P.S.C. ELECTRIC NO. 9

# TARIFF R.T.P. (Experimental Real-Time Pricing Tariff)

#### AVAILABILITY OF SERVICE.

## **TARIFF CODES**

OP Tariff

CIP-TOD Tariff

366 Secondary
367 Primary
378 Sub transmission
368 Sub transmission
369 Transmissions

Available for Real-Time Pricing (RTP) service, on an experimental basis, to customers normally taking firm service under Tariffs Q.P. or C.I.P.-T.O.D. for their total capacity requirements from the Company. The customer will pay real-time prices for load in excess of an amount designated by the customer. This experimental tariff will be limited to a maximum of 10 customers. The incremental cost of any special metering or communications equipment required for service under this experimental tariff beyond that normally provided under the applicable standard Q.P. or C.I.P.-T.O.D. tariff shall be borne by the customer. The Company reserves the right to terminate this Tariff at any time after the end of the experiment.

#### PROGRAM DESCRIPTION.

The Experimental Real-Time Pricing Tariff is voluntary and will be offered on a pilot basis through June 2013. The RTP Tariff will offer customers the opportunity to manage their electric costs by shifting load from higher cost to lower cost pricing periods or by adding new load during lower price periods. The experimental pilot will also offer the customer the ability to experiment in the wholesale electricity market by designating a portion of the customer's load subject to standard tariff rates with the remainder of the load subject to real-time prices. The designated portion of the customer's load is billed under the Company's standard Q.P. or C.I.P.-T.O.D. tariff. The remainder of the customer's capacity and energy load is billed at prices established in the PJM Interconnection, L.L.C. (PJM) RTO market.

#### CONDITIONS OF SERVICE.

The customer must have a demand of not less than 1 MW and specify at least 100 kW as being subject to this Tariff. The customer designates the maximum amount of load to be supplied by Kentucky Power Company under the applicable Tariff Q.P. or Tariff C.I.P. – T.O.D. All usage equal to or less than the customer-designated level of load will be billed under the appropriate Tariff Q.P. or Tariff C.I.P. – T.O.D. All usage in excess of the customer-designated level will be billed under Tariff RTP. All reactive demand shall be billed in accordance with the appropriate Tariff Q.P. or Tariff C.I.P. – T.O.D.

## RATE.

## Capacity Charge.

The Capacity Charge, stated in \$/kW, will be determined from the auction price set in the Reliability Pricing Model (RPM) auction held by PJM for each PJM planning year. The auction price will be adjusted by the class average diversity factor (DF) derived from billing demands for the preceding year and the 5 highest coincident peaks established for the class at the time of the 5 highest PJM hourly values. The price will be further adjusted for demand losses (DL) and a factor to reflect the PJM-required reserve margin (RM).

Capacity Charge = RPM x DF x DL x RM

Where:

RPM =Results of the annual RPM auction price applicable to the AEP load zone = \$3.346/kW-month
DF = Diversity Factor

C.I.P. – T.O.D. = 0.75 Q.P. = 0.64 DL = Demand Loss Factor

RM ≈ Reserve Margin = RPM clearing price reserve margin = 1.181

(Cont'd on Sheet No. 30-2)

PUBLIC SERVICE COMMISSION

JEFF R. DEROUEN

EXECUTIVE DIRECTOR

TARIFF BRANCH

**KENTUCKY** 

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P.S.C. ELECTRIC NO. 9

## TARIFF R.T.P. (Experimental Real-Time Pricing Tariff)

## RATE (continued).

#### 2. Energy Charge.

The Energy Charge, stated in \$/KWH, will be determined hourly using the AEP East Load Zone Real-Time Locational Marginal Price (LMP) established by PJM (including marginal losses), adjusted for energy losses (EL). The charge will be applied to the usage in excess of the customer-designated level for each billing period.

Energy Charge =  $LMP \times EL$ 

Where:

LMP = AEP East Load Zone Real-Time Locational Marginal Price EL = Energy Loss Factor excluding marginal losses for transmission and subtransmission

## 3. Transmission Charge.

The Transmission Charge, stated in \$/kW, will be determined from the Network Integration Transmission Service (NITS) rate for the AEP East Zone. The NITS rate will be adjusted by the class average diversity factor (DF) derived from billing demands for the preceding year and the coincident peak established for the class at the time of the highest AEP East Zone hourly value. The price will be further adjusted for demand losses (DL).

Transmission Charge = NITS x DF x DL

Where:

NITS = NITS Rate for the AEP East Zone = \$ 1.89230/kW DF = Diversity Factor C.I.P. - T.O.D. = 0.79 Q.P. = 0.69 DL = Demand Loss Factor

4. Other Market Services Charge.

The Other Market Services Charge, stated in \$/KWH is developed using all other PJM related market costs allocated to Kentucky Power Company from PJM not captured elsewhere. It is applied to all usage in excess of the customer-designated level for each billing period.

Secondary = \$0.002499/KWH Primary = \$0.002404/KWH Subtransmission = \$0.002359/KWH Transmission = \$0.002337/KWH

5. Distribution Charge.

The Distribution Charge, stated in \$/kW, is equivalent to the distribution portion of the current rates included in Tariff Q.P. and Tariff C.I.P. - T.O.D.

(Cont'd on Sheet No. 30-3)

Secondary = \$7.39/kW Primary = \$4.34/kW KENTUCKY
PUBLIC SERVICE COMMISSION

JEFF R. DEROUEN EXECUTIVE DIRECTOR

TARIFF BRANCH

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NAME TITLE

RANKFORT, KENTÜCKY ADDRE**S 29/2011** 

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Original Sheet No. 30-3
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P.S.C. ELECTRIC NO. 9

# TARIFF R.T.P. (Experimental Real-Time Pricing Tariff)

## RATE (continued).

6. Program Charge.

The Program Charge is \$150 per month for billing, administration and communications required to implement and administer the Experimental Real-Time Pricing Tariff.

Riders

Bills rendered under this Tariff for RTP usage shall be subject to any current or future non-generation related riders.

A customer's total bill shall equal the sum of the RTP bill for all usage in excess of the customer-designated level and the standard tariff bill for usage equal to or below the designated level.

## DELAYED PAYMENT CHARGE.

This tariff is due and payable in full on or before the due date stated on the bill. On all accounts not so paid, an additional charge of 5% of the unpaid balance will be made.

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## METERED VOLTAGE.

The rates set forth in this tariff are based upon the delivery and measurement of energy at the same voltage, thus measurement will be made at or compensated to the delivery voltage. At the sole discretion of the Company, such compensation may be achieved through the use of loss compensating equipment, the use of formulas to calculate losses or the application of multipliers to the metered quantities. In such cases, the metered kWh and kW values will be adjusted for billing purposes. If the Company elects to adjust kWh and kW based on multipliers, the adjustment shall be in accordance with the following:

- Measurements taken at the low-side of a customer-owned transformer will be multiplied by 1.01.
- (2) Measurements taken at the high-side of a Company-owned transformer will be multiplied by 0.98

## MONTHLY BILLING DEMAND.

Billing demand in KW shall be taken each month as the highest single 15-minute integrated peak in KW as registered during the month by a demand meter. The monthly billing demand so established shall in no event be less than 60% of the greater of (a) the customer's contract capacity set forth on the contract for electric service or (b) the customer's highest previously established monthly billing demand during the past 11 months. The RTP monthly billing demand shall be the customer's monthly billing demand in excess of the customer-designated level.

## TERM.

Customers who participate in this experimental tariff are required to enter into a written service agreement. Customers must enroll for a 12-month period and must stay with the service for an entire year. Customers who choose not to re-enroll in the program are ineligible to return to the program. No additional customers will be placed under this tariff after July 1, 2012.

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**KENTUCKY** 

(Cont'd on Sheet No. 30-4)	PUBLIC SERVICE COMMISSION		
	JEFF R. DEROUEN EXECUTIVE DIRECTOR		
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P.S.C. ELECTRIC NO. 9

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## TARIFF R.T.P. (Experimental Real-Time Pricing Tariff)

## TRANSFORMER AND LINE LOSSES.

Demand losses will be applied to the Capacity and Transmission Charges using the following factors:

Secondary = 1.10221 Primary = 1.06570

Subtransmission = 1.04278 Transmission =1.03211

Energy losses will be applied to the Energy Charge using the following factors:

Secondary = 1.06938(I) (R) Primary = 1.02972Subtransmission = 1.00954(R) Transmission = 1.00577

# SPECIAL TERMS AND CONDITIONS.

This tariff is subject to the Company's Terms and Conditions of Service.

A customer's plant is considered as one or more buildings, which are served by a single electrical distribution system provided and operated by customer. When the size of the customer's load necessitates the delivery of energy to the customer's plant over more than one circuit, the Company may elect to connect its circuits to different points on the customer's system irrespective of contrary provisions in Terms and Conditions of Service.

Customers with PURPA Section 210 qualifying cogeneration and/or small power production facilities shall take service under Tariff COGEN/SPP II or by special agreement with the Company.

> KENTUCKY PUBLIC SERVICE COMMISSION

> > JEFF R. DEROUEN EXECUTIVE DIRECTOR

TARIFF BRANCH

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