ELECTRIC POWER BOARD OF THE METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY

LARGE MANUFACTURING SERVICE RATE SCHEDULES

(May 2019)

Availability

These rates shall apply to the firm electric power requirements where (a) a customer's currently effective onpeak or offpeak contract demand, whichever is higher, is greater than 5,000 kW, and (b) 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, or 541214.

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

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

Unless otherwise provided for in a written agreement between TVA and the distributor providing service under these rate schedules, for customers served under these rate schedules, the customer's "meter-reading time" shall be 0000 hours CST or CDT, whichever is currently effective, on the first day of the calendar month following the month for which a bill under these rate schedules is being calculated. Further, in accordance with TVA-furnished or TVA-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 onpeak contract demand be different from its offpeak contract demand, these rate schedules 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand

The Manufacturing Service Rate--Schedule MSB rate schedule shall apply to customers with an onpeak or offpeak contract demand, whichever is higher, greater than 5,000 kW, but not more than 15,000 kW; The Manufacturing Service Rate--Schedule MSC rate schedule shall apply to customers with an onpeak or offpeak contract demand, whichever is higher, greater than 15,000 kW, but not more than 25,000 kW; and the Manufacturing Service Rate--Schedule MSD rate schedule shall apply to customers with an onpeak or offpeak contract demand, whichever is higher, greater than 25,000 kW.

Character of Service

Alternating current, single- or three-phase, 60 hertz. 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.

Base Charges

The base charges for Schedule MSB, Schedule MSC, and Schedule MSD are set forth under the Base Charges Attachment to this Large Manufacturing Service Rate Schedules document. Any references to the Base Charges section of Schedule MSB, Schedule MSC, and Schedule MSD will be deemed to include the Base Charges Attachment.

Adjustment

The base demand and energy charges shall be increased or decreased in accordance with the current Adjustment Addendum published by TVA.

Loss adjustments are made 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 own the transformation facilities and take service at the bulk transmission of 161 kV or higher shall be set to 0%.

Facilities Rental Charge

There shall be no facilities rental charge under these rate schedules for delivery at bulk 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 36¢ per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 93¢ per kW per month for the first 10,000 kW and 73¢ per kW per month for the excess over 10,000 kW. Such charge shall be applied to the higher of (1) the highest billing demand established during the latest 12-consecutive-month period or (2) the customer's currently effective onpeak or offpeak contract demand, whichever is higher, and shall be in addition to all other charges under these rate schedules, including minimum bill charges.

Reactive Demand Charges

If the reactive demand (in kVAR) is lagging during the 30-consecutive-minute period beginning or ending on a clock hour of the month in which the customer's highest metered demand occurs, there shall be added to the customer's bill a reactive charge of \$1.46 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 beginning or ending on a clock hour of the month 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 \$1.14 per kVAR of the amount of reactive demand. Such charges shall be in addition to all other charges under these rate schedules, including minimum bill charges.

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 Onpeak and Offpeak Hours

Except for Saturdays, Sundays, November 1, 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, Onpeak hours for each day shall for purposes of these rate schedules be from 1 p.m. to 7 p.m. during the months of April, May, June, July, August, September and October and from 4 a.m. to 10 a.m. during the months of January, February, March, November, and December. For all other hours of each day and all hours of such excepted days shall be offpeak hours. Such times shall be Central Standard Time or Central Daylight Time, whichever is then in effect. Said onpeak and offpeak hours are subject to change by TVA. In the event TVA determines that such changed onpeak and offpeak hours are appropriate, it shall so notify Distributor at least 12 months prior to the effective date of such changed hours.

<u>Determination of Onpeak and Offpeak Demands,</u> <u>Maximum Metered Demand, and Energy Amounts</u>

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under these rate schedules as onpeak and offpeak hours; provided, however, that notwithstanding the metered energy amount, the offpeak energy for any month shall in no case be less than the product of (1) the offpeak billing demand as calculated in the last paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

Distributor shall meter the onpeak and offpeak demands in kW of all customers taking service under these rate schedules. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under these rate schedules as onpeak and offpeak hours and, in each case, shall be the highest average during any 30-consecutive-minute period beginning or ending on a clock hour.

Except as provided below, (1) the onpeak billing demand shall be the highest onpeak metered demand in the month, (2) the offpeak billing demand shall be the highest offpeak metered demand in the month, and (3) the maximum billing demand shall be the higher of the onpeak billing demand or offpeak billing demand in the month.

The onpeak 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 onpeak contract demand or the highest onpeak billing demand established during the preceding 12 months.

The offpeak 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 offpeak contract demand or the highest offpeak billing demand established during the preceding 12 months.

Minimum Bill

The monthly bill under these rate schedules, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base service charge and administrative charge, (2) the portion of the base demand charge, as adjusted, applicable to onpeak billing demand applied to the customer's onpeak billing demand, (3) the portion of the base demand charge, as adjusted, applicable to maximum billing demand applied to the to the customer's maximum billing demand, (4) the base onpeak energy charge, as adjusted, applied to the customer's onpeak energy takings, and (5) the base offpeak energy charge, as adjusted, applied to the higher of customer's actual offpeak energy takings or the minimum offpeak energy takings amount provided for in the first paragraph of the section of these rate schedules entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts." Notwithstanding the foregoing, amounts calculated under any fuel cost adjustment that is included in the Adjustment Addendum shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

Excess demand charges are excluded from this calculation.

Distributor may require minimum bills higher than those stated above, including, without limitation, charges to cover any additional metering and related costs.

Contract Requirement

Distributor shall require contracts for all service provided under these rate schedules. The contract for Schedule MSB and Schedule MSC customers 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 1 year; after 10 years of service, any such contract for the renewal or extension of service may provide for termination upon not less than 4 months' notice. The contract for Schedule MSD customers 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 16 months' notice. The customer shall contract for its maximum requirements, which shall not exceed the amount of power capable of being used by customer, and Distributor shall not be obligated to supply power in greater amount at any time than the customer's currently effective onpeak or offpeak contract demand. If the customer uses any power other than that supplied by Distributor under these rate schedules, the contract may include other special provisions. The rate 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 Distributor and TVA.

Payment

Bills under these rate schedules will be rendered monthly. Any amount of the bill that is unpaid after the due date specified on bill may be subject to additional charges under Distributor's standard policy.

Single-Point Delivery

The charges under these rate schedules 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.

Service is subject to Rules and Regulations of Distributor.

	Schedule MSB	Schedule MSC	Schedule MSD	
Service Charge	\$2,000	\$2,000	\$2,000	per delivery point per month
Administrative Charge	\$350	\$350	\$350	per delivery point per month

Demand Charges:

		Schedule MSB (\$/kW)	Schedule MSC (\$/kW)	Schedule MSD (\$/kW)	
Summer Period	Onpeak Demand	10.24	10.24	10.24	per month of onpeak billing demand
	Maximum Demand	2.43	2.43	2.42	per month of maximum billing demand
	Excess Demand	10.24	10.24	10.24	per month of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.
Winter Period	Onpeak Demand	9.27	9.27	9.27	per month of onpeak billing demand
	Maximum Demand	2.43	2.43	2.42	per month of maximum billing demand
	Excess Demand	9.27	9.27	9.27	per month of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.
Transition Period	Onpeak Demand	9.27	9.27	9.27	per month of onpeak billing demand
	Maximum Demand	2.43	2.43	2.42	per month of maximum billing demand
	Excess Demand	9.27	9.27	9.27	per month of the amount, if any, by which (1) the customer's onpeak billing demand exceeds its onpeak contract demand or (2) the customer's offpeak billing demand exceeds its offpeak contract demand, whichever is higher.

Energy Charges:

		Schedule MSB (¢/kWh)	Schedule MSC (¢/kWh)	Schedule MSD (¢/kWh)	
Summer Period	Onpeak hours	7.429	7.317	7.090	per month for all metered onpeak kWh
	Offpeak hours Block 1	4.929	4.816	4.589	per month for the first 200 hours use of metered onpeak demand multiplied by the ratio of offpeak energy to total energy
	Offpeak hours Block 2	1.960	2.101	1.932	per month for the next 200 hours use of metered onpeak demand multiplied by the ratio of offpeak energy to total energy
	Offpeak Hours Block 3	1.705	2.101	1.873	per month for the hours use of metered onpeak demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
	Minimum offpeak energy	4.929	4.816	4.589	per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.
Winter Period	Onpeak hours	6.289	6.176	5.948	per month for all metered onpeak kWh
	Offpeak hours Block 1	5.152	5.038	4.811	per month for the first 200 hours use of metered onpeak demand multiplied by the ratio of offpeak energy to total energy
	Offpeak hours Block 2	1.960	2.101	1.932	per month for the next 200 hours use of metered onpeak demand multiplied by the ratio of offpeak energy to total energy
	Offpeak Hours Block 3	1.705	2.101	1.873	per month for the hours use of metered onpeak demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
	Minimum offpeak energy	5.152	5.038	4.811	per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.
Transition Period	Onpeak hours	5.239	5.126	4.898	per month for all metered onpeak kWh
	Offpeak hours Block 1	5.239	5.126	4.898	per month for the first 200 hours use of metered onpeak demand multiplied by the ratio of offpeak energy to total energy
	Offpeak hours Block 2	1.960	2.101	1.932	per month for the next 200 hours use of metered onpeak demand multiplied by the ratio of offpeak energy to total energy
	Offpeak Hours Block 3	1.705	2.101	1.873	per month for the hours use of metered onpeak demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
	Minimum offpeak energy	5.239	5.126	4.898	per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.