Minden, Louisiana | 782 |
| Natchitoches, Louisiana | 1,224 |
| New Madrid, Missouri | 32,359 |
| Nixa, Missouri | 31,083 |
| Northeast Texas Electric Cooperative | 206,523 |
| Olustee, Oklahoma | 356 |
| Paragould, Arkansas | 307,807 |
| Paris, Arkansas | 12,996 |
| Piggott, Arkansas | 26,546 |
| Poplar Bluff, Missouri | 316,093 |
| Purcell, Oklahoma | 14,972 |
| Rayburn Country Electric Cooperative | 0 |
| Ryan, Oklahoma | 3,217 |
| Sikeston, Missouri | 142,778 |
| Skiatook, Oklahoma | 13,306 |
| Spiro, Oklahoma | 6,745 |
| Springfield, Missouri | 60,746 |
| Tex-La Electric Cooperative of Texas | 4,526 |
| Thayer, Missouri | 3,880 |
| Vance Air Force Base, Oklahoma | 4,371 |
| Walters, Oklahoma | 9,753 |
| West Plains, Missouri | 165,170 |
| Western Farmers Electric Cooperative | 315,379 |
| Wetumka, Oklahoma | 3,532 |
| Yale, Oklahoma | 4,974 |

UNITED STATES DEPARTMENT OF ENERGY
SOUTHWESTERN POWER ADMINISTRATION

# RATE SCHEDULE NFTS-98[1]
# WHOLESALE RATES FOR NON-FEDERAL TRANSMISSION SERVICE

**Effective:**

During the period January 1, 1998, through September 30, 2001, in accordance with the Order of the Federal Energy Regulatory Commission issued April 29, 1998, (EF98-4011-000).

**Available:**

In the region where Southwestern Power Administration (Southwestern) owns and operates high-voltage transmission lines and related facilities, or has contractual rights to such transmission facilities owned by others (System of Southwestern).

**Applicable:**

To Transmission Customers which have executed Service Agreements with Southwestern for the transmission of non-Federal power and energy over the System of Southwestern. Non-Federal power and energy will be transmitted and/or displaced, at the request of such Transmission Customer, over those portions of the System of Southwestern in which the Administrator, Southwestern, in his or her sole judgment, has determined that uncommitted transmission and transformation capacities in the amount(s) requested are and will be available in excess of the capacities required to market Federal power and energy pursuant to Section 5 of the Flood Control Act of 1944 (58 Stat. 887,890; 16 U.S.C. 825s).

**Character and Conditions of Service:**

Non-Federal power and energy will be received into the System of Southwestern in accordance with established schedules, and transmitted and/or displaced as 3-phase, alternating current, at approximately 60 Hertz, and delivered at the voltage level of the point(s) of delivery specified by Service Agreement or Transmission Service Transaction.

**Definitions of Terms:**

A "*Service Agreement*" is a contract executed between a Transmission Customer and Southwestern for the transmission of non-Federal power and energy over the System of Southwestern. Service Agreements are "*Long-Term Firm Agreements,*" "*Enabling Agreements,*" or "*Network Service Agreements.*" Long-Term Firm Agreements provide for reserved transmission capacity on a firm basis, for a particular point-to-point delivery path, for a period of one year or more. An Enabling Agreement provides for the Transmission Customer to request a variety of arrangements for shorter periods, which may be on a firm or non-firm basis. A Network Service Agreement provides for Network Integration Transmission Service.

A "*Service Request*" is made under an Enabling Agreement through Southwestern's Open Access Same-Time Information System (OASIS) for reservation of transmission capacity over a particular point-to-point delivery path for a particular period. When a Service Request is approved by Southwestern, it becomes a "*Transmission Service Transaction.*" The

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[1]Supersedes Rate Schedule TDC-90

Transmission Customer must submit hourly schedules for actual service in addition to the Service Request.

"*Firm Point-to-Point Transmission Service* is transmission capacity reserved on a firm basis between specific points of receipt and delivery pursuant to either a Long-Term Firm Agreement or to a Transmission Service Transaction. "*Non-Firm Point-to-Point Transmission Service*" is transmission service reserved pursuant to a Transmission Service Transaction and which is subject to curtailment or interruption. "*Network Integration Transmission Service*" is transmission service provided under Part III of Southwestern's Open Access Transmission Service Tariff.

"*Secondary Transmission Service*" is associated with Firm Point-to-Point Transmission Service and Network Integration Transmission Service. For Firm Point-to-Point Transmission Service, it consists of transmission service provided on an as-available, non-firm basis, scheduled within the limits of a particular capacity reservation for transmission service, and scheduled from points of receipt, or to points of delivery, other than those designated in a Long-Term Firm Agreement or a Transmission Service Transaction for Firm Point-to-Point Transmission Service. For Network Integration Transmission Service, Secondary Transmission Service consists of transmission service provided on an as-available, non-firm basis, from resources other than the Network Resources designated in a Network Service Agreement, to meet the Network Customer's Network Load. The charges for Secondary Transmission Service, other than Real Power Losses, are included in the applicable capacity charges for Firm Point-to-Point Transmission Service and Network Integration Transmission Service.

The "*Demand Period*" used to determine maximum integrated rates of delivery for the purposes 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 to which electric power and energy are delivered from the System of Southwestern, or a specified set of delivery points which together form a single, electrically integrated load. "Peak demand" for such set of 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.

*"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.

*"Scheduling, System Control, and Dispatch Service"* (an Ancillary Service) is provided by Southwestern as Control 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"* (an Ancillary 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"* (an Ancillary 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 Control Area.

*"Spinning Operating Reserve Service"* (an Ancillary 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"* (an Ancillary 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"* (an Ancillary 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.

**Rates for Firm Point-to-Point Transmission Service:**

CAPACITY CHARGES FOR FIRM TRANSMISSION SERVICE:

| | |
|---|---|
| Monthly: | $0.69 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a longer term agreement |
| Weekly: | $0.173 per kilowatt of transmission capacity reserved in increments of one week of service |
| Daily: | $0.0314 per kilowatt of transmission capacity reserved in increments of one day of service |

**Service Associated with Capacity Charges for Firm Point-to-Point Transmission Service:**

The capacity charge for Firm Transmission Service includes Secondary Transmission Service, but does not include charges for Ancillary Services or for Real Power Losses associated with actual schedules.

**Application of Capacity Charges for Firm Point-to-Point Transmission Service:**

Capacity charges for firm transmission service are applied to quantities reserved by contract under a Long-Term Firm Agreement or in accordance with a Transmission Service Transaction.

Transmission Customers which have Long-Term Firm Agreements that do not specify a transmission capacity reservation will be charged on the greater of (1) the peak demand at any particular point of delivery during a particular month, rounded up to the nearest whole megawatt, or (2) the highest peak demand recorded at such point of delivery during any of the previous 11 months, rounded up to the nearest whole megawatt. The greater of (1) or (2), for any month, shall be considered such Transmission Customers' reserved capacity. Secondary Transmission Service for such Transmission Customers shall be limited during any month to the most recent peak demand on which a particular Transmission Customer is billed.

**Rates for Non-Firm Point-to-Point Transmission Service:**

CAPACITY CHARGES FOR NON-FIRM TRANSMISSION SERVICE:

| | |
|---|---|
| Monthly: | $0.55 per kilowatt of transmission capacity reserved in increments of one month of service |
| Weekly: | $0.138 per kilowatt of transmission capacity reserved in increments of one week of service |
| Daily: | $0.0251 per kilowatt of transmission capacity reserved in increments of one day of service |
| Hourly: | $0.00157 per kilowatthour of transmission capacity reserved in increments of one hour of service. |

**Application of Charges for Non-Firm Point-to-Point Transmission Service:**

Capacity charges for Non-Firm Transmission Service are applied to quantities reserved under a Transmission Service Transaction, and do not include charges for Ancillary Services or Real Power Losses.

**Rates for Network Integration Transmission Service:**

ANNUAL REVENUE REQUIREMENT FOR NETWORK INTEGRATION SERVICE
$4,922,3000

MONTHLY REVENUE REQUIREMENT FOR NETWORK INTEGRATION SERVICE
$410,192

NET CAPACITY AVAILABLE FOR NETWORK INTEGRATION SERVICE
573,300 kilowatts

CAPACITY CHARGE FOR NETWORK INTEGRATION TRANSMISSION SERVICE:
$0.72 per kilowatt of Network Load ($410,192/573,300 kilowatts)

**Application of Charge for Network Integration Transmission Service:**

Network Integration Transmission Service is available only for deliveries of non-Federal power and energy, and is applied to the Network Customer's Network Load exclusive of any deliveries of Federal power and energy. The capacity on which charges for any particular Network Customer are determined in accordance with Southwestern's Open Access Transmission Service Tariff and the Network Service Agreement. Network Integration Transmission Service includes Secondary Transmission Service, but does not include charges for Ancillary Services or for Real Power Losses.

**Rates for Real Power Losses**

Real Power Losses are computed as 4 percent of the total amount of non-Federal energy transmitted on behalf of a Transmission Customer. The monthly charge for such Real Power Losses will be computed as follows:

$$MC = .04 \times NFE \times PPUC$$

with the factors defined as follows:

MC = The monthly charge by Southwestern for Real Power Losses of non-Federal energy transmitted on behalf of a Transmission Customer;

NFE = The amount of non-Federal energy transmitted on behalf of a Transmission Customer during a particular month; and

PPUC = Purchased Power Unit Cost for Real Power Losses during the applicable Fiscal Year (October 1 through September 30) in mills per kilowatthour in accordance with the following formula:

$$PPUC = PFY \times \left(\sqrt{(FUT/PFY)^{1/n}}\right) \times GDP \times 1.1$$

with the factors defined as follows:

PFY = cost for energy during the previous Fiscal Year, as set forth in the most recently available Energy Information Administration (EIA) Publication for the previous Fiscal Year, for Southwestern's marketing area;

FUT = cost for energy projected "n" years into the future from the previous Fiscal Year as set forth in the EIA Publication for that previous Fiscal Year, for Southwestern's marketing area;

*n* = number of years from the previous Fiscal Year that the EIA Publication for the previous Fiscal Year projects FUT;

GDP = The Administrations' Gross Domestic Product Price Index, as cited in the most recent Presidential Budget of the United States.; and

1.1 = a factor representing power suppliers' administrative costs

The PPUC rate is adjusted at the beginning of each Fiscal Year, and will be published on Southwestern's OASIS. For Fiscal Year 1998, the PPUC rate of 20.8 mills per kilowatthour ($0.0208) has been established.

**Monthly Capacity Charges for Transformation Service:**

A charge of $0.25 per kilowatt will be assessed for capacity used to deliver energy at any point of delivery at which Southwestern provides transformation 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. 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 ASSOCIATED WITH TRANSMISSION SERVICES:

**(a) Scheduling, System Control, and Dispatch Service:**

Monthly: $0.03 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Agreement or Network Service Agreement

Weekly: $0.008 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0014 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00009 per kilowatthour of energy delivered as non-firm transmission service

**(b) Reactive Supply and Voltage Support from Generation Sources Service:**

Monthly: $0.03 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Agreement or Network Service Agreement

Weekly: $0.008 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0014 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00009 per kilowatthour of energy delivered as non-firm transmission service

**(c) Regulation and Frequency Response Service:**

Monthly: $0.04 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Agreement or Network Service Agreement

Weekly: $0.010 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0018 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00011 per kilowatthour of energy delivered as non-firm transmission service

**(d) Operating Reserves Service: Spinning Reserve:**

Monthly: $0.03 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Agreement or Network Service Agreement

Weekly: $0.008 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0014 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00009 per kilowatthour of energy delivered as non-firm transmission service

**(e) Operating Reserves Service: Supplementary Reserve:**

Monthly: $0.03 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Agreement or Network Service Agreement

Weekly: $0.008 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0014 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00009 per kilowatthour of energy delivered as non-firm transmission service

**(f) Energy Imbalance Service:**

$0.0 per kilowatt for all periods of reservation

**Availability of Ancillary Services:**

Services (a) and (b) are associated with all transmission services in and from the System of Southwestern. Services (c) through (f) listed above are available only for deliveries of power and energy to load centers within Southwestern's Control Area. All deliveries from the System of Southwestern to such load centers must have all four Ancillary Services (c) through (f) available for such deliveries, provided either by Southwestern or from other resources.

**Application of Ancillary Services Charges :**

Charges for all Ancillary Services applicable to a particular transmission service are assessed on reserved or network transmission capacity in accordance with the rates listed above. Services (a) and (b) are applied to all transmission services received from Southwestern. The charges for Ancillary Services are considered to include Ancillary Services for any Secondary Transmission Service, except in cases where Ancillary Services (c) through (f) are applicable to a Secondary Transmission Service schedule, but are not applicable to the firm capacity reservation under which Secondary Transmission Service is provided. In such case, the charges for Ancillary Services associated with such schedule shall be assessed at the hourly rates listed above for all associated energy, in accordance with the Ancillary Services provided at the particular point of delivery.

**Determination of Ancillary Services to Be Charged to a Transmission Customer:**

Transmission Customers located in Southwestern's Control Area, or delivering to load centers within the Control Area, must inform Southwestern by written notice of the Ancillary Services which they intend to take from Southwestern for any transmission services to such load centers, or 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 requirements for delivery.

Such written notice shall specify the Ancillary Services to be provided by Southwestern, or from other resources, for each point of delivery. The sources for the Ancillary Services which a Transmission Customer has elected to take in association with any particular point of delivery may not be changed during any calendar month. Transmission Customers may change the Ancillary Services which they take from Southwestern, and/or the sources from which they receive such services, by written notice provided at least 15 days prior to the first day of the month in which such changes are to be effected.

**Limitations on Energy Imbalance Service:**

Energy Imbalance Service is authorized for use only within a bandwidth of ± 1.5 percent of the actual requirements of the load at a particular point of delivery, for any hour, compared to the resources scheduled to meet such load during such hour. Deviations which are greater than ± 1.5 percent, but which are less than ±2,000 kilowatts, are considered to be within the authorized bandwidth. Deviations outside the authorized bandwidth are subject to a Capacity Overrun Penalty.

**Exemptions from the Energy Imbalance Service Bandwidth:**

Transmission Customers which receive long-term firm transmission service under contracts which were executed and put into effect prior to January 1, 1998, are exempted from the application of bandwidth limitations as described above. Such Transmission Customers are subject to a Capacity Overrun Penalty as set forth below for each kilowatt of difference, for any hour, between what Southwestern is able to schedule to meet the Transmission Customer's load from the Transmission Customer's resources and the Transmission Customer's actual load.

**Application of Capacity Overrun Penalty:**

Transmission Customers which receive deliveries within Southwestern's Control Area are obligated to provide resources sufficient to meet their loads. Such obligation is not related to the amount of transmission capacity that such Transmission Customers may have reserved for transmission service to a particular load. Except as provided above, in the event that a Transmission Customer underschedules its resources to meet load such that the difference between resources and actual metered load served from Southwestern's facilities, and as may be adjusted for transformer losses as applicable, for any hour, is outside the authorized bandwidth for Energy Imbalance Service, such Transmission Customer is subject to the following penalty:

CAPACITY OVERRUN PENALTY

For each hour in which energy flows outside the authorized bandwidth, the Transmission Customer will be obliged to purchase such energy at the following rates:

| Range of Deviation Outside of Authorized Bandwidth | Rate per Kilowatthour |
|---|---|
| From 1 to 2,000 kilowatts: | $0.05 |
| For 2,001 kilowatts and greater | $0.10 |

**Unauthorized Use of Energy Imbalance Service by Overscheduling of Resources:**

In the event that a Transmission Customer schedules greater resources than are needed to meet its load, such that energy flows at rates beyond the authorized bandwidth for the use of Energy Imbalance Service, Southwestern retains such energy at no cost to Southwestern and with no obligation to return such energy. Transmission Customers whose resources are scheduled by Southwestern are not subject to this provision.

**Requirements Related to Power Factor:**

Any Transmission 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 lagging for each electrically integrated load except where point(s) are point(s) of system integration for mutual system support.

**Determination of Power Factor:**

The power factor may be determined at intervals or continuously, at the option of Southwestern, and shall be computed under the formula:

$$PF = (kWh \times 100) \div \sqrt{(kWh^2 + rkVAh^2)} \quad ,$$

with the factors defined as follows:

PF = the power factor (in percentage) for any Demand Period of the month.

kWh = the total quantity of energy which is delivered during such Demand Period to the Transmission Customer's electrically integrated load, through all Southwestern points of delivery other than those points which are points of system integration for mutual system support.

rkVAh = the total quantity of reactive kilovolt-ampere-hours (kvars) delivered during such Demand Period to the Transmission Customer's electrically integrated load, through all Southwestern points of delivery other than those points which are points of system integration for mutual system support.

**Power Factor Penalty:**

Power factor penalties may be assessed for any month in which the formula above, when calculated for any Demand Period during such month, yields a power factor of less than 95 percent lagging. The penalty is assessed for such month in accordance with the following formula:

$$PENALTY = PD \times PFP \times \$1.00$$

with the factors defined as follows:

PENALTY = The amount in dollars to be assessed on the monthly invoice to the Transmission Customer as the Power Factor Penalty.

PD = The Transmission Customer's peak demand in kilowatts at the point of delivery for the month in which a low power factor was calculated.

PFP = The percentage equal to the difference, rounded to the nearest 1 percent, between 95 percent lagging and the computed power factor.

**Application of Power Factor Penalty:**

No penalty is assessed for leading power factor. Southwestern, 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 Transmission Customer has a single, electrically integrated load served through multiple points. The general criteria for such decision shall be that, given the configuration of the Transmission Customer's and Southwestern's systems, Southwestern will determine, in its sole judgment, whether the power factor computation 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.

Southwestern, at its sole option, may 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 power factor dropped below 95 percent lagging.

**UNITED STATES DEPARTMENT OF ENERGY**
**SOUTHWESTERN POWER ADMINISTRATION**

# RATE SCHEDULE EE-98[1]
# WHOLESALE RATE FOR EXCESS ENERGY

**Effective:**
During the period January 1, 1998, through September 30, 2001, in accordance with the Order of the Federal Energy Regulatory Commission issued April 29, 1998, (EF98-4011-000).

**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 electric utilities which, by contract, may purchase Excess Energy from Southwestern.

**Character and Conditions of Service:**
Three-phase, alternating current, delivered at approximately 60 Hertz, at the nominal voltage and points of delivery specified by contract.

**Energy Associated with Rate Schedule EE-98:**
Excess Energy will be furnished at such times and in such amounts as Southwestern determines to be available.

**Definition of Terms:**
*"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.

*"Scheduling, System Control, and Dispatch Service"* (an Ancillary Service) is provided by Southwestern as Control 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"* (an Ancillary 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"* (an Ancillary 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 Control Area.

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[1]Supersedes Rate Schedule EE-90

*"Spinning Operating Reserve Service"* (an Ancillary 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"* (an Ancillary 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"* (an Ancillary 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.

**Rates:**

ENERGY CHARGE: $0.00694 per kilowatthour delivered

CHARGES FOR ANCILLARY SERVICE ASSOCIATED WITH DELIVERIES TO LOAD CENTERS WITHIN SOUTHWESTERN'S CONTROL AREA:

| | |
|---|---|
| (a) Regulation & Frequency Response: | $0.00011 per kilowatthour delivered |
| (b) Operational Reserves, Spinning | $0.00009 per kilowatthour delivered |
| (c) Operational Reserves, Supplementary: | $0.00009 per kilowatthour delivered |
| (d) Energy Imbalance Service | no charge per kilowatthour |

**Services Associated with Energy Charge for Excess Energy**

The Excess Energy charge includes such transmission services as are necessary to deliver such energy and the Ancillary Services for Scheduling, System Control, and Dispatch Service and Reactive Supply and Voltage Control from Generation Sources Service.

**Availability of Ancillary Services:**

Ancillary Services (a) through (d) listed above are available only for deliveries of power and energy to load centers within Southwestern's Control Area. All deliveries from the System of Southwestern to such load centers must have all four Ancillary Services available for such deliveries, provided either by Southwestern or from other resources.

DEC 0 3 1999

hw 12/3/99

# NOTICE

To Customers and Interested Parties:

This is to inform you that the Deputy Secretary of Energy has approved Southwestern Power Administration's (Southwestern) revised Rate Schedules P-98C and NFTS-98C on an interim basis to be effective January 1, 2000, and has forwarded them to the Federal Energy Regulatory Commission for final approval. The following information provides details on the changes to the rate schedules.

We made modifications throughout both rate schedules for clarification purposes. In addition, two sections of each rate schedule were revised in greater detail to address real power losses and operating reserve ancillary services.

Real Power Losses

The real power losses provision for the transmission of non-Federal energy over Southwestern's transmission system has been modified to offer customers the annual option to elect to self-provide real power losses rather than being required to pay for the losses.

Southwestern has also revised the period over which the real power loss rate will be calculated. That period was changed from the most recent twelve-month period to Southwestern's previous fiscal year (October - September). This change will allow for the posting of the new annual rate on Southwestern's Open Access Same Time Information System (OASIS) and on Southwestern's homepage at *www.swpa.gov* by November 1 of each year to provide customers, who are contemplating their option to elect to self-provide power losses, sufficient time and the necessary rate information on which to base their decision.

The Real Power Loss Rate for the year beginning January 1, 2000, will be 25.2 mills per kilowatthour (kWh). The number of kWhs charged for losses remains at four (4) percent of the scheduled transactions. All customers will pay such rate for real power losses on their transmission of non-Federal energy. However, you now have the option to choose, on an annual basis, to elect to self-provide all of your real power losses, rather than pay for the losses. **If you so choose, you must do so initially by January 1, 2000, with implementation beginning February 1, 2000.** Thereafter, the annual election for self-provision of real power losses must be exercised by December 1 of the prior calendar year, with an effective date for both the self-provision option and the new loss rate at the beginning of the calendar year (January 1).

| CONCURRENCES | |
|---|---|
| RTG SYMBOL | 3100 |
| INITIAL/SIG. | hw |
| DATE | 12/3/99 |
| RTG SYMBOL | 3200 |
| INITIAL/SIG. | [illegible] |
| DATE | 12/3/99 |
| RTG SYMBOL | 3000 |
| INITIAL/SIG. | [illegible] |
| DATE | 12-3-99 |
| RTG SYMBOL | 1200 |
| INITIAL/SIG. | [illegible] |
| DATE | 12-3-99 |
| RTG SYMBOL | 1000 |
| INITIAL/SIG. | [illegible] |
| DATE | 12/3/99 |
| RTG SYMBOL | 3100 |
| INITIAL/SIG. | |
| DATE | |
| RTG SYMBOL | 5022 |
| INITIAL/SIG. | [illegible] |
| DATE | 12-6-99 |
| RTG SYMBOL | |
| INITIAL/SIG. | |
| DATE | |

Without a formal notification from you to elect to self-provide real power losses, you will be charged 25.2 mills per kWh for such losses on your transmission of non-Federal energy during calendar year 2000.

Spinning and Supplemental Operating Reserves
We have revised the provisions for the Spinning and Supplemental Operating Reserve ancillary services. Beginning January 1, 2000, customers having non-Federal generation within Southwestern's Control Area and customers having deliveries of Hydro Peaking Power from and within Southwestern's Control Area will be billed at the rate of $.0073 per kilowatt per month of reserved transmission capacity or Peaking Billing Demand for each of the two ancillary services. This change in rates and application is needed to reflect the way operating reserves are actually carried pursuant to Southwestern's membership in the Southwest Power Pool regional reliability council.

If you have any questions regarding these changes or how they apply to you, or if you would like copies of the new rate schedules, please contact Jim Sherwood at (918) 595-6673, *sherwood@swpa.gov*, or Barbara Otte at (918) 595-6674, *otte@swpa.gov*, or go to Southwestern's homepage at *www.swpa.gov*.

Sincerely,

Michael A. Deihl
Administrator

bcc: (e-mail)
S3000
S3200
S3300
S3400
S5000
S5200
S8000
S1200

(Addressee List Attached)

File: S3100:(6640-IS/CUST.NOT)
Desk
Reading
S3100:BEOtte:beo:6674:120399:(R:\SYS\RATCHG99\CUSNOT99.WPD)

UNITED STATES DEPARTMENT OF ENERGY
SOUTHWESTERN POWER ADMINISTRATION

# RATE SCHEDULE P-98C[1]
# WHOLESALE RATES FOR
# HYDRO PEAKING POWER

**Effective:**

During the period January 1, 2000, through September 30, 2001, in accordance with the Order of the Federal Energy Regulatory Commission issued February 28, 2000, (EF00-4011-000).

**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 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 P-98B, 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, or a specified set of delivery points which together form a single, electrically integrated load. "Peak demand" for such set of 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."

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[1] **Supersedes Rate Schedules P-98B**

*"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.

*"Scheduling, System Control, and Dispatch Service"* (an Ancillary Service) is provided by Southwestern as Control 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"* (an Ancillary 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"* (an Ancillary 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 Control Area.

*"Spinning Operating Reserve Service"* (an Ancillary 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"* (an Ancillary 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"* (an Ancillary 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, to be provided 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:

$2.56 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 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 pays or commits to provide for 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 Southwestern's system 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:**

ENERGY CHARGE:

(a) $0.0048 per kilowatthour of Peaking Energy and Supplemental Peaking Energy delivered; plus (b).

(b) A purchased power adder of $0.0011 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 $0.25 per kilowatt will be assessed for capacity used to deliver energy at any point of delivery at which Southwestern provides transformation 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 P-98C, 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
A monthly rate of $0.04 per kilowatt of Peaking Billing Demand

(b) Operating Reserves Service: Spinning Reserve
A monthly rate of $0.0073 per kilowatt of Peaking Billing Demand
A daily rate of $0.00033 per kilowatt for non-Federal generation inside Southwestern's control area.

(c) Operating Reserves Service: Supplemental Reserve
A monthly rate of $0.0073 per kilowatt of Peaking Billing Demand
A daily rate of $0.00033 per kilowatt for non-Federal generation inside Southwestern's control area.

(d) Energy Imbalance Service:
no charge

**Availability of Ancillary Services**

Ancillary Services (a) and (d) listed above are available only for deliveries of power and energy to load centers within Southwestern's Control Area. Ancillary Services (b) and (c) listed above are available only for deliveries of non-Federal power and energy generated by resources located within Southwestern's Control Area and for deliveries of all Hydro Peaking Power and associated energy from and within Southwestern's Control Area. Where available, such Ancillary Services must be taken from Southwestern; unless, subject to Southwestern's approval, they are provided by others.

**Application of Ancillary Services Charges**

For any month, the charges for Ancillary Services (a), (b), (c) and (d) listed above for deliveries of Hydro Peaking Power shall be based on the Peaking Billing Demand.

The daily charge for Ancillary Services (b) and (c) for non-Federal generation inside Southwestern's Control 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. For any particular customer with internal generation, the monthly accumulation of daily charges shall be reduced by the amount that transmission customer(s) are charged for Ancillary Services (b) and (c) for a particular month under rate schedule NFTS-98C when the source of power is such internal generation.

**Provision of Ancillary Services by Others**

Customers for which Ancillary Services (a), (b), (c) and (d) 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 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.

**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 in Southwestern's Open Access Transmission Service tariff does not apply to deliveries of Hydro Peaking Power, and therefore Energy Imbalance Service is not charged on such deliveries. Customers which 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 Control 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 | $0.10 |
| 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 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: $0.053 per kilowatthour

**Rates for Real Power Losses**

The Customer shall purchase real power losses unless it elects to self-provide such losses under the provision detailed below in *Annual Election to Self Provide Real Power Losses.*

Real Power Losses are computed as four (4) percent of the total amount of non-Federal energy transmitted under a particular Customer's Peaking Contract Demand. The monthly charge for such Real Power Losses will be computed on a per kilowatthour basis as follows:

$$MC = .04 \times NFE \times R$$

with the factors defined as follows:

MC = The monthly charge ($) by Southwestern for Real Power Losses of non-Federal energy transmitted under the capacity associated with Hydro Peaking Power;

NFE = The amount of non-Federal energy (kWh) transmitted under a Customer's Peaking Contract Demand during a particular month; and

R = The rate for Real Power Losses ($ per kWh), is equal to the average of Southwestern's actual costs for the purchase of energy to replace Real Power Losses during the previous fiscal year (October through September), as reflected in Southwestern's financial records.

The rate for Real Power Losses will be posted on Southwestern's OASIS by November 1 of each year. This rate will be effective for one year beginning January 1 of each calendar year.

*Annual Election to Self Provide Real Power Losses*: The Customer may elect, on an annual basis, to self-provide all loss energy for which it is responsible subject to the following conditions:

(1) Such election for self-provision shall be for a full calendar year (January through December) for that Customer and shall be exercised by execution of a Real Power Losses service agreement, or equivalent, before December 1 of the prior calendar year;

2) Unless otherwise specified in the Real Power Losses service agreement, the Customer shall schedule the delivery of real power losses into the System of Southwestern at the rate of one megawatt of real power losses for every 25 megawatts of non-Federal power and energy delivered to Customer's loads

served from the points of delivery set forth in the Southwestern/Customer contract;

3) The initial election for self-provision of real power losses will take place by January 1, 2000, with initial implementation for service beginning February 1, 2000. Thereafter, election for self-provision will occur in accordance with condition (1) above.

4) For any new customer taking transmission service from Southwestern after January 1, 2000, election to self-provide real power losses shall be made at the time the contract is negotiated. Such service shall be implemented as provided for in the contract and the election to self-provide shall apply through the end of that calendar year for all transmission services.

**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 lagging for each electrically integrated load except where point(s) are considered point(s) of system integration for mutual system support.

**Determination of Power Factor**

The power factor may be determined at intervals or continuously, at the option of Southwestern, and shall be computed under the formula:

$$PF = (kWh \times 100) \div _ (kWh^2 + rkVAh^2) \quad ,$$

with the factors defined as follows:

PF = the power factor (in percentage) for any Demand Period of the month.

kWh = the total quantity of energy which is delivered during such Demand Period to the Customer's electrically integrated load, through all Southwestern points of delivery other than those points which are points of system integration for mutual system support.

rkVAh = the total quantity of reactive kilovolt-ampere-hours (kvars) delivered during such Demand Period to the Customer's electrically integrated load through all Southwestern points of delivery other than those points which are points of system integration for mutual system support.

**Power Factor Penalty**

Power factor penalties may be assessed for any month in which the formula above, when calculated for any Demand Period during such month, yields a power factor of less than 95 percent lagging. The penalty is assessed for such month in accordance with the following formula:

PENALTY = PD x PFP x $1.00

with the factors defined as follows:

PENALTY =The amount in dollars to be assessed on the monthly invoice to the Customer as the Power Factor Penalty.

PD = The Customer's peak demand in kilowatts at the point or points of delivery for the month in which a low power factor was calculated.

PFP = The percentage equal to the difference, rounded to the nearest 1 percent, between 95 percent lagging and the computed power factor.

**Application of Power Factor Penalty**

No penalty is assessed for leading power factor. Southwestern, 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 where a Customer has a single, electrically integrated load served through multiple points. 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, whether the power factor computation 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.

Southwestern, at its sole option, may 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 power factor dropped below 95 percent lagging.

**Adjustment for Reduction in Service:**

If, during any month, the quantity of Peaking Contract Demand 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, 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.

**Procedure for Determining Southwestern's Net Purchased Power Adder Adjustment**

Not more than once annually, the Purchased Power Adder of $.0011 (1.1 mills) per kilowatthour of Peaking Energy, as noted in this Rate Schedule, may be adjusted by the Administrator, Southwestern, by an amount up to ±$.0011 (1.1 mills) per kilowatthour, as calculated by the following formula:

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

with the factors defined as follows:

ADJ = the dollar 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 $.0011 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 ($2,563,300 per year) of Southwestern's System Direct Purchases used as the basis for the Purchased Power Adder of $.0011 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 (2,240,300,000 KWh per year) from the Southwestern System, which total was used as the basis for the $.0011 per kilowatthour Purchased Power Adder.

**UNITED STATES DEPARTMENT OF ENERGY**
**SOUTHWESTERN POWER ADMINISTRATION**

# RATE SCHEDULE NFTS-98C[1]
# WHOLESALE RATES FOR NON-FEDERAL TRANSMISSION SERVICE

**Effective:**

During the period January 1, 2000, through September 30, 2001, in accordance with the Order of the Federal Energy Regulatory Commission issued February 28, 2000 (EF00-4011-000).

**Available:**

In the region where Southwestern Power Administration (Southwestern) owns and operates high-voltage transmission lines and related facilities, and/or has contractual rights to such transmission facilities owned by others (System of Southwestern).

**Applicable:**

To Customers which have executed Service Agreements with Southwestern for the transmission of non-Federal power and energy over the System of Southwestern. Non-Federal power and energy will be transmitted and/or displaced, at the request of such Customer, over those portions of the System of Southwestern in which the Administrator, Southwestern, in his or her sole judgment, has determined that uncommitted transmission and transformation capacities in the amount(s) requested are and will be available in excess of the capacities required to market Federal power and energy pursuant to Section 5 of the Flood Control Act of 1944 (58 Stat. 887,890; 16 U.S.C. 825s).

**Character and Conditions of Service:**

Non-Federal power and energy will be received into the System of Southwestern in accordance with established schedules, and transmitted and/or displaced as 3-phase, alternating current, at approximately 60 Hertz, and delivered at the voltage level of the point(s) of delivery specified by Service Agreement or Transmission Service Transaction.

**Definitions of Terms:**

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

A "*Service Agreement*" is a contract executed between a Customer and Southwestern for the transmission of non-Federal power and energy over the System of Southwestern. Service Agreements are "*Long-Term Firm Agreements,*" "*Enabling Agreements,*" or "*Network Service Agreements.*" Long-Term Firm Agreements provide for reserved transmission capacity on a firm basis, for a particular point-to-point delivery path, for a period of one year or more. An Enabling Agreement provides for the Customer to request a variety of arrangements for shorter periods, which may be on a firm or non-firm basis. A Network Service Agreement provides for Network Integration Transmission Service.

A "*Service Request*" is made under an Enabling Agreement through Southwestern's Open Access Same-Time Information System (OASIS) for reservation of transmission capacity over a particular point-to-point delivery path for a particular period. When a Service

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[1]**Supersedes Rate Schedule NFTS-98B**

Request is approved by Southwestern, it becomes a "*Transmission Service Transaction.*" The Customer must submit hourly schedules for actual service in addition to the Service Request.

"*Firm Point-to-Point Transmission Service"* is transmission capacity reserved on a firm basis between specific points of receipt and delivery pursuant to either a Long-Term Firm Agreement or to a Transmission Service Transaction. "*Non-Firm Point-to-Point Transmission Service"* is transmission service reserved pursuant to a Transmission Service Transaction and which is subject to curtailment or interruption. "*Network Integration Transmission Service*" is transmission service provided under Part III of Southwestern's Open Access Transmission Service Tariff.

"*Secondary Transmission Service*" is associated with Firm Point-to-Point Transmission Service and Network Integration Transmission Service. For Firm Point-to-Point Transmission Service, it consists of transmission service provided on an as-available, non-firm basis, scheduled within the limits of a particular capacity reservation for transmission service, and scheduled from points of receipt, or to points of delivery, other than those designated in a Long-Term Firm Agreement or a Transmission Service Transaction for Firm Point-to-Point Transmission Service. For Network Integration Transmission Service, Secondary Transmission Service consists of transmission service provided on an as-available, non-firm basis, from resources other than the Network Resources designated in a Network Service Agreement, to meet the Network Customer's Network Load. The charges for Secondary Transmission Service, other than Real Power Losses and Ancillary Services, are included in the applicable capacity charges for Firm Point-to-Point Transmission Service and Network Integration Transmission Service.

The "*Demand Period*" used to determine maximum integrated rates of delivery for the purposes 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 to which electric power and energy are delivered from the System of Southwestern, or a specified set of delivery points which together form a single, electrically integrated load. Peak Demand for such set of 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.

*"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.

*"Scheduling, System Control, and Dispatch Service"* (an Ancillary Service) is provided by Southwestern as Control 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"* (an Ancillary 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"* (an Ancillary 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 Control Area.

*"Spinning Operating Reserve Service"* (an Ancillary 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"* (an Ancillary 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"* (an Ancillary Service) corrects for differences over a period of time between schedules and actual hourly deliveries of energy to a load.

**Rates for Firm Point-to-Point Transmission Service:**

CAPACITY CHARGES FOR FIRM TRANSMISSION SERVICE:

| | |
|---|---|
| Monthly: | $0.69 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a longer term agreement |
| Weekly: | $0.173 per kilowatt of transmission capacity reserved in increments of one week of service |
| Daily: | $0.0314 per kilowatt of transmission capacity reserved in increments of one day of service |

**Service Associated with Capacity Charges for Firm Point-to-Point Transmission Service:**

The capacity charge for Firm Transmission Service includes Secondary Transmission Service, but does not include charges for Ancillary Services or for Real Power Losses associated with actual schedules.

**Application of Capacity Charges for Firm Point-to-Point Transmission Service:**

Capacity charges for firm transmission service are applied to quantities reserved by contract under a Long-Term Firm Agreement or in accordance with a Transmission Service Transaction.

Customers whose loads are directly connected to Southwestern's system and are not within Southwestern's control area will be charged on the greatest of (1) the peak demand at any particular point of delivery during a particular month, rounded up to the nearest whole megawatt, or (2) the highest peak demand recorded at such point of delivery during any of the previous 11 months, rounded up to the nearest whole megawatt, or (3) the capacity reserved by contract; which amount shall be considered such Customer's reserved capacity. Secondary Transmission Service for such Customers shall be limited during any month to the most recent peak demand on which a particular Customer is billed or to the capacity reserved by contract, whichever is greater.

**Rates for Non-Firm Point-to-Point Transmission Service:**

CAPACITY CHARGES FOR NON-FIRM TRANSMISSION SERVICE:

Monthly: $0.55 per kilowatt of transmission capacity reserved in increments of one month of service

Weekly: $0.138 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0251 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00157 per kilowatthour of transmission capacity reserved in increments of one hour of service.

**Application of Charges for Non-Firm Point-to-Point Transmission Service:**

Capacity charges for Non-Firm Transmission Service are applied to quantities reserved under a Transmission Service Transaction, and do not include charges for Ancillary Services or Real Power Losses.

**Rates for Network Integration Transmission Service:**

ANNUAL REVENUE REQUIREMENT FOR NETWORK INTEGRATION SERVICE
$4,922,3000
MONTHLY REVENUE REQUIREMENT FOR NETWORK INTEGRATION SERVICE
$410,192
NET CAPACITY AVAILABLE FOR NETWORK INTEGRATION SERVICE
573,300 kilowatts
CAPACITY CHARGE FOR NETWORK INTEGRATION TRANSMISSION SERVICE:
$0.72 per kilowatt of Network Load ($410,192/573,300 kilowatts)

**Application of Charge for Network Integration Transmission Service:**

Network Integration Transmission Service is available only for deliveries of non-Federal power and energy, and is applied to the Customer utilizing Network Service exclusive of any deliveries of Federal power and energy. The capacity on which charges for any particular Customer utilizing Network Service is determined in accordance with Southwestern's Open Access Transmission Service Tariff and the Network Service Agreement. Network Integration Transmission Service includes Secondary Transmission Service, but does not include charges for Ancillary Services or for Real Power Losses.

**Rates for Real Power Losses**

The Customer shall purchase real power losses unless it elects to self-provide such losses under the provisions detailed below in *Annual Election to Self Provide Real Power Losses.*

Real Power Losses are computed as four (4) percent of the total amount of non-Federal energy transmitted on behalf of a Customer. The monthly charge for such Real Power Losses will be computed on a per kilowatthour basis as follows:

$$MC = .04 \times NFE \times R$$

with the factors defined as follows:

MC = The monthly charge ($) by Southwestern for Real Power Losses of non-Federal energy transmitted on behalf of a Customer;

NFE = The amount of non-Federal energy (kWh) transmitted on behalf of a Customer during a particular month; and

R = The rate for Real Power Losses ($ per kWh), is an average of Southwestern's actual costs for the purchase of energy to replace Real Power Losses during the previous fiscal year (October through September), as reflected in Southwestern's financial records.

The rate for Real Power Losses will be posted on Southwestern's OASIS by November 1 of each year. This rate will become effective for one year beginning January 1 of each calendar year.

*Annual Election to Self Provide Real Power Losses*: The Customer may elect, on an annual basis, to self-provide all loss energy for which it is responsible subject to the following conditions:

(1) Such election for self-provision shall be for a full calendar year (January through December) for that Customer and shall be exercised by execution of a Service Agreement, or equivalent, before December 1 of the prior calendar year.

2) Unless otherwise specified in the Real Power Loss Agreement, the Customer shall schedule the delivery of real power losses in the System of Southwestern at the rate of one megawatt of real power losses for every 25 megawatts of non-Federal power and energy delivered to Customers' loads served from the points of delivery set forth in the Southwestern/Customer contract.

3) The initial election for self provision of real power losses will take place by January 1, 2000, with initial implementation for service beginning February 1, 2000. Thereafter, election for self provision will occur in accordance with condition (1) above.

4) For any new customer taking transmission service from Southwestern after January 1, 2000, election to self provide real power losses shall be made at the time the contract is negotiated. Such service shall be implemented as provided for in the contract and the election to self-provide shall apply through the end of that calendar year for all transmission services.

**Monthly Capacity Charges for Transformation Service:**

A charge of $0.25 per kilowatt will be assessed for capacity used to deliver energy at any point of delivery at which Southwestern provides transformation 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. 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 ASSOCIATED WITH TRANSMISSION SERVICES:

**(a) Scheduling, System Control, and Dispatch Service:**

Monthly: $0.03 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Agreement or Network Service Agreement

Weekly: $0.008 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0014 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00009 per kilowatthour of energy delivered as non-firm transmission service

**(b) Reactive Supply and Voltage Support from Generation Sources Service:**

Monthly: $0.03 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Agreement or Network Service Agreement

Weekly: $0.008 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0014 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00009 per kilowatthour of energy delivered as non-firm transmission service

**(c) Regulation and Frequency Response Service:**

Monthly: $0.04 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Agreement or Network Service Agreement

Weekly: $0.010 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0018 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00011 per kilowatthour of energy delivered as non-firm transmission service

**(d) Operating Reserves Service: Spinning Reserve:**

Monthly: $0.0073 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Agreement or Network Service Agreement

Weekly: $0.00183 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.00033 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00002 per kilowatthour of energy delivered as non-firm transmission service

**(e) Operating Reserves Service: Supplementary Reserve:**

Monthly: $0.0073 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Agreement or Network Service Agreement

Weekly: $0.00183 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.00033 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00002 per kilowatthour of energy delivered as non-firm transmission service

**(f) Energy Imbalance Service:**

$0.0 per kilowatt for all periods of reservation

**Availability of Ancillary Services:**

Ancillary Services (a) and (b) are available for all transmission services in and from the System of Southwestern and shall be provided by Southwestern. Ancillary Services (c) and (f) listed above are available only for deliveries of power and energy serving load within Southwestern's Control Area and shall be provided by Southwestern, unless, subject to Southwestern's approval, they are provided by others. Ancillary Services (d) and (e) are available only for deliveries of power and energy generated by resources located within Southwestern's Control Area and shall be provided by Southwestern, unless, subject to Southwestern's approval, they are provided by others.

**Application of Ancillary Services Charges:**

Charges for all Ancillary Services are applied to the reserved or network transmission service taken by the Customer in accordance with the rates listed above when such services are provided by Southwestern.

The charges for Ancillary Services are considered to include Ancillary Services for any **Secondary Transmission Service**, except in cases where Ancillary Services (c) through (f) are applicable to a Secondary Transmission Service transaction, but are not applicable to the firm capacity reservation under which Secondary Transmission Service is provided. When charges for Ancillary Services are applicable to Secondary Transmission Service, the charge for the Ancillary Service shall be the hourly rate applied to all energy transmitted utilizing the Secondary Transmission Service.

**Provision of Ancillary Services by Others:**

Customers for which Ancillary Services (c) through (f) 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 their election to provide all or part of such Ancillary Services from their own resources or a third party.

Subject to Southwestern's approval of the ability of such resources or third parties to meet Southwestern's technical 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' written notice or upon the completion of any necessary equipment modifications necessary to accommodate such change. Such notice requirements also apply to requests for Southwestern to provide Ancillary Services when such services are available as specified above.

**Limitations on Energy Imbalance Service:**

Energy Imbalance Service is authorized for use only within a bandwidth of ± 1.5 percent of the actual requirements of the load at a particular point of delivery, for any hour, compared to the resources scheduled to meet such load during such hour. Deviations which are greater than ± 1.5 percent, but which are less than ±2,000 kilowatts, are considered to be within the authorized bandwidth. Deviations outside the authorized bandwidth are subject to a Capacity Overrun Penalty. 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 like hours and similar circumstance.

**Application of Capacity Overrun Penalty:**

Customers which receive deliveries within Southwestern's Control Area are obligated to provide resources sufficient to meet their loads. Such obligation is not related to the amount of transmission capacity that such Customers may have reserved for transmission service to a particular load. In the event that a Customer under schedules its resources to meet its load, resulting in a difference between resources and actual metered load (adjusted for transformer losses as applicable) outside the authorized bandwidth for Energy Imbalance Service for any hour, then such Customer is subject to the following penalty:

CAPACITY OVERRUN PENALTY

For each hour during which energy flows outside the authorized bandwidth, the Customer will be obliged to purchase such energy at the following rates:

| Months Associated with Charge | Rate per Kilowatt |
|---|---|
| March, April, May, October, November, December | $0.10 |
| January, February, June, July, August, September | $0.30 |

**Unauthorized Use of Energy Imbalance Service by Overscheduling of Resources:**

In the event that a Customer schedules greater resources than are needed to meet its load, such that energy flows at rates beyond the authorized bandwidth for the use of Energy Imbalance Service, Southwestern retains such energy at no cost to Southwestern and with no obligation to return such energy. Customers whose resources are scheduled by Southwestern are not subject to this provision.

**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 lagging for each electrically integrated load except where point(s) are point(s) of system integration for mutual system support.

**Determination of Power Factor:**

The power factor may be determined at intervals or continuously, at the option of Southwestern, and shall be computed under the formula:

$$PF = (kWh \times 100) \div _ (kWh^2 + rkVAh^2) \quad ,$$

with the factors defined as follows:

PF = the power factor (in percentage) for any Demand Period of the month.

kWh = the total quantity of energy which is delivered during such Demand Period to the Customer's electrically integrated load, through all Southwestern points of delivery other than those points which are points of system integration for mutual system support.

rkVAh = the total quantity of reactive kilovolt-ampere-hours (kvars) delivered during such Demand Period to the Customer's electrically integrated

load, through all Southwestern points of delivery other than those points which are points of system integration for mutual system support.

**Power Factor Penalty:**

Power factor penalties may be assessed for any month in which the formula above, when calculated for any Demand Period during such month, yields a power factor of less than 95 percent lagging. The penalty is assessed for such month in accordance with the following formula:

PENALTY = PD x PFP x $1.00

with the factors defined as follows:

PENALTY = The amount in dollars to be assessed on the monthly invoice to the Customer as the Power Factor Penalty.

PD = The Customer's peak demand in kilowatts at the point of delivery for the month in which a low power factor was calculated.

PFP = The percentage equal to the difference, rounded to the nearest 1 percent, between 95 percent lagging and the computed power factor.

**Application of Power Factor Penalty:**

No penalty is assessed for leading power factor. Southwestern, 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. 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, whether the power factor computation 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.

Southwestern, at its sole option, may 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 power factor dropped below 95 percent lagging.

NOTICE OF ORDER CONFIRMING AND APPROVING
INTEGRATED SYSTEM POWER RATES ON A FINAL BASIS

This is to advise you that the rate schedules which were implemented on an interim basis effective January 1, 1999, have been approved and confirmed on a final basis. The Federal Energy Regulatory Commission (FERC), by Order issued April 15, 1999, under Docket No. EF99-4011-000, has confirmed and approved the following Integrated System Rate Schedules on a final basis for the period January 1, 1999, through September 30, 2001:

Rate Schedule P-98B, Wholesale Rates for Hydro Peaking Power

Rate Schedule NFTS-98B, Wholesale Rates for Non-Federal Transmission Service

The basic power sales and transmission service charges under these rate schedules are identical to those in the previously-approved rate schedules for the same service. Minor changes were made in the provisions for real power losses, energy imbalance and the capacity overrun penalty.

Enclosed for your information is a copy of the FERC Order. The approved rate schedules can be accessed through Southwestern's Home Page at http://www.swpa.gov, or if you have any questions or would like a copy of the Integrated System Rate Schedules, please contact Barbara Otte at 918-595-6674 (otte@swpa.gov) or Tracey Hannon at 918-595-6677 (hannon@swpa.gov).

Michael A. Deihl
Administrator

Enclosure

**UNITED STATES DEPARTMENT OF ENERGY**
**SOUTHWESTERN POWER ADMINISTRATION**

# RATE SCHEDULE P-98B[1]
# WHOLESALE RATES FOR
# HYDRO PEAKING POWER

**Effective:**

During the period January 1, 1999, through September 30, 2001, in accordance with Federal Energy Regulatory Commission order issued April 15, 1999, Docket No. EF99-4011-000.

**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 Power 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:**

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 P-98B, 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, or a specified set of delivery points which together form a single, electrically integrated load. "Peak demand" for such set of 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."

*"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.

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[1]**Supersedes Rate Schedules P-98A**

*"Scheduling, System Control, and Dispatch Service"* (an Ancillary Service) is provided by Southwestern as Control 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"* (an Ancillary 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"* (an Ancillary 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 Control Area.

*"Spinning Operating Reserve Service"* (an Ancillary 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"* (an Ancillary 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"* (an Ancillary 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, to be provided at rates of delivery which do not exceed the Power Customer's Peaking Contract Demand.

**Monthly Rates for Peaking Contract Demand:**

CAPACITY CHARGE FOR HYDRO PEAKING POWER:

$2.56 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 Power Customers. This capacity charge also

includes 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**

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 Power Customer's point of delivery for Hydro Peaking Power;

(3) the Power Customer pays for 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 Southwestern's system of such non-Federal energy and the Power 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:**

ENERGY CHARGE:

(a) $0.0048 per kilowatthour of Peaking Energy and Supplemental Peaking Energy delivered; plus (b).

(b) A purchased power adder of $0.0011 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 Power 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 $0.25 per kilowatt will be assessed for capacity used to deliver energy at any point of delivery at which Southwestern provides transformation 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 P-98B, 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.

**Monthly Rates for Ancillary Services:**

CAPACITY CHARGES FOR ANCILLARY SERVICES:

(a) Regulation and Frequency Response Service
$0.04 per kilowatt of Peaking Billing Demand

(b) Operating Reserves Service: Spinning Reserve
$0.03 per kilowatt of Peaking Billing Demand

(c) Operating Reserves Service: Supplementary Reserve
$0.03 per kilowatt of Peaking Billing Demand

(d) Energy Imbalance Service:
no charge

**Availability of Ancillary Services**

Services (a) through (d) listed above are available only for deliveries of power and energy to load centers within Southwestern's Control Area. All deliveries from the System of Southwestern to such load centers must have all four Ancillary Services available for such deliveries, provided either by Southwestern or from other resources.

**Application of Ancillary Services Charges**

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

**Determination of Ancillary Services to Be Charged to a Power Customer**

Power Customers located in Southwestern's Control Area must inform Southwestern by written notice of the Ancillary Services which they intend to take from Southwestern, or 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 requirements for delivery.

Such written notice shall specify the Ancillary Services to be provided by Southwestern, or from other resources, for each point of delivery. The sources for the Ancillary Services which a Power Customer has elected to take in association with any particular point of delivery may not be changed during any calendar month. Power Customers may change the Ancillary Services which they take from Southwestern, and/or the sources from which they receive such services, by written notice provided at least 15 days prior to the first day of the month in which such changes are to be effected.

**Limitations on Energy Imbalance Service**

Energy Imbalance Service primarily applies to deliveries of power and energy which are required to satisfy a Power Customer's load. As Hydro Peaking Power and associated energy are limited by contract, the Energy Imbalance Service bandwidth specified in Southwestern's Open Access Transmission Service tariff does not apply to deliveries of

Hydro Peaking Power, and therefore Energy Imbalance Service is not charged on such deliveries. Power Customers which 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**

Power Customers which have loads within Southwestern's Control 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 Power 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 Power 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 Power Customer is entitled, the Power 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 | $0.10 |
| January, February, June, July, August, September | $0.30 |

**Application of Energy Overrun Penalty**:

By contract, the Power 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 Power Customer schedules 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 Power Customer is subject to the Energy Overrun Penalty.

ENERGY OVERRUN PENALTY:

For each kilowatthour of overrun: $0.053 per kilowatthour

**Rates for Real Power Losses**

Real Power Losses are computed as 4 percent of the total amount of non-Federal energy transmitted under a particular Power Customer's Peaking Contract Demand. The monthly charge for such Real Power Losses will be computed on a per kilowatthour basis as follows:

$$MC = .04 \times NFE \times R$$

with the factors defined as follows:

MC = The monthly charge by Southwestern for Real Power Losses of non-Federal energy transmitted under the capacity associated with Hydro Peaking Power;

NFE = The amount of non-Federal energy transmitted under a Power Customer's Peaking Contract Demand during a particular month; and

R = The rate for Real Power Losses, is an average of Southwestern's actual costs for the purchase of energy to replace Real Power Losses during the most recent twelve-month period, as reflected in Southwestern's financial records.

The rate for Real Power Losses will be posted on Southwestern's OASIS. This rate will initially be effective January 1, 1999, and thereafter will be reviewed and adjusted to become effective at the beginning of each Fiscal Year (October 1).

**Requirements Related to Power Factor**

Any Power 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 lagging for each electrically integrated load except where point(s) are considered point(s) of system integration for mutual system support.

**Determination of Power Factor**

The power factor may be determined at intervals or continuously, at the option of Southwestern, and shall be computed under the formula:

$$PF = (kWh \times 100) \div _ (kWh^2 + rkVAh^2) \quad ,$$

with the factors defined as follows:

PF = the power factor (in percentage) for any Demand Period of the month.

kWh = the total quantity of energy which is delivered during such Demand Period to the Power Customer's electrically integrated load, through all Southwestern points of delivery other than those points which are points of system integration for mutual system support.

rkVAh = the total quantity of reactive kilovolt-ampere-hours (kvars) delivered during such Demand Period to the Power Customer's electrically

integrated load through all Southwestern points of delivery other than those points which are points of system integration for mutual system support.

**Power Factor Penalty**

Power factor penalties may be assessed for any month in which the formula above, when calculated for any Demand Period during such month, yields a power factor of less than 95 percent lagging. The penalty is assessed for such month in accordance with the following formula:

$$PENALTY = PD \times PFP \times \$1.00$$

with the factors defined as follows:

PENALTY = The amount in dollars to be assessed on the monthly invoice to the Power Customer as the Power Factor Penalty.

PD = The Power Customer's peak demand in kilowatts at the point or points of delivery for the month in which a low power factor was calculated.

PFP = The percentage equal to the difference, rounded to the nearest 1 percent, between 95 percent lagging and the computed power factor.

**Application of Power Factor Penalty**

No penalty is assessed for leading power factor. Southwestern, 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 where a Power Customer has a single, electrically integrated load served through multiple points. The general criteria for such decision shall be that, given the configuration of the Power Customer's and Southwestern's systems, Southwestern will determine, in its sole judgment, whether the power factor computation 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.

Southwestern, at its sole option, may 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 power factor dropped below 95 percent lagging.

**Adjustment for Reduction in Service:**

If, during any month, the quantity of Peaking Contract Demand 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 transmission and/or related facilities on the system of Southwestern, the Power 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 Power Customer's capacity charges associated with Hydro Peaking Power times the Peaking Billing Demand.

C = the Power 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.

**Procedure for Determining Southwestern's Net Purchased Power Adder Adjustment**

On the effective date of this Rate Schedule P-98B, the cumulative discretionary adjustment of -$0.0031 (a credit) per kilowatthour will be applied to the Purchased Power Adder referenced above under part (b) of the Energy Charge. This initial adjustment reflects the existing Purchased Power Deferral Account balance, and will be applied to each kilowatthour of Peaking Energy purchased by the Power Customer for service received after the said effective date. The Purchased Power Deferral Account balance is the result of Purchased Power Adder receipts collected under previous rate schedules.

Subsequently, not more than once annually, the Purchased Power Adder may be adjusted by the Administrator, Southwestern, by an amount up to ±$.0011 per kilowatthour, as calculated by the following formula:

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

with the factors defined as follows:

ADJ = the dollar 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 Net Purchased Power Adder by more than $.0011 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 ($2,563,300 per year) of Southwestern's

System Direct Purchases used as the basis for the Purchased Power Adder of $.0011 per kilowatthour of Peaking Energy;

DIF = the accumulated remainder of the difference in the actual and estimated (PURCH - EST) 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 Purchased Power Adder Adjustment in any previous periods;

SALES = the annual Total Peaking Energy sales projected to be delivered (2,240,300,000 KWh per year) from the Southwestern System, which total was used as the basis for the $.0011 per kilowatthour Purchased Power Adder.

**UNITED STATES DEPARTMENT OF ENERGY**
**SOUTHWESTERN POWER ADMINISTRATION**

# RATE SCHEDULE NFTS-98B[1]
# WHOLESALE RATES FOR NON-FEDERAL TRANSMISSION SERVICE

**Effective:**

During the period January 1, 1999, through September 30, 2001, in accordance with Federal Energy Regulatory Commission order issued April 15, 1999, Docket No. EF99-4011-000.

**Available:**

In the region where Southwestern Power Administration (Southwestern) owns and operates high-voltage transmission lines and related facilities, or has contractual rights to such transmission facilities owned by others (System of Southwestern).

**Applicable:**

To Transmission Customers which have executed Service Agreements with Southwestern for the transmission of non-Federal power and energy over the System of Southwestern. Non-Federal power and energy will be transmitted and/or displaced, at the request of such Transmission Customer, over those portions of the System of Southwestern in which the Administrator, Southwestern, in his or her sole judgment, has determined that uncommitted transmission and transformation capacities in the amount(s) requested are and will be available in excess of the capacities required to market Federal power and energy pursuant to Section 5 of the Flood Control Act of 1944 (58 Stat. 887,890; 16 U.S.C. 825s).

**Character and Conditions of Service:**

Non-Federal power and energy will be received into the System of Southwestern in accordance with established schedules, and transmitted and/or displaced as 3-phase, alternating current, at approximately 60 Hertz, and delivered at the voltage level of the point(s) of delivery specified by Service Agreement or Transmission Service Transaction.

**Definitions of Terms:**

A "*Service Agreement*" is a contract executed between a Transmission Customer and Southwestern for the transmission of non-Federal power and energy over the System of Southwestern. Service Agreements are "*Long-Term Firm Agreements,*" "*Enabling Agreements,*" or "*Network Service Agreements.*" Long-Term Firm Agreements provide for reserved transmission capacity on a firm basis, for a particular point-to-point delivery path, for a period of one year or more. An Enabling Agreement provides for the Transmission Customer to request a variety of arrangements for shorter periods, which may be on a firm or non-firm basis. A Network Service Agreement provides for Network Integration Transmission Service.

A "*Service Request*" is made under an Enabling Agreement through Southwestern's Open Access Same-Time Information System (OASIS) for reservation of transmission capacity over a particular point-to-point delivery path for a particular period. When a Service Request is approved by Southwestern, it becomes a "*Transmission Service Transaction.*"

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[1]**Supersedes Rate Schedule NFTS-98**

The Transmission Customer must submit hourly schedules for actual service in addition to the Service Request.

"*Firm Point-to-Point Transmission Service* is transmission capacity reserved on a firm basis between specific points of receipt and delivery pursuant to either a Long-Term Firm Agreement or to a Transmission Service Transaction. "*Non-Firm Point-to-Point Transmission Service*" is transmission service reserved pursuant to a Transmission Service Transaction and which is subject to curtailment or interruption. "*Network Integration Transmission Service*" is transmission service provided under Part III of Southwestern's Open Access Transmission Service Tariff.

"*Secondary Transmission Service*" is associated with Firm Point-to-Point Transmission Service and Network Integration Transmission Service. For Firm Point-to-Point Transmission Service, it consists of transmission service provided on an as-available, non-firm basis, scheduled within the limits of a particular capacity reservation for transmission service, and scheduled from points of receipt, or to points of delivery, other than those designated in a Long-Term Firm Agreement or a Transmission Service Transaction for Firm Point-to-Point Transmission Service. For Network Integration Transmission Service, Secondary Transmission Service consists of transmission service provided on an as-available, non-firm basis, from resources other than the Network Resources designated in a Network Service Agreement, to meet the Network Customer's Network Load. The charges for Secondary Transmission Service, other than Real Power Losses, are included in the applicable capacity charges for Firm Point-to-Point Transmission Service and Network Integration Transmission Service.

The "*Demand Period*" used to determine maximum integrated rates of delivery for the purposes 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 to which electric power and energy are delivered from the System of Southwestern, or a specified set of delivery points which together form a single, electrically integrated load. "Peak demand" for such set of 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.

"*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.

"*Scheduling, System Control, and Dispatch Service*" (an Ancillary Service) is provided by Southwestern as Control 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*" (an Ancillary 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*" (an Ancillary 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 Control Area.

*"Spinning Operating Reserve Service"* (an Ancillary 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"* (an Ancillary 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"* (an Ancillary Service) corrects for differences over a period of time between schedules and actual hourly deliveries of energy to a load.

**Rates for Firm Point-to-Point Transmission Service:**

CAPACITY CHARGES FOR FIRM TRANSMISSION SERVICE:

| | |
|---|---|
| Monthly: | $0.69 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a longer term agreement |
| Weekly: | $0.173 per kilowatt of transmission capacity reserved in increments of one week of service |
| Daily: | $0.0314 per kilowatt of transmission capacity reserved in increments of one day of service |

**Service Associated with Capacity Charges for Firm Point-to-Point Transmission Service:**

The capacity charge for Firm Transmission Service includes Secondary Transmission Service, but does not include charges for Ancillary Services or for Real Power Losses associated with actual schedules.

**Application of Capacity Charges for Firm Point-to-Point Transmission Service:**

Capacity charges for firm transmission service are applied to quantities reserved by contract under a Long-Term Firm Agreement or in accordance with a Transmission Service Transaction.

Transmission Customers whose loads are directly connected to Southwestern's system and are not within Southwestern's control area will be charged on the greatest of (1) the peak demand at any particular point of delivery during a particular month, rounded up to the nearest whole megawatt, or (2) the highest peak demand recorded at such point of delivery during any of the previous 11 months, rounded up to the nearest whole megawatt, or (3) the capacity reserved by contract, which amount shall be considered such transmission customer's reserved capacity. Secondary Transmission Service for such Transmission Customers shall be limited during any month to the most recent peak demand on which a particular Transmission Customer is billed or to the capacity reserved by contract, whichever is greater.

**Rates for Non-Firm Point-to-Point Transmission Service:**

CAPACITY CHARGES FOR NON-FIRM TRANSMISSION SERVICE:

Monthly: $0.55 per kilowatt of transmission capacity reserved in increments of one month of service

Weekly: $0.138 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0251 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00157 per kilowatthour of transmission capacity reserved in increments of one hour of service.

**Application of Charges for Non-Firm Point-to-Point Transmission Service:**

Capacity charges for Non-Firm Transmission Service are applied to quantities reserved under a Transmission Service Transaction, and do not include charges for Ancillary Services or Real Power Losses.

**Rates for Network Integration Transmission Service:**

ANNUAL REVENUE REQUIREMENT FOR NETWORK INTEGRATION SERVICE
$4,922,3000

MONTHLY REVENUE REQUIREMENT FOR NETWORK INTEGRATION SERVICE
$410,192

NET CAPACITY AVAILABLE FOR NETWORK INTEGRATION SERVICE
573,300 kilowatts

CAPACITY CHARGE FOR NETWORK INTEGRATION TRANSMISSION SERVICE:
$0.72 per kilowatt of Network Load ($410,192/573,300 kilowatts)

**Application of Charge for Network Integration Transmission Service:**

Network Integration Transmission Service is available only for deliveries of non-Federal power and energy, and is applied to the Network Customer's Network Load exclusive of any deliveries of Federal power and energy. The capacity on which charges for any particular Network Customer are determined in accordance with Southwestern's Open Access Transmission Service Tariff and the Network Service Agreement. Network Integration Transmission Service includes Secondary Transmission Service, but does not include charges for Ancillary Services or for Real Power Losses.

**Rates for Real Power Losses**

Real Power Losses are computed as 4 percent of the total amount of non-Federal energy transmitted on behalf of a Transmission Customer. The monthly charge for such Real Power Losses will be computed on a per kilowatthour basis as follows:

$$MC = .04 \times NFE \times R$$

with the factors defined as follows:

MC = The monthly charge by Southwestern for Real Power Losses of non-Federal energy transmitted on behalf of a Transmission Customer;

NFE = The amount of non-Federal energy transmitted on behalf of a Transmission Customer during a particular month; and

R = The rate for Real Power Losses, is an average of Southwestern's actual costs for the purchase of energy to replace Real Power Losses during the most recent twelve-month period, as reflected in Southwestern's financial records.

The rate for Real Power Losses will be posted on Southwestern's OASIS. This rate will initially be effective January 1, 1999, and thereafter will be reviewed and adjusted to become effective at the beginning of each Fiscal Year (October 1).

**Monthly Capacity Charges for Transformation Service:**

A charge of $0.25 per kilowatt will be assessed for capacity used to deliver energy at any point of delivery at which Southwestern provides transformation 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. 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 ASSOCIATED WITH TRANSMISSION SERVICES:

**(a) Scheduling, System Control, and Dispatch Service:**

Monthly: $0.03 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Agreement or Network Service Agreement

Weekly: $0.008 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0014 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00009 per kilowatthour of energy delivered as non-firm transmission service

**(b) Reactive Supply and Voltage Support from Generation Sources Service:**

Monthly: $0.03 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Agreement or Network Service Agreement

Weekly: $0.008 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0014 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00009 per kilowatthour of energy delivered as non-firm transmission service

**(c) Regulation and Frequency Response Service:**

Monthly: $0.04 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Agreement or Network Service Agreement

Weekly: $0.010 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0018 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00011 per kilowatthour of energy delivered as non-firm transmission service

**(d) Operating Reserves Service: Spinning Reserve:**

Monthly: $0.03 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Agreement or Network Service Agreement

Weekly: $0.008 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0014 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00009 per kilowatthour of energy delivered as non-firm transmission service

**(e) Operating Reserves Service: Supplementary Reserve:**

Monthly: $0.03 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Agreement or Network Service Agreement

Weekly: $0.008 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0014 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00009 per kilowatthour of energy delivered as non-firm transmission service

**(f) Energy Imbalance Service:**

$0.0 per kilowatt for all periods of reservation

**Availability of Ancillary Services:**

Services (a) and (b) are associated with all transmission services in and from the System of Southwestern. Services (c) through (f) listed above are available only for deliveries of power and energy to load centers within Southwestern's Control Area. All deliveries from the System of Southwestern to such load centers must have all four Ancillary Services (c) through (f) available for such deliveries, provided either by Southwestern or from other resources.

**Application of Ancillary Services Charges :**

Charges for all Ancillary Services applicable to a particular transmission service are assessed on reserved or network transmission capacity in accordance with the rates listed above. Services (a) and (b) are applied to all transmission services received from Southwestern. The charges for Ancillary Services are considered to include Ancillary Services for any Secondary Transmission Service, except in cases where Ancillary Services (c) through (f) are applicable to a Secondary Transmission Service schedule, but are not applicable to the firm capacity reservation under which Secondary Transmission Service is provided. In such case, the charges for Ancillary Services associated with such schedule shall be assessed at the hourly rates listed above for all associated energy, in accordance with the Ancillary Services provided at the particular point of delivery.

**Determination of Ancillary Services to Be Charged to a Transmission Customer:**

Transmission Customers located in Southwestern's Control Area, or delivering to load centers within the Control Area, must inform Southwestern by written notice of the Ancillary Services which they intend to receive from Southwestern for any transmission services to such load centers, or 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 requirements for delivery.

Such written notice shall specify the Ancillary Services to be provided by Southwestern, or from other resources, for each point of delivery. The sources for the Ancillary Services which a Transmission Customer has elected to receive in association with any particular point of delivery may not be changed during any calendar month. Transmission Customers may change the Ancillary Services which they receive from Southwestern, and/or the sources from which they receive such services, by written notice provided at least 15 days prior to the first day of the month in which such changes are to be effected.

**Limitations on Energy Imbalance Service:**

Energy Imbalance Service is authorized for use only within a bandwidth of ± 1.5 percent of the actual requirements of the load at a particular point of delivery, for any hour, compared to the resources scheduled to meet such load during such hour. Deviations which are greater than ± 1.5 percent, but which are less than ±2,000 kilowatts, are considered to be within the authorized bandwidth. Deviations outside the authorized bandwidth are subject to a Capacity Overrun Penalty. 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 like hours and similar circumstance.

**Application of Capacity Overrun Penalty:**

Transmission Customers which receive deliveries within Southwestern's Control Area are obligated to provide resources sufficient to meet their loads. Such obligation is not related to the amount of transmission capacity that such Transmission Customers may have reserved for transmission service to a particular load. In the event that a Transmission Customer under schedules its resources to meet its load, resulting in a difference between resources and actual metered load (adjusted for transformer losses as applicable) outside the authorized bandwidth for Energy Imbalance Service for any hour , then such Transmission Customer is subject to the following penalty:

CAPACITY OVERRUN PENALTY

For each hour during which energy flows outside the authorized bandwidth, the Transmission Customer will be obliged to purchase such energy at the following rates:

| Months Associated with Charge | Rate per Kilowatt |
|---|---|
| March, April, May, October, November, December | $0.10 |
| January, February, June, July, August, September | $0.30 |

**Unauthorized Use of Energy Imbalance Service by Overscheduling of Resources:**
In the event that a Transmission Customer schedules greater resources than are needed to meet its load, such that energy flows at rates beyond the authorized bandwidth for the use of Energy Imbalance Service, Southwestern retains such energy at no cost to Southwestern and with no obligation to return such energy. Transmission Customers whose resources are scheduled by Southwestern are not subject to this provision.

**Requirements Related to Power Factor:**
Any Transmission 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 lagging for each electrically integrated load except where point(s) are point(s) of system integration for mutual system support.

**Determination of Power Factor:**
The power factor may be determined at intervals or continuously, at the option of Southwestern, and shall be computed under the formula:

$$PF = (kWh \times 100) \div _ (kWh^2 + rkVAh^2) \quad ,$$

with the factors defined as follows:

PF = the power factor (in percentage) for any Demand Period of the month.

kWh = the total quantity of energy which is delivered during such Demand Period to the Transmission Customer's electrically integrated load, through all Southwestern points of delivery other than those points which are points of system integration for mutual system support.

rkVAh = the total quantity of reactive kilovolt-ampere-hours (kvars) delivered during such Demand Period to the Transmission Customer's electrically integrated load, through all Southwestern points of delivery other than those points which are points of system integration for mutual system support.

**Power Factor Penalty:**
Power factor penalties may be assessed for any month in which the formula above, when calculated for any Demand Period during such month, yields a power factor of less than 95 percent lagging. The penalty is assessed for such month in accordance with the following formula:

PENALTY = PD x PFP x $1.00

with the factors defined as follows:

PENALTY = The amount in dollars to be assessed on the monthly invoice to the Transmission Customer as the Power Factor Penalty.

PD = The Transmission Customer's peak demand in kilowatts at the point of delivery for the month in which a low power factor was calculated.

PFP = The percentage equal to the difference, rounded to the nearest 1 percent, between 95 percent lagging and the computed power factor.

**Application of Power Factor Penalty:**

No penalty is assessed for leading power factor. Southwestern, 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 Transmission Customer has a single, electrically integrated load served through multiple points. The general criteria for such decision shall be that, given the configuration of the Transmission Customer's and Southwestern's systems, Southwestern will determine, in its sole judgment, whether the power factor computation 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.

Southwestern, at its sole option, may 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 power factor dropped below 95 percent lagging.

**Department of Energy**
Southwestern Power Administration
Post Office Box 1619
Tulsa, Oklahoma 74101

APR 1 6 2001

NOTICE

To Customers and Interested Parties:

This is to inform you that the Secretary of Energy has approved Southwestern Power Administration's (Southwestern) revised Rate Schedules P-98D and NFTS-98D on an interim basis to be effective April 1, 2001, and has forwarded them to the Federal Energy Regulatory Commission for final approval. The following information provides further details on the changes to the rate schedules.

Modifications were made throughout both rate schedules for clarity or to eliminate language, if no longer applicable. In addition, Southwestern made detailed revisions to the Power Factor Penalty provision in both the P-98D and NFTS-98D rate schedules. Also, in the NFTS-98D rate schedule, Southwestern further clarified the Energy Imbalance Service provision and added a new provision for an Interconnection Facilities Service Charge.

Power Factor Penalty Provision

The Power Factor Penalty provision has been revised to charge for all hours during a month where a Power Factor is less than 95 percent lagging to more accurately reflect the actual taking of reactive kilovolt amperes (VARS) from the system of Southwestern. This penalty will serve as an incentive for connected utilities to provide their own voltage support. Southwestern, at its sole option, may reduce or waive the penalty when, in its 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, or during the period April 1 through September 30, 2001, to provide time for connected utilities to assess the impacts of such power factor penalty.

Energy Imbalance Service Provision

The Energy Imbalance Service provision in the NFTS-98 rate schedule has been further clarified to specify the hours and circumstances in which energy within the authorized bandwidth is to be returned to Southwestern. Energy delivered or received for this service is accounted for as an inadvertent flow and the provision has been clarified to specify that inadvertent flow in any given hour will only be offset with the flows in the corresponding hour of a day in the same category, either weekdays or weekend day/holidays. The hourly accumulations in the current month will be added to the hourly inadvertent balances from the previous month, resulting in a month-end balance for each hour. In the event any hourly month-end balance exceeds 12 MWHs, the

excess will be subject to the Capacity Overrun Penalty or the Unauthorized Use of Energy Imbalance Service by Overscheduling of Resources provision.

Interconnection Facilities Service Charge

In addition, Southwestern has added an Interconnection Facilities Service Charge to the NFTS-98D rate schedule. This charge will be applicable to interconnection requests for which Southwestern does not otherwise receive benefits or compensation for the use of Federal facilities.

Copies of the new rate schedules are available for download from Southwestern's homepage at http://www.swpa.gov. If you have any questions regarding these changes or how they apply to you, please contact Jim Sherwood at(918) 595-6673, *sherwood@swpa.gov*, or Jim McDonald at (918) 595-6690, *mcdonald@swpa.gov*.

Sincerely,

Michael A. Deihl
Administrator

UNITED STATES DEPARTMENT OF ENERGY
SOUTHWESTERN POWER ADMINISTRATION

# RATE SCHEDULE P-98D[1]
# WHOLESALE RATES FOR
# HYDRO PEAKING POWER

**Effective:**

During the period April 1, 2001, through September 30, 2001, in accordance with the Order of the Federal Energy Regulatory Commission issued July 31, 2001.

**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 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 P-98D, 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, or a specified set of delivery points which together form a single, electrically integrated load. "Peak demand" for such set of 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."

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[1] **Supersedes Rate Schedules P-98C**

*"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. Ancillary Services include:

> *"Scheduling, System Control, and Dispatch Service"* is provided by Southwestern as Control 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 Control 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, to be provided 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:

$2.56 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 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 pays or commits to provide for 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 Southwestern's system 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:**

ENERGY CHARGE:

(a) $0.0048 per kilowatthour of Peaking Energy and Supplemental Peaking Energy delivered; plus (b).

(b) A purchased power adder of $0.0011 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 $0.25 per kilowatt will be assessed for capacity used to deliver energy at any point of delivery at which Southwestern provides transformation 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
A monthly rate of $0.04 per kilowatt of Peaking Billing Demand.

(b) Spinning Operating Reserve Service:
A monthly rate of $0.0073 per kilowatt of Peaking Billing Demand
A daily rate of $0.00033 per kilowatt for non-Federal generation inside Southwestern's control area.

(c) Supplemental Operating Reserve Service:
A monthly rate of $0.0073 per kilowatt of Peaking Billing Demand
A daily rate of $0.00033 per kilowatt for non-Federal generation inside Southwestern's control area.

(d) Energy Imbalance Service:
$0.0 per kilowatt for all reservation periods.

**Availability of Ancillary Services**

Ancillary Services (a) and (d) listed above are available only for deliveries of power and energy to load centers within Southwestern's Control Area. Ancillary Services (b) and (c) listed above are available only for deliveries of non-Federal power and energy generated by resources located within Southwestern's Control Area and for deliveries of all Hydro Peaking Power and associated energy from and within Southwestern's Control Area. Where available, such Ancillary Services must be taken from Southwestern; unless, subject to Southwestern's approval, they are provided by others.

**Application of Ancillary Services Charges**

For any month, the charges for Ancillary Services (a), (b), (c) and (d) listed above for deliveries of Hydro Peaking Power shall be based on the Peaking Billing Demand.

The daily charge for Ancillary Services (b) and (c) for non-Federal generation inside Southwestern's Control 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. For any particular customer with internal generation, the monthly accumulation of daily charges shall be reduced by the amount that transmission customer(s) are charged for Ancillary Services (b) and (c) for a particular month under the applicable non-Federal transmission service rate schedule when the source of power is such internal generation.

**Provision of Ancillary Services by Others**

Customers for which Ancillary Services (a), (b), (c) and (d) 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 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.

**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 in Southwestern's Open Access Transmission Service tariff does not apply to deliveries of Hydro Peaking Power, and therefore Energy Imbalance Service is not charged on such deliveries. Customers which 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 Control 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 | $0.10 |
| 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: $0.053 per kilowatthour

**Rates for Real Power Losses**

The Customer shall purchase real power losses unless it elects to self-provide such losses under the provision detailed below in *Annual Election to Self Provide Real Power Losses.*

Real Power Losses are computed as four (4) percent of the total amount of non-Federal energy transmitted under a particular Customer's Peaking Contract Demand. The monthly charge for such Real Power Losses will be computed on a per kilowatthour basis as follows:

$$MC = .04 \times NFE \times R$$

with the factors defined as follows:

MC = The monthly charge ($) by Southwestern for Real Power Losses of non-Federal energy transmitted under the capacity associated with Hydro Peaking Power;

NFE = The amount of non-Federal energy (kWh) transmitted under a Customer's Peaking Contract Demand during a particular month; and

R = The rate for Real Power Losses ($ per kWh), is equal to the average of Southwestern's actual costs for the purchase of energy to replace Real Power Losses during the previous fiscal year (October through September), as reflected in Southwestern's financial records.

The rate for Real Power Losses will be posted on Southwestern's OASIS by November 1 of each year. This rate will be effective for one year beginning January 1 of each calendar year.

*Annual Election to Self Provide Real Power Losses*: The Customer may elect, on an annual basis, to self-provide all loss energy for which it is responsible subject to the following conditions:

(1) Such election for self-provision shall be for a full calendar year (January through December) for that Customer and shall be exercised by execution of a service agreement, or equivalent, before December 1 of the prior calendar year;

2) Unless otherwise specified in the service agreement, the Customer shall schedule the delivery of real power losses into the System of Southwestern at the rate of one megawatt of real power losses for every 25 megawatts of non-Federal power and energy delivered to Customer's loads served from the points of delivery set forth in the Southwestern/Customer contract;

3) For any new customer taking transmission service from Southwestern, election to self-provide real power losses shall be made at the time the contract is negotiated. Such service shall be implemented as provided for in the contract and the election to self-provide shall apply through the end of that calendar year for all transmission services.

**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:

$$PF = (kWh) \div _ (kWh^2 + rkVAh^2) \quad ,$$

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:

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

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 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 calulation 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, or during the period April 1 through September 30, 2001, to provide time to assess the impacts of such power factor penalty.

**Adjustment for Reduction in Service:**

If, during any month, the quantity of Peaking Contract Demand 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, 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.

**Procedure for Determining Southwestern's Net Purchased Power Adder Adjustment**

Not more than once annually, the Purchased Power Adder of $.0011 (1.1 mills) per kilowatthour of Peaking Energy, as noted in this Rate Schedule, may be adjusted by the Administrator, Southwestern, by an amount up to ±$.0011 (1.1 mills) per kilowatthour, as calculated by the following formula:

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

with the factors defined as follows:

ADJ = the dollar 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 $.0011 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 ($2,563,300 per year) of Southwestern's System Direct Purchases used as the basis for the Purchased Power Adder of $.0011 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 (2,240,300,000 KWh per year) from the System of Southwestern, which total was used as the basis for the $.0011 per kilowatthour Purchased Power Adder.

**UNITED STATES DEPARTMENT OF ENERGY**
**SOUTHWESTERN POWER ADMINISTRATION**

# RATE SCHEDULE NFTS-98D[1]
# WHOLESALE RATES FOR NON-FEDERAL TRANSMISSION/INTERCONNECTION FACILITIES SERVICE

**Effective:**
During the period, April 1, 2001, through September 30, 2001, in accordance with the Order of the Federal Energy Regulatory Commission issued July 31, 2001.

**Available:**
In the region where Southwestern Power Administration (Southwestern) owns and operates high-voltage transmission lines and related facilities, and/or has contractual rights to such transmission facilities owned by others (System of Southwestern).

**Applicable:**
To Customers which have executed Service Agreements with Southwestern for the transmission of non-Federal power and energy over the System of Southwestern or for its use for interconnections. Southwestern will provide services over those portions of the System of Southwestern in which the Administrator, Southwestern, in his or her sole judgment, has determined that uncommitted transmission and transformation capacities in the System of Southwestern are and will be available in excess of the capacities required to market Federal power and energy pursuant to Section 5 of the Flood Control Act of 1944 (58 Stat. 887,890; 16 U.S.C. 825s).

**Character and Conditions of Service:**
Service will be provided as 3-phase, alternating current, at approximately 60 Hertz, and at the voltage level of the point(s) specified by Service Agreement or Transmission Service Transaction.

**Definitions of Terms:**
"*Customer*" is the entity which is utilizing and/or purchasing services from Southwestern pursuant to this rate schedule.

A "*Service Agreement*" is a contract executed between a Customer and Southwestern for the transmission of non-Federal power and energy over the System of Southwestern or for interconnections. Service Agreements include:

> "*Long-Term Firm Transmission Agreements" that* provide for reserved transmission capacity on a firm basis, for a particular point-to-point delivery path, for a period of one year or more.
>
> "*Enabling Transmission Agreements*" that provide for the Customer to request a variety of arrangements for periods of less than one year, which may be on a firm or non-firm basis.
>
> "*Network Transmission Service Agreements*" that provide for the Customer to request firm transmission service for the delivery of

[1]**Supersedes Rate Schedule NFTS-98C**

capacity and energy from the Customer's network resources to the Customer's network load, for a period of one year or more.

"*Interconnection Agreements*" that provide for the use of the System of Southwestern and recognize the exchange of mutual benefits for such use or provide for application of a charge for Interconnection Facilities Service.

A "*Service Request*" is made under an Enabling Transmission Agreement through Southwestern's Open Access Same-Time Information System (OASIS) for reservation of transmission capacity over a particular point-to-point delivery path for a particular period. When a Service Request is approved by Southwestern, it becomes a "*Transmission Service Transaction*." The Customer must submit hourly schedules for actual service in addition to the Service Request.

"*Firm Point-to-Point Transmission Service*" is transmission service reserved on a firm basis between specific points of receipt and delivery pursuant to either a Long-Term Firm Transmission Agreement or to a Transmission Service Transaction. "*Non-Firm Point-to-Point Transmission Service*" is transmission service reserved pursuant to a Transmission Service Transaction and which is subject to curtailment or interruption. "*Network Integration Transmission Service*" is transmission service provided under Part III of Southwestern's Open Access Transmission Service Tariff which provides the Customer with firm transmission service for the delivery of capacity and energy from the Customer's resources to the Customer's load.

"*Secondary Transmission Service*" is associated with Firm Point-to-Point Transmission Service and Network Integration Transmission Service. For Firm Point-to-Point Transmission Service, it consists of transmission service provided on an as-available, non-firm basis, scheduled within the limits of a particular capacity reservation for transmission service, and scheduled from points of receipt, or to points of delivery, other than those designated in a Long-Term Firm Transmission Agreement or a Transmission Service Transaction for Firm Point-to-Point Transmission Service. For Network Integration Transmission Service, Secondary Transmission Service consists of transmission service provided on an as-available, non-firm basis, from resources other than the Network Resources designated in a Network Transmission Service Agreement, to meet the Customer's Network Load. The charges for Secondary Transmission Service, other than Real Power Losses and Ancillary Services, are included in the applicable capacity charges for Firm Point-to-Point Transmission Service and Network Integration Transmission Service.

The "*Demand Period*" used to determine maximum integrated rates of delivery for the purposes 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 or interconnection.

For the purposes of this rate schedule, the term "*Point of Delivery*" is used to mean either a single physical point to which electric power and energy are delivered from the System of Southwestern, or a specified set of delivery points which together form a single, electrically integrated load. Peak Demand for such set of 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.

*"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. Ancillary Services include:

> *"Scheduling, System Control, and Dispatch Service"* is provided by Southwestern as Control 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 Control 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.

"*Interconnection Facilities Service*" provides for the use of the System of Southwestern to deliver energy and/or provide system support at an interconnection.

Rates for Firm Point-to-Point Transmission Service:

CAPACITY CHARGES FOR FIRM TRANSMISSION SERVICE:

Monthly: $0.69 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a longer term agreement

Weekly: $0.173 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0314 per kilowatt of transmission capacity reserved in increments of one day of service

**Service Associated with Capacity Charges for Firm Point-to-Point Transmission Service:**

The capacity charge for firm transmission service includes Secondary Transmission Service, but does not include charges for Ancillary Services or for Real Power Losses associated with actual schedules.

**Application of Capacity Charges for Firm Point-to-Point Transmission Service:**

Capacity charges for firm transmission service are applied to quantities reserved by contract under a Long-Term Firm Transmission Agreement or in accordance with a Transmission Service Transaction.

Customers whose loads are directly connected to Southwestern's system and are not within Southwestern's control area will be charged on the greatest of (1) the Peak Demand at any particular point of delivery during a particular month, rounded up to the nearest whole megawatt, or (2) the highest Peak Demand recorded at such point of delivery during any of the previous 11 months, rounded up to the nearest whole megawatt, or (3) the capacity reserved by contract; which amount shall be considered such Customer's reserved capacity. Secondary Transmission Service for such Customers shall be limited during any month to the most recent Peak Demand on which a particular Customer is billed or to the capacity reserved by contract, whichever is greater.

**Rates for Non-Firm Point-to-Point Transmission Service:**

CAPACITY CHARGES FOR NON-FIRM TRANSMISSION SERVICE:

Monthly: $0.55 per kilowatt of transmission capacity reserved in increments of one month of service

Weekly: $0.138 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0251 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00157 per kilowatthour of transmission capacity reserved in increments of one hour of service

**Application of Charges for Non-Firm Point-to-Point Transmission Service:**

Capacity charges for Non-Firm Transmission Service are applied to quantities reserved under a Transmission Service Transaction, and do not include charges for Ancillary Services or Real Power Losses.

**Rates for Network Integration Transmission Service:**

ANNUAL REVENUE REQUIREMENT FOR NETWORK INTEGRATION SERVICE
$4,922,300
MONTHLY REVENUE REQUIREMENT FOR NETWORK INTEGRATION SERVICE
$410,192
NET CAPACITY AVAILABLE FOR NETWORK INTEGRATION SERVICE
573,300 kilowatts
CAPACITY CHARGE FOR NETWORK INTEGRATION TRANSMISSION SERVICE:
$0.72 per kilowatt of Network Load ($410,192/573,300 kilowatts)

**Application of Charge for Network Integration Transmission Service:**

Network Integration Transmission Service is available only for deliveries of non-Federal power and energy, and is applied to the Customer utilizing such service exclusive of any deliveries of Federal power and energy. The capacity on which charges for any particular Customer utilizing this service is determined in accordance with Southwestern's Open Access Transmission Service Tariff and the Network Transmission Service Agreement. Network Integration Transmission Service includes Secondary Transmission Service, but does not include charges for Ancillary Services or for Real Power Losses.

**Rates for Real Power Losses**

The Customer shall purchase real power losses unless it elects to self-provide such losses under the provisions detailed below in *Annual Election to Self-Provide Real Power Losses.*

Real Power Losses are computed as four (4) percent of the total amount of non-Federal energy transmitted on behalf of a Customer. The monthly charge for such Real Power Losses will be computed on a per kilowatthour basis as follows:

$$MC = .04 \times NFE \times R$$

with the factors defined as follows:

MC = The monthly charge ($) by Southwestern for Real Power Losses of non-Federal energy transmitted on behalf of a Customer;

NFE = The amount of non-Federal energy (kWh) transmitted on behalf of a Customer during a particular month; and

R = The rate for Real Power Losses ($ per kWh), is an average of Southwestern's actual costs for the purchase of energy to replace Real Power Losses during the previous fiscal year (October through September), as reflected in Southwestern's financial records.

The rate for Real Power Losses will be posted on Southwestern's OASIS by November 1 of each year. This rate will become effective for one year beginning January 1 of each calendar year.

*Annual Election to Self-Provide Real Power Losses*: The Customer may elect, on an annual basis, to self-provide all loss energy for which it is responsible, subject to the following conditions:

(1) Such election for self-provision shall be for a full calendar year (January through December) for that Customer and shall be exercised by execution of a Service Agreement, or equivalent, before December 1 of the prior calendar year.

2) Unless otherwise specified in the Service Agreement, the Customer shall schedule the delivery of real power losses in the System of Southwestern at the rate of one megawatt of real power losses for every 25 megawatts of non-Federal power and energy delivered to Customers' loads served from the points of delivery set forth in the Southwestern/Customer contract.

3) For any new Customer taking transmission service from Southwestern, election to self-provide real power losses shall be made at the time the contract is negotiated. Such service shall be implemented as provided for in the contract and the election to self-provide shall apply through the end of that calendar year for all transmission services.

**Monthly Capacity Charges for Transformation Service:**

A charge of $0.25 per kilowatt will be assessed for capacity used to deliver energy at any point of delivery at which Southwestern provides transformation 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. 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 ASSOCIATED WITH TRANSMISSION SERVICES:

**(a) Scheduling, System Control, and Dispatch Service:**

Monthly: $0.03 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement

Weekly: $0.008 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0014 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00009 per kilowatthour of energy delivered as non-firm transmission service

**(b) Reactive Supply and Voltage Control from Generation Sources Service:**

Monthly: $0.03 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement

Weekly: $0.008 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0014 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00009 per kilowatthour of energy delivered as non-firm transmission service

**(c) Regulation and Frequency Response Service:**

Monthly: $0.04 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement

Weekly: $0.010 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0018 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00011 per kilowatthour of energy delivered as non-firm transmission service

**(d) Spinning Operating Reserve Service:**

Monthly: $0.0073 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement

Weekly: $0.00183 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.00033 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00002 per [illegible] hour of energy delivered as non-firm transmission service

(e) Supplemental Operating Reserve Service:

Monthly: $0.0073 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement

Weekly: $0.00183 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.00033 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00002 per kilowatthour of energy delivered as non-firm transmission service

**(f) Energy Imbalance Service:**

$0.0 per kilowatt for all periods of reservation

**Availability of Ancillary Services:**

Ancillary Services (a) and (b) are available for all transmission services in and from the System of Southwestern and shall be provided by Southwestern. Ancillary Services (c) and (f) listed above are available only for deliveries of power and energy serving load within Southwestern's Control Area and shall be provided by Southwestern, unless, subject to Southwestern's approval, they are provided by others. Ancillary Services (d) and (e) are available only for deliveries of power and energy generated by resources located within Southwestern's Control Area and shall be provided by Southwestern, unless, subject to Southwestern's approval, they are provided by others.

**Application of Ancillary Services Charges:**

Charges for all Ancillary Services are applied to the reserved or network transmission service taken by the Customer in accordance with the rates listed above when such services are provided by Southwestern.

The charges for Ancillary Services are considered to include Ancillary Services for any Secondary Transmission Service, except in cases where Ancillary Services (c) through (f) are applicable to a Secondary Transmission Service transaction, but are not applicable to the firm capacity reservation under which Secondary Transmission Service is provided. When charges for Ancillary Services are applicable to Secondary Transmission Service, the charge for the Ancillary Service shall be the hourly rate applied to all energy transmitted utilizing the Secondary Transmission Service.

**Provision of Ancillary Services by Others:**

Customers for which Ancillary Services (c) through (f) 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 their election to provide all or part of such Ancillary Services from their own resources or a third party.

Subject to Southwestern's approval of the ability of such resources or third parties to meet Southwestern's technical 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' written notice or upon the completion of any necessary equipment modifications necessary to accommodate such change. Such notice requirements also apply to requests for Southwestern to provide Ancillary Services when such services are available as specified above.

**Limitations on Energy Imbalance Service:**

Energy Imbalance Service is authorized for use only within a bandwidth of _ 1.5 percent of the actual requirements of the load at a particular point of delivery, for any hour, compared to the resources scheduled to meet such load during such hour. Deviations which are greater than _ 1.5 percent, but which are less than _ 2,000 kilowatts, are considered to be within the authorized bandwidth. Deviations outside the authorized bandwidth are subject to a Capacity Overrun Penalty.

Energy delivered or received within the authorized bandwidth for this service is accounted for as an inadvertent flow and will be netted against flows in the future. The inadvertent flow in any given hour will only be offset with the flows in the corresponding hour of a day in the same category. The two categories of days are weekdays and weekend days/holidays. This process will result in a separate inadvertent accumulation for each hour of the two categories of days. The hourly accumulations in the current month will be added to the hourly inadvertent balances from the previous month, resulting in a month-end balance for each hour.

The Customer is required to adjust the scheduling of resources in such a way as to reduce the accumulation towards zero. It is recognized that the inadvertent hourly flows can be both negative and positive, and that offsetting flows should deter a significant accumulation of inadvertent. In the event any hourly month-end balance exceeds 12 MWHs, the excess will be subject to the Application of Capacity Overrun Penalty or the Unauthorized Use of Energy Imbalance Service by Overscheduling of Resources provisions, depending on the direction of the accumulation.

**Application of Capacity Overrun Penalty:**

Customers which receive deliveries within Southwestern's Control Area are obligated to provide resources sufficient to meet their loads. Such obligation is not related to the amount of transmission capacity that such Customers may have reserved for transmission service to a particular load. Customers whose resources are scheduled by Southwestern are not subject to this provision. In the event that a Customer under schedules its resources to meet its load, resulting in a difference between resources and actual metered load (adjusted for transformer losses as applicable) outside the authorized bandwidth for Energy Imbalance Service for any hour, then such Customer is subject to the following penalty:

CAPACITY OVERRUN PENALTY

For each hour during which energy flows outside the authorized bandwidth, the Customer will be obliged to purchase such energy at the following rates:

| Months Associated with Charge | Rate per Kilowatt |
|---|---|
| March, April, May, October, November, December | $0.10 |
| January, February, June, July, August, September | $0.30 |

**Unauthorized Use of Energy Imbalance Service by Overscheduling of Resources:**
In the event that a Customer schedules greater resources than are needed to meet its load, such that energy flows at rates beyond the authorized bandwidth for the use of Energy Imbalance Service, Southwestern retains such energy at no cost to Southwestern and with no obligation to return such energy. Customers whose resources are scheduled by Southwestern are not subject to this provision.

**Application of Charge for Interconnection Facilities Service:**
Any Customer that requests an interconnection from Southwestern which, in Southwestern's sole judgment and at its sole option, does not provide commensurate benefits or compensation to Southwestern for the use of its facilities shall be assessed a capacity charge for Interconnection Facilities Service. For any month, charges for Interconnection Facilities Service shall be assessed on the greater of (1) that month's actual Peak Demand, or (2) the highest Peak Demand recorded during the previous eleven months, as metered at the interconnection. The use of Interconnection Facilities Service will be subject to power factor provisions as specified in this rate schedule.

**Rate for Interconnection Facilities Service:**
The monthly capacity charge for Interconnection Facilities Service is $0.69 per kilowatt.

**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:

$$PF = kWh \div _ (kWh^2 + rkVAh^2) \quad ,$$

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:

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

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 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, or during the period April 1 through September 30, 2001, to provide time to assess the impacts of such power factor penalty.

**Department of Energy**
Southwestern Power Administration
One West Third Street
Tulsa, Oklahoma 74103-3519

OCT 28 2003

NOTICE OF ORDER CONFIRMING AND APPROVING
INTEGRATED SYSTEM POWER RATES ON A FINAL BASIS

You are hereby notified, in accordance with the terms and conditions of our power sales contract, that the Federal Energy Regulatory Commission (FERC), pursuant to the authority under U.S. Department of Energy Delegation Order No. 00-037.00, dated December 6, 2001, has confirmed and approved the following Integrated System Rate Schedules for the period October 1, 2002 through September 30, 2006:

Rate Schedule P-02, Wholesale Rates for Hydro Peaking Power

Rate Schedule NFTS-02, Wholesale Rates for Non-Federal Transmission Service

Rate Schedule EE-02, Wholesale Rate for Excess Energy

The Integrated System Rate Schedules were confirmed, approved and placed in effect on an interim basis by the Secretary of Energy in Rate Order No. SWPA-48 issued September 18, 2002. The FERC provided final approval of the Integrated System Rate Schedules, as submitted by the Secretary of Energy, on October 22, 2003, under Docket No. EF02-4011-000.

Enclosed is a copy of the FERC Order Confirming and Approving Rate Schedules on a final basis. Copies of the approved Integrated System Rate Schedules were previously furnished. If you would like additional copies, please access Southwestern online at http://www.swpa.gov/ or contact Barbara Otte at 918-595-6674 or Gary Hayter at 918-595-6675.

Michael A. Deihl
Administrator

Enclosure

**UNITED STATES DEPARTMENT OF ENERGY**
**SOUTHWESTERN POWER ADMINISTRATION**

# RATE SCHEDULE P-02[1]
# WHOLESALE RATES FOR HYDRO PEAKING POWER

**Effective:**

During the period October 1, 2002,through September 30, 2006, in accordance with Federal Energy Regulatory Commission order issued October 22, 2003, Docket No. EF02-4011-000.

**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:**

A*Customer@* is the entity which is utilizing and/or purchasing 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, or a specified set of delivery points which together form a single, electrically integrated load. "Peak demand" for such set of 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 Schedules P-98D**

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. Ancillary Services include:

> *"Scheduling, System Control, and Dispatch Service"* is provided by Southwestern as Control 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 Control 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, to be provided 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:

$2.72 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 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 pays or commits to provide for 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 Southwestern's system 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:**

ENERGY CHARGE:

(a) $0.0050 per kilowatthour of Peaking Energy and Supplemental Peaking Energy delivered; plus (b).

(b) A purchased power adder of $0.0025 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 $0.28 per kilowatt will be assessed for capacity used to deliver energy at any point of delivery at which Southwestern provides transformation 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 $0.06 per kilowatt of Peaking Billing Demand.

(b) Spinning Operating Reserve Service:
Monthly rate of $0.0056 per kilowatt of Peaking Billing Demand
Daily rate of $0.00025 per kilowatt for non-Federal generation inside Southwestern=s control area

(c) Supplemental Operating Reserve Service:
Monthly rate of $0.0056 per kilowatt of Peaking Billing Demand
Daily rate of $0.00025 per kilowatt for non-Federal generation inside Southwestern=s control area

(d) Energy Imbalance Service:
$0.0 per kilowatt for all reservation periods.

**Availability of Ancillary Services**

Ancillary Services (a) and (d) listed above are available only for deliveries of power and energy to load centers within Southwestern's Control Area. Ancillary Services (b) and (c) listed above are available only for deliveries of non-Federal power and energy generated by resources located within Southwestern=s Control Area and for deliveries of all Hydro Peaking Power and associated energy from and within Southwestern=s Control Area. Where available, such Ancillary Services must be taken from Southwestern; unless, subject to Southwestern=s approval, they are provided by others.

**Application of Ancillary Services Charges**

For any month, the charges for Ancillary Services (a), (b), (c) and (d) listed above for deliveries of Hydro Peaking Power shall be based on the Peaking Billing Demand.

The daily charge for Ancillary Services (b) and (c) for non-Federal generation inside Southwestern=s Control 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. For any particular customer with internal generation, the monthly accumulation

of daily charges shall be reduced by the amount that transmission customer(s) are charged for Ancillary Services (b) and (c) for a particular month under the applicable non-Federal transmission service rate schedule when the source of power is such internal generation.

**Provision of Ancillary Services by Others**

Customers for which Ancillary Services (a), (b), (c) and (d) 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 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.

**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 in Southwestern=s Open Access Transmission Service tariff does not apply to deliveries of Hydro Peaking Power, and therefore Energy Imbalance Service is not charged on such deliveries. Customers which 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 Control 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 | $0.10 |
| 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: $0.055 per kilowatthour

**Rates for Real Power Losses**

The Customer shall purchase real power losses unless it elects to self-provide such losses under the provision detailed below in *Annual Election to Self Provide Real Power Losses.*

Real Power Losses are computed as four (4) percent of the total amount of non-Federal energy transmitted under a particular Customer=s Peaking Contract Demand. The monthly charge for such Real Power Losses will be computed on a per kilowatthour basis as follows:

$$MC = .04 \times NFE \times R$$

with the factors defined as follows:

MC = The monthly charge ($) by Southwestern for Real Power Losses of non-Federal energy transmitted under the capacity associated with Hydro Peaking Power;

NFE = The amount of non-Federal energy (kWh) transmitted under a Customer=s Peaking Contract Demand during a particular month; and

R = The rate for Real Power Losses ($ per kWh), is equal to the average of Southwestern=s actual costs for the purchase of energy to replace Real Power Losses during the previous fiscal year (October through September), as reflected in Southwestern=s financial records.

The rate for Real Power Losses will be posted on Southwestern=s OASIS by November 1 of each year. This rate will be effective for one year beginning January 1 of each calendar year.

*Annual Election to Self Provide Real Power Losses*: The Customer may elect, on an annual basis, to self-provide all loss energy for which it is responsible subject to the following conditions:

(1) Such election for self-provision shall be for a full calendar year (January through December) for that Customer and shall be exercised by execution of a service agreement, or equivalent, before December 1 of the prior calendar year;

(2) Unless otherwise specified in the service agreement, the Customer shall schedule the delivery of real power losses into the System of Southwestern at the rate of one megawatt of real power losses for every 25 megawatts of non-Federal power and energy delivered to Customer's loads served from the points of delivery set forth in the Southwestern/Customer contract;

(3) For any new customer taking transmission service from Southwestern, election to self-provide real power losses shall be made at the time the contract is negotiated. Such service shall be implemented as provided for in the contract and the election to self-provide shall apply through the end of that calendar year for all transmission services.

**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:

$$PF = (kWh) ) s (kWh^2 + rkVAh^2) ,$$

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:

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

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 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, the Customer's capacity charges for such month will be reduced for each such reduction in service by an amount computed under the formula:

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

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.

**Procedure for Determining Southwestern's Net Purchased Power Adder Adjustment**

Not more than once annually, the Purchased Power Adder of $.0025 (2.5 mills) per kilowatthour of Peaking Energy, as noted in this Rate Schedule, may be adjusted by the Administrator, Southwestern, by an amount up to ±$.0011 (1.1 mills) per kilowatthour, as calculated by the following formula:

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

with the factors defined as follows:

ADJ = the dollar 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 $.0011 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 ($5,520,600 per year) of Southwestern's System Direct Purchases used as the basis for the Purchased Power Adder of $.0025 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 $.0025 per kilowatthour Purchased Power Adder.

**UNITED STATES DEPARTMENT OF ENERGY**
**SOUTHWESTERN POWER ADMINISTRATION**

# RATE SCHEDULE NFTS-02 [1]
# WHOLESALE RATES FOR NON-FEDERAL TRANSMISSION/INTERCONNECTION FACILITIES SERVICE

**Effective:**
During the period October 1, 2002, through September 30, 2006, in accordance with Federal Energy Regulatory Commission order issued October 22, 2003, Docket No. EF02-4011-000.

**Available:**
In the region where Southwestern Power Administration (Southwestern) owns and operates high-voltage transmission lines and related facilities, and/or has contractual rights to such transmission facilities owned by others (System of Southwestern).

**Applicable:**
To Customers which have executed Service Agreements with Southwestern for the transmission of non-Federal power and energy over the System of Southwestern or for its use for interconnections. Southwestern will provide services over those portions of the System of Southwestern in which the Administrator, Southwestern, in his or her sole judgment, has determined that uncommitted transmission and transformation capacities in the System of Southwestern are and will be available in excess of the capacities required to market Federal power and energy pursuant to Section 5 of the Flood Control Act of 1944 (58 Stat. 887,890; 16 U.S.C. 825s).

**Character and Conditions of Service:**
Service will be provided as 3-phase, alternating current, at approximately 60 Hertz, and at the voltage level of the point(s) specified by Service Agreement or Transmission Service Transaction.

**Definitions of Terms:**
A*Customer@* is the entity which is utilizing and/or purchasing services from Southwestern pursuant to this rate schedule.

A "*Service Agreement*" is a contract executed between a Customer and Southwestern for the transmission of non-Federal power and energy over the System of Southwestern or for interconnections. Service Agreements include:

> "*Long-Term Firm Transmission Agreements" that* provide for reserved transmission capacity on a firm basis, for a particular point-to-point delivery path, for a period of one year or more.
>
> "*Enabling Transmission Agreements*" that provide for the Customer to request a variety of arrangements for periods of less than one year, which may be on a firm or non-firm basis.

[1]**Supersedes Rate Schedule NFTS-98D**

"*Network Transmission Service Agreements*" that provide for the Customer to request firm transmission service for the delivery of capacity and energy from the Customer=s network resources to the Customer=s network load, for a period of one year or more

A*Interconnection Agreements*@ that provide for the use of the System of Southwestern and recognize the exchange of mutual benefits for such use or provide for application of a charge for Interconnection Facilities Service.

A "*Service Request*" is made under an Enabling Transmission Agreement through Southwestern's Open Access Same-Time Information System (OASIS) for reservation of transmission capacity over a particular point-to-point delivery path for a particular period. When a Service Request is approved by Southwestern, it becomes a "*Transmission Service Transaction.*" The Customer must submit hourly schedules for actual service in addition to the Service Request.

"*Firm Point-to-Point Transmission Service*@ is transmission service reserved on a firm basis between specific points of receipt and delivery pursuant to either a Long-Term Firm Transmission Agreement or to a Transmission Service Transaction. "*Non-Firm Point-to-Point Transmission Service"* is transmission service reserved on a non-firm basis for specific points of receipt and delivery pursuant to a Transmission Service Transaction. "*Network Integration Transmission Service*" is transmission service provided under Part III of Southwestern's Open Access Transmission Service Tariff which provides the Customer with firm transmission service for the delivery of capacity and energy from the Customer=s resources to the Customer=s load.

"*Secondary Transmission Service*" is associated with Firm Point-to-Point Transmission Service and Network Integration Transmission Service. For Firm Point-to-Point Transmission Service, it consists of transmission service provided on an as-available, non-firm basis, scheduled within the limits of a particular capacity reservation for transmission service, and scheduled from points of receipt, or to points of delivery, other than those designated in a Long-Term Firm Transmission Agreement or a Transmission Service Transaction for Firm Point-to-Point Transmission Service. For Network Integration Transmission Service, Secondary Transmission Service consists of transmission service provided on an as-available, non-firm basis, from resources other than the Network Resources designated in a Network Transmission Service Agreement, to meet the Customer's Network Load. The charges for Secondary Transmission Service, other than Real Power Losses and Ancillary Services, are included in the applicable capacity charges for Firm Point-to-Point Transmission Service and Network Integration Transmission Service.

The "*Demand Period*" used to determine maximum integrated rates of delivery for the purposes 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 or interconnection.

For the purposes of this rate schedule, the term "*Point of Delivery*" is used to mean either a single physical point to which electric power and energy are delivered from the

System of Southwestern, or a specified set of delivery points which together form a single, electrically integrated load. Peak Demand for such set of 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.

*"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. Ancillary Services include:

*"Scheduling, System Control, and Dispatch Service"* is provided by Southwestern as Control 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 Control 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.

A*Interconnection Facilities Service*@ provides for the use of the System of Southwestern to deliver energy and/or provide system support at an interconnection.

<u>Rates for Firm Point-to-Point Transmission Service</u>:

<u>CAPACITY CHARGES FOR FIRM TRANSMISSION SERVICE</u>:

Monthly: $0.73 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a longer term agreement

Weekly: $0.183 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0332 per kilowatt of transmission capacity reserved in increments of one day of service

**Service Associated with Capacity Charges for Firm Point-to-Point Transmission Service:**

The capacity charge for firm transmission service includes Secondary Transmission Service, but does not include charges for Ancillary Services or for Real Power Losses associated with actual schedules.

**Application of Capacity Charges for Firm Point-to-Point Transmission Service:**

Capacity charges for firm transmission service are applied to quantities reserved by contract under a Long-Term Firm Transmission Agreement or in accordance with a Transmission Service Transaction.

Customers, unless otherwise specified by contract, will be charged on the greatest of (1) the Peak Demand at any particular point of delivery during a particular month, rounded up to the nearest whole megawatt, or (2) the highest Peak Demand recorded at such point of delivery during any of the previous 11 months, rounded up to the nearest whole megawatt, or (3) the capacity reserved by contract; which amount shall be considered such Customer's reserved capacity. Secondary Transmission Service for such Customers shall be limited during any month to the most recent Peak Demand on which a particular Customer is billed or to the capacity reserved by contract, whichever is greater.

**Rates for Non-Firm Point-to-Point Transmission Service:**

CAPACITY CHARGES FOR NON-FIRM TRANSMISSION SERVICE:

Monthly: 80 percent of the firm monthly charge of transmission capacity reserved in increments of one month of service

Weekly: 80 percent of the firm monthly charge divided by 4 of transmission capacity reserved in increments of one week of service

Daily: 80 percent of the firm monthly charge divided by 22 of transmission capacity reserved in increments of one day of service

Hourly: 80 percent of the firm monthly charge divided by 352 of transmission capacity reserved in increments of one hour of service

**Application of Charges for Non-Firm Point-to-Point Transmission Service:**

Capacity charges for Non-Firm Transmission Service are applied to quantities reserved under a Transmission Service Transaction, and do not include charges for Ancillary Services or Real Power Losses.

**Rates for Network Integration Transmission Service:**

ANNUAL REVENUE REQUIREMENT FOR NETWORK INTEGRATION SERVICE
$7,427,000

MONTHLY REVENUE REQUIREMENT FOR NETWORK INTEGRATION SERVICE
$618,917

NET CAPACITY AVAILABLE FOR NETWORK INTEGRATION SERVICE
842,300 kilowatts

CAPACITY CHARGE FOR NETWORK INTEGRATION TRANSMISSION SERVICE:
$0.73 per kilowatt of Network Load ($618,917/842,300 kilowatts)

**Application of Charge for Network Integration Transmission Service:**

Network Integration Transmission Service is available only for deliveries of non-Federal power and energy, and is applied to the Customer utilizing such service exclusive of any deliveries of Federal power and energy. The capacity on which charges for any particular Customer utilizing this service is determined on the greatest of (1) the Peak Demand at any particular point of delivery during a particular month, rounded up to the nearest whole megawatt, or (2) the highest Peak Demand recorded at such point of delivery during any of the previous 11 months, rounded up to the nearest whole megawatt. Secondary transmission Service for such Customers shall be limited during any month to the most recent Peak Demand on which a particular Customer is billed. Charges for Ancillary Services and for Real Power Losses shall also be assessed.

**Rates for Real Power Losses**

The Customer shall purchase real power losses unless it elects to self-provide such losses under the provisions detailed below in *Annual Election to Self-Provide Real Power Losses.*

Real Power Losses are computed as four (4) percent of the total amount of non-Federal energy transmitted on behalf of a Customer. The monthly charge for such Real Power Losses will be computed on a per kilowatthour basis as follows:

$$MC = .04 \times NFE \times R$$

with the factors defined as follows:

MC = The monthly charge ($) by Southwestern for Real Power Losses of non-Federal energy transmitted on behalf of a Customer;

NFE = The amount of non-Federal energy (kWh) transmitted on behalf of a Customer during a particular month; and

R = The rate for Real Power Losses ($ per kWh), is an average of Southwestern=s actual costs for the purchase of energy to replace Real Power Losses during the previous fiscal year (October through September), as reflected in Southwestern=s financial records.

The rate for Real Power Losses will be posted on Southwestern=s OASIS by November 1 of each year. This rate will become effective for one year beginning January 1 of each calendar year.

*Annual Election to Self-Provide Real Power Losses*: The Customer may elect, on an annual basis, to self-provide all loss energy for which it is responsible, subject to the following conditions:

(1) Such election for self-provision shall be for a full calendar year (January through December) for that Customer and shall be exercised by execution of a Service Agreement, or equivalent, before December 1 of the prior calendar year.

(2) Unless otherwise specified in the Service Agreement, the Customer shall schedule the delivery of real power losses in the System of Southwestern at the rate of one megawatt of real power losses for every 25 megawatts of non-Federal power and energy delivered to Customers' loads served from the points of delivery set forth in the Southwestern/Customer contract.

(3) For any new Customer taking transmission service from Southwestern, election to self-provide real power losses shall be made at the time the contract is negotiated. Such service shall be implemented as provided for in the contract and the election to self-provide shall apply through the end of that calendar year for all transmission services.

**Monthly Capacity Charges for Transformation Service:**

A charge of $0.28 per kilowatt will be assessed for capacity used to deliver energy at any point of delivery at which Southwestern provides transformation 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. 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 ASSOCIATED WITH TRANSMISSION SERVICES:

**(a) Scheduling, System Control, and Dispatch Service:**

Monthly: $0.05 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement

Weekly: $0.013 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0023 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00014 per kilowatthour of energy delivered as non-firm transmission service

**(b) Reactive Supply and Voltage Control from Generation Sources Service:**

Monthly: $0.03 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement

Weekly: $0.008 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0014 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00009 per kilowatthour of energy delivered as non-firm transmission service

**(c) Regulation and Frequency Response Service:**

Monthly: $0.06 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement

Weekly: $0.015 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0027 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00017 per kilowatthour of energy delivered as non-firm transmission service

**(d) Spinning Operating Reserve Service:**

Monthly: $0.0056 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement

Weekly: $0.0014 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.00025 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00002 per kilowatthour of energy delivered as non-firm transmission service

**(e) Supplemental Operating Reserve Service:**

Monthly: $0.0056 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement

Weekly: $0.0014 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.00025 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00002 per kilowatthour of energy delivered as non-firm transmission service

**(f) Energy Imbalance Service:**

$0.0 per kilowatt for all periods of reservation

**Availability of Ancillary Services:**

Ancillary Services (a) and (b) are available for all transmission services in and from the System of Southwestern and shall be provided by Southwestern. Ancillary Services (c) and (f) listed above are available only for deliveries of power and energy serving load within Southwestern's Control Area and shall be provided by Southwestern, unless, subject to Southwestern's approval, they are provided by others. Ancillary Services (d) and (e) are available only for deliveries of power and energy generated by resources located within Southwestern's Control Area and shall be provided by Southwestern, unless, subject to Southwestern's approval, they are provided by others.

**Application of Ancillary Services Charges:**

Charges for all Ancillary Services are applied to the reserved or network transmission service taken by the Customer in accordance with the rates listed above when such services are provided by Southwestern.

The charges for Ancillary Services are considered to include Ancillary Services for any Secondary Transmission Service, except in cases where Ancillary Services (c) through (f) are applicable to a Secondary Transmission Service transaction, but are not applicable to the firm capacity reservation under which Secondary Transmission Service is provided. When charges for Ancillary Services are applicable to Secondary Transmission Service, the charge for the Ancillary Service shall be the hourly rate applied to all energy transmitted utilizing the Secondary Transmission Service.

**Provision of Ancillary Services by Others:**

Customers for which Ancillary Services (c) through (f) 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 their election to provide all or part of such Ancillary Services from their own resources or a third party.

Subject to Southwestern's approval of the ability of such resources or third parties to meet Southwestern's technical 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= written notice or upon the completion of any necessary equipment modifications necessary to accommodate such change. Such notice requirements also apply to requests for Southwestern to provide Ancillary Services when such services are available as specified above.

**Limitations on Energy Imbalance Service:**

Energy Imbalance Service is authorized for use only within a bandwidth of ± 1.5 percent of the actual requirements of the load at a particular point of delivery, for any hour, compared to the resources scheduled to meet such load during such hour. Deviations which are greater than ± 1.5 percent, but which are less than ± 2,000 kilowatts, are considered to be within the authorized bandwidth. Deviations outside the authorized bandwidth are subject to a Capacity Overrun Penalty.

Energy delivered or received within the authorized bandwidth for this service is accounted for as an inadvertent flow and will be netted against flows in the future. The inadvertent flow in any given hour will only be offset with the flows in the corresponding hour of a day in the same category. The two categories of days are weekdays and weekend days/holidays. This process will result in a separate inadvertent accumulation for each hour of the two categories of days. The hourly accumulations in the current month will be added to the hourly inadvertent balances from the previous month, resulting in a month-end balance for each hour.

The Customer is required to adjust the scheduling of resources in such a way as to reduce the accumulation towards zero. It is recognized that the inadvertent hourly flows can be both negative and positive, and that offsetting flows should deter a significant accumulation of inadvertent. In the event any hourly month-end balance exceeds 12 MWHs, the excess will be subject to the Application of Capacity Overrun Penalty or the Unauthorized Use of Energy Imbalance Service by Overscheduling of Resources provisions, depending on the direction of the accumulation.

**Application of Capacity Overrun Penalty:**

Customers which receive deliveries within Southwestern's Control Area are obligated to provide resources sufficient to meet their loads. Such obligation is not related to the amount of transmission capacity that such Customers may have reserved for transmission service to a particular load. Customers whose resources are scheduled by Southwestern are not subject to this provision. In the event that a Customer under schedules its resources to meet its load, resulting in a difference between resources and actual metered load (adjusted for transformer losses as applicable) outside the authorized bandwidth for Energy Imbalance Service for any hour, then such Customer is subject to the following penalty:

CAPACITY OVERRUN PENALTY

For each hour during which energy flows outside the authorized bandwidth, the Customer will be obliged to purchase such energy at the following rates:

| Months Associated with Charge | Rate per Kilowatt |
|---|---|
| March, April, May, October, November, December | $0.10 |
| January, February, June, July, August, September | $0.30 |

**Unauthorized Use of Energy Imbalance Service by Overscheduling of Resources:**
In the event that a Customer schedules greater resources than are needed to meet its load, such that energy flows at rates beyond the authorized bandwidth for the use of Energy Imbalance Service, Southwestern retains such energy at no cost to Southwestern and with no obligation to return such energy. Customers whose resources are scheduled by Southwestern are not subject to this provision.

**Application of Charge for Interconnection Facilities Service:**
Any Customer that requests an interconnection from Southwestern which, in Southwestern's sole judgment and at its sole option, does not provide commensurate benefits or compensation to Southwestern for the use of its facilities shall be assessed a capacity charge for Interconnection Facilities Service. For any month, charges for Interconnection Facilities Service shall be assessed on the greater of (1) that month's actual Peak Demand, or (2) the highest Peak Demand recorded during the previous eleven months, as metered at the interconnection. The use of Interconnection Facilities Service will be subject to power factor provisions as specified in this rate schedule.

**Rate for Interconnection Facilities Service:**
The monthly capacity charge for Interconnection Facilities Service is $0.73 per kilowatt.

**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:

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

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:

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

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 APF@ 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 APF@ 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 AC@ 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.

**UNITED STATES DEPARTMENT OF ENERGY**
**SOUTHWESTERN POWER ADMINISTRATION**

# RATE SCHEDULE EE-02 [1]
# WHOLESALE RATE FOR EXCESS ENERGY

**Effective:**

During the period October 1, 2002, through September 30, 2006, in accordance with Federal Energy Regulatory Commission order issued October 22, 2003, Docket No. EF02-4011-000.

**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 electric utilities which, by contract, may purchase Excess Energy from Southwestern.

**Character and Conditions of Service:**

Three-phase, alternating current, delivered at approximately 60 Hertz, at the nominal voltage and points of delivery specified by contract.

**Energy Associated with this Rate Schedule:**

Excess Energy will be furnished at such times and in such amounts as Southwestern determines to be available.

**Definition of Terms:**

*"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. Ancillary Services include:

> *"Scheduling, System Control, and Dispatch Service"* is provided by Southwestern as Control 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 Control Area.

[1]**Supersedes Rate Schedule EE-98**

*"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 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.

**Rates for Excess Energy:**

ENERGY CHARGE: $0.0073 per kilowatthour delivered

CHARGES FOR ANCILLARY SERVICE ASSOCIATED WITH DELIVERIES TO LOAD CENTERS WITHIN SOUTHWESTERN'S CONTROL AREA:

| | |
|---|---|
| (a) Regulation & Frequency Response: | $0.00017 per kilowatthour delivered |
| (b) Operational Reserves, Spinning | $0.00002 per kilowatthour delivered |
| (c) Operational Reserves, Supplementary | $0.00002 per kilowatthour delivered |
| (d) Energy Imbalance Service | no charge per kilowatthour |

**Services Associated with Energy Charge for Excess Energy**

The Excess Energy charge includes such transmission services as are necessary to deliver such energy and the Ancillary Services for Scheduling, System Control, and Dispatch Service and for Reactive Supply and Voltage Control from Generation Sources Service.

**Availability of Ancillary Services:**

Ancillary Services (a) through (d) listed above are available only for deliveries of power and energy to load centers within Southwestern's Control Area. All deliveries from the System of Southwestern to such load centers must have all four Ancillary Services available for such deliveries, provided either by Southwestern or from other resources.

**Department of Energy**
Southwestern Power Administration
One West Third Street
Tulsa, Oklahoma 74103-3519

October 17, 2005

NOTICE OF ORDER CONFIRMING AND APPROVING
INTEGRATED SYSTEM POWER RATES ON A FINAL BASIS

You are hereby notified, in accordance with the terms and conditions of our power sales contract, that the Federal Energy Regulatory Commission (FERC), pursuant to the authority under U.S. Department of Energy Delegation Order No. 00-037.00, dated December 6, 2001, has confirmed and approved the following Integrated System Rate Schedules on a final basis for the period January 1, 2005 through September 30, 2008:

Rate Schedule P-04, Wholesale Rates for Hydro Peaking Power

Rate Schedule NFTS-04, Wholesale Rates for Non-Federal Transmission Service

Rate Schedule EE-04, Wholesale Rate for Excess Energy

The Integrated System Rate Schedules were confirmed, approved and placed in effect on an interim basis by the Secretary of Energy in Rate Order No. SWPA-51. The FERC approved the Integrated System Rate Schedules, as submitted by the Secretary, by Order issued October 11, 2005, under Docket No. EF05-4011-000.

Enclosed is a copy of the FERC Order. Copies of the approved Integrated System Rate Schedules were previously furnished. If you would like additional copies, please contact Stephanie Bradley at 918-595-6676 or access http://www.swpa.gov/ under the Rates link.

Michael A. Deihl
Administrator

**UNITED STATES DEPARTMENT OF ENERGY**
**SOUTHWESTERN POWER ADMINISTRATION**

# RATE SCHEDULE P-04[1]
# WHOLESALE RATES FOR HYDRO PEAKING POWER

**Effective:**
During the period January 1, 2005, through September 30, 2008, in accordance with Federal Energy Regulatory Commission order issued October 11, 2005, Docket No. EF05-4011-000.

**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 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, or a specified set of delivery points which together form a single, electrically integrated load. "Peak demand" for such set of 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-02**

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. Ancillary Services include:

> *"Scheduling, System Control, and Dispatch Service"* is provided by Southwestern as Control 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 Control 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, to be provided 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:

$2.73 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 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 pays or commits to provide for 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 Southwestern's system 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:**

ENERGY CHARGE:

(a) $0.0080 per kilowatthour of Peaking Energy delivered; plus (c).

(b) $0.0051 per kilowatthour of Supplemental Peaking Energy delivered;

(c) A purchased power adder of $0.0028 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 $0.30 per kilowatt will be assessed for capacity used to deliver energy at any point of delivery at which Southwestern provides transformation 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 $0.07 per kilowatt of Peaking Billing Demand.

(b) Spinning Operating Reserve Service:
Monthly rate of $0.0077 per kilowatt of Peaking Billing Demand
Daily rate of $0.00035 per kilowatt for non-Federal generation inside Southwestern's control area

(c) Supplemental Operating Reserve Service:
Monthly rate of $0.0077 per kilowatt of Peaking Billing Demand
Daily rate of $0.00035 per kilowatt for non-Federal generation inside Southwestern's control area

(d) Energy Imbalance Service:
$0.0 per kilowatt for all reservation periods.

**Availability of Ancillary Services**

Ancillary Services (a) and (d) listed above are available only for deliveries of power and energy to load centers within Southwestern's Control Area. Ancillary Services (b) and (c) listed above are available only for deliveries of non-Federal power and energy generated by resources located within Southwestern's Control Area and for deliveries of all Hydro Peaking Power and associated energy from and within Southwestern's Control Area. Where available, such Ancillary Services must be taken from Southwestern; unless, subject to Southwestern's approval, they are provided by others.

**Application of Ancillary Services Charges**

For any month, the charges for Ancillary Services (a), (b), (c) and (d) listed above for deliveries of Hydro Peaking Power shall be based on the Peaking Billing Demand.

The daily charge for Ancillary Services (b) and (c) for non-Federal generation inside Southwestern's Control 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. For any particular customer with internal generation, the monthly accumulation of daily

charges shall be reduced by the amount that transmission customer(s) are charged for Ancillary Services (b) and (c) for a particular month under the applicable non-Federal transmission service rate schedule when the source of power is such internal generation.

**Provision of Ancillary Services by Others**

Customers for which Ancillary Services (a), (b), (c) and (d) 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 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.

**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 in Southwestern's Open Access Transmission Service tariff does not apply to deliveries of Hydro Peaking Power, and therefore Energy Imbalance Service is not charged on such deliveries. Customers which 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 Control 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 | $0.10 |
| 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: $0.088 per kilowatthour

**Rates for Real Power Losses**

The Customer shall purchase real power losses unless it elects to self-provide such losses under the provision detailed below in *Annual Election to Self Provide Real Power Losses.*

Real Power Losses are computed as four (4) percent of the total amount of non-Federal energy transmitted under a particular Customer's Peaking Contract Demand. The monthly charge for such Real Power Losses will be computed on a per kilowatthour basis as follows:

$$MC = .04 \times NFE \times R$$

with the factors defined as follows:

MC = The monthly charge ($) by Southwestern for Real Power Losses of non-Federal energy transmitted under the capacity associated with Hydro Peaking Power;

NFE = The amount of non-Federal energy (kWh) transmitted under a Customer's Peaking Contract Demand during a particular month; and

R = The rate for Real Power Losses ($ per kWh), is equal to the average of Southwestern's actual costs for the purchase of energy to replace Real Power Losses during the previous fiscal year (October through September), as reflected in Southwestern's financial records.

The rate for Real Power Losses will be posted on Southwestern's OASIS by November 1 of each year. This rate will be effective for one year beginning January 1 of each calendar year.

*Annual Election to Self Provide Real Power Losses*: The Customer may elect, on an annual basis, to self-provide all loss energy for which it is responsible subject to the following conditions:

(1) Such election for self-provision shall be for a full calendar year (January through December) for that Customer and shall be exercised by execution of a service agreement, or equivalent, before December 1 of the prior calendar year;

(2) Unless otherwise specified in the service agreement, the Customer shall schedule the delivery of real power losses into the System of Southwestern at the rate of one megawatt of real power losses for every 25 megawatts of non-Federal power and energy delivered to Customers' loads served from the points of delivery set forth in the Southwestern/Customer contract;

(3) For any new customer taking transmission service from Southwestern, election to self-provide real power losses shall be made at the time the contract is negotiated. Such service shall be implemented as provided for in the contract and the election to self-provide shall apply through the end of that calendar year for all transmission services.

**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:

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

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 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 once annually, the Purchased Power Adder of $.0028 (2.8 mills) per kilowatthour of Peaking Energy, as noted in this Rate Schedule, may be adjusted by the Administrator, Southwestern, by an amount up to ±$.0011 (1.1 mills) per kilowatthour, as calculated by the following formula:

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

with the factors defined as follows:

ADJ = the dollar amount of the total adjustment, plus or minus, to be applied to the Net Purchased Power Adder, rounded to the nearest $.0001 per kilowatt-hour, provided that the total ADJ to be applied in any year shall not vary from the then-effective ADJ by more than $.0011 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 ($6,342,800 per year) of Southwestern's System Direct Purchases used as the basis for the Purchased Power Adder of $.0028 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 $.0028 per kilowatthour Purchased Power Adder.

**UNITED STATES DEPARTMENT OF ENERGY**
**SOUTHWESTERN POWER ADMINISTRATION**

# RATE SCHEDULE NFTS-04 [1]
# WHOLESALE RATES FOR NON-FEDERAL TRANSMISSION/INTERCONNECTION FACILITIES SERVICE

**Effective:**
During the period January 1, 2005, through September 30, 2008, in accordance with Federal Energy Regulatory Commission order issued October 11, 2005, Docket No. EF05-4011-000.

**Available:**
In the region where Southwestern Power Administration (Southwestern) owns and operates high-voltage transmission lines and related facilities, and/or has contractual rights to such transmission facilities owned by others (System of Southwestern).

**Applicable:**
To Customers which have executed Service Agreements with Southwestern for the transmission of non-Federal power and energy over the System of Southwestern or for its use for interconnections. Southwestern will provide services over those portions of the System of Southwestern in which the Administrator, Southwestern, in his or her sole judgment, has determined that uncommitted transmission and transformation capacities in the System of Southwestern are and will be available in excess of the capacities required to market Federal power and energy pursuant to Section 5 of the Flood Control Act of 1944 (58 Stat. 887,890; 16 U.S.C. 825s).

**Character and Conditions of Service:**
Service will be provided as 3-phase, alternating current, at approximately 60 Hertz, and at the voltage level of the point(s) specified by Service Agreement or Transmission Service Transaction.

**Definitions of Terms:**
A *Customer* is the entity which is utilizing and/or purchasing services from Southwestern pursuant to this rate schedule.

A "*Service Agreement*" is a contract executed between a Customer and Southwestern for the transmission of non-Federal power and energy over the System of Southwestern or for interconnections. Service Agreements include:

> "*Long-Term Firm Transmission Agreements" that* provide for reserved transmission capacity on a firm basis, for a particular point-to-point delivery path, for a period of one year or more.
>
> "*Enabling Transmission Agreements*" that provide for the Customer to request a variety of arrangements for periods of less than one year, which may be on a firm or non-firm basis.
>
> *"Network Transmission Service Agreements*" that provide for the Customer to request firm transmission service for the delivery of capacity and energy from the Customer's network resources to the Customer's network load, for a period of one year or more.

[1]**Supersedes Rate Schedule NFTS-02**

"*Interconnection Agreements*" that provide for the use of the System of Southwestern and recognize the exchange of mutual benefits for such use or provide for application of a charge for Interconnection Facilities Service.

A "*Service Request*" is made under an Enabling Transmission Agreement through Southwestern's Open Access Same-Time Information System (OASIS) for reservation of transmission capacity over a particular point-to-point delivery path for a particular period. When a Service Request is approved by Southwestern, it becomes a "*Transmission Service Transaction.*" The Customer must submit hourly schedules for actual service in addition to the Service Request.

"*Firm Point-to-Point Transmission Service*" is transmission service reserved on a firm basis between specific points of receipt and delivery pursuant to either a Long-Term Firm Transmission Agreement or to a Transmission Service Transaction. "*Non-Firm Point-to-Point Transmission Service*" is transmission service reserved on a non-firm basis for specific points of receipt and delivery pursuant to a Transmission Service Transaction. "*Network Integration Transmission Service*" is transmission service provided under Part III of Southwestern's Open Access Transmission Service Tariff which provides the Customer with firm transmission service for the delivery of capacity and energy from the Customer's resources to the Customer's load.

"*Secondary Transmission Service*" is associated with Firm Point-to-Point Transmission Service and Network Integration Transmission Service. For Firm Point-to-Point Transmission Service, it consists of transmission service provided on an as-available, non-firm basis, scheduled within the limits of a particular capacity reservation for transmission service, and scheduled from points of receipt, or to points of delivery, other than those designated in a Long-Term Firm Transmission Agreement or a Transmission Service Transaction for Firm Point-to-Point Transmission Service. For Network Integration Transmission Service, Secondary Transmission Service consists of transmission service provided on an as-available, non-firm basis, from resources other than the Network Resources designated in a Network Transmission Service Agreement, to meet the Customer's Network Load. The charges for Secondary Transmission Service, other than Real Power Losses and Ancillary Services, are included in the applicable capacity charges for Firm Point-to-Point Transmission Service and Network Integration Transmission Service.

The "*Demand Period*" used to determine maximum integrated rates of delivery for the purposes 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 or interconnection.

For the purposes of this rate schedule, the term "*Point of Delivery*" is used to mean either a single physical point to which electric power and energy are delivered from the System of Southwestern, or a specified set of delivery points which together form a single, electrically integrated load. Peak Demand for such set of 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.

"*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. Ancillary Services include:

"*Scheduling, System Control, and Dispatch Service*" is provided by Southwestern as Control 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 Control 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.

*"Interconnection Facilities Service"* provides for the use of the System of Southwestern to deliver energy and/or provide system support at an interconnection.

Rates for Firm Point-to-Point Transmission Service:

CAPACITY CHARGES FOR FIRM TRANSMISSION SERVICE:

| | |
|---|---|
| Monthly: | $0.85 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a longer term agreement |
| Weekly: | $0.213 per kilowatt of transmission capacity reserved in increments of one week of service |
| Daily: | $0.0386 per kilowatt of transmission capacity reserved in increments of one day of service |

**Service Associated with Capacity Charges for Firm Point-to-Point Transmission Service:**

The capacity charge for firm transmission service includes Secondary Transmission Service, but does not include charges for Ancillary Services or for Real Power Losses associated with actual schedules.

**Application of Capacity Charges for Firm Point-to-Point Transmission Service:**

Capacity charges for firm transmission service are applied to quantities reserved by contract under a Long-Term Firm Transmission Agreement or in accordance with a Transmission Service Transaction.

Customers, unless otherwise specified by contract, will be charged on the greatest of (1) the Peak Demand at any particular point of delivery during a particular month, rounded up to the nearest whole megawatt, or (2) the highest Peak Demand recorded at such point of delivery during any of the previous 11 months, rounded up to the nearest whole megawatt, or (3) the capacity reserved by contract; which amount shall be considered such Customer's reserved capacity. Secondary

Transmission Service for such Customers shall be limited during any month to the most recent Peak Demand on which a particular Customer is billed or to the capacity reserved by contract, whichever is greater.

**Rates for Non-Firm Point-to-Point Transmission Service:**

CAPACITY CHARGES FOR NON-FIRM TRANSMISSION SERVICE:

Monthly: 80 percent of the firm monthly charge of transmission capacity reserved in increments of one month of service

Weekly: 80 percent of the firm monthly charge divided by 4 of transmission capacity reserved in increments of one week of service

Daily: 80 percent of the firm monthly charge divided by 22 of transmission capacity reserved in increments of one day of service

Hourly: 80 percent of the firm monthly charge divided by 352 of transmission capacity reserved in increments of one hour of service

**Application of Charges for Non-Firm Point-to-Point Transmission Service:**

Capacity charges for Non-Firm Transmission Service are applied to quantities reserved under a Transmission Service Transaction, and do not include charges for Ancillary Services or Real Power Losses.

**Rates for Network Integration Transmission Service:**

ANNUAL REVENUE REQUIREMENT FOR NETWORK INTEGRATION SERVICE
$8,752,200

MONTHLY REVENUE REQUIREMENT FOR NETWORK INTEGRATION SERVICE
$729,350

NET CAPACITY AVAILABLE FOR NETWORK INTEGRATION SERVICE
860,000 kilowatts

CAPACITY CHARGE FOR NETWORK INTEGRATION TRANSMISSION SERVICE:
$0.85 per kilowatt of Network Load ($729,350/860,000 kilowatts)

**Application of Charge for Network Integration Transmission Service:**

Network Integration Transmission Service is available only for deliveries of non-Federal power and energy, and is applied to the Customer utilizing such service exclusive of any deliveries of Federal power and energy. The capacity on which charges for any particular Customer utilizing this service is determined on the greatest of (1) the Peak Demand at any particular point of delivery during a particular month, rounded up to the nearest whole megawatt, or (2) the highest Peak Demand recorded at such point of delivery during any of the previous 11 months, rounded up to the nearest whole megawatt. Secondary transmission Service for such Customers shall be limited during any month to the most recent Peak Demand on which a particular Customer is billed. Charges for Ancillary Services and for Real Power Losses shall also be assessed.

**Rates for Real Power Losses**

The Customer shall purchase real power losses unless it elects to self-provide such losses under the provisions detailed below in *Annual Election to Self-Provide Real Power Losses.*

Real Power Losses are computed as four (4) percent of the total amount of non-Federal energy transmitted on behalf of a Customer. The monthly charge for such Real Power Losses will be computed on a per kilowatthour basis as follows:

$$MC = .04 \times NFE \times R$$

with the factors defined as follows:

MC = The monthly charge ($) by Southwestern for Real Power Losses of non-Federal energy transmitted on behalf of a Customer;

NFE = The amount of non-Federal energy (kWh) transmitted on behalf of a Customer during a particular month; and

R = The rate for Real Power Losses ($ per kWh), is an average of Southwestern's actual costs for the purchase of energy to replace Real Power Losses during the previous fiscal year (October through September), as reflected in Southwestern's financial records.

The rate for Real Power Losses will be posted on Southwestern's OASIS by November 1 of each year. This rate will become effective for one year beginning January 1 of each calendar year.

*Annual Election to Self-Provide Real Power Losses*: The Customer may elect, on an annual basis, to self-provide all loss energy for which it is responsible, subject to the following conditions:

(1) Such election for self-provision shall be for a full calendar year (January through December) for that Customer and shall be exercised by execution of a Service Agreement, or equivalent, before December 1 of the prior calendar year.

(2) Unless otherwise specified in the Service Agreement, the Customer shall schedule the delivery of real power losses in the System of Southwestern at the rate of one megawatt of real power losses for every 25 megawatts of non-Federal power and energy delivered to Customers' loads served from the points of delivery set forth in the Southwestern/Customer contract.

(3) For any new Customer taking transmission service from Southwestern, election to self-provide real power losses shall be made at the time the contract is negotiated. Such service shall be implemented as provided for in the contract and the election to self-provide shall apply through the end of that calendar year for all transmission services.

**Monthly Capacity Charges for Transformation Service:**

A charge of $0.30 per kilowatt will be assessed for capacity used to deliver energy at any point of delivery at which Southwestern provides transformation 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. 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 ASSOCIATED WITH TRANSMISSION SERVICES:

**(a) Scheduling, System Control, and Dispatch Service:**

Monthly: $0.05 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement

Weekly: $0.013 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0023 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00014 per kilowatthour of energy delivered as non-firm transmission service

**(b) Reactive Supply and Voltage Control from Generation Sources Service:**

Monthly: $0.03 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement

Weekly: $0.008 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0014 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00009 per kilowatthour of energy delivered as non-firm transmission service

**(c) Regulation and Frequency Response Service:**

Monthly: $0.07 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement

Weekly: $0.018 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0032 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00020 per kilowatthour of energy delivered as non-firm transmission service

**(d) Spinning Operating Reserve Service:**

Monthly: $0.0077 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement

Weekly: $0.0019 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.00035 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00002 per kilowatthour of energy delivered as non-firm transmission service

**(e) Supplemental Operating Reserve Service:**

Monthly: $0.0077 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement

Weekly: $0.0019 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.00035 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00002 per kilowatthour of energy delivered as non-firm transmission service

**(f) Energy Imbalance Service:**
$0.0 per kilowatt for all periods of reservation

**Availability of Ancillary Services:**

Ancillary Services (a) and (b) are available for all transmission services in and from the System of Southwestern and shall be provided by Southwestern. Ancillary Services (c) and (f) listed above are available only for deliveries of power and energy serving load within Southwestern's Control Area and shall be provided by Southwestern, unless, subject to Southwestern's approval, they are provided by others. Ancillary Services (d) and (e) are available only for deliveries of power and energy generated by resources located within Southwestern's Control Area and shall be provided by Southwestern, unless, subject to Southwestern's approval, they are provided by others.

**Application of Ancillary Services Charges:**

Charges for all Ancillary Services are applied to the reserved or network transmission service taken by the Customer in accordance with the rates listed above when such services are provided by Southwestern.

The charges for Ancillary Services are considered to include Ancillary Services for any Secondary Transmission Service, except in cases where Ancillary Services (c) through (f) are applicable to a Secondary Transmission Service transaction, but are not applicable to the firm capacity reservation under which Secondary Transmission Service is provided. When charges for Ancillary Services are applicable to Secondary Transmission Service, the charge for the Ancillary Service shall be the hourly rate applied to all energy transmitted utilizing the Secondary Transmission Service.

**Provision of Ancillary Services by Others:**

Customers for which Ancillary Services (c) through (f) 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 their election to provide all or part of such Ancillary Services from their own resources or a third party.

Subject to Southwestern's approval of the ability of such resources or third parties to meet Southwestern's technical 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 written notice or upon the completion of any necessary equipment modifications necessary to accommodate such change. Such notice requirements also apply to requests for Southwestern to provide Ancillary Services when such services are available as specified above.

**Limitations on Energy Imbalance Service:**

Energy Imbalance Service is authorized for use only within a bandwidth of ± 1.5 percent of the actual requirements of the load at a particular point of delivery, for any hour, compared to the resources scheduled to meet such load during such hour. Deviations which are greater than ± 1.5 percent, but which are less than ± 2,000 kilowatts, are considered to be within the authorized bandwidth. Deviations outside the authorized bandwidth are subject to a Capacity Overrun Penalty.

Energy delivered or received within the authorized bandwidth for this service is accounted for as an inadvertent flow and will be netted against flows in the future. The inadvertent flow in any given hour will only be offset with the flows in the corresponding hour of a day in the same category. The two categories of days are weekdays and weekend days/holidays. This process will result in a separate inadvertent accumulation for each hour of the two categories of days. The hourly accumulations in the current month will be added to the hourly inadvertent balances from the previous month, resulting in a month-end balance for each hour.

The Customer is required to adjust the scheduling of resources in such a way as to reduce the accumulation towards zero. It is recognized that the inadvertent hourly flows can be both negative and positive, and that offsetting flows should deter a significant accumulation of inadvertent. In the event any hourly month-end balance exceeds 12 MWHs, the excess will be subject to the Application of Capacity Overrun Penalty or the Unauthorized Use of Energy Imbalance Service by Overscheduling of Resources provisions, depending on the direction of the accumulation.

**Application of Capacity Overrun Penalty:**

Customers, which receive deliveries within Southwestern's Control Area, are obligated to provide resources sufficient to meet their loads. Such obligation is not related to the amount of transmission capacity that such Customers may have reserved for transmission service to a particular load. Customers whose resources are scheduled by Southwestern are not subject to this provision. In the event that a Customer under schedules its resources to meet its load, resulting in a difference between resources and actual metered load (adjusted for transformer losses as applicable) outside the authorized bandwidth for Energy Imbalance Service for any hour, then such Customer is subject to the following penalty:

CAPACITY OVERRUN PENALTY

For each hour during which energy flows outside the authorized bandwidth, the Customer will be obliged to purchase such energy at the following rates:

| Months Associated with Charge | Rate per Kilowatt |
|---|---|
| March, April, May, October, November, December | $0.10 |
| January, February, June, July, August, September | $0.30 |

**Unauthorized Use of Energy Imbalance Service by Overscheduling of Resources:**

In the event that a Customer schedules greater resources than are needed to meet its load, such that energy flows at rates beyond the authorized bandwidth for the use of Energy Imbalance Service, Southwestern retains such energy at no cost to Southwestern and with no obligation to return such energy. Customers whose resources are scheduled by Southwestern are not subject to this provision.

**Application of Charge for Interconnection Facilities Service:**

Any Customer that requests an interconnection from Southwestern which, in Southwestern's sole judgment and at its sole option, does not provide commensurate benefits or compensation to Southwestern for the use of its facilities shall be assessed a capacity charge for Interconnection Facilities Service. For any month, charges for Interconnection Facilities Service shall be assessed on the greater of (1) that month's actual Peak Demand, or (2) the highest Peak Demand recorded during the previous eleven months, as metered at the interconnection. The use of Interconnection Facilities Service will be subject to power factor provisions as specified in this rate schedule. The interconnection customer shall also be assessed charges for Real Power Losses on metered flow through the interconnection where Interconnection Facilities Services is assessed.

**Rate for Interconnection Facilities Service:**

The monthly capacity charge for Interconnection Facilities Service is $0.85 per kilowatt.

**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:

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

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:

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

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.

**UNITED STATES DEPARTMENT OF ENERGY**
**SOUTHWESTERN POWER ADMINISTRATION**

**RATE SCHEDULE EE-04 [1]**
**WHOLESALE RATE FOR EXCESS ENERGY**

**Effective:**
During the period January 1, 2005, through September 30, 2008, in accordance with Federal Energy Regulatory Commission order issued October 11, 2005, Docket No. EF05-4011-000.

**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 electric utilities which, by contract, may purchase Excess Energy from Southwestern.

**Character and Conditions of Service:**
Three-phase, alternating current, delivered at approximately 60 Hertz, at the nominal voltage and points of delivery specified by contract.

**Energy Associated with this Rate Schedule:**
Excess Energy will be furnished at such times and in such amounts as Southwestern determines to be available.

**Transmission and Related Ancillary Services:**
Transmission service for the delivery of Excess Energy shall be the sole responsibility of such customer purchasing Excess Energy.

**Rate for Excess Energy:**

ENERGY CHARGE: $0.0051 per kilowatthour.

[1]Supersedes Rate Schedule EE-02

**Department of Energy**
Southwestern Power Administration
One West Third Street
Tulsa, Oklahoma 74103-3519

November 29, 2006

NOTICE OF ORDER CONFIRMING AND APPROVING
INTEGRATED SYSTEM POWER RATES ON A FINAL BASIS

You are hereby notified, in accordance with the terms and conditions of our power sales contract, that the Federal Energy Regulatory Commission (FERC), pursuant to the authority under U.S. Department of Energy Delegation Order No. 00-037.00, dated December 6, 2001, has confirmed and approved the following Integrated System Rate Schedules on a final basis for the period February 1, 2006, through September 30, 2009:

Rate Schedule P-05, Wholesale Rates for Hydro Peaking Power

Rate Schedule NFTS-05, Wholesale Rates for Non-Federal Transmission Service

Rate Schedule EE-05, Wholesale Rate for Excess Energy

The Integrated System Rate Schedules were confirmed, approved and placed in effect on an interim basis by the Secretary of Energy in Rate Order No. SWPA-53. The FERC approved the Integrated System Rate Schedules, as submitted by the Deputy Secretary, by Order issued November 17, 2006, under Docket No. EF06-4011-000.

Please understand that the above mentioned rate schedules have already been superseded by new rate schedules. The currently effective rate schedules (P-06, NFTS-06, EE-06) were approved on an interim basis by the Deputy Secretary in Rate Order No. SWPA-56, for the period October 1, 2006, through September 30, 2010.

Enclosed is a copy of the FERC Order. Copies of the Integrated System Rate Schedules were previously furnished. If you would like additional copies, please contact Stephanie Bradley at 918-595-6676.

Michael A. Deihl
Administrator

Enclosure

**UNITED STATES DEPARTMENT OF ENERGY**
**SOUTHWESTERN POWER ADMINISTRATION**

# RATE SCHEDULE P-05[1]
# WHOLESALE RATES FOR HYDRO PEAKING POWER

**Effective:**
During the period February 1, 2006, through September 30, 2009, in accordance with Federal Energy Regulatory Commission order issued November 17, 2006.

**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-04**

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 Control 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 Control 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:

$3.03 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 pays for or 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:**

ENERGY CHARGE:

(a) $0.0082 per kilowatthour of Peaking Energy delivered; plus (c).

(b) $0.0055 per kilowatthour of Supplemental Peaking Energy delivered;

(c) A purchased power adder of $0.0029 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 $0.30 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 $0.08 per kilowatt of Peaking Billing Demand.

(b) Spinning Operating Reserve Service:
Monthly rate of $0.0079 per kilowatt of Peaking Billing Demand
Daily rate of $0.00036 per kilowatt for non-Federal generation inside Southwestern's control area

(c) Supplemental Operating Reserve Service:
Monthly rate of $0.0079 per kilowatt of Peaking Billing Demand
Daily rate of $0.00036 per kilowatt for non-Federal generation inside Southwestern's control area

(d) Energy Imbalance Service:
$0.0 per kilowatt for all reservation periods.

**Availability of Ancillary Services**

Ancillary Services (a) and (d) listed above are available only for deliveries of power and energy to load centers within Southwestern's Control Area. Ancillary Services (b) and (c) listed above are available only for deliveries of non-Federal power and energy generated by resources located within Southwestern's Control Area and for deliveries of all Hydro Peaking Power and associated energy from and within Southwestern's Control Area. Where available, such Ancillary Services must be taken from Southwestern; unless, subject to Southwestern's approval, they are provided by others.

**Application of Ancillary Services Charges**

For any month, the charges for Ancillary Services (a), (b), (c) and (d) listed above for deliveries of Hydro Peaking Power shall be based on the Peaking Billing Demand.

The daily charge for Ancillary Services (b) and (c) for non-Federal generation inside Southwestern's Control 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 (a), (b), (c) and (d) 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 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.

**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 in Southwestern's Open Access Transmission Service tariff 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 Control 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

**Rates for Real Power Losses**

The Customer shall purchase real power losses unless it elects to self-provide such losses under the provision detailed below in *Annual Election to Self Provide Real Power Losses.*

Real Power Losses are computed as four (4) percent of the total amount of non-Federal energy transmitted under a particular Customer's Peaking Contract Demand. The monthly charge for such Real Power Losses will be computed on a per kilowatthour basis as follows:

$$MC = .04 \times NFE \times R$$

with the factors defined as follows:

MC = The monthly charge ($) by Southwestern for Real Power Losses of non-Federal energy transmitted under the capacity associated with Hydro Peaking Power;

NFE = The amount of non-Federal energy (kWh) transmitted under a Customer's Peaking Contract Demand during a particular month; and

R = The rate for Real Power Losses ($ per kWh), is equal to the average of Southwestern's actual costs for the purchase of energy to replace Real Power Losses during the previous fiscal year (October through September), as reflected in Southwestern's financial records.

The rate for Real Power Losses will be posted on Southwestern's OASIS by November 1 of each year. This rate will be effective for one year beginning January 1 of each calendar year.

*Annual Election to Self Provide Real Power Losses*: The Customer may elect, on an annual basis, to self-provide all loss energy for which it is responsible subject to the following conditions:

(1) Such election for self-provision shall be for a full calendar year (January through December) for that Customer and shall be exercised by execution of a service agreement, or equivalent, before December 1 of the prior calendar year;

(2) Unless otherwise specified in the service agreement, the Customer shall schedule the delivery of real power losses into the System of Southwestern at the rate of one megawatt of real power losses for every 25 megawatts of non-Federal power and energy delivered to Customers' loads served from the points of delivery set forth in the Southwestern/Customer contract;

(3) For any new customer taking transmission service from Southwestern, election to self-provide real power losses shall be made at the time the contract is negotiated. Such service shall be implemented as provided for in the contract and the election to self-provide shall apply through the end of that calendar year for all transmission services.

**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:

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

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 once annually, the Purchased Power Adder of $.0029 (2.9 mills) per kilowatthour of Peaking Energy, as noted in this Rate Schedule, may be adjusted by the Administrator, Southwestern, by an amount up to ±$.0011 (1.1 mills) per kilowatthour, as calculated by the following formula:

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

with the factors defined as follows:

ADJ = the dollar amount of the total adjustment, plus or minus, to be applied to the Net Purchased Power Adder, rounded to the nearest $.0001 per kilowatt-hour, provided that the total ADJ to be applied in any year shall not vary from the then-effective ADJ by more than $.0011 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 ($6,505,400 per year) of Southwestern's System Direct Purchases used as the basis for the Purchased Power Adder of $.0029 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 $.0029 per kilowatthour Purchased Power Adder.

**UNITED STATES DEPARTMENT OF ENERGY**
**SOUTHWESTERN POWER ADMINISTRATION**

# RATE SCHEDULE NFTS-05 [1]
# WHOLESALE RATES FOR NON-FEDERAL TRANSMISSION/INTERCONNECTION FACILITIES SERVICE

**Effective:**
During the period February 1, 2006, through September 30, 2009, in accordance with Federal Energy Regulatory Commission order issued November 17, 2006.

**Available:**
In the region where Southwestern Power Administration (Southwestern) owns and operates high-voltage transmission lines and related facilities, and/or has contractual rights to such transmission facilities owned by others (System of Southwestern).

**Applicable:**
To Customers which have executed Service Agreements with Southwestern for the transmission of non-Federal power and energy over the System of Southwestern or for its use for interconnections. Southwestern will provide services over those portions of the System of Southwestern in which the Administrator, Southwestern, in his or her sole judgment, has determined that uncommitted transmission and transformation capacities in the System of Southwestern are and will be available in excess of the capacities required to market Federal power and energy pursuant to Section 5 of the Flood Control Act of 1944 (58 Stat. 887,890; 16 U.S.C. 825s).

**Character and Conditions of Service:**
Service will be provided as 3-phase, alternating current, at approximately 60 Hertz, and at the voltage level of the point(s) specified by Service Agreement or Transmission Service Transaction.

**Definitions of Terms:**
A *Customer* is the entity which is utilizing and/or purchasing services from Southwestern pursuant to this rate schedule.

A "*Service Agreement*" is a contract executed between a Customer and Southwestern for the transmission of non-Federal power and energy over the System of Southwestern or for interconnections. Service Agreements include:

> "*Firm Transmission Service Agreements*" that provide for reserved transmission capacity on a firm basis, for a particular point-to-point delivery path.
>
> "*Non-Firm Transmission Service Agreements*" that provide for the Customer to request transmission service on a non-firm basis.
>
> "*Network Transmission Service Agreements*" that provide for the Customer to request firm transmission service for the delivery of capacity and energy from the Customer's network resources to the Customer's network load, for a period of one year or more.

[1] **Supersedes Rate Schedule NFTS-04**

"*Interconnection Agreements*" that provide for the use of the System of Southwestern and recognize the exchange of mutual benefits for such use or provide for application of a charge for Interconnection Facilities Service.

A "*Service Request*" is made under a Transmission Service Agreement through Southwestern's Open Access Same-Time Information System (OASIS) for reservation of transmission capacity over a particular point-to-point delivery path for a particular period. When a Service Request is approved by Southwestern, it becomes a "*Transmission Service Transaction.*" The Customer must submit hourly schedules for actual service in addition to the Service Request.

"*Firm Point-to-Point Transmission Service*" is transmission service reserved on a firm basis between specific points of receipt and delivery pursuant to either a Firm Transmission Agreement or to a Transmission Service Transaction. "*Non-Firm Point-to-Point Transmission Service*" is transmission service reserved on a non-firm basis for specific points of receipt and delivery pursuant to a Transmission Service Transaction. "*Network Integration Transmission Service*" is transmission service provided under Part III of Southwestern's Open Access Transmission Service Tariff which provides the Customer with firm transmission service for the delivery of capacity and energy from the Customer's resources to the Customer's load.

"*Secondary Transmission Service*" is associated with Firm Point-to-Point Transmission Service and Network Integration Transmission Service. For Firm Point-to-Point Transmission Service, it consists of transmission service provided on an as-available, non-firm basis, scheduled within the limits of a particular capacity reservation for transmission service, and scheduled from points of receipt, or to points of delivery, other than those designated in a Long-Term Firm Transmission Agreement or a Transmission Service Transaction for Firm Point-to-Point Transmission Service. For Network Integration Transmission Service, Secondary Transmission Service consists of transmission service provided on an as-available, non-firm basis, from resources other than the Network Resources designated in a Network Transmission Service Agreement, to meet the Customer's Network Load. The charges for Secondary Transmission Service, other than Real Power Losses and Ancillary Services, are included in the applicable capacity charges for Firm Point-to-Point Transmission Service and Network Integration Transmission Service.

The "*Demand Period*" used to determine a maximum integrated rate of delivery for the purposes 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 or interconnection.

For the purposes of this rate schedule, the term "*Point of Delivery*" is used to mean either a single physical point to which electric power and energy are delivered from the System of Southwestern, or a specified set of delivery points which together form a single, electrically integrated load. Peak Demand for such set of 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.

"*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. Ancillary Services include:

"*Scheduling, System Control, and Dispatch Service*" is provided by Southwestern as Control 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 Control 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.

*"Interconnection Facilities Service"* provides for the use of the System of Southwestern to deliver energy and/or provide system support at an interconnection.

**Rates for Firm Point-to-Point Transmission Service:**

CAPACITY CHARGES FOR FIRM TRANSMISSION SERVICE:

| | |
|---|---|
| Monthly: | $0.90 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a longer term agreement |
| Weekly: | $0.225 per kilowatt of transmission capacity reserved in increments of one week of service |
| Daily: | $0.0409 per kilowatt of transmission capacity reserved in increments of one day of service |

**Service Associated with Capacity Charges for Firm Point-to-Point Transmission Service:**

The capacity charge for firm transmission service includes Secondary Transmission Service, but does not include charges for Ancillary Services or for Real Power Losses associated with actual schedules.

**Application of Capacity Charges for Firm Point-to-Point Transmission Service:**

Capacity charges for firm transmission service are applied to quantities reserved by contract under a Firm Transmission Agreement or in accordance with a Transmission Service Transaction.

Customers, unless otherwise specified by contract, will be charged on the greatest of (1) the Peak Demand at any particular point of delivery during a particular month, rounded up to the nearest whole megawatt, or (2) the highest Peak Demand recorded at such point of delivery during any of the previous 11 months, rounded up to the nearest whole megawatt, or (3) the capacity reserved by contract; which amount shall be considered such Customer's reserved capacity. Secondary Transmission Service for such Customers shall be limited during any month to the most recent Peak Demand on which a particular Customer is billed or to the capacity reserved by contract, whichever is greater.

**Rates for Non-Firm Point-to-Point Transmission Service:**

CAPACITY CHARGES FOR NON-FIRM TRANSMISSION SERVICE:

Monthly: 80 percent of the firm monthly charge of transmission capacity reserved in increments of one month of service

Weekly: 80 percent of the firm monthly charge divided by 4 of transmission capacity reserved in increments of one week of service

Daily: 80 percent of the firm monthly charge divided by 22 of transmission capacity reserved in increments of one day of service

Hourly: 80 percent of the firm monthly charge divided by 352 of transmission capacity reserved in increments of one hour of service

**Application of Charges for Non-Firm Point-to-Point Transmission Service:**

Capacity charges for Non-Firm Transmission Service are applied to quantities reserved under a Transmission Service Transaction, and do not include charges for Ancillary Services or Real Power Losses.

**Rates for Network Integration Transmission Service:**

ANNUAL REVENUE REQUIREMENT FOR NETWORK INTEGRATION SERVICE
$9,155,900

MONTHLY REVENUE REQUIREMENT FOR NETWORK INTEGRATION SERVICE
$762,992

NET CAPACITY AVAILABLE FOR NETWORK INTEGRATION SERVICE
845,000 kilowatts

CAPACITY CHARGE FOR NETWORK INTEGRATION TRANSMISSION SERVICE:
$0.90 per kilowatt of Network Load ($762,992/845,000 kilowatts)

**Application of Charge for Network Integration Transmission Service:**

Network Integration Transmission Service is available only for deliveries of non-Federal power and energy, and is applied to the Customer utilizing such service exclusive of any deliveries of Federal power and energy. The capacity on which charges for any particular Customer utilizing this service is determined on the greatest of (1) the Peak Demand at any particular point of delivery during a particular month, rounded up to the nearest whole megawatt, or (2) the highest Peak Demand recorded at such point of delivery during any of the previous 11 months, rounded up to the nearest whole megawatt.

For those Customers taking Network Integration Transmission Service who are also taking delivery of Federal Power and Energy, the Peak Demand shall be determined by subtracting the energy scheduled for delivery of Federal Power and Energy for any hour from the metered demand for such hour.

Secondary transmission Service for such Customers shall be limited during any month to the most recent Peak Demand on which a particular Customer is billed. Charges for Ancillary Services and for Real Power Losses shall also be assessed.

**Rates for Real Power Losses**

The Customer shall purchase real power losses unless it elects to self-provide such losses under the provisions detailed below in *Annual Election to Self-Provide Real Power Losses*.

Real Power Losses are computed as four (4) percent of the total amount of non-Federal energy transmitted on behalf of a Customer. The monthly charge for such Real Power Losses will be computed on a per kilowatthour basis as follows:

$$MC = .04 \times NFE \times R$$

with the factors defined as follows:

MC = The monthly charge ($) by Southwestern for Real Power Losses of non-Federal energy transmitted on behalf of a Customer;

NFE = The amount of non-Federal energy (kWh) transmitted on behalf of a Customer during a particular month; and

R = The rate for Real Power Losses ($ per kWh), is an average of Southwestern's actual costs for the purchase of energy to replace Real Power Losses during the previous fiscal year (October through September), as reflected in Southwestern's financial records.

The rate for Real Power Losses will be posted on Southwestern's OASIS by November 1 of each year. This rate will become effective for one year beginning January 1 of each calendar year.

*Annual Election to Self-Provide Real Power Losses*: The Customer may elect, on an annual basis, to self-provide all loss energy for which it is responsible, subject to the following conditions:

(1) Such election for self-provision shall be for a full calendar year (January through December) for that Customer and shall be exercised by execution of a Service Agreement, or equivalent, before December 1 of the prior calendar year.

(2) Unless otherwise specified in the Service Agreement, the Customer shall schedule the delivery of real power losses in the System of Southwestern at the rate of one megawatt of real power losses for every 25 megawatts of non-Federal power and energy delivered to Customers' loads served from the points of delivery set forth in the Southwestern/Customer contract.

(3) For any new Customer taking transmission service from Southwestern, election to self-provide real power losses shall be made at the time the contract is negotiated. Such service shall be implemented as provided for in the contract and the election to self-provide shall apply through the end of that calendar year for all transmission services.

**Monthly Capacity Charges for Transformation Service:**

A charge of $0.30 per kilowatt will be assessed for capacity used to deliver energy at any point of delivery at which Southwestern provides transformation 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. 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 ASSOCIATED WITH TRANSMISSION SERVICES:

**(a) Scheduling, System Control, and Dispatch Service:**

Monthly: $0.06 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement

Weekly: $0.015 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0027 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00017 per kilowatthour of energy delivered as non-firm transmission service

**(b) Reactive Supply and Voltage Control from Generation Sources Service:**

Monthly: $0.03 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement

Weekly: $0.008 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0014 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00009 per kilowatthour of energy delivered as non-firm transmission service

**(c) Regulation and Frequency Response Service:**

Monthly: $0.08 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement

Weekly: $0.020 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0036 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00023 per kilowatthour of energy delivered as non-firm transmission service

**(d) Spinning Operating Reserve Service:**

Monthly: $0.0079 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement

Weekly: $0.00198 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.00036 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00002 per kilowatthour of energy delivered as non-firm transmission service

(e) **Supplemental Operating Reserve Service:**

Monthly: $0.0079 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement

Weekly: $0.00198 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.00036 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00002 per kilowatthour of energy delivered as non-firm transmission service

**(f) Energy Imbalance Service:**

$0.0 per kilowatt for all periods of reservation

**Availability of Ancillary Services:**

Ancillary Services (a) and (b) are available for all transmission services in and from the System of Southwestern and shall be provided by Southwestern. Ancillary Services (c) and (f) listed above are available only for deliveries of power and energy serving load within Southwestern's Control Area and shall be provided by Southwestern, unless, subject to Southwestern's approval, they are provided by others. Ancillary Services (d) and (e) are available only for deliveries of power and energy generated by resources located within Southwestern's Control Area and shall be provided by Southwestern, unless, subject to Southwestern's approval, they are provided by others.

**Application of Ancillary Services Charges:**

Charges for all Ancillary Services are applied to the reserved or network transmission service taken by the Customer in accordance with the rates listed above when such services are provided by Southwestern.

The charges for Ancillary Services are considered to include Ancillary Services for any Secondary Transmission Service, except in cases where Ancillary Services (c) through (f) are applicable to a Secondary Transmission Service transaction, but are not applicable to the firm capacity reservation under which Secondary Transmission Service is provided. When charges for Ancillary Services are applicable to Secondary Transmission Service, the charge for the Ancillary Service shall be the hourly rate applied to all energy transmitted utilizing the Secondary Transmission Service.

**Provision of Ancillary Services by Others:**

Customers for which Ancillary Services (c) through (f) 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 their election to provide all or part of such Ancillary Services from their own resources or a third party.

Subject to Southwestern's approval of the ability of such resources or third parties to meet Southwestern's technical 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 written notice or upon the completion of any necessary equipment modifications necessary to accommodate such change. Such notice requirements also apply to requests for Southwestern to provide Ancillary Services when such services are available as specified above.

**Limitations on Energy Imbalance Service:**

Energy Imbalance Service is authorized for use only within a bandwidth of ± 1.5 percent of the actual requirements of the load at a particular point of delivery, for any hour, compared to the resources scheduled to meet such load during such hour. Deviations which are greater than ± 1.5 percent, but which are less than ± 2,000 kilowatts, are considered to be within the authorized bandwidth. Deviations outside the authorized bandwidth are subject to a Capacity Overrun Penalty.

Energy delivered or received within the authorized bandwidth for this service is accounted for as an inadvertent flow and will be netted against flows in the future. The inadvertent flow in any given hour will only be offset with the flows in the corresponding hour of a day in the same category. The two categories of days are weekdays and weekend days/North American Electric Reliability Council holidays. This process will result in a separate inadvertent accumulation for each hour of the two categories of days. The hourly accumulations in the current month will be added to the hourly inadvertent balances from the previous month, resulting in a month-end balance for each hour.

The Customer is required to adjust the scheduling of resources in such a way as to reduce the accumulation towards zero. It is recognized that the inadvertent hourly flows can be both negative and positive, and that offsetting flows should deter a significant accumulation of inadvertent. In the event any hourly month-end balance exceeds 12 MWHs, the excess will be subject to the Application of Capacity Overrun Penalty or the Unauthorized Use of Energy Imbalance Service by Overscheduling of Resources provisions, depending on the direction of the accumulation.

**Application of Capacity Overrun Penalty:**

Customers, who receive deliveries within Southwestern's Control Area, are obligated to provide resources sufficient to meet their loads. Such obligation is not related to the amount of transmission capacity that such Customers may have reserved for transmission service to a particular load. Customers whose resources are scheduled by Southwestern are not subject to this provision. In the event that a Customer under schedules its resources to meet its load, resulting in a difference between resources and actual metered load (adjusted for transformer losses as applicable) outside the authorized bandwidth for Energy Imbalance Service for any hour, then such Customer is subject to the following penalty:

CAPACITY OVERRUN PENALTY

For each hour during which energy flows outside the authorized bandwidth, the Customer will be obliged to purchase such energy 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 |

**Unauthorized Use of Energy Imbalance Service by Overscheduling of Resources:**

In the event that a Customer schedules greater resources than are needed to meet its load, such that energy flows at rates beyond the authorized bandwidth for the use of Energy Imbalance Service, Southwestern retains such energy at no cost to Southwestern and with no obligation to return such energy. Customers whose resources are scheduled by Southwestern are not subject to this provision.

**Application of Charge for Interconnection Facilities Service:**

Any Customer that requests an interconnection from Southwestern which, in Southwestern's sole judgment and at its sole option, does not provide commensurate benefits or compensation to Southwestern for the use of its facilities shall be assessed a capacity charge for Interconnection Facilities Service. For any month, charges for Interconnection Facilities Service shall be assessed on the greater of (1) that month's actual Peak Demand, or (2) the highest Peak Demand recorded during the previous eleven months, as metered at the interconnection. The use of Interconnection Facilities Service will be subject to power factor provisions as specified in this rate schedule. The interconnection customer shall also be assessed charges for Real Power Losses on metered flow through the interconnection where Interconnection Facilities Services is assessed.

**Rate for Interconnection Facilities Service:**

The monthly capacity charge for Interconnection Facilities Service is $0.90 per kilowatt.

**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:

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

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:

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

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.

**UNITED STATES DEPARTMENT OF ENERGY**
**SOUTHWESTERN POWER ADMINISTRATION**

**RATE SCHEDULE EE-05 [1]**
**WHOLESALE RATE FOR EXCESS ENERGY**

**Effective:**
During the period February 1, 2006, through September 30, 2009, in accordance with Federal Energy Regulatory Commission order issued November 17, 2006.

**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 electric utilities which, by contract, may purchase Excess Energy from Southwestern.

**Character and Conditions of Service:**
Three-phase, alternating current, delivered at approximately 60 Hertz, at the nominal voltage and points of delivery specified by contract.

**Energy Associated with this Rate Schedule:**
Excess Energy will be furnished at such times and in such amounts as Southwestern determines to be available.

**Transmission and Related Ancillary Services:**
Transmission service for the delivery of Excess Energy shall be the sole responsibility of such customer purchasing Excess Energy.

**Rate for Excess Energy:**

| | |
|---|---|
| ENERGY CHARGE: | $0.0055 per kilowatthour. |

[1]Supersedes Rate Schedule EE-04

**Department of Energy**
Southwestern Power Administration
One West Third Street
Tulsa, Oklahoma 74103-3502

January 13, 2010

To Customers and Interested Parties:

This is to inform you that the Deputy Secretary of Energy has approved Southwestern Power Administration's (Southwestern) Rate Schedules P-09, NFTS-09, and EE-09 on an interim basis effective January 1, 2010, and has forwarded them to the Federal Energy Regulatory Commission for final approval.

The approved rate schedules provide for increases to the capacity and energy rates, the transmission rate and all associated ancillary services for the effective period ending September 30, 2013, to assure recovery of sufficient revenue needed to repay the Federal investment.

Furthermore, as provided for in the new Rate Schedule P-09, Southwestern has completed its annual review of the Purchased Power Deferral Account (Account) balance and the Discretionary Purchased Power Adder Adjustment (Adder Adjustment).

With better than expected water conditions experienced in the region, Southwestern has had to purchase less energy than anticipated to meet contractual requirements. These reduced energy purchases have resulted in lowering the negative balance in the Account. To maintain the Account balance, the Adder Adjustment will be reduced from 4.5 mills to 0.0 mills per kWh of peaking energy. This is within the Administrator's discretionary authority to change the Adder Adjustment up to twice annually and limited to no more than ± 6.7 mills per kWh per year.

This revised Adder Adjustment will result in a change in the total rate per kWh of Peaking Energy for those of you with 1200 hour Peaking Energy contracts as follows:

| Effective Date | Peaking Energy Mills/kWh | Purchased Power Adder Mills/kWh | Adder Adjustment Mills/kWh | Total Rate Mills/kWh |
|---|---|---|---|---|
| October 1, 2006 through December 31, 2009 | +8.2 | +6.7 | 4.5 | +19.4 |
| January 1, 2010 until superseded | +8.6 | +6.7 | 0.0 | +15.3 |

The new Purchased Power Adder and Adder Adjustment rates will be effective with your power invoice for January 2010 service, and will remain in effect until superseded by a subsequent Adder Adjustment or until Rate Schedules are revised.

Copies of the new rate schedules are available for download from Southwestern's homepage at http://www.swpa.gov. If you have any questions regarding these changes or how they apply to you, please contact Stephanie Bradley at (918) 595-6676, stephanie.bradley@swpa.gov, or George Robbins at (918) 595-6680, george.robbins@swpa.gov.

Sincerely,

James K. McDonald

James K. McDonald
Assistant Administrator
Office of Corporate Operations

**UNITED STATES DEPARTMENT OF ENERGY**
**SOUTHWESTERN POWER ADMINISTRATION**

# RATE SCHEDULE P-09[1]
# WHOLESALE RATES FOR HYDRO PEAKING POWER

**Effective:**
During the period January 1, 2010, through September 30, 2013, in accordance with Rate Order No. SWPA-62 issued by the Deputy Secretary of Energy on December 30, 2009.

**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."

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[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

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

Where:

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

RP = (Dollar per MWh of Regulation Purchased – Supplemental Energy Rate) ×Total 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:

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

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 $.0067 (6.7 mills) per kilowatthour of Peaking Energy, as noted in this Rate Schedule, may be adjusted by the Administrator, Southwestern, by an amount up to a total of ±$.0067 (6.7 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 killowatthour 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.

**UNITED STATES DEPARTMENT OF ENERGY**
**SOUTHWESTERN POWER ADMINISTRATION**

# RATE SCHEDULE NFTS-09 [1]
# WHOLESALE RATES FOR NON-FEDERAL TRANSMISSION/INTERCONNECTION FACILITIES SERVICE

**Effective:**

During the period January 1, 2010, through September 30, 2013, in accordance with Rate Order No. SWPA-62 issued by the Deputy Secretary of Energy on December 30, 2009.

**Available:**

In the region where Southwestern Power Administration (Southwestern) owns and operates high-voltage transmission lines and related facilities, and/or has contractual rights to such transmission facilities owned by others (System of Southwestern).

**Applicable:**

To Customers which have executed Service Agreements with Southwestern for the transmission of non-Federal power and energy over the System of Southwestern or for its use for interconnections. Southwestern will provide services over those portions of the System of Southwestern in which the Administrator, Southwestern, in his or her sole judgment, has determined that uncommitted transmission and transformation capacities in the System of Southwestern are and will be available in excess of the capacities required to market Federal power and energy pursuant to Section 5 of the Flood Control Act of 1944 (58 Stat. 887,890; 16 U.S.C. 825s).

**Character and Conditions of Service:**

Service will be provided as 3-phase, alternating current, at approximately 60 Hertz, and at the voltage level of the point(s) specified by Service Agreement or Transmission Service Transaction.

**Definitions of Terms:**

A *Customer* is the entity which is utilizing and/or purchasing services from Southwestern pursuant to this rate schedule.

A "*Service Agreement*" is a contract executed between a Customer and Southwestern for the transmission of non-Federal power and energy over the System of Southwestern or for interconnections. Service Agreements include:

> "*Firm Transmission Service Agreements*" that provide for reserved transmission capacity on a firm basis, for a particular point-to-point delivery path.
>
> "*Non-Firm Transmission Service Agreements*" that provide for the Customer to request transmission service on a non-firm basis.
>
> "*Network Transmission Service Agreements*" that provide for the Customer to request firm transmission service for the delivery of capacity and energy from the Customer's network resources to the Customer's network load, for a period of one year or more.

[1] **Supersedes Rate Schedule NFTS-06A**

"*Interconnection Agreements*" that provide for the use of the System of Southwestern and recognize the exchange of mutual benefits for such use or provide for application of a charge for Interconnection Facilities Service.

A "*Service Request*" is made under a Transmission Service Agreement through the Southwest Power Pool, Inc. (SPP) Open Access Same-Time Information System (OASIS) for reservation of transmission capacity over a particular point-to-point delivery path for a particular period. When a Service Request is approved by SPP, it becomes a "*Transmission Service Transaction.*" The Customer must submit hourly schedules for actual service in addition to the Service Request.

"*Firm Point-to-Point Transmission Service*" is transmission service reserved on a firm basis between specific points of receipt and delivery pursuant to either a Firm Transmission Agreement or to a Transmission Service Transaction. "*Non-Firm Point-to-Point Transmission Service*" is transmission service reserved on a non-firm basis for specific points of receipt and delivery pursuant to a Transmission Service Transaction. "*Network Integration Transmission Service*" is transmission service provided under Part III of Southwestern's Open Access Transmission Service Tariff which provides the Customer with firm transmission service for the delivery of capacity and energy from the Customer's resources to the Customer's load.

"*Secondary Transmission Service*" is associated with Firm Point-to-Point Transmission Service and Network Integration Transmission Service. For Firm Point-to-Point Transmission Service, it consists of transmission service provided on an as-available, non-firm basis, scheduled within the limits of a particular capacity reservation for transmission service, and scheduled from points of receipt, or to points of delivery, other than those designated in a Long-Term Firm Transmission Agreement or a Transmission Service Transaction for Firm Point-to-Point Transmission Service. For Network Integration Transmission Service, Secondary Transmission Service consists of transmission service provided on an as-available, non-firm basis, from resources other than the Network Resources designated in a Network Transmission Service Agreement, to meet the Customer's Network Load. The charges for Secondary Transmission Service, other than Ancillary Services, are included in the applicable capacity charges for Firm Point-to-Point Transmission Service and Network Integration Transmission Service.

The "*Demand Period*" used to determine a maximum integrated rate of delivery for the purposes 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 or interconnection.

For the purposes of this rate schedule, the term "*Point of Delivery*" is used to mean either a single physical point to which electric power and energy are delivered from the System of Southwestern, or a specified set of delivery points which together form a single, electrically integrated load. Peak Demand for such set of 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.

"*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. Ancillary Services include:

*"Scheduling, System Control, and Dispatch Service"* ("Scheduling") 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"* ("Reactive Supply") 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.

*"Interconnection Facilities Service"* provides for the use of the System of Southwestern to deliver energy and/or provide system support at an interconnection.

**Rates for Firm Point-to-Point Transmission Service:**

CAPACITY CHARGES FOR FIRM TRANSMISSION SERVICE:

| | |
|---|---|
| Monthly: | $1.18 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a longer term agreement |
| Weekly: | $0.295 per kilowatt of transmission capacity reserved in increments of one week of service |
| Daily: | $0.0536 per kilowatt of transmission capacity reserved in increments of one day of service |

**Service Associated with Capacity Charges for Firm Point-to-Point Transmission Service:**

The capacity charge for firm transmission service includes Secondary Transmission Service, but does not include charges for Ancillary Services associated with actual schedules.

**Application of Capacity Charges for Firm Point-to-Point Transmission Service:**

Capacity charges for firm transmission service are applied to quantities reserved by contract under a Firm Transmission Agreement or in accordance with a Transmission Service Transaction.

Customers, unless otherwise specified by contract, will be charged on the greatest of (1) the Peak Demand at any particular point of delivery during a particular month, rounded up to the

nearest whole megawatt, or (2) the highest Peak Demand recorded at such point of delivery during any of the previous 11 months, rounded up to the nearest whole megawatt, or (3) the capacity reserved by contract; which amount shall be considered such Customer's reserved capacity. Secondary Transmission Service for such Customers shall be limited during any month to the most recent Peak Demand on which a particular Customer is billed or to the capacity reserved by contract, whichever is greater.

**Rates for Non-Firm Point-to-Point Transmission Service:**

CAPACITY CHARGES FOR NON-FIRM TRANSMISSION SERVICE:

| | |
|---|---|
| Monthly: | 80 percent of the firm monthly charge of transmission capacity reserved in increments of one month of service |
| Weekly: | 80 percent of the firm monthly charge divided by 4 of transmission capacity reserved in increments of one week of service |
| Daily: | 80 percent of the firm monthly charge divided by 22 of transmission capacity reserved in increments of one day of service |
| Hourly: | 80 percent of the firm monthly charge divided by 352 of transmission capacity reserved in increments of one hour of service |

**Application of Charges for Non-Firm Point-to-Point Transmission Service:**

Capacity charges for Non-Firm Transmission Service are applied to quantities reserved under a Transmission Service Transaction, and do not include charges for Ancillary Services.

**Rates for Network Integration Transmission Service:**

ANNUAL REVENUE REQUIREMENT FOR NETWORK INTEGRATION SERVICE: $13,107,700

MONTHLY REVENUE REQUIREMENT FOR NETWORK INTEGRATION SERVICE: $1,092,308

NET CAPACITY AVAILABLE FOR NETWORK INTEGRATION SERVICE: 929,000 kW

CAPACITY CHARGE FOR NETWORK INTEGRATION TRANSMISSION SERVICE: $1.18 per kilowatt of Network Load ($1,092,308/929,000 kW)

**Application of Charge for Network Integration Transmission Service:**

Network Integration Transmission Service is available only for deliveries of non-Federal power and energy, and is applied to the Customer utilizing such service exclusive of any deliveries of Federal power and energy. The capacity on which charges for any particular Customer utilizing this service is determined on the greatest of (1) the Peak Demand at any particular point of delivery during a particular month, rounded up to the nearest whole megawatt, or (2) the highest Peak Demand recorded at such point of delivery during any of the previous 11 months, rounded up to the nearest whole megawatt.

For those Customers taking Network Integration Transmission Service who are also taking delivery of Federal Power and Energy, the Peak Demand shall be determined by subtracting the energy scheduled for delivery of Federal Power and Energy for any hour from the metered demand for such hour.

Secondary transmission Service for such Customers shall be limited during any month to the most recent Peak Demand on which a particular Customer is billed. Charges for Ancillary Services shall also be assessed.

**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.

**Monthly 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 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. 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 ASSOCIATED WITH TRANSMISSION SERVICES:

**(a) Scheduling, System Control, and Dispatch Service:**

Monthly: $0.07 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement

Weekly: $0.018 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0032 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00020 per kilowatt of transmission energy delivered as non-firm transmission service.

**(b) Reactive Supply and Voltage Control from Generation Sources Service:**

Monthly: $0.04 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement

Weekly: $0.010 per kilowatt of transmission capacity reserved in increments of one week of service

Daily: $0.0018 per kilowatt of transmission capacity reserved in increments of one day of service

Hourly: $0.00011 per kilowatt of transmission energy delivered as non-firm transmission service.

**(c) Regulation and Frequency Response Service:**

| | |
|---|---|
| Monthly: | $0.09 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement |
| Weekly: | $0.023 per kilowatt of transmission capacity reserved in increments of one week of service |
| Daily: | $0.0041 per kilowatt of transmission capacity reserved in increments of one day of service |
| Hourly: | $0.00026 per kilowatt of transmission energy delivered as non-firm transmission service. |

**(d) Spinning Operating Reserve Service:**

| | |
|---|---|
| Monthly: | $0.0092 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement |
| Weekly: | $0.0023 per kilowatt of transmission capacity reserved in increments of one week of service |
| Daily: | $0.00042 per kilowatt of transmission capacity reserved in increments of one day of service |
| Hourly: | $0.00003 per kilowatt of transmission energy delivered as non-firm transmission service. |

**(e) Supplemental Operating Reserve Service:**

| | |
|---|---|
| Monthly: | $0.0092 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement |
| Weekly: | $0.0023 per kilowatt of transmission capacity reserved in increments of one week of service |
| Daily: | $0.00042 per kilowatt of transmission capacity reserved in increments of one day of service |
| Hourly: | $0.00003 per kilowatt of transmission energy delivered as non-firm transmission service. |

**(f) Energy Imbalance Service:**

$0.0 per kilowatt for all periods of reservation

**Availability of Ancillary Services:**

Scheduling and Reactive Supply Services are available for all transmission services in and from the System of Southwestern and shall be provided by Southwestern. Regulation and Frequency Response Service and Energy Imbalance Service listed above are available only for deliveries of power and energy serving load within Southwestern's Balancing Authority Area and shall be provided by Southwestern, unless, subject to Southwestern's approval, they are provided by others. Spinning and Supplemental Operating Reserve Services are available only for deliveries of power and energy generated by resources located within Southwestern's Balancing Authority Area and shall be provided by Southwestern, unless, subject to Southwestern's approval, they are provided by others.

**Application of Ancillary Services Charges:**

Charges for all Ancillary Services are applied to the reserved or network transmission service taken by the Customer in accordance with the rates listed above when such services are provided by Southwestern.

The charges for Ancillary Services are considered to include Ancillary Services for any Secondary Transmission Service, except in cases where Ancillary Services (c) through (f) are applicable to a Secondary Transmission Service transaction, but are not applicable to the firm capacity reservation under which Secondary Transmission Service is provided. When charges for Ancillary Services are applicable to Secondary Transmission Service, the charge for the Ancillary Service shall be the hourly rate applied to all energy transmitted utilizing the Secondary Transmission Service.

**Provision of Ancillary Services by Others:**

Customers for which Ancillary Services (c) through (f) 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 their election to provide all or part of such Ancillary Services from their own resources or a third party. Such notice requirements also apply to requests for Southwestern to provide Ancillary Services when such services are available as specified above.

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 written notice or upon the 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 P-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

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

Where:

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

RP = (Dollar per MWh of Regulation Purchased – Supplemental Energy Rate) ×Total 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 is authorized for use only within a bandwidth of ± 1.5 percent of the actual requirements of the load at a particular point of delivery, for any hour, compared to the resources scheduled to meet such load during such hour. Deviations which are greater than ± 1.5 percent, but which are less than ± 2,000 kilowatts, are considered to be within the authorized bandwidth. Deviations outside the authorized bandwidth are subject to a Capacity Overrun Penalty.

Energy delivered or received within the authorized bandwidth for this service is accounted for as an inadvertent flow and will be netted against flows in the future. The inadvertent flow in any given hour will only be offset with the flows in the corresponding hour of a day in the same category. The two categories of days are weekdays and weekend days/North American Electric Reliability Council holidays. This process will result in a separate inadvertent accumulation for each hour of the two categories of days. The hourly accumulations in the current month will be added to the hourly inadvertent balances from the previous month, resulting in a month-end balance for each hour.

The Customer is required to adjust the scheduling of resources in such a way as to reduce the accumulation towards zero. It is recognized that the inadvertent hourly flows can be both negative and positive, and that offsetting flows should deter a significant accumulation of inadvertent. In the event any hourly month-end balance exceeds 12 MWHs, the excess will be subject to the Application of Capacity Overrun Penalty or the Unauthorized Use of Energy

Imbalance Service by Overscheduling of Resources provisions, depending on the direction of the accumulation.

**Application of Capacity Overrun Penalty:**

Customers, who receive deliveries within Southwestern's Balancing Authority Area, are obligated to provide resources sufficient to meet their loads. Such obligation is not related to the amount of transmission capacity that such Customers may have reserved for transmission service to a particular load. Customers whose resources are scheduled by Southwestern are not subject to this provision. In the event that a Customer under schedules its resources to meet its load, resulting in a difference between resources and actual metered load (adjusted for transformer losses as applicable) outside the authorized bandwidth for Energy Imbalance Service for any hour, then such Customer is subject to the following penalty:

CAPACITY OVERRUN PENALTY

For each hour during which energy flows outside the authorized bandwidth, the Customer will be obliged to purchase such energy 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 |

**Unauthorized Use of Energy Imbalance Service by Overscheduling of Resources:**

In the event that a Customer schedules greater resources than are needed to meet its load, such that energy flows at rates beyond the authorized bandwidth for the use of Energy Imbalance Service, Southwestern retains such energy at no cost to Southwestern and with no obligation to return such energy. Customers whose resources are scheduled by Southwestern are not subject to this provision.

**Application of Charge for Interconnection Facilities Service:**

Any Customer that requests an interconnection from Southwestern which, in Southwestern's sole judgment and at its sole option, does not provide commensurate benefits or compensation to Southwestern for the use of its facilities shall be assessed a capacity charge for Interconnection Facilities Service. For any month, charges for Interconnection Facilities Service shall be assessed on the greater of (1) that month's actual Peak Demand, or (2) the highest Peak Demand recorded during the previous eleven months, as metered at the interconnection. The use of Interconnection Facilities Service will be subject to power factor provisions as specified in this rate schedule. The interconnection customer shall also schedule and deliver Real Power Losses pursuant to the provisions of this Rate Schedule based on metered flow through the interconnection where Interconnection Facilities Services is assessed.

**Rate for Interconnection Facilities Service:**

The monthly capacity charge for Interconnection Facilities Service:
$1.18 per kilowatt

**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:

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

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:

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

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.

**UNITED STATES DEPARTMENT OF ENERGY**
**SOUTHWESTERN POWER ADMINISTRATION**

**RATE SCHEDULE EE-09[1]**
**WHOLESALE RATE FOR EXCESS ENERGY**

**Effective:**
During the period January 1, 2010, through September 30, 2013, in accordance with Rate Order No. SWPA-62 issued by the Deputy Secretary of Energy on December 30, 2009.

**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 electric utilities which, by contract, may purchase Excess Energy from Southwestern.

**Character and Conditions of Service:**
Three-phase, alternating current, delivered at approximately 60 Hertz, at the nominal voltage and points of delivery specified by contract.

**Energy Associated with this Rate Schedule:**
Excess Energy will be furnished at such times and in such amounts as Southwestern determines to be available.

**Transmission and Related Ancillary Services:**
Transmission service for the delivery of Excess Energy shall be the sole responsibility of such customer purchasing Excess Energy.

**Rate for Excess Energy:**

ENERGY CHARGE: $0.0086 per kilowatthour.

[1]Supersedes Rate Schedule EE-06

**Department of Energy**
Southwestern Power Administration
One West Third Street
Tulsa, Oklahoma 74103-3519

MAR 14 2007

NOTICE OF ORDER CONFIRMING AND APPROVING
INTEGRATED SYSTEM POWER RATES ON A FINAL BASIS

You are hereby notified, in accordance with the terms and conditions of our power sales contract, that the Federal Energy Regulatory Commission (FERC), pursuant to the authority under U.S. Department of Energy Delegation Order No. 00-037.00, dated December 6, 2001, has confirmed and approved the following Integrated System Rate Schedules on a final basis for the period October 1, 2006, through September 30, 2010:

Rate Schedule P-06, Wholesale Rates for Hydro Peaking Power

Rate Schedule NFTS-06, Wholesale Rates for Non-Federal Transmission Service

Rate Schedule EE-06, Wholesale Rate for Excess Energy

The Integrated System Rate Schedules were confirmed, approved and placed in effect on an interim basis by the Secretary of Energy in Rate Order No. SWPA-56. The FERC approved the Integrated System Rate Schedules, as submitted by the Deputy Secretary, by Order issued February 27, 2007, under Docket No. EF07-4011-000.

Copies of the Integrated System Rate Schedules are accessible at www.swpa.gov under the Rates link. If you have any questions regarding the new rate schedules, please contact Jim McDonald at (918) 595-6690, jim.mcdonald@swpa.gov, or Stephanie Bradley at (918) 595-6676, stephanie.bradley@swpa.gov.

Sincerely,

Michael A. Deihl
Administrator

**UNITED STATES DEPARTMENT OF ENERGY**
**SOUTHWESTERN POWER ADMINISTRATION**

# RATE SCHEDULE P-06 [1]
# WHOLESALE RATES FOR HYDRO PEAKING POWER

**Effective:**

During the period October 1, 2006, through September 30, 2010, in accordance with Federal Energy Regulatory Commission order issued February 27,2007, Docket No. EF07-4011-000.

**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-05**

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 Control 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 Control 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:

| 10/1/2006 – 9/30/2007 | 10/1/2007 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|
| $3.03 per kilowatt of Peaking Billing Demand | $3.18 per kilowatt of Peaking Billing Demand | $3.51 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 pays for or 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:

| 10/1/2006 – 9/30/2007 | 10/1/2007 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|
| $0.0082 per kilowatthour of Peaking Energy delivered; plus (c). | $0.0082 per kilowatthour of Peaking Energy delivered; plus (c). | $0.0082 per kilowatthour of Peaking Energy delivered; plus (c). |

(b) SUPPLEMENTAL ENERGY CHARGE:

| 10/1/2006 – 9/30/2007 | 10/1/2007 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|
| $0.0055 per kilowatthour of Peaking Energy | $0.0082 per kilowatthour of Peaking Energy | $0.0082 per kilowatthour of Peaking Energy. |

(c) 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 $0.30 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:

| | 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|
| Monthly rate | $0.08 per kilowatt of Peaking Billing Demand | $0.09 per kilowatt of Peaking Billing Demand. |

(b) Spinning Operating Reserve Service:

| | 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|
| Monthly rate | $0.0079 per kilowatt of Peaking Billing Demand | $0.0092 per kilowatt of Peaking Billing Demand. |
| Daily rate | $0.00036 per kilowatt for non-Federal generation inside Southwestern's control area | $0.00042 per kilowatt for non-Federal generation inside Southwestern's control area |

(c) Supplemental Operating Reserve Service:

| | 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|
| Monthly rate | $0.0079 per kilowatt of Peaking Billing Demand | $0.0092 per kilowatt of Peaking Billing Demand |
| Daily rate | $0.00036 per kilowatt for non-Federal generation inside Southwestern's control area | $0.00042 per kilowatt for non-Federal generation inside Southwestern's control area |

(d) Energy Imbalance Service:

$0.0 per kilowatt for all reservation periods.

**Availability of Ancillary Services**

Ancillary Services (a) and (d) listed above are available only for deliveries of power and energy to load centers within Southwestern's Control Area. Ancillary Services (b) and (c) listed above are available only for deliveries of non-Federal power and energy generated by resources located within Southwestern's Control Area and for deliveries of all Hydro Peaking Power and associated energy from and within Southwestern's Control Area. Where available, such Ancillary Services must be taken from Southwestern; unless, subject to Southwestern's approval, they are provided by others.

**Application of Ancillary Services Charges**

For any month, the charges for Ancillary Services (a), (b), (c) and (d) listed above for deliveries of Hydro Peaking Power shall be based on the Peaking Billing Demand.

The daily charge for Ancillary Services (b) and (c) for non-Federal generation inside Southwestern's Control 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 (a), (b), (c) and (d) 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 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.

**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 in Southwestern's Open Access Transmission Service tariff 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 Control 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

**Rates for Real Power Losses**

The Customer shall purchase real power losses unless it elects to self-provide such losses under the provision detailed below in *Annual Election to Self Provide Real Power Losses.*

Real Power Losses are computed as four (4) percent of the total amount of non-Federal energy transmitted under a particular Customer's Peaking Contract Demand. The monthly charge for such Real Power Losses will be computed on a per kilowatthour basis as follows:

$$MC = .04 \times NFE \times R$$

with the factors defined as follows:

MC = The monthly charge ($) by Southwestern for Real Power Losses of non-Federal energy transmitted under the capacity associated with Hydro Peaking Power;

NFE = The amount of non-Federal energy (kWh) transmitted under a Customer's Peaking Contract Demand during a particular month; and

R = The rate for Real Power Losses ($ per kWh), is equal to the average of Southwestern's actual costs for the purchase of energy to replace Real Power Losses during the previous fiscal year (October through September), as reflected in Southwestern's financial records.

The rate for Real Power Losses will be posted on Southwestern's OASIS by November 1 of each year. This rate will be effective for one year beginning January 1 of each calendar year.

*Annual Election to Self Provide Real Power Losses*: The Customer may elect, on an annual basis, to self-provide all loss energy for which it is responsible subject to the following conditions:

(1) Such election for self-provision shall be for a full calendar year (January through December) for that Customer and shall be exercised by execution of a service agreement, or equivalent, before December 1 of the prior calendar year;

(2) Unless otherwise specified in the service agreement, the Customer shall schedule the delivery of real power losses into the System of Southwestern at the rate of one megawatt of real power losses for every 25 megawatts of non-Federal power and energy delivered to Customers' loads served from the points of delivery set forth in the Southwestern/Customer contract;

(3) For any new customer taking transmission service from Southwestern, election to self-provide real power losses shall be made at the time the contract is negotiated. Such service shall be implemented as provided for in the contract and the election to self-provide shall apply through the end of that calendar year for all transmission services.

**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:

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

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 $.0067 (6.7 mills) per kilowatthour of Peaking Energy, as noted in this Rate Schedule, may be adjusted by the Administrator, Southwestern, by an amount up to a total of ±$.0067 (6.7 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 amount of the total adjustment, plus or minus, to be applied to the Net Purchased Power Adder, rounded to the nearest $.0001 per kilowatt-hour, 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.

**UNITED STATES DEPARTMENT OF ENERGY**
**SOUTHWESTERN POWER ADMINISTRATION**

# RATE SCHEDULE NFTS-06 [1]
# WHOLESALE RATES FOR NON-FEDERAL TRANSMISSION/INTERCONNECTION FACILITIES SERVICE

**Effective:**

During the period October 1, 2006, through September 30, 2010, in accordance with Federal Energy Regulatory Commission order issued February 27, 2007, Docket No. EF07-4011-000.

**Available:**

In the region where Southwestern Power Administration (Southwestern) owns and operates high-voltage transmission lines and related facilities, and/or has contractual rights to such transmission facilities owned by others (System of Southwestern).

**Applicable:**

To Customers which have executed Service Agreements with Southwestern for the transmission of non-Federal power and energy over the System of Southwestern or for its use for interconnections. Southwestern will provide services over those portions of the System of Southwestern in which the Administrator, Southwestern, in his or her sole judgment, has determined that uncommitted transmission and transformation capacities in the System of Southwestern are and will be available in excess of the capacities required to market Federal power and energy pursuant to Section 5 of the Flood Control Act of 1944 (58 Stat. 887,890; 16 U.S.C. 825s).

**Character and Conditions of Service:**

Service will be provided as 3-phase, alternating current, at approximately 60 Hertz, and at the voltage level of the point(s) specified by Service Agreement or Transmission Service Transaction.

**Definitions of Terms:**

A *Customer* is the entity which is utilizing and/or purchasing services from Southwestern pursuant to this rate schedule.

A "*Service Agreement*" is a contract executed between a Customer and Southwestern for the transmission of non-Federal power and energy over the System of Southwestern or for interconnections. Service Agreements include:

> "*Firm Transmission Service Agreements*" that provide for reserved transmission capacity on a firm basis, for a particular point-to-point delivery path.
>
> "*Non-Firm Transmission Service Agreements*" that provide for the Customer to request transmission service on a non-firm basis.
>
> "*Network Transmission Service Agreements*" that provide for the Customer to request firm transmission service for the delivery of capacity and energy from the Customer's network resources to the Customer's network load, for a period of one year or more.

[1] **Supersedes Rate Schedule NFTS-05**

"*Interconnection Agreements*" that provide for the use of the System of Southwestern and recognize the exchange of mutual benefits for such use or provide for application of a charge for Interconnection Facilities Service.

A "*Service Request*" is made under a Transmission Service Agreement through Southwestern's Open Access Same-Time Information System (OASIS) for reservation of transmission capacity over a particular point-to-point delivery path for a particular period. When a Service Request is approved by Southwestern, it becomes a "*Transmission Service Transaction.*" The Customer must submit hourly schedules for actual service in addition to the Service Request.

"*Firm Point-to-Point Transmission Service*" is transmission service reserved on a firm basis between specific points of receipt and delivery pursuant to either a Firm Transmission Agreement or to a Transmission Service Transaction. "*Non-Firm Point-to-Point Transmission Service*" is transmission service reserved on a non-firm basis for specific points of receipt and delivery pursuant to a Transmission Service Transaction. "*Network Integration Transmission Service*" is transmission service provided under Part III of Southwestern's Open Access Transmission Service Tariff which provides the Customer with firm transmission service for the delivery of capacity and energy from the Customer's resources to the Customer's load.

"*Secondary Transmission Service*" is associated with Firm Point-to-Point Transmission Service and Network Integration Transmission Service. For Firm Point-to-Point Transmission Service, it consists of transmission service provided on an as-available, non-firm basis, scheduled within the limits of a particular capacity reservation for transmission service, and scheduled from points of receipt, or to points of delivery, other than those designated in a Long-Term Firm Transmission Agreement or a Transmission Service Transaction for Firm Point-to-Point Transmission Service. For Network Integration Transmission Service, Secondary Transmission Service consists of transmission service provided on an as-available, non-firm basis, from resources other than the Network Resources designated in a Network Transmission Service Agreement, to meet the Customer's Network Load. The charges for Secondary Transmission Service, other than Real Power Losses and Ancillary Services, are included in the applicable capacity charges for Firm Point-to-Point Transmission Service and Network Integration Transmission Service.

The "*Demand Period*" used to determine a maximum integrated rate of delivery for the purposes 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 or interconnection.

For the purposes of this rate schedule, the term "*Point of Delivery*" is used to mean either a single physical point to which electric power and energy are delivered from the System of Southwestern, or a specified set of delivery points which together form a single, electrically integrated load. Peak Demand for such set of 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.

"*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. Ancillary Services include:

"*Scheduling, System Control, and Dispatch Service*" is provided by Southwestern as Control 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 Control 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.

*"Interconnection Facilities Service"* provides for the use of the System of Southwestern to deliver energy and/or provide system support at an interconnection.

**Rates for Firm Point-to-Point Transmission Service:**

CAPACITY CHARGES FOR FIRM TRANSMISSION SERVICE:

| | 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|
| Monthly: | $0.90 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a longer term agreement | $0.95 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a longer term agreement |
| Weekly: | $0.225 per kilowatt of transmission capacity reserved in increments of one week of service | $0.238 per kilowatt of transmission capacity reserved in increments of one week of service |
| Daily: | $0.0409 per kilowatt of transmission capacity reserved in increments of one day of service | $0.0432 per kilowatt of transmission capacity reserved in increments of one day of service |

**Service Associated with Capacity Charges for Firm Point-to-Point Transmission Service:**

The capacity charge for firm transmission service includes Secondary Transmission Service, but does not include charges for Ancillary Services or for Real Power Losses associated with actual schedules.

**Application of Capacity Charges for Firm Point-to-Point Transmission Service:**

Capacity charges for firm transmission service are applied to quantities reserved by contract under a Firm Transmission Agreement or in accordance with a Transmission Service Transaction.

Customers, unless otherwise specified by contract, will be charged on the greatest of (1) the Peak Demand at any particular point of delivery during a particular month, rounded up to the nearest whole megawatt, or (2) the highest Peak Demand recorded at such point of delivery during any of

the previous 11 months, rounded up to the nearest whole megawatt, or (3) the capacity reserved by contract; which amount shall be considered such Customer's reserved capacity. Secondary Transmission Service for such Customers shall be limited during any month to the most recent Peak Demand on which a particular Customer is billed or to the capacity reserved by contract, whichever is greater.

**Rates for Non-Firm Point-to-Point Transmission Service:**

CAPACITY CHARGES FOR NON-FIRM TRANSMISSION SERVICE:

Monthly: 80 percent of the firm monthly charge of transmission capacity reserved in increments of one month of service

Weekly: 80 percent of the firm monthly charge divided by 4 of transmission capacity reserved in increments of one week of service

Daily: 80 percent of the firm monthly charge divided by 22 of transmission capacity reserved in increments of one day of service

Hourly: 80 percent of the firm monthly charge divided by 352 of transmission capacity reserved in increments of one hour of service

**Application of Charges for Non-Firm Point-to-Point Transmission Service:**

Capacity charges for Non-Firm Transmission Service are applied to quantities reserved under a Transmission Service Transaction, and do not include charges for Ancillary Services or Real Power Losses.

**Rates for Network Integration Transmission Service:**

ANNUAL REVENUE REQUIREMENT FOR NETWORK INTEGRATION SERVICE:

| 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|
| $9,155,900 | $9,431,500 |

MONTHLY REVENUE REQUIREMENT FOR NETWORK INTEGRATION SERVICE:

| 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|
| $762,992 | $785,958 |

NET CAPACITY AVAILABLE FOR NETWORK INTEGRATION SERVICE:

| 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|
| 845,000 kilowatts | 828,000 kilowatts |

CAPACITY CHARGE FOR NETWORK INTEGRATION TRANSMISSION SERVICE:

| 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|
| $0.90 per kilowatt of Network Load ($762,992/845,000 kilowatts | $0.95 per kilowatt of Network Load ($785,958/828,000 kilowatts |

**Application of Charge for Network Integration Transmission Service:**

Network Integration Transmission Service is available only for deliveries of non-Federal power and energy, and is applied to the Customer utilizing such service exclusive of any deliveries of Federal power and energy. The capacity on which charges for any particular Customer utilizing this service is determined on the greatest of (1) the Peak Demand at any particular point of delivery during a particular month, rounded up to the nearest whole megawatt, or (2) the highest Peak

Demand recorded at such point of delivery during any of the previous 11 months, rounded up to the nearest whole megawatt.

For those Customers taking Network Integration Transmission Service who are also taking delivery of Federal Power and Energy, the Peak Demand shall be determined by subtracting the energy scheduled for delivery of Federal Power and Energy for any hour from the metered demand for such hour.

Secondary transmission Service for such Customers shall be limited during any month to the most recent Peak Demand on which a particular Customer is billed. Charges for Ancillary Services and for Real Power Losses shall also be assessed.

**Rates for Real Power Losses**

The Customer shall purchase real power losses unless it elects to self-provide such losses under the provisions detailed below in *Annual Election to Self-Provide Real Power Losses.*

Real Power Losses are computed as four (4) percent of the total amount of non-Federal energy transmitted on behalf of a Customer. The monthly charge for such Real Power Losses will be computed on a per kilowatthour basis as follows:

$$MC = .04 \times NFE \times R$$

with the factors defined as follows:

MC = The monthly charge ($) by Southwestern for Real Power Losses of non-Federal energy transmitted on behalf of a Customer;

NFE = The amount of non-Federal energy (kWh) transmitted on behalf of a Customer during a particular month; and

R = The rate for Real Power Losses ($ per kWh), is an average of Southwestern's actual costs for the purchase of energy to replace Real Power Losses during the previous fiscal year (October through September), as reflected in Southwestern's financial records.

The rate for Real Power Losses will be posted on Southwestern's OASIS by November 1 of each year. This rate will become effective for one year beginning January 1 of each calendar year.

*Annual Election to Self-Provide Real Power Losses*: The Customer may elect, on an annual basis, to self-provide all loss energy for which it is responsible, subject to the following conditions:

(1) Such election for self-provision shall be for a full calendar year (January through December) for that Customer and shall be exercised by execution of a Service Agreement, or equivalent, before December 1 of the prior calendar year.

(2) Unless otherwise specified in the Service Agreement, the Customer shall schedule the delivery of real power losses in the System of Southwestern at the rate of one megawatt of real power losses for every 25 megawatts of non-Federal power and energy delivered to Customers' loads served from the points of delivery set forth in the Southwestern/Customer contract.

(3) For any new Customer taking transmission service from Southwestern, election to self-provide real power losses shall be made at the time the contract is negotiated.

Such service shall be implemented as provided for in the contract and the election to self-provide shall apply through the end of that calendar year for all transmission services.

**Monthly Capacity Charges for Transformation Service:**

A charge of $0.30 per kilowatt will be assessed for capacity used to deliver energy at any point of delivery at which Southwestern provides transformation 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. 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 ASSOCIATED WITH TRANSMISSION SERVICES:

**(a) Scheduling, System Control, and Dispatch Service:**

| | 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|
| Monthly: | $0.06 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement | $0.06 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement |
| Weekly: | $0.015 per kilowatt of transmission capacity reserved in increments of one week of service | $0.015 per kilowatt of transmission capacity reserved in increments of one week of service |
| Daily: | $0.0027 per kilowatt of transmission capacity reserved in increments of one day of service | $0.0027 per kilowatt of transmission capacity reserved in increments of one day of service |
| Hourly: | $0.00017 per kilowatt of energy delivered as non-firm transmission service | $0.00017 per kilowatt of energy delivered as non-firm transmission service |

**(b) Reactive Supply and Voltage Control from Generation Sources Service:**

| | 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|
| Monthly: | $0.03 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement | $0.04 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement |
| Weekly: | $0.008 per kilowatt of transmission capacity reserved in increments of one week of service | $0.010 per kilowatt of transmission capacity reserved in increments of one week of service |
| Daily: | $0.0014 per kilowatt of transmission capacity reserved in increments of one day of service | $0.0018 per kilowatt of transmission capacity reserved in increments of one day of service |

| | | |
|---|---|---|
| Hourly: | $0.00009 per kilowatt of energy delivered as non-firm transmission service | $0.00011 per kilowatt of energy delivered as non-firm transmission service |

**(c) Regulation and Frequency Response Service:**

| | 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|
| Monthly: | $0.08 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement | $0.09 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement |
| Weekly: | $0.020 per kilowatt of transmission capacity reserved in increments of one week of service | $0.023 per kilowatt of transmission capacity reserved in increments of one week of service |
| Daily: | $0.0036 per kilowatt of transmission capacity reserved in increments of one day of service | $0.0041 per kilowatt of transmission capacity reserved in increments of one day of service |
| Hourly: | $0.00023 per kilowatt of energy delivered as non-firm transmission service | $0.00026 per kilowatt of energy delivered as non-firm transmission service |

**(d) Spinning Operating Reserve Service:**

| | 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|
| Monthly: | $0.0079 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement | $0.0092 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement |
| Weekly: | $0.00198 per kilowatt of transmission capacity reserved in increments of one week of service | $0.0023 per kilowatt of transmission capacity reserved in increments of one week of service |
| Daily: | $0.00036 per kilowatt of transmission capacity reserved in increments of one day of service | $0.00042 per kilowatt of transmission capacity reserved in increments of one day of service |
| Hourly: | $0.00002 per kilowatt of energy delivered as non-firm transmission service | $0.00003 per kilowatt of energy delivered as non-firm transmission service |

**(e) Supplemental Operating Reserve Service:**

| | 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|
| Monthly: | $0.0079 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement | $0.0092 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement |
| Weekly: | $0.00198 per kilowatt of transmission capacity reserved in increments of one week of service | $0.0023 per kilowatt of transmission capacity reserved in increments of one week of service |

| | | |
|---|---|---|
| Daily: | $0.00036 per kilowatt of transmission capacity reserved in increments of one day of service | $0.00042 per kilowatt of transmission capacity reserved in increments of one day of service |
| Hourly: | $0.00002 per kilowatt of energy delivered as non-firm transmission service | $0.00003 per kilowatt of energy delivered as non-firm transmission service |

**(f) Energy Imbalance Service:**
$0.0 per kilowatt for all periods of reservation

**Availability of Ancillary Services:**

Ancillary Services (a) and (b) are available for all transmission services in and from the System of Southwestern and shall be provided by Southwestern. Ancillary Services (c) and (f) listed above are available only for deliveries of power and energy serving load within Southwestern's Control Area and shall be provided by Southwestern, unless, subject to Southwestern's approval, they are provided by others. Ancillary Services (d) and (e) are available only for deliveries of power and energy generated by resources located within Southwestern's Control Area and shall be provided by Southwestern, unless, subject to Southwestern's approval, they are provided by others.

**Application of Ancillary Services Charges:**

Charges for all Ancillary Services are applied to the reserved or network transmission service taken by the Customer in accordance with the rates listed above when such services are provided by Southwestern.

The charges for Ancillary Services are considered to include Ancillary Services for any Secondary Transmission Service, except in cases where Ancillary Services (c) through (f) are applicable to a Secondary Transmission Service transaction, but are not applicable to the firm capacity reservation under which Secondary Transmission Service is provided. When charges for Ancillary Services are applicable to Secondary Transmission Service, the charge for the Ancillary Service shall be the hourly rate applied to all energy transmitted utilizing the Secondary Transmission Service.

**Provision of Ancillary Services by Others:**

Customers for which Ancillary Services (c) through (f) 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 their election to provide all or part of such Ancillary Services from their own resources or a third party.

Subject to Southwestern's approval of the ability of such resources or third parties to meet Southwestern's technical 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 written notice or upon the completion of any necessary equipment modifications necessary to accommodate such change. Such notice requirements also apply to requests for Southwestern to provide Ancillary Services when such services are available as specified above.

**Limitations on Energy Imbalance Service:**

Energy Imbalance Service is authorized for use only within a bandwidth of ± 1.5 percent of the actual requirements of the load at a particular point of delivery, for any hour, compared to the resources scheduled to meet such load during such hour. Deviations which are greater than ± 1.5 percent, but which are less than ± 2,000 kilowatts, are considered to be within the authorized bandwidth. Deviations outside the authorized bandwidth are subject to a Capacity Overrun Penalty.

Energy delivered or received within the authorized bandwidth for this service is accounted for as an inadvertent flow and will be netted against flows in the future. The inadvertent flow in any given hour will only be offset with the flows in the corresponding hour of a day in the same category. The two categories of days are weekdays and weekend days/North American Electric Reliability Council holidays. This process will result in a separate inadvertent accumulation for each hour of the two categories of days. The hourly accumulations in the current month will be added to the hourly inadvertent balances from the previous month, resulting in a month-end balance for each hour.

The Customer is required to adjust the scheduling of resources in such a way as to reduce the accumulation towards zero. It is recognized that the inadvertent hourly flows can be both negative and positive, and that offsetting flows should deter a significant accumulation of inadvertent. In the event any hourly month-end balance exceeds 12 MWHs, the excess will be subject to the Application of Capacity Overrun Penalty or the Unauthorized Use of Energy Imbalance Service by Overscheduling of Resources provisions, depending on the direction of the accumulation.

**Application of Capacity Overrun Penalty:**

Customers, who receive deliveries within Southwestern's Control Area, are obligated to provide resources sufficient to meet their loads. Such obligation is not related to the amount of transmission capacity that such Customers may have reserved for transmission service to a particular load. Customers whose resources are scheduled by Southwestern are not subject to this provision. In the event that a Customer under schedules its resources to meet its load, resulting in a difference between resources and actual metered load (adjusted for transformer losses as applicable) outside the authorized bandwidth for Energy Imbalance Service for any hour, then such Customer is subject to the following penalty:

CAPACITY OVERRUN PENALTY

For each hour during which energy flows outside the authorized bandwidth, the Customer will be obliged to purchase such energy 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 |

**Unauthorized Use of Energy Imbalance Service by Overscheduling of Resources:**

In the event that a Customer schedules greater resources than are needed to meet its load, such that energy flows at rates beyond the authorized bandwidth for the use of Energy Imbalance Service, Southwestern retains such energy at no cost to Southwestern and with no obligation to return such energy. Customers whose resources are scheduled by Southwestern are not subject to this provision.

**Application of Charge for Interconnection Facilities Service:**

Any Customer that requests an interconnection from Southwestern which, in Southwestern's sole judgment and at its sole option, does not provide commensurate benefits or compensation to Southwestern for the use of its facilities shall be assessed a capacity charge for Interconnection Facilities Service. For any month, charges for Interconnection Facilities Service shall be assessed on the greater of (1) that month's actual Peak Demand, or (2) the highest Peak Demand recorded

during the previous eleven months, as metered at the interconnection. The use of Interconnection Facilities Service will be subject to power factor provisions as specified in this rate schedule. The interconnection customer shall also be assessed charges for Real Power Losses on metered flow through the interconnection where Interconnection Facilities Services is assessed.

**Rate for Interconnection Facilities Service**:

The monthly capacity charge for Interconnection Facilities Service:

| 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|
| $0.90 per kilowatt | $0.95 per kilowatt |

**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:

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

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:

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

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.

**UNITED STATES DEPARTMENT OF ENERGY**
**SOUTHWESTERN POWER ADMINISTRATION**

**RATE SCHEDULE EE-06 [1]**
**WHOLESALE RATE FOR EXCESS ENERGY**

**Effective:**
During the period October 1, 2006, through September 30, 2010, in accordance with Federal Energy Regulatory Commission order issued February 27, 2007, Docket No. EF07-4011-000.

**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 electric utilities which, by contract, may purchase Excess Energy from Southwestern.

**Character and Conditions of Service:**
Three-phase, alternating current, delivered at approximately 60 Hertz, at the nominal voltage and points of delivery specified by contract.

**Energy Associated with this Rate Schedule:**
Excess Energy will be furnished at such times and in such amounts as Southwestern determines to be available.

**Transmission and Related Ancillary Services:**
Transmission service for the delivery of Excess Energy shall be the sole responsibility of such customer purchasing Excess Energy.

**Rate for Excess Energy:**

ENERGY CHARGE:

| 10/1/2006 – 9/30/2007 | 10/1/2007 – 9/30/2010 |
|---|---|
| $0.0055 per kilowatthour. | $0.0082 per kilowatthour. |

[1]Supersedes Rate Schedule EE-05

**UNITED STATES DEPARTMENT OF ENERGY**
**SOUTHWESTERN POWER ADMINISTRATION**

# RATE SCHEDULE P-06A[1]
# WHOLESALE RATES FOR
# HYDRO PEAKING POWER

**Effective:**

During the period January 1, 2009, through September 30, 2010, in accordance with Federal Energy Regulatory Commission order issued June 24, 2009, Docket No. EF09-4011-000.

**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-06**

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 Control 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 Control 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:

| 10/1/2006 – 9/30/2007 | 10/1/2007 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|
| $3.03 per kilowatt of Peaking Billing Demand | $3.18 per kilowatt of Peaking Billing Demand | $3.51 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:

| 10/1/2006 – 9/30/2007 | 10/1/2007 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|
| $0.0082 per kilowatthour of Peaking Energy delivered; plus (c). | $0.0082 per kilowatthour of Peaking Energy delivered; plus (c). | $0.0082 per kilowatthour of Peaking Energy delivered; plus (c). |

(b) SUPPLEMENTAL ENERGY CHARGE:

| 10/1/2006 – 9/30/2007 | 10/1/2007 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|

| | | |
|---|---|---|
| $0.0055 per kilowatthour of Peaking Energy | $0.0082 per kilowatthour of Peaking Energy | $0.0082 per kilowatthour of Peaking Energy. |

(c) 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 $0.30 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:

| | 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|
| Monthly rate | $0.08 per kilowatt of Peaking Billing Demand | $0.09 per kilowatt of Peaking Billing Demand. |

(b) Spinning Operating Reserve Service:

| | 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|
| Monthly rate | $0.0079 per kilowatt of Peaking Billing Demand | $0.0092 per kilowatt of Peaking Billing Demand. |
| Daily rate | $0.00036 per kilowatt for non-Federal generation inside Southwestern's control area | $0.00042 per kilowatt for non-Federal generation inside Southwestern's control area |

(c) Supplemental Operating Reserve Service:

| | 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|

| | | |
|---|---|---|
| Monthly rate | $0.0079 per kilowatt of Peaking Billing Demand | $0.0092 per kilowatt of Peaking Billing Demand |
| Daily rate | $0.00036 per kilowatt for non-Federal generation inside Southwestern's control area | $0.00042 per kilowatt for non-Federal generation inside Southwestern's control area |

(d) Energy Imbalance Service:
$0.0 per kilowatt for all reservation periods.

**Availability of Ancillary Services**

Ancillary Services (a) and (d) listed above are available only for deliveries of power and energy to load centers within Southwestern's Control Area. Ancillary Services (b) and (c) listed above are available only for deliveries of non-Federal power and energy generated by resources located within Southwestern's Control Area and for deliveries of all Hydro Peaking Power and associated energy from and within Southwestern's Control Area. Where available, such Ancillary Services must be taken from Southwestern; unless, subject to Southwestern's approval, they are provided by others.

**Application of Ancillary Services Charges**

For any month, the charges for Ancillary Services (a), (b), (c) and (d) listed above for deliveries of Hydro Peaking Power shall be based on the Peaking Billing Demand.

The daily charge for Ancillary Services (b) and (c) for non-Federal generation inside Southwestern's Control 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 (a), (b), (c) and (d) 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 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.

**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 in Southwestern's Open Access Transmission Service tariff 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 Control 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:

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

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 $.0067 (6.7 mills) per kilowatthour of Peaking Energy, as noted in this Rate Schedule, may be adjusted by the Administrator, Southwestern, by an amount up to a total of ±$.0067 (6.7 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 amount of the total adjustment, plus or minus, to be applied to the Net Purchased Power Adder, rounded to the nearest $.0001 per kilowatt-hour, 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.

**UNITED STATES DEPARTMENT OF ENERGY**
**SOUTHWESTERN POWER ADMINISTRATION**

# RATE SCHEDULE NFTS-06A [1]
# WHOLESALE RATES FOR NON-FEDERAL TRANSMISSION/INTERCONNECTION FACILITIES SERVICE

**Effective:**
During the period January 1, 2009, through September 30, 2010, in accordance with Federal Energy Regulatory Commission order issued June 24, 2009, Docket No. EF09-4011-000.

**Available:**
In the region where Southwestern Power Administration (Southwestern) owns and operates high-voltage transmission lines and related facilities, and/or has contractual rights to such transmission facilities owned by others (System of Southwestern).

**Applicable:**
To Customers which have executed Service Agreements with Southwestern for the transmission of non-Federal power and energy over the System of Southwestern or for its use for interconnections. Southwestern will provide services over those portions of the System of Southwestern in which the Administrator, Southwestern, in his or her sole judgment, has determined that uncommitted transmission and transformation capacities in the System of Southwestern are and will be available in excess of the capacities required to market Federal power and energy pursuant to Section 5 of the Flood Control Act of 1944 (58 Stat. 887,890; 16 U.S.C. 825s).

**Character and Conditions of Service:**
Service will be provided as 3-phase, alternating current, at approximately 60 Hertz, and at the voltage level of the point(s) specified by Service Agreement or Transmission Service Transaction.

**Definitions of Terms:**
A *Customer* is the entity which is utilizing and/or purchasing services from Southwestern pursuant to this rate schedule.

A "*Service Agreement*" is a contract executed between a Customer and Southwestern for the transmission of non-Federal power and energy over the System of Southwestern or for interconnections. Service Agreements include:

> "*Firm Transmission Service Agreements*" that provide for reserved transmission capacity on a firm basis, for a particular point-to-point delivery path.
>
> "*Non-Firm Transmission Service Agreements*" that provide for the Customer to request transmission service on a non-firm basis.
>
> "*Network Transmission Service Agreements*" that provide for the Customer to request firm transmission service for the delivery of capacity and energy from the Customer's network resources to the Customer's network load, for a period of one year or more.

[1] **Supersedes Rate Schedule NFTS-06**

"*Interconnection Agreements*" that provide for the use of the System of Southwestern and recognize the exchange of mutual benefits for such use or provide for application of a charge for Interconnection Facilities Service.

A "*Service Request*" is made under a Transmission Service Agreement through the Southwest Power Pool, Inc. (SPP) Open Access Same-Time Information System (OASIS) for reservation of transmission capacity over a particular point-to-point delivery path for a particular period. When a Service Request is approved by SPP, it becomes a "*Transmission Service Transaction*." The Customer must submit hourly schedules for actual service in addition to the Service Request.

"*Firm Point-to-Point Transmission Service*" is transmission service reserved on a firm basis between specific points of receipt and delivery pursuant to either a Firm Transmission Agreement or to a Transmission Service Transaction. "*Non-Firm Point-to-Point Transmission Service*" is transmission service reserved on a non-firm basis for specific points of receipt and delivery pursuant to a Transmission Service Transaction. "*Network Integration Transmission Service*" is transmission service provided under Part III of Southwestern's Open Access Transmission Service Tariff which provides the Customer with firm transmission service for the delivery of capacity and energy from the Customer's resources to the Customer's load.

"*Secondary Transmission Service*" is associated with Firm Point-to-Point Transmission Service and Network Integration Transmission Service. For Firm Point-to-Point Transmission Service, it consists of transmission service provided on an as-available, non-firm basis, scheduled within the limits of a particular capacity reservation for transmission service, and scheduled from points of receipt, or to points of delivery, other than those designated in a Long-Term Firm Transmission Agreement or a Transmission Service Transaction for Firm Point-to-Point Transmission Service. For Network Integration Transmission Service, Secondary Transmission Service consists of transmission service provided on an as-available, non-firm basis, from resources other than the Network Resources designated in a Network Transmission Service Agreement, to meet the Customer's Network Load. The charges for Secondary Transmission Service, other than Ancillary Services, are included in the applicable capacity charges for Firm Point-to-Point Transmission Service and Network Integration Transmission Service.

The "*Demand Period*" used to determine a maximum integrated rate of delivery for the purposes 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 or interconnection.

For the purposes of this rate schedule, the term "*Point of Delivery*" is used to mean either a single physical point to which electric power and energy are delivered from the System of Southwestern, or a specified set of delivery points which together form a single, electrically integrated load. Peak Demand for such set of 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.

"*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. Ancillary Services include:

"*Scheduling, System Control, and Dispatch Service*" is provided by Southwestern as Control 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 Control 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.

*"Interconnection Facilities Service"* provides for the use of the System of Southwestern to deliver energy and/or provide system support at an interconnection.

**Rates for Firm Point-to-Point Transmission Service:**

CAPACITY CHARGES FOR FIRM TRANSMISSION SERVICE:

| | 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|
| Monthly: | $0.90 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a longer term agreement | $0.95 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a longer term agreement |
| Weekly: | $0.225 per kilowatt of transmission capacity reserved in increments of one week of service | $0.238 per kilowatt of transmission capacity reserved in increments of one week of service |
| Daily: | $0.0409 per kilowatt of transmission capacity reserved in increments of one day of service | $0.0432 per kilowatt of transmission capacity reserved in increments of one day of service |

**Service Associated with Capacity Charges for Firm Point-to-Point Transmission Service:**

The capacity charge for firm transmission service includes Secondary Transmission Service, but does not include charges for Ancillary Services associated with actual schedules.

**Application of Capacity Charges for Firm Point-to-Point Transmission Service:**

Capacity charges for firm transmission service are applied to quantities reserved by contract under a Firm Transmission Agreement or in accordance with a Transmission Service Transaction.

Customers, unless otherwise specified by contract, will be charged on the greatest of (1) the Peak Demand at any particular point of delivery during a particular month, rounded up to the nearest whole megawatt, or (2) the highest Peak Demand recorded at such point of delivery during any of the previous 11 months, rounded up to the nearest whole megawatt, or (3) the capacity reserved by contract; which amount shall be considered such Customer's reserved capacity. Secondary Transmission Service for such Customers shall be limited during any month to the most recent Peak Demand on which a particular Customer is billed or to the capacity reserved by contract, whichever is greater.

**Rates for Non-Firm Point-to-Point Transmission Service:**

CAPACITY CHARGES FOR NON-FIRM TRANSMISSION SERVICE:

Monthly: 80 percent of the firm monthly charge of transmission capacity reserved in increments of one month of service

Weekly: 80 percent of the firm monthly charge divided by 4 of transmission capacity reserved in increments of one week of service

Daily: 80 percent of the firm monthly charge divided by 22 of transmission capacity reserved in increments of one day of service

Hourly: 80 percent of the firm monthly charge divided by 352 of transmission capacity reserved in increments of one hour of service

**Application of Charges for Non-Firm Point-to-Point Transmission Service:**

Capacity charges for Non-Firm Transmission Service are applied to quantities reserved under a Transmission Service Transaction, and do not include charges for Ancillary Services.

**Rates for Network Integration Transmission Service:**

ANNUAL REVENUE REQUIREMENT FOR NETWORK INTEGRATION SERVICE:

| 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|
| $9,155,900 | $9,431,500 |

MONTHLY REVENUE REQUIREMENT FOR NETWORK INTEGRATION SERVICE:

| 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|
| $762,992 | $785,958 |

NET CAPACITY AVAILABLE FOR NETWORK INTEGRATION SERVICE:

| 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|
| 845,000 kilowatts | 828,000 kilowatts |

CAPACITY CHARGE FOR NETWORK INTEGRATION TRANSMISSION SERVICE:

| 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|
| $0.90 per kilowatt of Network Load ($762,992/845,000 kilowatts | $0.95 per kilowatt of Network Load ($785,958/828,000 kilowatts |

**Application of Charge for Network Integration Transmission Service:**

Network Integration Transmission Service is available only for deliveries of non-Federal power and energy, and is applied to the Customer utilizing such service exclusive of any deliveries of Federal power and energy. The capacity on which charges for any particular

Customer utilizing this service is determined on the greatest of (1) the Peak Demand at any particular point of delivery during a particular month, rounded up to the nearest whole megawatt, or (2) the highest Peak Demand recorded at such point of delivery during any of the previous 11 months, rounded up to the nearest whole megawatt.

For those Customers taking Network Integration Transmission Service who are also taking delivery of Federal Power and Energy, the Peak Demand shall be determined by subtracting the energy scheduled for delivery of Federal Power and Energy for any hour from the metered demand for such hour.

Secondary transmission Service for such Customers shall be limited during any month to the most recent Peak Demand on which a particular Customer is billed. Charges for Ancillary Services shall also be assessed.

**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.

**Monthly Capacity Charges for Transformation Service:**

A charge of $0.30 per kilowatt will be assessed for capacity used to deliver energy at any point of delivery at which Southwestern provides transformation 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. 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 ASSOCIATED WITH TRANSMISSION SERVICES:

**(a) Scheduling, System Control, and Dispatch Service:**

| | 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|
| Monthly: | $0.06 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement | $0.06 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement |
| Weekly: | $0.015 per kilowatt of transmission capacity reserved in increments of one week of service | $0.015 per kilowatt of transmission capacity reserved in increments of one week of service |
| Daily: | $0.0027 per kilowatt of transmission capacity reserved in increments of one day of service | $0.0027 per kilowatt of transmission capacity reserved in increments of one day of service |
| Hourly: | $0.00017 per kilowatt of energy delivered as non-firm transmission service | $0.00017 per kilowatt of energy delivered as non-firm transmission service |

**(b) Reactive Supply and Voltage Control from Generation Sources Service:**

| | 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|

| | | |
|---|---|---|
| Monthly: | $0.03 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement | $0.04 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement |
| Weekly: | $0.008 per kilowatt of transmission capacity reserved in increments of one week of service | $0.010 per kilowatt of transmission capacity reserved in increments of one week of service |
| Daily: | $0.0014 per kilowatt of transmission capacity reserved in increments of one day of service | $0.0018 per kilowatt of transmission capacity reserved in increments of one day of service |
| Hourly: | $0.00009 per kilowatt of energy delivered as non-firm transmission service | $0.00011 per kilowatt of energy delivered as non-firm transmission service |

**(c) Regulation and Frequency Response Service:**

| | 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|
| Monthly: | $0.08 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement | $0.09 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement |
| Weekly: | $0.020 per kilowatt of transmission capacity reserved in increments of one week of service | $0.023 per kilowatt of transmission capacity reserved in increments of one week of service |
| Daily: | $0.0036 per kilowatt of transmission capacity reserved in increments of one day of service | $0.0041 per kilowatt of transmission capacity reserved in increments of one day of service |
| Hourly: | $0.00023 per kilowatt of energy delivered as non-firm transmission service | $0.00026 per kilowatt of energy delivered as non-firm transmission service |

**(d) Spinning Operating Reserve Service:**

| | 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|
| Monthly: | $0.0079 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement | $0.0092 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement |
| Weekly: | $0.00198 per kilowatt of transmission capacity reserved in increments of one week of service | $0.0023 per kilowatt of transmission capacity reserved in increments of one week of service |
| Daily: | $0.00036 per kilowatt of transmission capacity reserved in increments of one day of service | $0.00042 per kilowatt of transmission capacity reserved in increments of one day of service |

| | | |
|---|---|---|
| Hourly: | $0.00002 per kilowatt of energy delivered as non-firm transmission service | $0.00003 per kilowatt of energy delivered as non-firm transmission service |

**(e) Supplemental Operating Reserve Service:**

| | 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|---|
| Monthly: | $0.0079 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement | $0.0092 per kilowatt of transmission capacity reserved in increments of one month of service or invoiced in accordance with a Long-Term Firm Transmission Agreement or Network Transmission Service Agreement |
| Weekly: | $0.00198 per kilowatt of transmission capacity reserved in increments of one week of service | $0.0023 per kilowatt of transmission capacity reserved in increments of one week of service |
| Daily: | $0.00036 per kilowatt of transmission capacity reserved in increments of one day of service | $0.00042 per kilowatt of transmission capacity reserved in increments of one day of service |
| Hourly: | $0.00002 per kilowatt of energy delivered as non-firm transmission service | $0.00003 per kilowatt of energy delivered as non-firm transmission service |

**(f) Energy Imbalance Service:**

$0.0 per kilowatt for all periods of reservation

**Availability of Ancillary Services:**

Ancillary Services (a) and (b) are available for all transmission services in and from the System of Southwestern and shall be provided by Southwestern. Ancillary Services (c) and (f) listed above are available only for deliveries of power and energy serving load within Southwestern's Control Area and shall be provided by Southwestern, unless, subject to Southwestern's approval, they are provided by others. Ancillary Services (d) and (e) are available only for deliveries of power and energy generated by resources located within Southwestern's Control Area and shall be provided by Southwestern, unless, subject to Southwestern's approval, they are provided by others.

**Application of Ancillary Services Charges:**

Charges for all Ancillary Services are applied to the reserved or network transmission service taken by the Customer in accordance with the rates listed above when such services are provided by Southwestern.

The charges for Ancillary Services are considered to include Ancillary Services for any Secondary Transmission Service, except in cases where Ancillary Services (c) through (f) are applicable to a Secondary Transmission Service transaction, but are not applicable to the firm capacity reservation under which Secondary Transmission Service is provided. When charges for Ancillary Services are applicable to Secondary Transmission Service, the charge for the Ancillary Service shall be the hourly rate applied to all energy transmitted utilizing the Secondary Transmission Service.

**Provision of Ancillary Services by Others:**

Customers for which Ancillary Services (c) through (f) 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 their election to provide all or part of such Ancillary Services from their own resources or a third party.

Subject to Southwestern's approval of the ability of such resources or third parties to meet Southwestern's technical 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 written notice or upon the completion of any necessary equipment modifications necessary to accommodate such change. Such notice requirements also apply to requests for Southwestern to provide Ancillary Services when such services are available as specified above.

**Limitations on Energy Imbalance Service:**

Energy Imbalance Service is authorized for use only within a bandwidth of ± 1.5 percent of the actual requirements of the load at a particular point of delivery, for any hour, compared to the resources scheduled to meet such load during such hour. Deviations which are greater than ± 1.5 percent, but which are less than ± 2,000 kilowatts, are considered to be within the authorized bandwidth. Deviations outside the authorized bandwidth are subject to a Capacity Overrun Penalty.

Energy delivered or received within the authorized bandwidth for this service is accounted for as an inadvertent flow and will be netted against flows in the future. The inadvertent flow in any given hour will only be offset with the flows in the corresponding hour of a day in the same category. The two categories of days are weekdays and weekend days/North American Electric Reliability Council holidays. This process will result in a separate inadvertent accumulation for each hour of the two categories of days. The hourly accumulations in the current month will be added to the hourly inadvertent balances from the previous month, resulting in a month-end balance for each hour.

The Customer is required to adjust the scheduling of resources in such a way as to reduce the accumulation towards zero. It is recognized that the inadvertent hourly flows can be both negative and positive, and that offsetting flows should deter a significant accumulation of inadvertent. In the event any hourly month-end balance exceeds 12 MWHs, the excess will be subject to the Application of Capacity Overrun Penalty or the Unauthorized Use of Energy Imbalance Service by Overscheduling of Resources provisions, depending on the direction of the accumulation.

**Application of Capacity Overrun Penalty:**

Customers, who receive deliveries within Southwestern's Control Area, are obligated to provide resources sufficient to meet their loads. Such obligation is not related to the amount of transmission capacity that such Customers may have reserved for transmission service to a particular load. Customers whose resources are scheduled by Southwestern are not subject to this provision. In the event that a Customer under schedules its resources to meet its load, resulting in a difference between resources and actual metered load (adjusted for transformer losses as applicable) outside the authorized bandwidth for Energy Imbalance Service for any hour, then such Customer is subject to the following penalty:

CAPACITY OVERRUN PENALTY

For each hour during which energy flows outside the authorized bandwidth, the Customer will be obliged to purchase such energy 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 |

**Unauthorized Use of Energy Imbalance Service by Overscheduling of Resources:**

In the event that a Customer schedules greater resources than are needed to meet its load, such that energy flows at rates beyond the authorized bandwidth for the use of Energy Imbalance Service, Southwestern retains such energy at no cost to Southwestern and with no obligation to return such energy. Customers whose resources are scheduled by Southwestern are not subject to this provision.

**Application of Charge for Interconnection Facilities Service:**

Any Customer that requests an interconnection from Southwestern which, in Southwestern's sole judgment and at its sole option, does not provide commensurate benefits or compensation to Southwestern for the use of its facilities shall be assessed a capacity charge for Interconnection Facilities Service. For any month, charges for Interconnection Facilities Service shall be assessed on the greater of (1) that month's actual Peak Demand, or (2) the highest Peak Demand recorded during the previous eleven months, as metered at the interconnection. The use of Interconnection Facilities Service will be subject to power factor provisions as specified in this rate schedule. The interconnection customer shall also schedule and deliver Real Power Losses pursuant to the provisions of this Rate Schedule based on metered flow through the interconnection where Interconnection Facilities Services is assessed.

**Rate for Interconnection Facilities Service:**

The monthly capacity charge for Interconnection Facilities Service:

| 10/1/2006 – 9/30/2008 | 10/1/2008 – 9/30/2010 |
|---|---|
| $0.90 per kilowatt | $0.95 per kilowatt |

**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:

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

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:

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

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.