# MEMPHIS LIGHT, GAS AND WATER DIVISION CITY OF MEMPHIS ELECTRIC SERVICE SCHEDULE TMS

#### TIME OF USE MANUFACTURING SERVICE

### AVAILABILITY

This schedule shall apply to the firm electric power requirements of a customer where the major use of electricity is for activities conducted at the delivery point serving that customer which are classified with a 2-digit Standard Industrial Classification Code between 20 and 39, inclusive, or classified with 2002 North American Industry Classification System (NAICS) code 5181, or 2007 NAICS codes 5182, 522320, and 541214.

Prior to initially taking any service under this schedule, and from time to time thereafter as may be required by the Division or the Tennessee Valley Authority (TVA), a customer shall certify to both the Division and TVA that it meets the requirements set forth in the condition above. The certification form to be used shall be (i) furnished or approved by TVA, (ii) provided by the Division to the customer, and (iii) signed and promptly returned by the customer to the Division. Further, such customer shall promptly certify any change in the status of any of the information contained in the certification form to the Division.

Service during any period for which a customer does not meet the requirements set forth in the condition above will be made available by the Division under, and billed in accordance with, the applicable General Service schedule.

Unless otherwise provided for in a written agreement between TVA and the Division, for customers served under this schedule, the customer's "meter-reading time" shall be 0000 hours Central Standard Time (CST) or Central Daylight Time (CDT), whichever is currently effective, on the first day of the calendar month following the month for which a bill under this schedule is being calculated. Further, in accordance with TVA furnished or approved guidelines or specifications, TVA shall have unrestricted remote access to the metering data at all times, as well as unrestricted physical access to the metering facilities for the purpose of confirming remotely-accessed data during such periods as are specified by TVA.

For a customer requesting that its on-peak contract demand be different from its off-peak contract demand, this schedule shall be available only for (1) a new contract, (2) a replacement or renewal contract following expiration of the existing contract, or (3) a replacement or renewal contract or an amended existing contract in which the customer is increasing its demand requirements above the existing contract demand level, but under this item (3) neither the new on-peak nor the new off-peak contract demand shall be lower than the customer's existing contract demand.

Electricity supplied under this schedule is for the exclusive use of the Customer and shall not be resold or shared with others.

### CUSTOMERS CLASS DESCRIPTION

The Division shall require contracts for all service provided under this schedule. Customers are categorized into the following classes based on the higher of the customer's current effective on-peak or off-peak contract demand. The following designation determines the applicable billing rate and contract terms.

Rate Class	greater than	but not more than			
TDMSA	1,000 kW	5,000 kW			
TMSB	5,000 kW	15,000 kW			
TMSC	15,000 kW	25,000 kW			
TMSD	25,000 kW				

### **CHARACTER OF SERVICE**

The service supplied shall be 60 hertz alternating current, single phase or three-phase. Power shall be delivered at a transmission voltage of 161 KV or, if such transmission voltage is not available, at the highest voltage available in the vicinity, unless at the customer's request a lower standard voltage is agreed upon.

# TENNESSEE VALLEY AUTHORITY FUEL COST AND PURCHASED POWER ADJUSTMENT RIDER

The rates contained within are subject to adjustment under the provisions of the Tennessee Valley Authority Fuel Cost and Purchased Power Adjustment Rider (FCA). The FCA rates are published monthly and can be accessed through www.mlgw.com.

### ADJUSTMENT

The base demand and energy charges shall be increased or decreased in accordance with the current Adjustment Addendum published by TVA. In addition, such charges shall be increased or decreased to correspond to increases or decreases determined by TVA in the value of the hydro generation benefit allocated to residential customers.

Loss adjustments are made to retail rates and to the monthly FCA adjustment under the Adjustment Addendum to recognize additional distribution cost of providing service to the retail customers. The loss factors applied to customers that take service at transmission voltages of 115 kV or higher shall be set to 0%.

# **DETERMINATION OF SEASONAL PERIODS**

Summer Period shall mean the June, July, August, and September billing months. Winter Period shall mean the December, January, February, and March billing months. Transition Period shall mean the April, May, October, and November billing months.

# DETERMINATION OF ON-PEAK AND OFF-PEAK HOURS

Except for Saturdays, Sundays, November 1st and the weekdays that are observed as Federal holidays for New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day, on-peak hours for each day shall be from 1 p.m. to 7 p.m. from April through October and from 4 a.m. to 10 a.m. during all remaining months. All other hours of each day that are not otherwise defined as on-peak hours and all hours of such excepted days shall be off-peak hours. Such times shall be CST or CDT, whichever is then in effect. Said on-peak and off-peak hours are subject to change by TVA. In the event TVA determines that such changed on-peak and off-peak hours are appropriate, it shall so notify the Division at least 12 months prior to the effective date of such changed hours, and the Division shall promptly notify customer.

# DETERMINATION OF ON-PEAK AND OFF-PEAK DEMANDS, MAXIMUM METERED DEMAND, AND ENERGY AMOUNTS

The on-peak and off-peak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this schedule as on-peak and off-peak hours; provided, however, that notwithstanding the metered energy amount, the off-peak energy for any month shall in no case be less than the product of (1) the off-peak billing demand as calculated in the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month) at the applicable rate of Off-peak Block 1.

The Division shall meter the on-peak and off-peak demands in kW of all customers taking service under this schedule. The on-peak metered demand and off-peak metered demand for any month shall be determined separately for the respective hours of the month designated under this schedule as on-peak and off-peak hours. In each case, the metered demand shall be the highest average demand during any 30-consecutive-minute period beginning or ending on a clock hour of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the on-peak and off-peak billing demands. The maximum metered demand for any month shall be the higher of (1) the highest on-peak metered demand in the month or (2) the highest off-peak metered demand in the month. The on-peak billing demand shall in no case be less than the sum of (1) 30 percent of the first 5,000 kW, (2) 40 percent of the next 20,000 kW, (3) 50 percent of the next 25,000 kW, (4) 60 percent of the next 50,000 kW, (5) 70 percent of the next 100,000 kW, (6) 80 percent of the next 150,000 kW, and (7) 85 percent of all kW in excess of 350,000 kW of the higher of the currently effective on-peak contract demand or the highest onpeak billing demand established during the preceding 12 months. The off-peak billing demand shall in no case be less than the sum of (1) 30 percent of the first 5,000 kW, (2) 40 percent of the next 20,000 kW, (3) 50 percent of the next 25,000 kW, (4) 60 percent of the next 50,000 kW, (5) 70 percent of the next 100,000 kW, (6) 80 percent of the next 150,000 kW, and (7) 85 percent of all kW in excess of 350.000 kW of the higher of the currently effective off-peak contract demand or the highest offpeak billing demand established during the preceding 12 months. The maximum billing demand for any month shall be the higher of (1) the on-peak billing demand or (2) the off-peak billing demand in the month.

# FACILITIES RENTAL CHARGE

There shall be no facilities rental charge under this schedule for delivery at transmission voltage levels of 161 kV or higher.

For delivery at less than 161 kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be  $\underline{\$0.38}$  per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be  $\underline{\$0.97}$  per kW per month for the first 10,000 kW and  $\underline{\$0.76}$  per kW per month for the excess over 10,000 kW. Such charge shall be applied to the highest

of (1) the highest on-peak or off-peak billing demand established during the latest 12-consecutive-month period, (2) the customer's currently effective on-peak contract demand, or (3) the customer's currently effective off-peak contract demand and shall be in addition to all other charges under this schedule, including minimum bill charges.

# **REACTIVE DEMAND CHARGES**

If the reactive demand (in kVAR) is lagging during the 30-consecutive-minute period in which the customer's highest metered demand occurs, there shall be added to the customer's bill a reactive charge of \$1.49 per kVAR of the amount, if any, by which the reactive demand exceeds 33 percent of such metered demand. If the reactive demand (in kVAR) is leading during the 30-consecutive-minute period in which the customer's lowest metered demand (excluding any metered demands which are less than 25 percent of the highest metered demand) occurs, there shall be added to the customer's bill a reactive charge of \$1.17 per kVAR of the amount of reactive demand. Such charges shall be in addition to all other charges under this schedule, including minimum bill charges.

# MINIMUM MONTHLY BILL

The monthly bill under this schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base service and TVA administrative charges, (2) the portion of the base demand charge, as adjusted, (but excluding the additional portion thereof applicable to excess of billing demand over contract demand) applicable to on-peak billing demand applied to the customer's on-peak billing demand, (3) the portion of the base demand charge, as adjusted, (but excluding the additional portion thereof applicable to excess of billing demand over contract demand) applicable to any excess of off-peak over on-peak billing demand applied to the amount, if any, by which the customer's off-peak billing demand exceeds its on-peak billing demand, (4) the base on-peak energy charge, as adjusted, applied to the customer's on-peak energy takings, and (5) the base off-peak energy charge, as adjusted, applied to the higher of customer's actual off-peak energy takings or the minimum off-peak energy takings amount provided for in the first paragraph of the section of this schedule entitled "Determination of On-peak and Off-peak Demands, Maximum Metered Demand, and Energy Amounts".

The Division may require minimum bills higher than those stated above.

### **CONTRACT REQUIREMENT**

Under TDMSA, the contract shall be for an initial term of at least 1 year and extended automatically from year to year thereafter. After the initial term, the TDMSA contract may be terminated upon not less than a 90 day notice.

Under the TMSB, TMSC and TMSD rates, the contract shall be for an initial term of at least 5 years and any renewals or extensions of the initial contract shall be for a term of at least 5 years. After 10 years of service, any such contract for the renewal or extension of service may provide for termination upon not less than a 16-month notice.

The customer shall contract for its maximum requirements, which shall not exceed the amount of power capable of being used by customer, and the Division shall not be obligated to supply power in greater amount at any time than the customer's currently effective on-peak or off-peak contract demand. If the customer uses any power other than that supplied by the Division under this schedule, the contract will include other special provisions. The schedule in any power contract shall be subject to adjustment, modification, change, or replacement from time to time as provided under the power contract between the Division and TVA.

## PAYMENT

Rates and charges included within are net. In the event that any bill is not paid on or before the delinquent date shown on bill, there shall be added to the bill an amount equal to 5 percent on the first \$250.00 of the bill plus one percent on any portion of the bill exceeding \$250.00; to any amount remaining unpaid 30 days after the delinquent date of the bill, there shall be added a penalty of one percent, and an additional one percent shall be added at the end of each successive 30-day period until the amount is paid in full.

### SINGLE-POINT DELIVERY

The charges under this schedule are based upon the supply of service through a single delivery and metering point, and at a single voltage. If service is supplied to the same customer through more than one point of delivery or at different voltages, the supply of service at each delivery and metering point and at each different voltage shall be separately metered and billed.

# CURRENT EFFECTIVE BASE RATES

All charges are on a per month basis.

Service Charge per delivery point:
TVA Administrative Charge per delivery point:

Rates applicable for delivery at:	Transmission Voltage: 115kV and Up			Distribution Voltage : <115 kV				
Summer	TDMSA	TMSB	TMSC	TMSD	TDMSA	TMSB	TMSC	TMSD
On-peak billing demand per kW:	\$10.50	\$10.50	\$10.50	\$10.50	\$10.95	\$10.95	\$10.95	\$10.95
Maximum billing demand per kW:	\$4.07	\$2.72	\$2.16	\$1.89	\$4.19	\$2.80	\$2.23	\$1.95
Excess demand per kW:	\$10.50	\$10.50	\$10.50	\$10.50	\$10.95	\$10.95	\$10.95	\$10.95
On-peak energy per kWh:	\$0.05904	\$0.06137	\$0.06022	\$0.05724	\$0.06149	\$0.06391	\$0.06271	\$0.05963
Off-peak block 1 per kWh:	\$0.03341	\$0.03574	\$0.03457	\$0.03161	\$0.03477	\$0.03720	\$0.03598	\$0.03291
Off-peak block 2 per kWh:	\$0.00529	\$0.00529	\$0.00673	\$0.00435	\$0.00545	\$0.00545	\$0.00695	\$0.00449
Off-peak block 3 per kWh:	\$0.00267	\$0.00267	\$0.00673	\$0.00375	\$0.00272	\$0.00272	\$0.00695	\$0.00387
Winter								
On-peak billing demand per kW:	\$9.51	\$9.51	\$9.51	\$9.51	\$9.91	\$9.91	\$9.91	\$9.91
Maximum billing demand per kW:	\$4.07	\$2.72	\$2.16	\$1.89	\$4.19	\$2.80	\$2.23	\$1.95
Excess demand per kW:	\$9.51	\$9.51	\$9.51	\$9.51	\$9.91	\$9.91	\$9.91	\$9.91
On-peak energy per kWh:	\$0.04734	\$0.04968	\$0.04851	\$0.04554	\$0.04929	\$0.05172	\$0.05051	\$0.04742
Off-peak block 1 per kWh:	\$0.03570	\$0.03803	\$0.03685	\$0.03387	\$0.03715	\$0.03958	\$0.03836	\$0.03527
Off-peak block 2 per kWh:	\$0.00529	\$0.00529	\$0.00673	\$0.00435	\$0.00545	\$0.00545	\$0.00695	\$0.00449
Off-peak block 3 per kWh:	\$0.00267	\$0.00267	\$0.00673	\$0.00375	\$0.00272	\$0.00272	\$0.00695	\$0.00387
Transition								
On-peak billing demand per kW:	\$9.51	\$9.51	\$9.51	\$9.51	\$9.91	\$9.91	\$9.91	\$9.91
Maximum billing demand per kW:	\$4.07	\$2.72	\$2.16	\$1.89	\$4.19	\$2.80	\$2.23	\$1.95
Excess demand per kW:	\$9.51	\$9.51	\$9.51	\$9.51	\$9.91	\$9.91	\$9.91	\$9.91
On-peak energy per kWh:	\$0.03660	\$0.03891	\$0.03775	\$0.03477	\$0.03810	\$0.04051	\$0.03928	\$0.03621
Off-peak block 1 per kWh:	\$0.03660	\$0.03891	\$0.03775	\$0.03477	\$0.03810	\$0.04051	\$0.03928	\$0.03621
Off-peak block 2 per kWh:	\$0.00529	\$0.00529	\$0.00673	\$0.00435	\$0.00545	\$0.00545	\$0.00695	\$0.00449
Off-peak block 3 per kWh:	\$0.00267	\$0.00267	\$0.00673	\$0.00375	\$0.00272	\$0.00272	\$0.00695	\$0.00387

\$1,600.00 \$350.00

Excess Demand:Demand amount that exceeds the effective contract demand.Off-Peak Block 1:First 200 hours use of on-peak metered demand multiplied by the ratio of metered<br/>off-peak energy to metered total energyOff-Peak Block 2:Next 200 hours use of on-peak metered demand multiplied by the ratio of metered<br/>off-peak energy to metered total energy

Off-Peak Block 3: Over 400 hours use of on-peak metered demand multiplied by the ratio of metered off-peak energy to metered total energy

Service is subject to Rules and Regulations of the Division.