

ACS-1008
ANCILLARY SERVICES AND CONTROL AREA SERVICES RATE
Redline Version

SECTION I. AVAILABILITY

This schedule supersedes Schedule ACS-086. It is available to all Transmission Customers taking service under the Open Access Transmission Tariff and other contractual arrangements. This schedule is available also for transmission service of a similar nature that may be ordered by the Federal Energy Regulatory Commission (FERC) pursuant to sections 211 and 212 of the Federal Power Act (16 U.S.C. §§824j and 824k). Service under this schedule is subject to BPA-TS's General Rate Schedule Provisions (GRSPs).

Ancillary Services are needed with transmission service to maintain reliability within and among the Control Areas affected by the transmission service. The Transmission Provider is required to provide, and the Transmission Customer is required to purchase, the following Ancillary Services: (a) Scheduling, System Control and Dispatch, and (b) Reactive Supply and Voltage Control from Generation Sources.

The Transmission Provider is required to offer to provide the following Ancillary Services only to the Transmission Customer serving load within the Transmission Provider's Control Area: (a) Regulation and Frequency Response and (b) Energy Imbalance. The Transmission Customer serving load within the Transmission Provider's Control Area is required to acquire these Ancillary Services, whether from the Transmission Provider, from a third party, or by self-supply. The Transmission Provider is required to offer to provide (a) Operating Reserve – Spinning, and (b) Operating Reserve – Supplemental to the Transmission Customer ~~servicing load with generation located in the Transmission Provider's Control Area~~ in accordance with applicable NERC, WECC, and NWPP standards. The Transmission Customer serving load with generation located in the Transmission Provider's Control Area is required to acquire these Ancillary Services, whether from the Transmission Provider, from a third party, or by self-supply. The Transmission Customer may not decline the Transmission Provider's offer of Ancillary Services unless it demonstrates that it has acquired the Ancillary Services from another source. The Transmission Customer must list in its Application which Ancillary Services it will purchase from the Transmission Provider.

Ancillary Service rates available under this rate schedule are:

1. Scheduling, System Control, and Dispatch Service



2. Reactive Supply and Voltage Control from Generation Sources Service
3. Regulation and Frequency Response Service
4. Energy Imbalance Service
5. Operating Reserve -- Spinning Reserve Service
6. Operating Reserve -- Supplemental Reserve Service

Control Area Services are available to meet the Reliability Obligations of a party with resources or loads in the BPA Control Area. A party that is not satisfying all of its Reliability Obligations through the purchase or self-provision of Ancillary Services must purchase Control Area Services to meet its Reliability Obligations. Control Area Services are also available to parties with resources or loads in the BPA Control Area that have Reliability Obligations, but do not have a transmission agreement with BPA. Reliability Obligations for resources or loads in the BPA Control Area shall be determined consistent with the applicable North American Electric Reliability Council (NERC), Western Electricity Coordinating Council (WECC), and Northwest Power Pool (NWPP) criteria.

Control Area Service rates available under this rate schedule are:

1. Regulation and Frequency Response Service
2. Generation Imbalance Service
3. Operating Reserve -- Spinning Reserve Service
4. Operating Reserve -- Supplemental Reserve Service
5. Wind Integration: With-in Hour Balancing Service

SECTION II. ANCILLARY SERVICE RATES

A. SCHEDULING, SYSTEM CONTROL AND DISPATCH SERVICE

The rates below apply to Transmission Customers taking Scheduling, System Control and Dispatch Service from BPA-TS. These rates apply to both firm and non-firm transmission service. Transmission arrangements on the Network, on the Southern Intertie, and on the Montana Intertie are each charged separately for Scheduling, System Control and Dispatch Service.

1. RATES

a. Long-Term Firm PTP Transmission Service and NT Service

The rate shall not exceed \$0.203 per kilowatt per month.

b. Short-Term Firm and Non-Firm PTP Transmission Service

For each reservation, the rates shall not exceed:

(1) Monthly, Weekly, and Daily Firm and Non-Firm Service

(a) Days 1 through 5 \$0.010 per kilowatt per day

(b) Day 6 and beyond \$0.006 per kilowatt per day

(2) Hourly Firm and Non-Firm Service

The rate shall not exceed 0.59 mills per kilowatthour.

2. BILLING FACTORS

a. Point-To-Point Transmission Service

For Transmission Customers taking Point-to-Point Transmission Service (PTP, IS, and IM rates), the Billing Factor for each rate specified in section 1.a., 1.b.(1), and for the Hourly Firm PTP Transmission Service rate specified in 1.b.(2) shall be the Reserved Capacity, which is the greater of:

1. the sum of the capacity reservations at the Point(s) of Receipt, or
2. the sum of the capacity reservations at the Point(s) of Delivery.

The Reserved Capacity for Firm PTP Transmission Service shall not be adjusted for any Short-Distance Discounts or for any modifications on a non-firm basis in determining the Scheduling, System Control and Dispatch Service Billing Factor.

The Billing Factor for the rate specified in section 1.b.(2) for Hourly Non-Firm Service shall be the ~~scheduled kilowatthours. Upon 60 day's notice by BPA-TS, the Billing Factor for the rate specified in section 1.b.(2) for Hourly Non-Firm Service shall become the~~ Reserved Capacity and:

~~When Reserved Capacity becomes the Billing Factor for Hourly Non-Firm Service,~~ the following shall apply:

- i. If the need for Curtailment is caused by conditions on the Federal Columbia River Transmission System, the Billing Factor will be as follows:
 - a. If Hourly Non-Firm PTP Transmission Service is Curtailed or Interrupted before the close of the hourly non-firm scheduling window, the Billing Factor will be the Reserved Capacity minus the curtailed capacity.
 - b. If Hourly Non-Firm PTP Transmission Service is Curtailed or Interrupted after the close of the hourly non-firm scheduling window, the Billing Factor will be the Transmission Customer's actual schedule in the hour.
- ii. If the need for Curtailment is caused by conditions on another transmission provider's transmission system, the Billing Factor will be the Reserved Capacity.

These Billing Factors apply to all PTP transmission service under the Open Access Transmission Tariff regardless of whether the Transmission Customer actually uses (schedules) the transmission.

b. Network Integration Transmission Service

For Transmission Customers taking Network Integration Transmission Service, the Billing Factor for the rate specified in section 1.a. shall equal the NT Base Charge Billing Factor determined pursuant to section III.A. of the Network Integration Rate Schedule (NT-~~0810~~).

c. Adjustment for Customers Subject to the Unauthorized Increase Charge (UIC)

For Transmission Customers taking Point-to-Point Transmission Service (PTP, IS, and IM rate schedules) that are subject to a UIC in a billing month, the Billing Factor for the billing month shall be the Billing Factor calculated above plus the UIC Billing Factor calculated under section II.G.2.a. of the GRSPs.

For Transmission Customers taking Network Integration Transmission Service that are subject to a UIC in a billing month, the Billing Factor for the billing month shall be the Billing Factor calculated above plus the UIC Billing Factor calculated under section II.G.2.b. of the GRSPs.

SECTION II. ANCILLARY SERVICE RATES

B. REACTIVE SUPPLY AND VOLTAGE CONTROL FROM GENERATION SOURCES SERVICE

The rates below apply to Transmission Customers taking Reactive Supply and Voltage Control from Generation Sources (GSR) Service from BPA-TS. These rates apply to both firm and non-firm transmission service. Transmission arrangements on the Network, on the Southern Intertie, and on the Montana Intertie are each charged separately for Reactive Supply and Voltage Control from Generation Sources Service.

1. RATES

The rates for GSR Service will be set on a quarterly basis, beginning October 2009⁷, according to the formulas below. Rates for Long-Term PTP and NT Service and for Short-Term Monthly, Weekly and Daily Service (sections a. and b.(1), below) shall be calculated to three decimal places. Rates for Hourly Service (section b.(2), below) shall be calculated to two decimal places.

a. Long-Term Firm PTP Transmission Service and NT Service

The rate, in dollars per kilowatt per month (\$/kW/mo), shall not exceed:

$$\frac{4(N_q + U_{q-1} + Z_{q-1})}{bd - 4S_q}$$

Where:

- bd = 407,916,470,532 MW-mo = Average of forecasted FY 201008 and FY 2009-2011 GSR Service billing determinants. Each annual billing determinant is the sum of the 12 monthly billing determinants.
- N_q = Non-federal GSR cost to be paid by BPA-TS under a FERC-approved rate during the relevant quarter, as anticipated prior to the quarter. (\$)
- U_{q-1} = Payments of non-federal GSR cost made in the preceding quarter(s) that were not included in the effective rate for the preceding quarter(s). Any

refunds received by BPA-TS would reduce this cost. U_{q-1} is a true-up for any deviation of non-federal GSR costs from the amount used in a previous quarter's GSR rate calculation. For calculating the GSR rate effective October 1, 2009~~7~~, U_{q-1} is zero. (\$)

S_q = Reduction in effective billing demand for approved self-supply of reactive during the relevant quarter, as anticipated prior to the quarter. (MW-mo)

Z_{q-1} = A dollar true-up for under- or overstatement of reactive self-supply in rate calculations for the preceding quarter(s). For calculating the GSR rate effective October 1, 2009~~7~~, Z_{q-1} is zero. Z_{q-1} will be calculated by multiplying the under- or overstated megawatt amount of self-supply by the GSR rate that was effective during the quarter of self-supply deviation. (\$)

“Relevant quarter” refers to the 3-month period for which the rate is being determined.

b. Short-Term Firm and Non-Firm PTP Transmission Service

(1) Monthly, Weekly, and Daily Firm and Non-firm Service

For each reservation, the rates shall not exceed:

(a) Days 1 through 5 (\$/kW/day)

$$\text{Long-Term Service Rate} * \frac{12 \text{ months}}{52 \text{ weeks} * 5 \text{ days}}$$

(b) Day 6 and beyond (\$/kW/day)

$$\text{Long-Term Service Rate} * \frac{12 \text{ months}}{52 \text{ weeks} * 7 \text{ days}}$$

(2) Hourly Firm and Non-Firm Service (mills/kilowatthour)

The rate shall not exceed:

$$\text{Long-Term Service Rate} * \frac{12 \text{ months}}{52 \text{ weeks} * 5 \text{ days} * 16 \text{ hours}}$$

Where:

The “Long-Term Service Rate” specified in the formulas in sections 1.b.(1)(a) and (b), and 1.b.(2), above, is the rate determined in section 1.a., Long-Term Firm PTP Transmission Service and NT Service, in \$/kW/mo.

2. BILLING FACTORS

a. Point-To-Point Transmission Service

For Transmission Customers taking Point-to-Point Transmission Service (PTP, IS, and IM rates), the Billing Factor for each rate specified in section 1.a., 1.b.(1) and for Hourly Firm PTP Transmission Service specified in 1.b.(2) shall be the Reserved Capacity, which is the greater of:

1. the sum of the capacity reservations at the Point(s) of Receipt, or
2. the sum of the capacity reservations at the Point(s) of Delivery.

The Reserved Capacity for Firm PTP Transmission Service shall not be adjusted for any Short-Distance Discount or for any modifications on a non-firm basis in determining the Reactive Supply and Voltage Control from Generation Sources Service Billing Factor.

The Billing Factor for the rate specified in section 1.b.(2) for Hourly Non-Firm Service shall be ~~the scheduled kilowatthours. Upon 60 day’s notice by BPA TS, the Billing Factor for the rate specified in section 1.b.(2) for Hourly Non-Firm Service shall become the~~ Reserved Capacity and .

~~When Reserved Capacity becomes the Billing Factor for Hourly Non-Firm Service,~~ the following shall apply:

- i. If the need for Curtailment is caused by conditions on the Federal Columbia River Transmission System, the Billing Factor will be as follows:
 - a. If Hourly Non-Firm PTP Transmission Service is Curtailed or Interrupted before the close of the hourly non-firm scheduling window, the Billing Factor will be the Reserved Capacity minus the curtailed capacity.
 - b. If Hourly Non-Firm PTP Transmission Service is Curtailed or Interrupted after the close of the hourly non-firm scheduling window, the Billing Factor will be the Transmission Customer's actual schedule in the hour.
- ii. If the need for Curtailment is caused by conditions on another transmission provider's transmission system, the Billing Factor will be the Reserved Capacity.

These Billing Factors apply to all PTP transmission service under the Open Access Transmission Tariff regardless of whether the Transmission Customer actually uses (schedules) the transmission.

b. Network Integration Transmission Service

For Transmission Customers taking Network Integration Transmission Service, the Billing Factor for the rate specified in section 1.a. shall equal the NT Base Charge Billing Factor determined pursuant to section III.A. of the Network Integration Rate Schedule (NT-~~0810~~).

c. Adjustment for Self-Supply

The Billing Factors in sections 2.a. and 2.b. above may be reduced as specified in the Transmission Customer's Service Agreement to the extent the Transmission Customer demonstrates to BPA-TS's

satisfaction that it can self-provide Reactive Supply and Voltage Control from Generation Sources Service.

d. Adjustment for Customers Subject to the Unauthorized Increase Charge (UIC)

For Transmission Customers taking Point-to-Point Transmission Service (PTP, IS, and IM rate schedules) that are subject to a UIC in a billing month, the Billing Factor for the billing month shall be the Billing Factor calculated above plus the UIC Billing Factor calculated under section II.G.2.a. of the GRSPs.

For Transmission Customers taking Network Integration Transmission Service that are subject to a UIC in a billing month, the Billing Factor for the billing month shall be the Billing Factor calculated above plus the UIC Billing Factor calculated under section II.G.2.b. of the GRSPs.

SECTION II. ANCILLARY SERVICE RATES

C. REGULATION AND FREQUENCY RESPONSE SERVICE

The rate below for Regulation and Frequency Response (RFR) Service applies to Transmission Customers serving loads in the BPA Control Area. Regulation and Frequency Response Service provides the generation capability to follow the moment-to-moment variations of loads in the BPA Control Area and maintain the power system frequency at 60 Hz in conformance with NERC and WECC reliability standards.

1. RATE

The rate shall not exceed ~~0.270, 33, 37~~ mills per kilowatthour.

2. BILLING FACTOR

The Billing Factor is the customer's total load in the BPA Control Area, in kilowatthours.

SECTION II. ANCILLARY SERVICE RATES

D. ENERGY IMBALANCE SERVICE

The rates below apply to Transmission Customers taking Energy Imbalance Service from BPA-TS. Energy Imbalance Service is taken when there is a difference between scheduled and actual energy delivered to a load in the BPA Control Area during a schedule hour.

1. RATES

a. Imbalances Within Deviation Band 1

Deviation Band 1 applies to deviations that are less than or equal to: i) $\pm 1.5\%$ of the scheduled amount of energy, or ii) ± 2 MW, whichever is larger in absolute value. BPA-TS will maintain deviation accounts showing the net Energy Imbalance (the sum of positive and negative deviations from schedule for each hour) for Heavy Load Hour (HLH) and Light Load Hour (LLH) periods. Return energy may be scheduled at any time during the month to bring the deviation account balances to zero at the end of each month. BPA-TS will approve the hourly schedules of return energy. The customer shall make the arrangements and submit the schedule for the balancing transaction.

The following rates will be applied when a deviation balance remains at the end of the month:

- (i) When the monthly net energy (determined for HLH and LLH periods) taken by the Transmission Customer is greater than the energy scheduled, the charge is BPA's incremental cost based on the applicable average HLH and average LLH incremental cost for the month.
- (ii) When the monthly net energy (determined for HLH and LLH periods) taken by the Transmission Customer is less than the energy scheduled, the credit is BPA's incremental cost based on the applicable average HLH and LLH incremental cost for the month.

b. Imbalances Within Deviation Band 2

Deviation Band 2 applies to the portion of the deviation i) greater than $\pm 1.5\%$ of the scheduled amount of energy or ± 2 MW, whichever is larger in absolute value, ii) up to and including $\pm 7.5\%$ of the scheduled amount of energy or ± 10 MW, whichever is larger in absolute value.

- (i) When energy taken by the Transmission Customer in a schedule hour is greater than the energy scheduled, the charge is 110% of BPA's incremental cost.
- (ii) When energy taken by the Transmission Customer in a schedule hour is less than the scheduled amount, the credit is 90% of BPA's incremental cost.

c. Imbalances Within Deviation Band 3

Deviation Band 3 applies to the portion of the deviation i) greater than $\pm 7.5\%$ of the scheduled amount of energy, or ii) greater than ± 10 MW of the scheduled amount of energy, whichever is larger in absolute value.

- (i) When energy taken by the Transmission Customer in a schedule hour is greater than the energy scheduled, the charge is 125% of BPA's highest incremental cost that occurs during the that day. The highest daily incremental cost shall be determined separately for HLH and LLH.
- (ii) When energy taken by the Transmission Customer in a schedule hour is less than the scheduled amount, the credit is 75% of BPA's lowest incremental cost that occurs during that day. The lowest daily incremental cost shall be determined separately for HLH and LLH.

2. OTHER RATE PROVISIONS

a. BPA Incremental Cost

BPA's incremental cost will be based on an hourly energy index in the PNW. If no adequate hourly index exists, an alternative index will be used. The index to be used will be posted on the OASIS at least 30 days prior to use for determining the BPA incremental cost and will not be changed more often than once per year unless

BPA-TS determines that the existing index is no longer a reliable price index.

For any hour(s) that the energy index is negative, no credit is given for positive deviations (actual energy delivered is more than scheduled).

b. Spill Conditions

For any day that the Federal System is in a Spill Condition, no credit is given for negative deviations (actual energy delivered is less than scheduled) for any hour of that day.

If the energy index is negative in any hour that the Federal System is in a Spill Condition:

- (i) For negative deviations (actual energy delivered is less than scheduled) within Band 1, no credit will be given.
- (ii) For negative deviations (actual energy delivered is less than scheduled) within Band 2, the charge is ~~determined using~~ 110% of the energy index for that hour.
- (iii) -For negative deviations (actual energy delivered is less than scheduled) within Band 3, the charge is ~~determined using~~ 125% of the energy index for that hour.

c. Intentional Deviation

For any hour(s) that an imbalance is determined by BPA-TS to be an Intentional Deviation: For each Intentional Deviation, BPA in its sole determination will apply the following:

- (1) No credit is given when energy taken is less than the scheduled energy.
- (2) When energy taken exceeds the scheduled energy, the charge is the greater of: i) ~~25~~150% of BPA's highest incremental cost that occurs during that day, or ii) 100 mills per kilowatthour.

If the energy index is negative in any hour(s) that the imbalance is an Intentional Deviation (as determined by BPA-TS), for negative deviations (actual energy delivered is less than scheduled) which are determined by BPA-TS to be Intentional Deviations, the charge is determined using the energy index for that hour.

SECTION II. ANCILLARY SERVICE RATES

E. OPERATING RESERVE -- SPINNING RESERVE SERVICE

The rates below apply to Transmission Customers taking Operating Reserve -- Spinning Reserve Service from BPA-TS and to generators in the BPA Control Area for settlement of energy deliveries. Spinning Reserve Service is needed to serve load immediately in the event of a system contingency. ~~For a Transmission Customer's load (located inside or outside of the BPA Control Area) served by generation located in the BPA Control Area, the Transmission Customer's Spinning Reserve Requirement shall be determined consistent with applicable NERC, WECC and NWPP standards. BPA will determine the Transmission Customer's Spinning Reserve Requirement in accordance with applicable NERC, WECC and NWPP standards.~~

1. RATES

a. Spinning Reserve Service

- (i) For customers that elect to purchase Operating Reserve--Spinning Reserve Service from BPA Transmission Services, the rate shall not exceed ~~7.93~~11.156 mills per kilowatthour.
- (ii) For customers that are required to purchase Operating Reserve--Spinning Reserve Service from BPA Transmission Services because they defaulted on their self-supply or third-party supply obligations, the rate shall be ~~9.12~~12.84~~12.82~~ mills per kilowatthour.

b. For energy delivered, the generator shall, as directed by BPA-TS, either:

- (i) Purchase the energy at the hourly market index price applicable at the time of occurrence, or
- (ii) Return the energy at the times specified by BPA-TS.

2. BILLING FACTORS



- a.** The Billing Factor for the rates specified in section 1.a. is the Transmission Customer's Spinning Reserve Requirement determined in accordance with applicable WECC and NWPP standards. BPA Transmission Services will post on its OASIS website the Spinning Reserve Requirement. If the Federal Energy Regulatory Commission approves a new Spinning Reserve Requirement during the FY2010-11 rate period, such Spinning Reserve Requirement will go into effect on the effective date set by FERC, and BPA will update the Spinning Reserves Requirement posted on its OASIS website accordingly. ~~Application of current standards establish a minimum Spinning Reserve Requirement equal to the sum of:~~
- ~~(i) Two and a half percent (2.5%) of the hydroelectric and wind generation dedicated to the Transmission Customer's firm load responsibility; and~~
 - ~~(ii) Three and a half percent (3.5%) of other generation dedicated to the Transmission Customer's firm load responsibility.~~
- b.** The Billing Factor for energy delivered when Spinning Reserve Service is called upon is the energy delivered, in kilowatthours.

SECTION II. ANCILLARY SERVICE RATES

F. OPERATING RESERVE -- SUPPLEMENTAL RESERVE SERVICE

The rates below apply to Transmission Customers taking Operating Reserve -- Spinning Reserve Service from BPA-TS and to generators in the BPA Control Area for settlement of energy deliveries. Spinning Reserve Service is needed to serve load immediately in the event of a system contingency. ~~For a Transmission Customer's load (located inside or outside of the BPA Control Area) served by generation located in the BPA Control Area, the Transmission Customer's Spinning Reserve Requirement shall be determined consistent with applicable NERC, WECC and NWPP standards. BPA will determine the Transmission Customer's Spinning Reserve Requirement in accordance with applicable NERC, WECC and NWPP standards.~~

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1. RATES

a. Supplemental Reserve Service

(i) For customers that elect to purchase Operating Reserve-- Supplemental Reserve Service Transmission Services, the rate shall not exceed ~~7.939.869.85~~ mills per kilowatthour.

(ii) For customers that are required to purchase Operating Reserve -- Supplemental Reserve Service from BPA Transmission Services because they defaulted on their self-supply or third-party supply obligations, the rate shall be ~~9.1211.3411.33~~ mills per kilowatthour.

b. For energy delivered, the Transmission Customer (for interruptible imports only) or the generator shall, as directed by BPA-TS, either:

(i) Purchase the energy at the hourly market index price applicable at the time of occurrence, or

(ii) Return the energy at the times specified by BPA-TS.

The Transmission Customer shall be responsible for the settlement of delivered energy associated with interruptible imports (see section 2.a.(iii)). The generator shall be responsible for the

settlement of delivered energy associated with generation in the BPA Control Area.

2. BILLING FACTORS

- a.** The Billing Factor for the rates specified in section 1.a. is the Transmission Customer's Supplemental Reserve Requirement determined in accordance with applicable WECC and NWPP standards. BPA Transmission Services will post on its OASIS website the Spinning Reserve Requirement. If the Federal Energy Regulatory Commission approves a new Spinning Reserve Requirement during the FY2010-11 rate period, such Spinning Reserve Requirement will go into effect on the effective date set by FERC, and BPA will update the Spinning Reserves Requirement posted on its OASIS website accordingly. Application of current standards establish a minimum Supplemental Reserve Requirement equal to the sum of:
- ~~(i) Two and one half percent (2.5%) of the hydroelectric and wind generation dedicated to the Transmission Customer's firm load responsibility, plus~~
 - ~~(ii) Three and one half percent (3.5%) of other generation dedicated to the Transmission Customer's firm load responsibility, plus~~
 - ~~(iii) Any power scheduled into the BPA Control Area that can be interrupted on ten (10) minutes' notice.~~
- b.** The Billing Factor for energy delivered when Supplemental Reserve Service is called upon is the energy delivered, in kilowatthours.

SECTION III. CONTROL AREA SERVICE RATES

A. REGULATION AND FREQUENCY RESPONSE SERVICE

The rate below applies to all loads in the BPA Control Area that are receiving Regulation and Frequency Response (RFR) Service from the BPA Control Area, and such Regulation and Frequency Response Service is not provided for under a BPA-TS transmission agreement. Regulation and Frequency Response Service provides the generation capability to follow the moment-to-moment variations of loads in the BPA Control Area and maintain the power system frequency at 60 Hz in conformance with NERC and WECC reliability standards.

1. RATE

The rate shall not exceed 0.~~33~~.3727 mills per kilowatthour.

2. BILLING FACTOR

The Billing Factor is the customer's total load in the BPA Control Area, in kilowatthours.

SECTION III. CONTROL AREA SERVICE RATES

B. GENERATION IMBALANCE SERVICE

The rates below apply to generation resources in the BPA Control Area if Generation Imbalance Service is provided for in an interconnection agreement or other arrangement. Generation Imbalance Service is taken when there is a difference between scheduled and actual energy delivered from generation resources in the BPA Control Area during a schedule hour.

1. RATES

a. Imbalances Within Deviation Band 1

Deviation Band 1 applies to deviations that are less than or equal to: i) $\pm 1.5\%$ of the scheduled amount of energy, or ii) ± 2 MW, whichever is larger in absolute value. BPA-TS will maintain deviation accounts showing the net Generation Imbalance (the sum of positive and negative deviations from schedule for each hour) for Heavy Load Hour (HLH) and Light Load Hour (LLH) periods. Return energy may be scheduled at any time during the month to bring the deviation account balances to zero at the end of each month. BPA-TS will approve the hourly schedules of return energy. The customer shall make the arrangements and submit the schedule for the balancing transaction.

The following rates will be applied when a deviation balance remains at the end of the month:

- (i) When the monthly net energy (determined for HLH and LLH periods) delivered from a generation resource is less than the energy scheduled, the charge is BPA's incremental cost based on the applicable average HLH and average LLH incremental cost for the month.
- (ii) When the monthly net energy (determined for HLH and LLH periods) delivered from a generation resource is greater than the energy scheduled, the credit is BPA's incremental cost based on the applicable average HLH and LLH incremental cost for the month.

b. Imbalances Within Deviation Band 2

Deviation Band 2 applies to the portion of the deviation i) greater than $\pm 1.5\%$ of the scheduled amount of energy or ± 2 MW, whichever is larger in absolute value, ii) up to and including $\pm 7.5\%$ of the scheduled amount of energy or ± 10 MW, whichever is larger in absolute value.

- (i) When energy delivered in a schedule hour from the generation resource is less than the energy scheduled, the charge is 110% of BPA's incremental cost.
- (ii) When energy delivered from the generation resource is greater than the scheduled amount, the credit is 90% of BPA's incremental cost.

c. Imbalances Within Deviation Band 3

Deviation Band 3 applies to the portion of the deviation i) greater than $\pm 7.5\%$ of the scheduled amount of energy, or ii) greater than ± 10 MW of the scheduled amount of energy, whichever is larger in absolute value.

- (i) When energy delivered in a schedule hour from the generation resource is less than the energy scheduled, the charge is 125% of BPA's highest incremental cost that occurs during that day. The highest daily incremental cost shall be determined separately for HLH and LLH.
- (ii) When energy delivered from the generation resource is greater than the scheduled amount, the credit is 75% of BPA's lowest incremental cost that occurs during that day. The lowest daily incremental cost shall be determined separately for HLH and LLH.

2. OTHER RATE PROVISIONS

a. BPA Incremental Cost

BPA's incremental cost will be based on an hourly energy index in the PNW. If no adequate hourly index exists, an alternative index will be used. The index to be used will be posted on the OASIS at least 30 days prior to use for determining the BPA incremental cost

and will not be changed more often than once per year unless BPA-TS determines that the existing index is no longer a reliable price index.

For any hour(s) that the energy index is negative, no credit is given for positive deviations (actual generation less than schedules).

b. Spill Conditions

For any day that the Federal System is in a Spill Condition, no credit is given for negative deviations (actual generation greater than schedules) for any hour of that day.

If the energy index is negative in any hour that the Federal System is in a Spill Condition:

(i) For negative deviations (actual generation greater than schedules) within Band 1, no credit will be given.

(ii) For negative deviations (actual generation greater than schedules) within Band 2, the charge is ~~determined using~~ 110% of the energy index for that hour.

(iii) For negative deviations (actual generation greater than schedules) within Band 3, the charge is ~~determined using~~ 125% of the energy index for that hour.

c. Intentional Deviation

For each Intentional Deviation, BPA in its sole determination will apply the following:

No credit is given for negative deviations (actual generation greater than schedules) for any hour(s) that the imbalance is an Intentional Deviation (as determined by BPA-TS).

For positive deviations (actual generation less than schedules) which are determined by BPA-TS to be Intentional Deviations, the charge is the greater of: i) ~~125~~150% of BPA's highest incremental cost that occurs during that day, or ii) 100 mills per kilowatthour.

If the energy index is negative in any hour that the imbalance is an Intentional Deviation (as determined by BPA-TS), for negative deviations (actual generation greater than schedules) which are

determined by BPA-TS to be Intentional Deviations, the charge is determined using the energy index for that hour.

d. Exemptions from Deviation Band 3

The following resources are not subject to Deviation Band 3:

- (i) wind resources; and
- (ii) new generation resources undergoing testing before commercial operation for up to 90 days.

All such deviations greater than $\pm 1.5\%$ or ± 2 MW will be charged consistent with section 1.b., Imbalances Within Deviation Band 2.

SECTION III. CONTROL AREA SERVICE RATES

C. OPERATING RESERVE -- SPINNING RESERVE SERVICE

Operating Reserve -- Spinning Reserve Service must be purchased by a party with generation in the BPA Control Area that is receiving this service from BPA-TS, and such Spinning Reserve Service is not provided for under a BPA-TS transmission agreement. Service is being received if there are no other qualifying resources providing this required reserve service in conformance with NERC, WECC and NWPP standards. BPA will determine the Transmission Customer's Spinning Reserve Requirement in accordance with applicable NERC, WECC and NWPP standards.

1. RATES

a. Spinning Reserve Service

- (i) For customers that elect to purchase Operating Reserve-- Spinning Reserves from BPA Transmission Services, the rate shall not exceed ~~7.93~~ 11.16 ~~11.15~~ mills per kilowatthour.
- (ii) For customers that are required to purchase Operating Reserve-- Spinning Reserve Service from BPA Transmission Services because they defaulted on their self-supply or third-party supply obligations, the rate shall be ~~9.42~~ 12.82 mills per kilowatthour.

b. For energy delivered, the customer shall, as directed by BPA-TS, either:

- (i) Purchase the energy at the hourly market index price applicable at the time of occurrence, or
- (ii) Return the energy at the times specified by BPA-TS.

2. BILLING FACTORS

- a. The Billing Factor for the rates specified in section 1.a. is the Spinning Reserve Requirement determined in accordance with applicable WECC and NWPP standards. BPA Transmission Services will post on its OASIS website the Spinning Reserve Requirement. If the Federal Energy Regulatory Commission approves a new Spinning Reserve Requirement during the FY2010-11 rate period, such Spinning Reserve Requirement will go into effect on the effective date set by FERC, and BPA will update the Spinning Reserves Requirement posted on its OASIS website accordingly. ~~Application of current standards establish a minimum Spinning Reserve Requirement equal to the sum of:~~
- ~~(i) Two and one half percent (2.5%) of the hydroelectric and wind generation dedicated to the customer's firm load responsibility, plus~~
 - ~~(ii) Three and one half percent (3.5%) of other generation dedicated to the customer's firm load responsibility.~~
- b. The Billing Factor for energy delivered when Spinning Reserve Service is called upon is the energy delivered, in kilowatthours.

SECTION III. CONTROL AREA SERVICE RATES

D. OPERATING RESERVE -- SUPPLEMENTAL RESERVE SERVICE

Operating Reserve -- Supplemental Reserve Service must be purchased by a party with generation in the BPA Control Area that is receiving this service from BPA-TS, and such Supplemental Reserve Service is not provided for under a BPA-TS transmission agreement. Service is being received if there are no other qualifying resources providing this required reserve service in conformance with NERC, WECC and NWPP standards. BPA will determine the Transmission Customer's Spinning Reserve Requirement in accordance with applicable NERC, WECC and NWPP standards.

1. RATES

a. Reserve Service

- (i) For customers that elect to purchase Operating Reserve-- Supplemental Reserve Service from BPA Transmission Services, the rate shall not exceed ~~7.939~~8.69.85 mills per kilowatthour.
- (ii) For customers that are required to purchase Operating Reserve-- Supplemental Reserve Service from BPA Transmission Services because they defaulted on their self-supply or third-party supply obligations, the rate shall be ~~9.12~~11.34~~11.33~~ mills per kilowatthour.

b. For energy delivered, the customer shall, as directed by BPA-TS, either:

- (i) Purchase the energy at the hourly market index price applicable at the time of occurrence, or
- (ii) Return the energy at the times specified by BPA-TS.

2. BILLING FACTORS

- a. The Billing Factor for the rates specified in section 1.a. is the Supplemental Reserve Requirement determined in accordance with applicable WECC and NWPP standards. BPA Transmission Services will post on its OASIS website the Spinning Reserve Requirement. If the Federal Energy



Regulatory Commission approves a new Spinning Reserve Requirement during the FY2010-11 rate period, such Spinning Reserve Requirement will go into effect on the effective date set by FERC, and BPA will update the Spinning Reserves Requirement posted on its OASIS website accordingly
Application of current standards establish a minimum Supplemental Reserve Requirement equal to the sum of:

- ~~(i) Two and one half percent (2.5%) of the hydroelectric and wind generation dedicated to the customer's firm load Responsibility, plus~~
- ~~(ii) Three and one half percent (3.5%) of other generation dedicated to the customer's firm load responsibility, plus~~
- ~~(iii) Any power scheduled into the BPA Control Area that can be interrupted on ten (10) minutes' notice.~~

- b.** The Billing Factor for energy delivered when Supplemental Reserve Service is called upon is the energy delivered, in kilowatthours.

SECTION III. CONTROL AREA SERVICE RATES

E. WIND INTEGRATION – WITHIN-HOUR BALANCING SERVICE

The rate below applies to all wind plants in the BPA Control Area except as described in Section E. 3. Within-Hour Balancing Service provides the generation capability to follow within-hour variations of wind resources in the BPA Control Area and to maintain the power system frequency at 60 Hz in conformance with NERC and WECC reliability standards.

1. RATE

The rate shall not exceed ~~\$0.68~~ 2.73 per kilowatt per month.

2. BILLING FACTOR

The Billing Factor is as follows:

- (i) For each wind plant, or phase of a wind plant, that has completed installation of all units no later than the 15th of the month prior to the billing month the billing factor will be the nameplate of the plant in kW. A unit has completed installation when it has generated and delivered power to the BPA system.
- (ii) For each wind plant, or phase of a wind plant, for which some but not all units have been installed by the 15th day of the month prior to the billing month, the billing factor will be the maximum measured hourly output of the plant through the 15th day of the prior month in kW.

3. EXCEPTIONS

- (i) This rate will not apply to a wind plant, or phase of a wind plant, that, in BPA's determination, has put in place, tested, and successfully implemented no later than the 15th day of the month prior to the billing month, the dynamic transfer of plant output out of BPA's Balancing Authority Area to another Balancing Authority Area.
- (ii) This rate will not apply to a wind plant, or phase of a wind plant, that, in BPA's determination, has put in place, tested, and successfully implemented no later than the 15th day of the month

prior to the billing month, self-supply of within-hour balancing,
including any contractual arrangements for third-party supply.

SECTION IV. ADJUSTMENTS, CHARGES, AND OTHER RATE PROVISIONS

A. RATE ADJUSTMENT DUE TO FERC ORDER UNDER FPA §212

Customers taking service under this rate schedule are subject to the Rate Adjustment Due to FERC Order under FPA §212 specified in section II.D of the GRSPs.