Knoxville Utilities Board Board Meeting Minutes Thursday, August 19, 2021 Noon

Call to Order

The Knoxville Utilities Board met in regular session in the Mintha E. Roach Corporate Services and Conference Center at 4505 Middlebrook Pike, on Thursday, August 19, 2021, pursuant to the public notice published in the January 2, 2021, edition of the *News Sentinel*. Chair Jerry Askew called the meeting to order at 12:00 p.m.

Roll Call

Commissioners Present: Jerry Askew, Kathy Hamilton, Celeste Herbert, Adrienne Simpson-Brown, Tyvi Small, and John Worden.

Commissioner Absent: Claudia Caballero

Approval of Minutes

Upon a motion by Commissioner Small and a second by Commissioner Herbert, the June 17, 2021 Board Meeting minutes were approved by a roll call vote. The following Commissioners voted "aye": Askew, Hamilton, Herbert, Simpson-Brown, Small, and Worden. No Commissioner voted "nay".

Old Business

None.

New Business

Resolution 1441, A Resolution Replacing the Existing Rate Schedules of the Electric Division as Previously Established by Resolution 1060 as Heretofore Amended

This Resolution Replaces the Existing Rate Schedules of the Electric Division by Amending Section 1 of Resolution 1060, Providing for an Increase in Electric Rates Effective April 1, 2022, an Increase in Electric Rates Effective April 1, 2023, and an Increase in Electric Rates Effective April 1, 2024

August 19, 2021

Resolution 1442, A Resolution Requesting the Council of the City of Knoxville, Tennessee to Provide for the Issuance of Not to Exceed Fifty-Five Million and No/100 Dollars (\$55,000,000) In Aggregate Principal Amount of Electric System Revenue Bonds, Series MM-2021

Resolution 1443, A Resolution to Amend Resolution No. 1436, the Caption of Which is as Follows: "A Resolution Making and Fixing the Annual Budget Appropriations of the Knoxville Utilities Board from the Funds of the Electric Division, the Gas Division, the Water Division, and the Wastewater Division for the Fiscal Year Beginning July 1, 2021, Providing for Expenditures Paid for the Period Beginning July 1, 2021 and Ending June 30, 2022"

Resolution 1444, A Resolution Making and Fixing the Annual Budget Appropriations of the Knoxville Utilities Board from the Funds of the Fiber Division Beginning August 19, 2021, Providing for Expenditures Paid for the Period Beginning August 19, 2021, and Ending June 30, 2022

Resolution 1445, A Resolution Approving Commitment Appropriations for the Period Beginning August 19, 2021, Thereby Authorizing the Commitment of Expenditures to be Paid Subsequent to June 30, 2022, for Contractual Commitments Executed and Other Obligations Incurred on or Before June 30, 2022

President Gabriel Bolas advised the Board that KUB's Fiber Division has been established and plans for grid modernization and broadband service have been approved. He recognized Jamie Davis, Vice President and CTO, and Chris Hood, Controller, to present several resolutions related to the funding of the highspeed fiber optic network for the electric system for fiscal year 2022 and the funding for Fiber Division operations for fiscal year 2022.

President Bolas recommended adoption of Resolution 1441 on first reading and Resolutions 1442, 1443, 1444, and 1445 on first and final reading. His written recommendation is included in Attachment 1.

Upon a motion by Commissioner Hamilton and a second by Commissioner Herbert, Resolution 1441 was adopted by a roll call vote on first reading. The following Commissioners voted "aye": Askew, Hamilton, Herbert, Simpson-Brown, Small, and Worden. No Commissioner voted "nay".

Upon a motion by Commissioner Small and a second by Commissioner Worden, Resolution 1442 was adopted by a roll call vote on first and final reading. The following Commissioners voted "aye": Askew, Hamilton, Herbert, Simpson-Brown, Small, and Worden. No Commissioner voted "nay".

August 19, 2021

Upon a motion by Commissioner Hamilton and a second by Commissioner Worden, Resolution 1443 was adopted by a roll call vote on first and final reading. The following Commissioners voted "aye": Askew, Hamilton, Herbert, Simpson-Brown, Small, and Worden. No Commissioner voted "nay".

Upon a motion by Commissioner Small and a second by Commissioner Herbert, Resolution 1444 was adopted by a roll call vote on first and final reading. The following Commissioners voted "aye": Askew, Hamilton, Herbert, Simpson-Brown, Small, and Worden. No Commissioner voted "nay".

Upon a motion by Commissioner Simpson-Brown and a second by Commissioner Small, Resolution 1445 was adopted by a roll call vote on first and final reading. The following Commissioners voted "aye": Askew, Hamilton, Herbert, Simpson-Brown, Small, and Worden. No Commissioner voted "nay".

President's Report

American Water Works Association 2021 Distribution Awards

President Gabriel Bolas recognized Derwin Hagood, Senior Vice President of Operations, to provide details of recent awards KUB received from American Water Works Association. KUB received the Award of Excellence in Distribution System Operations, KUB employees Jimmy England received the Operator Meritorious Award, and Joy Dockery received the Customer Service Award.

Other Business

Commissioner Simpson-Brown announced that the Nominating Committee met today to begin this year's process for nominating candidates for the Commissioner term that begins January 1st. This will be for a new Commissioner to replace Commissioner Worden, whose term is expiring.

The application is available on KUB's website at <u>www.kub.org</u> or by calling KUB. Applications should be submitted by 12 p.m. on Thursday, September 9, 2021. Knoxville's City Charter requires that five or more candidates be nominated at the October meeting for transmittal to the Mayor for final selection and confirmation by City Council.

Public Comment

Calvin Taylor Skinner - Address not provided

Adjournment

There being nothing further to come before the Board, Chair Askew declared the Board meeting adjourned at 12:37 p.m.

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Jerry Askew, Chair

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Mark Walker, Board Secretary

Attachments

Attachment 1	Recommendation Letter and Resolution 1441 - Resolution 1441, A Resolution Replacing the Existing Rate Schedules of the Electric Division as Previously Established by Resolution 1060 as Heretofore Amended	<u>Page(s)</u> 10688 – 10941
	This Resolution Replaces the Existing Rate Schedules of the Electric Division by Amending Section 1 of Resolution 1060, Providing for an Increase in Electric Rates Effective April 1, 2022, an Increase in Electric Rates Effective April 1, 2023, and an Increase in Electric Rates Effective April 1, 2024	
Attachment 2	Resolution 1442 – A Resolution Requesting the Council of the City of Knoxville, Tennessee to Provide for the Issuance of Not to Exceed Fifty-Five Million and No/100 Dollars (\$55,000,000) In Aggregate Principal Amount of Electric System Revenue Bonds, Series MM-2021	10942 – 10979
Attachment 3	Resolution 1443 – A Resolution to Amend Resolution No. 1436, the Caption of Which is as Follows: "A Resolution Making and Fixing the Annual Budget Appropriations of the Knoxville Utilities Board from the Funds of the Electric Division, the Gas Division, the Water Division, and the Wastewater Division for the Fiscal Year Beginning July 1, 2021, Providing for Expenditures Paid for the Period Beginning July 1, 2021 and Ending June 30, 2022"	10980 – 10983
Attachment 4	Resolution 1444 – A Resolution Making and Fixing the Annual Budget Appropriations of the Knoxville Utilities Board from the Funds of the Fiber Division Beginning August 19, 2021, Providing for Expenditures Paid for the Period Beginning August 19, 2021, and Ending June 30, 2022	10984 – 10988
Attachment 5	Resolution 1445 – A Resolution Approving Commitment Appropriations for the Period Beginning August 19, 2021, Thereby Authorizing the Commitment of Expenditures to be Paid Subsequent to June 30, 2022, for Contractual Commitments Executed and Other Obligations Incurred on or Before June 30, 2022	10989 – 10993



August 13, 2021

Knoxville Utilities Board 445 S. Gay Street Knoxville, Tennessee 37902-1109

Commissioners:

As you will recall, over the past several Board meetings we have discussed funding-related items that would be brought before the Board for consideration in the event City Council approved KUB's entry into the broadband services market. Given City Council's recent approval for KUB to provide broadband services, the August 19 Board meeting agenda includes several official action items related to funding the high-speed fiber network for the electric distribution system and the provision of broadband services. The following official actions items are to be considered at next week's meeting:

- Adoption of three consecutive 3% annual electric rate increase to be effective April 2022, April 2023, and April 2024
- Issuance of up to \$55 million in revenue bonds for the Electric Division
- Addition of \$43.1 million to Electric Division budget appropriations for fiscal year 2022
- Adoption of \$6 million in Fiber Division budget appropriations for fiscal year 2022
- Adoption of \$3 million in Fiber Division commitment appropriations for fiscal year 2022 covering contracts or obligations entered by the Fiber Division during the fiscal year for expenditures to be made after the fiscal year

An overview of each official action item is provided below:

Resolution 1441

Resolution 1441 replaces the existing rate schedules of the Electric Division to provide for three consecutive 3% annual electric rate increases to be effective April 2022, April 2023, and April 2024.

The proposed electric rate increases will help fund Century II electric system infrastructure improvements and the construction of the high-speed fiber optic network for the electric distribution system that, in addition to providing for improved electric system efficiency and reliability, will enable KUB to provide broadband services to customers within its electric system service territory. About two-thirds of the revenue derived from the proposed rate increases will be used to fund Century II infrastructure improvements while one-third will be used to help fund the high-speed fiber network.

For KUB residential electric customers, the proposed increases will be applied solely to the usage (or kWh) rate, so monthly bill impacts will be based upon a customer's monthly electric usage. The total impact of the proposed rate increases on the average residential electric customer's monthly bill is around \$10.80, with \$7.20 going for on-going Century II infrastructure improvements and \$3.60 for the high-speed fiber optic network. The average residential electric customer uses about 1,100 kWh per month. More than half of KUB's residential electric customers use less than the system average. For example, about 20% of our customers use about 800 kWh per month – the total impact of the proposed rate increases on their monthly bill would be less than \$8.

The impacts of the proposed rate increases on KUB's commercial and industrial electric customers will vary based on their monthly power usage.

Resolution 1441 requires two readings. If approved on first reading at the August 19 meeting, we anticipate second reading would occur at the September 16 meeting.

Resolution 1442

Resolution 1442 requests City Council approval for the issuance of up to \$55 million in revenue bonds for the Electric Division.

The proceeds of the bonds will be used to fund electric system capital expenditures during fiscal year 2022 including Century II infrastructure improvements and construction of the high-speed fiber optic network for the electric distribution system. The proceeds will also cover issuance costs and underwriter fees. A summary of the major provisions of the proposed City Council bond resolution is enclosed for your information.

Resolution 1443

Resolution 1443 amends Electric Division budget appropriations for fiscal year 2022 adopted by the Board in May to provide funding for expenditures associated with construction of the high-speed fiber optic network for the electric distribution system. The additional budget appropriations will also cover the inter-divisional loan from the Electric Division to the Fiber Division to help fund start-up costs for the Fiber Division during fiscal year 2022. The original Electric Division budget did not include these expenditures as final approval for KUB providing broadband services did not occur until after the budget was adopted.

Resolution 1443 adds \$43.1 million to fiscal year 2022 budget appropriations for the Electric Division increasing the approved amount from \$595.9 million to a new total of \$639 million. The \$43.1 million includes \$10 million for the inter-divisional loan to the Fiber Division.

A letter from Mark Walker, Senior VP and CFO, certifying the availability of funds for the proposed additional Electric Division budget appropriations is enclosed for your information.

Resolution 1444

Resolution 1444 adopts budget appropriations for the Fiber Division for the period beginning August 19, 2021 and ending June 30, 2022. The proposed budget appropriations of \$6 million will fund operating and capital expenditures related to the fiber system communication network for the provision of broadband services.

Mr. Walker has prepared a letter certifying the availability of funds for the Fiber Division budget for fiscal year 2022.

Resolution 1445

Resolution 1445 adopts commitment appropriations of \$3 million for the Fiber Division for the period beginning August 19, 2021, and ending June 30, 2022, authorizing KUB to execute contracts and incur obligations on behalf of the Fiber Division that commit KUB to expenditures after June 30, 2022. Mr. Walker has also prepared a letter certifying the availability of funds for the Fiber Division commitment appropriations.

Drafts of Resolutions 1441, 1442, 1443, 1444 and 1445 are enclosed for your review. I recommend the adoption of Resolution 1441 on first reading, and the remaining resolutions on first and final reading.

Respectfully submitted,

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Gabriel J. Bolas II President and CEO

Enclosures

RESOLUTION NO. 1441

A Resolution Replacing the Existing Rate Schedules of the Electric Division as Previously Established by Resolution 1060 as Heretofore Amended

This Resolution Replaces the Existing Rate Schedules of the Electric Division by Amending Section 1 of Resolution 1060, Providing for an Increase in Electric Rates Effective April 1, 2022, an Increase in Electric Rates Effective April 1, 2023, and an Increase in Electric Rates Effective April 1, 2024

Whereas, by the provisions of the Charter of the City of Knoxville, Tennessee (the "City"), the management and operation of the City's electric system has been placed under the jurisdiction of the Board of Commissioners (the "Board") of the Knoxville Utilities Board ("KUB"); and

Whereas, the Board previously adopted Resolution 1060, as heretofore amended, providing rate schedules for the Electric Division of KUB; and

Whereas, the Board previously recognized the need for a strategic long-term solution to the issue of aging infrastructure, and has directed and reaffirmed KUB's comprehensive maintenance and replacement programs, referred to as Century II, for all divisions, including the Electric Division; and

Whereas, the Board previously endorsed long-term funding plans for all divisions, including the Electric Division, providing financial support for Century II in support of safe, reliable, and affordable utility services for current and future generations of KUB customers; and

Whereas, no electric rate increases were implemented during 2020 and 2021 as the result of various cost savings realized by the Electric Division; and

Whereas, staff has recommended 3% rate increases for the Electric Division for the next three fiscal years in support of continued Century II electric system improvements and enhanced electric grid modernization, including the construction of a high-speed fiber optic network that will improve the efficiency and reliability of the electric distribution system and enable the provision of broadband services to customers in KUB's electric service territory; and

Whereas, the proposed 3% electric rate increases were reviewed with the Board at its regularly scheduled meetings held on March 11, 2021 and June 17, 2021, respectively: and

Whereas, the long-term rate forecast for the Electric Division includes no additional electric rate increases for a period of at least seven fiscal years following the implementation of the final 3% rate increase; and

Whereas, the Board has determined, based on the projected level of expenditures for the Electric Division that the proposed rate increases are necessary to provide additional revenue to support the needed level of investment in infrastructure maintenance and replacement for the electric system; and

Whereas, in accordance with Section 1107(D) of the Charter of the City, the Board is required to charge sufficient rates for electric service to pay all obligations of the Electric Division; and

Whereas, in accordance with Section 1107(L) of the Charter, KUB has provided the required public notice of not less than five (5) days prior to a meeting of the Board when a rate change is to be considered.

Now, Therefore, Be It Hereby Resolved by the Board of Commissioners of the Knoxville Utilities Board:

Section 1. That all existing rate schedules of the Electric Division as set forth in Section 1 of Resolution No. 1060, as heretofore amended, are hereby deleted in their entirety and replaced with the rate schedules of the Electric Division as set forth in Exhibit A to the Resolution, to be effective April 1, 2022.

Section 2. That all existing rate schedules of the Electric Division as set forth in Section 1 of Resolution No. 1060, as heretofore amended, are hereby deleted in their entirety and replaced with the rate schedules of the Electric Division as set forth in Exhibit B to the Resolution, to be effective April 1, 2023.

Section 3. That all existing rate schedules of the Electric Division as set forth in Section 1 of Resolution No. 1060, as heretofore amended, are hereby deleted in their entirety and replaced with the rate schedules of the Electric Division as set forth in Exhibit C to the Resolution, to be effective April 1, 2024.

Jerry Askew, Chair

Mark Walker, Board Secretary

APPROVED ON 1st READING: 08-19-21 APPROVED ON 2nd READING: EFFECTIVE DATE: MINUTE BOOK <u>44</u> PAGE <u>10691-10941</u> RESOLUTION 1441 EXHIBIT A RATE SCHEDULES OF THE ELECTRIC DIVISION EFFECTIVE APRIL 1, 2022

1

RESIDENTIAL RATE - SCHEDULE RS

Availability

This rate shall be available only for electric service to a single-family dwelling and its appurtenances, where the major use of electricity is for domestic purposes such as lighting, household appliances, and the personal comfort and convenience of those residing therein.

Character of Service

Alternating current, single-phase, 60 hertz. Power shall be delivered at a service voltage available in the vicinity or agreed to by KUB. Multi-phase service shall be supplied in accordance with KUB's standard policy.

Base Charges

Basic Service Charge:	\$20.50 per month
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Energy Charge:

Summer Period	\$0.09492 per kWh per month	
Winter Period	\$0.09451 per kWh per month	
Transition Period	\$0.09451 per kWh per month	

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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.

Minimum Monthly Bill

The basic service charge constitutes the minimum monthly bill for all customers served under this rate schedule except those customers for which a higher minimum monthly bill is required under KUB's standard policy because of special circumstances affecting the cost of rendering service.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery and metering point, and at a single voltage.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

GENERAL POWER RATE - SCHEDULE GSA

Availability

This rate shall be available for the firm power requirements (where a customer's contract demand is 5,000 kW or less) for electric service to non-residential customers. This rate shall also apply to customers to whom service is not available under any other resale rate schedule.

Character of Service

Alternating current, single or three-phase, 60 hertz. Power shall be delivered at a service voltage available in the vicinity or agreed to by KUB.

Base Charges

 If (a) the higher of (i) the customer's currently effective contract demand, if any, or (ii) its highest billing demand during the latest 12-month period is not more than 50 kW and (b) the customer's monthly energy takings for any month during such period do not exceed 15,000 kWh:

Customer Charge: \$30.00 per delivery point per month

Energy Charge:

Summer Period	\$0.11502 per kWh per month
Winter Period	\$0.11461 per kWh per month
Transition Period	\$0.11461 per kWh per month

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If (a) the higher of (i) the customer's currently effective contract demand or (ii) its highest billing demand during the latest 12-month period is greater than 50 kW but not more than 1,000 kW or (b) the customer's billing demand is less than 50 kW and its energy takings for any month during such period exceed 15,000 kWh:

\$98.00 per delivery point per month
First 50 kW of billing demand per month, no demand charge
Excess over 50 kW of billing demand per month, at \$15.69 per kW
First 50 kW of billing demand per month, no demand charge

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	Excess over 50 kW of billing demand per month, at \$14.90 per kW
Transition Period	First 50 kW of billing demand per month, no demand charge
	Excess over 50 kW of billing demand per month, at \$14.90 per kW
Energy Charge:	
Summer Period	First 15,000 kWh per month at \$0.14348 per kWh
	Additional kWh per month at \$0.06338 per kWh
Winter Period	First 15,000 kWh per month at \$0.14307 per kWh
	Additional kWh per month at \$0.06338 per kWh
Transition Period	First 15,000 kWh per month at \$0.14307 per kWh
	Additional kWh per month at \$0.06338 per kWh
	stomer's currently effective contract demand or (b) its uring the latest 12-month period is greater than
Customer Charge:	\$269.00 per delivery point per month
Demand Charge:	
Summer Period	First 1,000 kW of billing demand per month, at \$16.46 per kW
	Excess over 1,000 kW of billing demand per month, at \$17.13 per kW, plus an additional
	\$17.13 per kW per month for each kW, if any, of the amount by which the customer's billing demand exceeds the higher of 2,500 kW or its contract demand
Winter Period	First 1,000 kW of billing demand per month, at \$15.70 per kW
	Excess over 1,000 kW of billing demand per month, at \$16.37 per kW, plus an additional
	\$16.37 per kW per month for each kW, if any, of the amount by which the customer's billing demand exceeds the higher of 2,500 kW or its contract demand

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Transition Period	First 1,000 kW of billing demand per month, at \$15.70 per kW
	Excess over 1,000 kW of billing demand per month, at \$16.37 per kW, plus an additional
	\$16.37 per kW per month for each kW, if any, of the amount by which the customer's billing demand exceeds the higher of 2,500 kW or its contract demand
Energy Charge:	
Summer Period	\$0.07359 per kWh per month
Winter Period	\$0.07359 per kWh per month
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Transition Period \$0.07359 per kWh per month

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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 Demand

KUB shall meter the demands in kW of all customers having loads in excess of 50 kW. The metered demand for any month shall be the highest average during any 30consecutive-minute period of the month of the load metered in kW. The measured demand for any month shall be the higher of the highest average during any 30consecutive-minute period of the month of (a) the load metered in kW or (b) 85 percent of the load in kVA plus an additional 10 percent for that part of the load over 5,000 kVA, and such measured demand shall be used as the billing demand, except that the billing demand for any month shall in no case be less than 30 percent of the higher of the preceding 12 months.

Minimum Bill

The monthly bill under this rate schedule shall not be less than the sum of (a) the base customer charge, (b) the base demand charge, as adjusted, applied to the customer's billing demand, and (c) the base energy charge, as adjusted, applied to the customer's energy takings; provided, however, that, under (2.) of the Base Charges, the monthly bill shall in no event be less than the sum (a) the base customer charge and (b) 20 percent of the portion of the base demand charge, as adjusted, applicable to the second block (excess over 50kW) of billing demand, multiplied by the higher of the customer's currently effective contract demand or its highest billing demand established during the preceding 12 months.

KUB may require minimum bills higher than those stated above.

Contract Requirements

KUB shall require contracts for service provided under this rate schedule to customers whose demand requirements exceed 1,000 kW and such contracts shall be for an initial term of at least one year. The customer shall contract for its maximum requirements, which shall not exceed the amount of power capable of being used by customer, and KUB shall not be obligated to supply power in greater amount at any time than the customer's currently effective contract demand. If the customer uses any power other than that supplied by KUB under this rate schedule, 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 approved by the Board.

Single - Point Delivery

The charges under this rate 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 at each different voltage shall be separately metered and billed.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

OUTDOOR LIGHTING RATE - SCHEDULE LS

Availability

Available for service to street and park lighting systems, traffic signal systems, athletic field lighting installations, and outdoor lighting for individual customers.

Service under this schedule is for a term of not less than one year.

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.

PART A – CHARGES FOR STREET AND PARK LIGHTING SYSTEMS, TRAFFIC SIGNAL SYSTEMS, AND ATHLETIC FIELD LIGHTING INSTALLATIONS

Energy Charge:

Summer Period	\$0.08596 per kWh per month		
Winter Period	\$0.08596 per kWh per month		
Transition Period	\$0.08596 per kWh per month		

II. Facility Charge

The annual facility charge shall be **16.45** percent of the installed cost to KUB's electric system of the facilities devoted to street and park lighting service specified in this Part A. Such installed cost shall be recomputed on July 1 of each year, or more often if substantial changes in the facilities are made. Each month, one-twelfth of the then total annual facility charge shall be billed to the customer. If any part of the facilities has not been provided at the electric system's expense or if the installed cost of any portion thereof is reflected on the books of another municipality or agency or department, the annual facility charge shall be adjusted to reflect properly the remaining cost to be borne by the electric system.

Traffic signal systems and athletic field lighting installations shall be provided, owned, and maintained by and at the expense of the customer, except as KUB may agree otherwise in accordance with the provisions of the paragraph next following in this Section II. The facilities necessary to provide service to such systems and installations shall be provided by and at the expense of KUB's electric system, and the annual facility charge provided for first above in this Section II shall apply to the installed cost of such facilities. When so authorized by policy duly adopted by the Board, traffic signal systems and athletic field lighting installations may be provided, owned, and maintained by KUB's electric system for the customer's benefit. In such cases KUB may require reimbursement from the customer for a portion of the initial installed cost of any such system or installation and shall require payment by the customer of a facility charge sufficient to cover all of KUB's costs (except reimbursed costs), including appropriate overheads, of providing, owning, and maintaining such system or installation; provided that, for athletic field lighting installations, such facility charge shall be **15.26** percent per year of such costs. Said facility charge shall be in addition to the annual facility charge on the facilities necessary to provide service to such system or installation as provided for in the preceding paragraph. Replacement of lamps and related glassware for traffic signal systems and athletic field lighting installations provided under this paragraph shall be paid for under the provisions of paragraph A in section IV.

III. Customer Charge – Traffic Signal Systems and Athletic Field Lighting Installations.

KUB shall apply a uniform **monthly customer charge of \$2.50** for service to each traffic signal system or athletic field lighting installation.

IV. Replacement of Lamps and Related Glassware - Street and Park Lighting

Customer shall be billed and shall pay for replacements as provided in paragraph A below, which shall be applied to all service for street and park lighting.

- A. KUB shall bill the customer monthly for such replacements during each month at KUB's cost of materials, including appropriate storeroom expense.
- B. KUB shall bill the customer monthly for one-twelfth of the amount by which KUB's cost of materials, including appropriate storeroom expenses, exceeds the products of 3 mills multiplied by the number of kilowatt-hours used for street and park lighting during the fiscal year immediately preceding the fiscal year in which such month occurs.

Metering

For any billing month or part of such month in which the energy is not metered or for which a meter reading is found to be in error or a meter is found to have failed, the energy for billing purposes for that billing month or part of such month shall be computed from the rated capacity of the lamps (including ballast) plus 5 percent of such capacity to reflect secondary circuit losses, multiplied by the number of hours of use.

Revenue and Cost Review

KUB's costs of providing service under Part A of this rate schedule are subject to review at any time to determine if KUB's revenues from the charges being applied are sufficient to cover its costs. (Such costs, including applicable overheads, include, but are not limited to, those incurred in the operation and maintenance of the systems provided and those resulting from depreciation and payments for taxes, tax equivalents and interest). If any such review discloses that revenues are either less or more than sufficient to cover said costs, the Board shall revise the above facility charges so that revenues will be sufficient to cover said costs.

PART B-CHARGES FOR OUTDOOR LIGHTING FOR INDIVIDUAL CUSTOMERS

		Charges Per	Fixture P	er Month	
	La	mp Size	Rated	Facility	Total Lamp
(a) Type of Fixture	e (Wat	ts) (Lumens)	kWh	Charge	Charge
Mercury Vapor	or 175	7,650	70	\$5.14	\$11.16
Incandescent*	400	19,100	155	7.18	20.50
	1,000**	47,500	378	11.49	43.98
High Pressure	100	8,550	42	\$5.14	\$ 8.75
Sodium	250	23,000	105	6.10	15.13
	400	45,000	165	7.18	21.36
	1,000**	126,000	385	11.49	44.58
Decorative	100	8,550	42	\$5.86	\$9.47

* Mercury Vapor and Incandescent fixtures not offered for new service.

** 1,000 watt fixtures not offered for new service.

Light-Emitting Diode (LED) options provided through Schedule LED

(b) Energy Charge: For each lamp size under (a) above,

Summer Period	\$0.08596 per kWh per month
Winter Period	\$0.08596 per kWh per month
Transition Period	\$0.08596 per kWh per month

Additional Facilities

The above charges in this Part B are limited to service from a photoelectrically controlled standard lighting fixture installed on a pole already in place. If the customer wishes to have the fixture installed at a location other than on a pole already in place, the

customer shall pay an **additional monthly charge of \$5.18 per pole** for additional poles required to serve the fixture from KUB's nearest available source. (This section does not apply to Decorative Lighting Fixtures).

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

Lamp Replacements

Replacements of lamps and related glassware will be made in accordance with replacement policies of KUB.

Special Outdoor Lighting Installations

When so authorized by policy duly adopted by the Board, special outdoor lighting installations (other than as provided for under Parts A and B above) may be provided, owned, and maintained by KUB's electric system. In such cases, KUB may require reimbursement from the customer for a portion of the initial installed cost of any such installation and shall require payment by the customer of monthly charges sufficient to cover all of KUB's costs (except reimbursed costs), including appropriate overheads of providing, owning, and maintaining such installations, and making lamp replacements.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

LIGHT-EMITTING DIODE (LED) OUTDOOR LIGHTING RATE - SCHEDULE LED

Availability

Available for LED outdoor lighting service to individual customers. Service under this schedule is for a term of not less than one year.

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.

Charges per Fixture Per Month

(a) Lamp Size	Rated kWh	Facility Charge	Total Lamp Charge
100 WE	21	\$5.91	\$ 7.72
250 WE	58	7.32	12.31
400 WE	79	10.05	16.84

(b) Energy Charge: For each lamp size under (a) above,

Summer Period	\$0.08596 per kWh per month
Winter Period	\$0.08596 per kWh per month
Transition Period	\$0.08596 per kWh per month

Additional Facilities

The above charges are limited to service installed on a pole already in place. If the customer wishes to have the fixture installed at a location other than on a pole already in place, the customer shall pay an additional monthly charge of \$5.18 per pole for additional poles required to serve the fixture from KUB's nearest available source.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in

purchased power costs as determined by any purchased power adjustment adopted by the Board.

Lamp Replacements

Replacements of lamps and related glassware will be made in accordance with replacement policies of KUB.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

11

GENERAL POWER RATE SCHEDULE TDGSA

Availability

This rate, subject to availability from TVA, shall be available for firm electric power requirements where the higher of a customer's currently effective onpeak or offpeak contract demand is greater than 1,000 kW but not more than 5,000 kW for electric service to commercial, industrial, and governmental customers, and to institutional customers, including, without limitation, churches, clubs, fraternities, orphanages, nursing homes, rooming or boarding houses, and like customers, provided that the other conditions of this section are met.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

Customer Charge:

\$1,500 per delivery point per month.

Administrative Charge: \$700 per delivery point per month.

Demand Charge: Summer Period: Onpeak Demand

\$10.96 per kW per month of the customer's onpeak billing demand, plus

\$7.20 per kW per month of the customer's maximum billing demand plus
\$18.16 per kW per month for each kW 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
\$10.00 per kW per month of the customer's onpeak billing demand, plus
\$7.20 per kW per month of the customer's maximum billing demand plus
\$17.20 per kW per month for each kW 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
\$10.00 per kW per month of the customer's onpeak billing demand, plus
\$7.20 per kW per month of the customer's maximum billing demand plus
\$17.20 per kW per month for each kW 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
0.11138 per kWh per month for all metered onpeak kWh, plus

Offpeak Block 1

\$0.07785 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

Block 2	\$0.03533 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.03230 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Winter Period: Onpeak	\$0.09608 per kWh per month for all metered onpeak kWh, plus
onpour	to boot per kivin per month for all metered onpeak kivin, plus
Offpeak	
Block 1	\$0.08082 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.03533 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.03230 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
2	
Transition Period: Onpeak	\$0.08201 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	\$0.08201 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.03533 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.03230 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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 and (2) 40 percent of any kW in excess of 5,000 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 and (2) 40 percent of the first 5,000 kW and shall in no case be less than the sum of (1) 30 percent of the first 5,000 kW and (2) 40 percent of the first 5,000 kW and (2) 40 percent of any kW in excess of 5,000 kW and (2) 40 percent of any kW in

5,000 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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the Board shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least one year; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than four 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a

single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

GENERAL POWER RATE SCHEDULE GSB

Availability

This rate, subject to availability from TVA, shall be available for firm electric power requirements where the higher of a customer's currently effective onpeak or offpeak contract demand is greater than 5,000 kW but not more than 15,000 kW; provided that the other conditions of this section are met.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

Customer Charge: \$1,500 per delivery point per month.

Administrative Charge: \$700 per delivery point per month.

Demand Charge: Summer Period:	
Onpeak Demand	\$10.76 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$6.24 per kW per month of the customer's maximum billing demand plus

Excess Demand	\$17.00 per kW per month for each kW 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	\$9.80 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$6.24 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$16.04 per kW per month for each kW 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	\$9.80 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$6.24 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$16.04 per kW per month for each kW 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 Charge:	
Summer Period:	
Onpeak	\$0.08710 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	\$0.06242 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02818 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

Block 3	\$0.02480 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Winter Period: Onpeak	\$0.07585 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	\$0.06462 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02818 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.02480 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Transition Period:	
Onpeak	\$0.06211 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	\$0.06211 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02818 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.02480 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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 and (2) 40 percent of any kW in excess of 5,000 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 and (2) 40 percent of the first 5,000 kW and (2) 40 percent of any kW in excess of 5,000 kW of the higher of the currently effective offpeak billing demand or the highest of the sum of (1) 30 percent of the first 5,000 kW and (2) 40 percent of any kW in excess of 5,000 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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the Board shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least one year; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than four 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

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GENERAL POWER RATE SCHEDULE GSC

Availability

This rate, subject to availability from TVA, shall be available for firm electric power requirements where the higher of a customer's currently effective onpeak or offpeak contract demand is greater than 15,000 kW but not more than 25,000 kW; provided that the other conditions of this section are met.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

Customer Charge:	\$1,500 per delivery point per month.
Administrative Charge:	\$700 per delivery point per month.
Demand Charge: Summer Period: Onpeak Demand	\$10.76 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$6.11 per kW per month of the customer's maximum billing demand plus

Excess Demand	\$16.87 per kW per month for each kW 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	\$9.80 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$6.11 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$15.91 per kW per month for each kW 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	\$9.80 per kW per month of the customer's onpeak billing demand, plus
Maximum Demano	d \$6.11 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$15.91 per kW per month for each kW 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 Charge: Summer Period: Onpeak	\$0.08701 per kWh per month for all metered onpeak kWh, plus
Offpeak Block 1	\$0.06233 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02809 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.02471 per kWh per month for the hours use of onpeak

	metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Winter Period: Onpeak	\$0.07576 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	\$0.06453 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02809 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.02471 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Transition Period:	
Onpeak	\$0.06202 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	\$0.06202 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02809 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.02471 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk

transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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, and (3) 50 percent of any kW in excess of 25,000 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, and (3) 50 percent of any kW in excess of 25,000 kW, (2) 40 percent of the next 20,000 kW, and (3) 50 percent of any kW in excess of 25,000 kW of the higher of the currently effective offpeak contract demand or the first 5,000 kW, (2) 40 percent of the next 20,000 kW, and (3) 50 percent of any kW in excess of 25,000 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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the Board shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least one year; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than four 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

GENERAL POWER RATE SCHEDULE GSD

Availability

This rate, subject to availability from TVA, shall be available for firm electric power requirements where the higher of a customer's currently effective onpeak or offpeak contract demand is greater than 25,000 kW; provided that the other conditions of this section are met.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

Customer Charge: \$1,500 per delivery point per month.

Administrative Charge: \$700 per delivery point per month.

Demand Charge: Summer Period: Onpeak Demand	\$10.76 per kW per month of the customer's onpeak
onpour Domana	billing demand, plus
Maximum Demand	\$5.98 per kW per month of the customer's maximum billing demand plus

Excess Demand \$16.74 per kW per month for each kW 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** \$9.80 per kW per month of the customer's onpeak billing demand, plus Maximum Demand \$5.98 per kW per month of the customer's maximum billing demand plus Excess Demand \$15.78 per kW per month for each kW 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** \$9.80 per kW per month of the customer's onpeak billing demand, plus Maximum Demand \$5.98 per kW per month of the customer's maximum billing demand plus Excess Demand \$15.78 per kW per month for each kW 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 Charge: Summer Period: Onpeak \$0.08695 per kWh per month for all metered onpeak kWh, plus Offpeak Block 1 \$0.06227 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus Block 2 \$0.02689 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

\$0.02465 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
\$0.07570 per kWh per month for all metered onpeak kWh, plus
\$0.06447 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
\$0.02689 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
\$0.02465 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
\$0.06196 per kWh per month for all metered onpeak kWh, plus
\$0.06196 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
\$0.02689 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
\$0.02465 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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 shall in no case be less than the sum of (1) 30 percent of the next 20,000 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 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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the **Board** shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least five years; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than sixteen 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

MANUFACTURING SERVICE RATE SCHEDULE TDMSA

Availability

This rate, subject to availability from TVA, shall be available for firm electric power requirements where (a) a customer's currently effective onpeak or offpeak contract demand, whichever is higher, is greater than 1,000 kW but not more 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, and 541214.

Prior to initially taking any service under this schedule, and from time to time thereafter as may be required by KUB, a customer shall certify to KUB that it meets the requirements set forth in condition (b) above. The certification form to be used shall be furnished by KUB to the customer, and signed and promptly returned by the customer to KUB. Further, such customer shall promptly certify any change in the status of any of the information contained in the certification form.

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 KUB under, and billed in accordance with, the applicable General Power schedule.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

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Customer Charge:	\$1,500 per delivery point per month.
Administrative Charge:	\$700 per delivery point per month.
Demand Charge: Summer Period: Onpeak Demand	\$10.25 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$5.48 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$15.73 per kW per month for each kW 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	\$9.28 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$5.48 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$14.76 per kW per month for each kW 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	\$9.28 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$5.48 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$14.76 per kW per month for each kW 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

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Energy Charge: Summer Period: Onpeak	\$0.08604 per kWh per month for all metered onpeak kWh, plus
Office als	
Offpeak Block 1	\$0.06101 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.03356 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.03101 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
and the second second	
Winter Period: Onpeak	\$0.07461 per kWh per month for all metered onpeak kWh, plus
Offpeak Block 1	\$0.06324 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.03356 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.03101 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Transition Period:	
Onpeak	\$0.06413 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	\$0.06413 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.03356 per kWh per month for the next 200 hours use of

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onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

Block 3 \$0.03101 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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 and (2) 40 percent of any kW in excess of 5,000 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 and (2) 40 percent of the first 5,000 kW and (2) 40 percent of any kW in excess of 5,000 kW of the higher of the currently effective offpeak billing demand established during the preceding 12 months. The offpeak billing demand or the highest offpeak contract demand or the highest offpeak billing demand established during the preceding 12 months.

Minimum Bill

The monthly bill under this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the Board shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least one year; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than four 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

MANUFACTURING SERVICE RATE SCHEDULE MSB

Availability

This rate, subject to availability from TVA, shall be available for 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 but not more than 15,000 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, and 541214.

Prior to initially taking any service under this schedule, and from time to time thereafter as may be required by KUB, a customer shall certify to KUB that it meets the requirements set forth in condition (b) above. The certification form to be used shall be furnished by KUB to the customer, and signed and promptly returned by the customer to KUB. Further, such customer shall promptly certify any change in the status of any of the information contained in the certification form.

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 KUB under, and billed in accordance with, the applicable General Power schedule.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

Customer Charge: \$1,500 per delivery point per month. Administrative Charge: \$700 per delivery point per month. Demand Charge: Summer Period: **Onpeak Demand** \$10.14 per kW per month of the customer's onpeak billing demand, plus Maximum Demand \$3.26 per kW per month of the customer's maximum billing demand plus Excess Demand \$13.40 per kW per month for each kW 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** \$9.18 per kW per month of the customer's onpeak billing demand, plus Maximum Demand \$3.26 per kW per month of the customer's maximum billing demand plus Excess Demand \$12.44 per kW per month for each kW 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** \$9.18 per kW per month of the customer's onpeak billing demand, plus Maximum Demand \$3.26 per kW per month of the customer's maximum billing demand plus Excess Demand \$12.44 per kW per month for each kW 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 Charge: Summer Period: Onpeak	\$0.07964 per kWh per month for all metered onpeak kWh, plus
Offpeak Block 1	\$0.05488 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02547 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.02295 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Winter Period:	
Onpeak	\$0.06834 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	\$0.05709 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02547 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.02295 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Transition Period: Onpeak	\$0.05795 per kWh per month for all metered onpeak kWh, plus
	teres of her man her month of an more of enhour man had
Offpeak Block 1	\$0.05795 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02547 per kWh per month for the next 200 hours use of

onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

Block 3 \$0.02295 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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 and (2) 40 percent of any kW in excess of 5,000 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 and (2) 40 percent of the first 5,000 kW and (2) 40 percent of any kW in excess of 5,000 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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the Board shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least one year; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than four 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

MANUFACTURING SERVICE RATE SCHEDULE MSC

Availability

This rate, subject to availability from TVA, shall be available for firm electric power requirements where (a) a customer's currently effective onpeak or offpeak contract demand, whichever is higher, is greater than 15,000 kW but not more than 25,000 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, and 541214.

Prior to initially taking any service under this schedule, and from time to time thereafter as may be required by KUB, a customer shall certify to KUB that it meets the requirements set forth in condition (b) above. The certification form to be used shall be furnished by KUB to the customer, and signed and promptly returned by the customer to KUB. Further, such customer shall promptly certify any change in the status of any of the information contained in the certification form.

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 KUB under, and billed in accordance with, the applicable General Power schedule.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

Customer Charge:	\$1,500 per delivery point per month.
Administrative Charge:	\$700 per delivery point per month.
Demand Charge: Summer Period: Onpeak Demand	\$10.14 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$3.14 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$13.28 per kW per month for each kW 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	\$9.18 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$3.14 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$12.32 per kW per month for each kW 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	\$9.18 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$3.14 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$12.32 per kW per month for each kW 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 Charge: Summer Period: Onpeak	\$0.07858 per kWh per month for all metered onpeak kWh, plus	
Offpeak Block 1	\$0.05381 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus	
Block 2	\$0.02691 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus	
Block 3	\$0.02691 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy	
Winter Period: Onpeak	\$0.06727 per kWh per month for all metered onpeak kWh, plus	
Offpeak Block 1	\$0.05601 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus	
Block 2	\$0.02691 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus	
Block 3	\$0.02691 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy	
Transition Period: Onpeak	\$0.05688 per kWh per month for all metered onpeak kWh, plus	
Offpeak Block 1	\$0.05688 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus	
Block 2	\$0.02691 per kWh per month for the next 200 hours use of	

onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

Block 3 \$0.02691 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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, and (3) 50 percent of any kW in excess of 25,000 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, and (3) 50 percent of the first 5,000 kW, (2) 40 percent of the next 20,000 kW, and (3) 50 percent of the first 5,000 kW, (2) 40 percent of the next 20,000 kW, and (3) 50 percent of any kW in excess of 25,000 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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the Board shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least one year; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than four 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

MANUFACTURING SERVICE RATE SCHEDULE MSD

Availability

This rate, subject to availability from TVA, shall be available for firm electric power requirements where (a) a customer's currently effective onpeak or offpeak contract demand, whichever is higher, is greater than 25,000 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, and 541214.

Prior to initially taking any service under this schedule, and from time to time thereafter as may be required by KUB, a customer shall certify to KUB that it meets the requirements set forth in condition (b) above. The certification form to be used shall be furnished by KUB to the customer, and signed and promptly returned by the customer to KUB. Further, such customer shall promptly certify any change in the status of any of the information contained in the certification form.

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 KUB under, and billed in accordance with, the applicable General Power schedule.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

Customer Charge:	\$1,500 per delivery point per month.
Administrative Charge:	\$700 per delivery point per month.
Demand Charge: Summer Period: Onpeak Demand	\$10.14 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$2.71 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$12.85 per kW per month for each kW 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	\$9.18 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$2.71 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$11.89 per kW per month for each kW 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	\$9.18 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$2.71 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$11.89 per kW per month for each kW 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 Charge: Summer Period:	\$0.07514 per WMb per month for all motored appeak KMb plus
Onpeak	\$0.07514 per kWh per month for all metered onpeak kWh, plus
Offpeak Block 1	\$0.05038 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02406 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.02348 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Winter Period:	
Onpeak	\$0.06384 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	\$0.05257 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02406 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.02348 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Transition Period:	
Onpeak	\$0.05344 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	\$0.05344 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02406 per kWh per month for the next 200 hours use of

onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

Block 3 \$0.02348 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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 and (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 shall in no case be less than the sum of (1) 30 percent of the next 20,000 kW, (3) 50 percent of the next 50,000 kW, (4) 60 percent of the next 50,000 kW, (5) 70 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, and (7) 85 percent of the next 100,000 kW, (6) 80 percent of the next 150,000 kW, and (7) 85 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, (6) 80 percent of the next 150,000 kW, and (7) 85 percent of all kW in excess of 350,000 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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the Board shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The

contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least five years; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than sixteen 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

ELECTRIC VEHICLE CHARGING POWER RATE - SCHEDULE EVC

Availability

This rate shall exclusively apply to separately metered charging stations for electric vehicles where the charging station's demand is greater than 50 kW but not more than 5,000 kW.

All customers participating under this rate schedule shall agree to a full requirements service from KUB. In addition, customers must agree that the sole use of the electric service is for the purpose of charging electric vehicles used for transportation purposes only.

Unless otherwise provided for in a written agreement between TVA and KUB, 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 rate schedule is being calculated.

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

Customer Charge: \$100 per delivery point per month

Energy Charge: All Seasons:	
Onpeak	\$0.14225 per kWh per month for all metered onpeak kWh, plus
Offpeak	\$0.14225 per kWh per month for all metered offpeak kWh, plus

Distribution Delivery Charge: \$0.08219 per total metered kWh per month

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

Facilities Rental Charge

Where the charging station's demand is greater than 50 kW, but not more than 1,000 kW, there shall be no facilities rental charge under this rate schedule.

Where the charging station's demand is greater than 1,000 kW there shall be no facilities rental charge under this rate schedule 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 37¢ per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97¢ per kW per month for the first 10,000 kW and 76¢ 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 this rate schedule, 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 this rate schedule, 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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule 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 CST or CDT, whichever is then in effect. Said onpeak and offpeak hours are subject to change by KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule as onpeak and offpeak hours; provided, however, that notwithstanding the metered energy amount, the Distribution Delivery energy for any month shall in no case be less than the product of (1) the maximum billing demand as calculated in the paragraph below and (2) 37 hours (reflecting a 5 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 and (2) 40 percent of any kW in excess of 5,000 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 and (2) 40 percent of any kW in excess of 5,000 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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge, (2) the base onpeak energy charge, as adjusted, applied to the customer's onpeak energy takings, (3) the base offpeak energy charge, as adjusted, applied to the customer's offpeak energy takings, and (4) the base distribution delivery charge applied to the higher of the customer's total energy takings or the minimum energy takings amount provided for in the first paragraph of the section of this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts."

KUB may require minimum bills higher than those stated above.

Contract Requirement

All customers shall be required to execute contracts and such contracts shall be for an initial term of at least 1 year. The customer shall contract for its maximum requirements, which shall not exceed the amount of power capable of being used by customer, and KUB shall not be obligated to supply power in greater amount at any time than the customer's currently effective contract demand. The customer is prohibited from using any power other than that supplied by KUB under this rate schedule. 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 approved by the Board.

After having received service for at least 1 year under this rate schedule, the customer, subject to 90 days prior written notice and appropriate amendments in its power contract with KUB, may receive service under the General Power Rate - Schedule GSA. In such case the term of the power contract shall remain the same and the contract demand for service under the General Power Rate - Schedule GSA shall not be less than the contract demand in effect when service was taken under this rate schedule.

Single-Point Delivery

The charges under this rate 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.

Rules and Regulations

INTERRUPTIBLE POWER 5 (IP5)

Availability

KUB provides Interruptible Power 5 (IP5) to qualified power users through its wholesale power supplier, the Tennessee Valley Authority (TVA), in accordance with the power supply contract between KUB and TVA.

IP5 shall be made available to qualified power users pursuant to specific contractual arrangements between KUB and the customer (such contractual arrangements may be contained in one or more written instruments and are hereinafter sometimes referred to as the "Contract").

Charges for IP5

KUB Administrative Charge:

\$350.00 per month

All other IP5-related charges including TVA Administrative Cost Charges shall be established in accordance with the Contract.

Interruptibility

IP5 furnished to a customer under the Contract shall be subject to interruption and to suspension of availability as provided for in the Contract.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

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INTERRUPTIBLE POWER 30 (IP30)

Availability

KUB provides Interruptible Power 30 (IP30) to qualified power users through its wholesale power supplier, the Tennessee Valley Authority (TVA), in accordance with the power supply contract between KUB and TVA.

IP30 shall be made available to qualified power users pursuant to specific contractual arrangements between KUB and the customer (such contractual arrangements may be contained in one or more written instruments and are hereinafter sometimes referred to as the "Contract").

Charges for IP30

KUB Administrative Charge:

\$350.00 per month

All other IP30-related charges including TVA Administrative Cost Charges shall be established in accordance with the Contract.

Interruptibility

IP30 furnished to a customer under the Contract shall be subject to interruption and to suspension of availability as provided for in the Contract.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

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TWO-PART REAL TIME PRICING (RTP)

Availability

KUB provides Two-Part Real Time Pricing (Two-Part RTP) to qualified general power users through its wholesale power supplier, the Tennessee Valley Authority (TVA), in accordance with the power supply contract between KUB and TVA.

Two-Part RTP shall be made available to qualified general power users pursuant to specific contractual arrangements between KUB and the customer (such contractual arrangements may be contained in one or more written instruments and are hereinafter sometimes referred to as the "Contract").

Charges for Two-Part RTP

KUB Administrative Charge:

\$350.00 per month

All other Two-Part RTP charges including TVA Administrative Charges shall be established in accordance with the Contract.

Interruptibility

Two-Part RTP furnished to a customer under the Contract may be subject to interruption and to suspension of availability as provided for in the Contract.

Rules and Regulations

START-UP AND TESTING POWER (STP)

Availability

KUB provides Start-up and Testing Power (STP) to qualified power users through its wholesale power supplier, the Tennessee Valley Authority (TVA), in accordance with the power supply contract between KUB and TVA.

STP shall be made available to qualified power users pursuant to specific contractual arrangements between KUB and the customer (such contractual arrangements may be contained in one or more written instruments and are hereinafter sometimes referred to as the "Contract").

Charges for STP

KUB Administrative Charge:

\$350.00 per month

All other STP-related charges including TVA Administrative Cost Charges shall be established in accordance with the Contract.

Interruptibility

STP furnished to a customer under the Contract shall be subject to interruption and to suspension of availability as provided for in the Contract.

Rules and Regulations

PILOT PROGRAM RESIDENTIAL TIME-OF-USE RATE SCHEDULE RS-TOU

Residential Time-Of-Use Rate Pilot Program Description

The purpose of the Residential Time-Of-Use Rate pilot program (RS-TOU pilot) is to enable a phased implementation of Time-Of-Use rates for all KUB Residential customers. The RS-TOU pilot will provide participating customers experience with Time-Of-Use billing processes and the bill impacts of varying usage in response to Time-Of-Use rates. The duration of the RS-TOU pilot shall be determined by KUB at its sole discretion.

Residential Time-Of-Use Rate Pilot Program Availability

This rate shall be available only for electric service through a single meter, or served through a multiple meter configuration designed as a single billing point for the Generation Partner program, or similar TVA program, to a single-family dwelling, where the major use of electricity is for domestic purposes such as lighting, household appliances, and the personal comfort and convenience of those residing therein. This rate shall be available to customers which have an advanced meter and have elected to participate in the RS-TOU pilot. KUB reserves the right to limit participation.

Character of Service

Alternating current, single-phase, 60 hertz. Power shall be delivered at a service voltage available in the vicinity or agreed to by KUB. Multi-phase service shall be supplied in accordance with KUB's standard policy.

Base Charges

Basic Service Charge:

\$20.50 per month

Energy Charge:

Onpeak Offpeak \$0.20171 per kWh per month for all metered onpeak kWh \$0.06995 per kWh per month for all metered offpeak kWh

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

Determination of Onpeak and Offpeak Hours

All hours stated in Eastern Prevailing time

Weekdays (Monday - Friday)

Onpeak 2 p.m. to 8 p.m. calendar months April through October

5 a.m. to 11 a.m. calendar months November through March

Offpeak All other hours

Weekends and Holidays*

All hours Offpeak

*Holidays include:

New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day

Minimum Monthly Bill

The basic service charge constitutes the minimum monthly bill for all customers served under this rate schedule except those customers for which a higher minimum monthly bill is required under KUB's standard policy because of special circumstances affecting the cost of rendering service.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery and metering point, and at a single voltage.

Rules and Regulations

PILOT PROGRAM GENERAL POWER TIME-OF-USE RATE SCHEDULE GSA-TOU

General Power Time-Of-Use Rate Pilot Program Description

The purpose of the General Power Time-Of-Use Rate pilot program (GSA-TOU pilot) is to enable a phased implementation of Time-Of-Use rates for all KUB General Power customers with demand of 1,000 kW or less. The GSA -TOU pilot will provide participating customers experience with Time-Of-Use billing processes and the bill impacts of varying usage in response to Time-Of-Use rates. The duration of the GSA-TOU pilot shall be determined by KUB at its sole discretion.

General Power Time-Of-Use Pilot Program Availability

This rate shall be available for the firm power requirements (where a customer's contract demand is 1,000 kW or less) for electric service to non-residential customers. This rate shall be available to customers which have an advanced meter and have elected to participate in the GSA-TOU pilot. KUB reserves the right to limit participation.

Character of Service

Alternating current, single or three-phase, 60 hertz. Power shall be delivered at a service voltage available in the vicinity or agreed to by KUB.

Base Charges

1. If (a) the higher of (i) the customer's currently effective contract demand, if any, or (ii) its highest billing demand during the latest 12-month period is not more than 50 kW:

Customer Charge: \$30.00 per delivery point per month

Demand Charge: \$2.06 per kW of maximum billing demand per month

Energy Charge:

Onpeak \$0.20917 per kWh per month for all metered onpeak kWh

Offpeak \$0.07741 per kWh per month for all metered offpeak kWh

2A. If the higher of (i) the customer's currently effective contract demand or (ii) its highest billing demand during the latest 12-month period is greater than 50 kW but not more than 100 kW:

Customer Charge:	\$98.00 per delivery point per month
Demand Charge:	\$4.61 per kW of maximum billing demand per month
Energy Charge:	
Onpeak	\$0.22192 per kWh per month for all metered onpeak kWh

- Offpeak \$0.09016 per kWh per month for all metered offpeak kWh
- 2B. If the higher of (a) the customer's currently effective contract demand or (b) its highest billing demand during the latest 12-month period is greater than 100 kW but not more than 1,000 kW:

Customer Charge: \$114.00 per delivery point per month

Demand Charge: \$6.79 per kW of maximum billing demand per month

Energy Charge:

Onpeak \$0.19818 per kWh per month for all metered onpeak kV	Onpeak	\$0.19818 per kWh	per month for al	I metered onpeak kW
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- Offpeak \$0.06642 per kWh per month for all metered offpeak kWh
- If the higher of (a) the customer's currently effective contract demand or (b) its highest billing demand during the latest 12-month period is greater than 1,000 kW:
 - A. Customers meeting these requirements are not eligible to enter the GSA-TOU pilot program. The TDGSA and TDMSA (if qualified) rates are available as Time-Of-Use alternatives at this level of demand.
 - B. If customer's demand rises above 1,000 kW while participating in the GSA-TOU pilot program, the customer will be removed from the pilot and billed under General Power Rate - Schedule GSA.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes

in purchased power costs as determined by any purchased power adjustment adopted by the Board.

Determination of Onpeak and Offpeak Hours

All hours stated in Eastern Prevailing time

Weekdays (Monday - Friday)

Onpeak 2 p.m. to 8 p.m. calendar months April through October

5 a.m. to 11 a.m. calendar months November through March

Offpeak All other hours

Weekends and Holidays*

All hours Offpeak

*Holidays include:

New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day

Determination of Demand

KUB shall meter the demands in kW of all customers served under the GSA-TOU rate schedule. The Metered Demand for any month shall be the highest average during any 30-minute-consecutive period of the month of the load metered in kW. The Measured Demand for any month shall be the higher of (a) or (b) below:

The Billing Demand for any month shall be the higher of the following:

- a) Metered Demand
- b) 85 percent of the load in kVA
- c) 30 percent of the higher of the currently effective contract demand or the highest billing demand established during the preceding 12 months.

Minimum Bill

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The monthly bill under this rate schedule shall not be less than the sum of (a) the customer charge, (b) the demand charge, as adjusted, applied to the customer's billing demand, and (c) the energy charges, as adjusted, applied to the customer's energy takings.

KUB may require minimum bills higher than those stated above.

Contract Requirements

At its sole discretion, KUB may require contracts for service provided under this rate schedule and such contracts shall be for an initial term of at least one year. The customer shall contract for its maximum requirements, which shall not exceed the amount of power capable of being used by customer, and KUB shall not be obligated to supply power in greater amount at any time than the customer's currently effective contract demand. If the customer uses any power other than that supplied by KUB under this rate schedule, 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 approved by the Board.

Single – Point Delivery

The charges under this rate 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 at each different voltage shall be separately metered and billed.

Rules and Regulations

RESOLUTION 1441 EXHIBIT B RATE SCHEDULES OF THE ELECTRIC DIVISION EFFECTIVE APRIL 1, 2023

RESIDENTIAL RATE - SCHEDULE RS

Availability

This rate shall be available only for electric service to a single-family dwelling and its appurtenances, where the major use of electricity is for domestic purposes such as lighting, household appliances, and the personal comfort and convenience of those residing therein.

Character of Service

Alternating current, single-phase, 60 hertz. Power shall be delivered at a service voltage available in the vicinity or agreed to by KUB. Multi-phase service shall be supplied in accordance with KUB's standard policy.

Base Charges

Basic Service Charge: \$20.50 per month

Energy Charge:

Summer Period	\$0.09834 per kWh per month
Winter Period	\$0.09793 per kWh per month
Transition Period	\$0.09793 per kWh per month

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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.

Minimum Monthly Bill

The basic service charge constitutes the minimum monthly bill for all customers served under this rate schedule except those customers for which a higher minimum monthly bill is required under KUB's standard policy because of special circumstances affecting the cost of rendering service.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery and metering point, and at a single voltage.

Rules and Regulations

GENERAL POWER RATE - SCHEDULE GSA

Availability

This rate shall be available for the firm power requirements (where a customer's contract demand is 5,000 kW or less) for electric service to non-residential customers. This rate shall also apply to customers to whom service is not available under any other resale rate schedule.

Character of Service

Alternating current, single or three-phase, 60 hertz. Power shall be delivered at a service voltage available in the vicinity or agreed to by KUB.

Base Charges

 If (a) the higher of (i) the customer's currently effective contract demand, if any, or (ii) its highest billing demand during the latest 12-month period is not more than 50 kW and (b) the customer's monthly energy takings for any month during such period do not exceed 15,000 kWh:

Customer Charge: \$31.00 per delivery point per month

Energy Charge:

Summer Period	\$0.11840 per kWh per month
Winter Period	\$0.11799 per kWh per month
Transition Period	\$0.11799 per kWh per month

2.

If (a) the higher of (i) the customer's currently effective contract demand or (ii) its highest billing demand during the latest 12-month period is greater than 50 kW but not more than 1,000 kW or (b) the customer's billing demand is less than 50 kW and its energy takings for any month during such period exceed 15,000 kWh:

Customer Charge:	\$101.00 per delivery point per month
Demand Charge:	
Summer Period	First 50 kW of billing demand per month, no demand charge
	Excess over 50 kW of billing demand per month, at \$16.22 per kW
Winter Period	First 50 kW of billing demand per month, no demand charge

	Excess over 50 kW of billing demand per month, at \$15.43 per kW
Transition Period	First 50 kW of billing demand per month, no demand charge
	Excess over 50 kW of billing demand per month, at \$15.43 per kW
Energy Charge:	
Summer Period	First 15,000 kWh per month at \$0.14851 per kWh
	Additional kWh per month at \$0.06560 per kWh
Winter Period	First 15,000 kWh per month at \$0.14810 per kWh
	Additional kWh per month at \$0.06560 per kWh
Transition Period	First 15,000 kWh per month at \$0.14810 per kWh
	Additional kWh per month at \$0.06560 per kWh
	stomer's currently effective contract demand or (b) its
highest billing demand d 1,000 kW:	stomer's currently effective contract demand or (b) its uring the latest 12-month period is greater than
highest billing demand d 1,000 kW: Customer Charge:	stomer's currently effective contract demand or (b) its uring the latest 12-month period is greater than
highest billing demand d 1,000 kW: Customer Charge: Demand Charge:	stomer's currently effective contract demand or (b) its uring the latest 12-month period is greater than \$278.00 per delivery point per month First 1,000 kW of billing demand per month, at \$17.02
highest billing demand d 1,000 kW: Customer Charge: Demand Charge:	stomer's currently effective contract demand or (b) its uring the latest 12-month period is greater than \$278.00 per delivery point per month First 1,000 kW of billing demand per month, at \$17.02 per kW Excess over 1,000 kW of billing demand per month, at
highest billing demand d 1,000 kW: Customer Charge: Demand Charge:	 stomer's currently effective contract demand or (b) its uring the latest 12-month period is greater than \$278.00 per delivery point per month First 1,000 kW of billing demand per month, at \$17.02 per kW Excess over 1,000 kW of billing demand per month, at \$17.71 per kW, plus an additional \$17.71 per kW per month for each kW, if any, of the amount by which the customer's billing demand exceeds the higher of 2,500 kW or its contract
highest billing demand d 1,000 kW: Customer Charge: Demand Charge: Summer Period	 stomer's currently effective contract demand or (b) its uring the latest 12-month period is greater than \$278.00 per delivery point per month First 1,000 kW of billing demand per month, at \$17.02 per kW Excess over 1,000 kW of billing demand per month, at \$17.71 per kW, plus an additional \$17.71 per kW per month for each kW, if any, of the amount by which the customer's billing demand exceeds the higher of 2,500 kW or its contract demand First 1,000 kW of billing demand per month, at

3.

Transition Period	First 1,000 kW of billing demand per month, at \$16.26 per kW
	Excess over 1,000 kW of billing demand per month, at \$16.95 per kW, plus an additional
	\$16.95 per kW per month for each kW, if any, of the amount by which the customer's billing demand exceeds the higher of 2,500 kW or its contract demand
Energy Charge:	
Summer Period	\$0.07617 per kWh per month

Winter Period	\$0.07617 per kWh per month
Transition Period	\$0.07617 per kWh per month

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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 Demand

KUB shall meter the demands in kW of all customers having loads in excess of 50 kW. The metered demand for any month shall be the highest average during any 30consecutive-minute period of the month of the load metered in kW. The measured demand for any month shall be the higher of the highest average during any 30consecutive-minute period of the month of (a) the load metered in kW or (b) 85 percent of the load in kVA plus an additional 10 percent for that part of the load over 5,000 kVA, and such measured demand shall be used as the billing demand, except that the billing demand for any month shall in no case be less than 30 percent of the higher of the currently effective contract demand or the highest billing demand established during the preceding 12 months.

Minimum Bill

The monthly bill under this rate schedule shall not be less than the sum of (a) the base customer charge, (b) the base demand charge, as adjusted, applied to the customer's billing demand, and (c) the base energy charge, as adjusted, applied to the customer's energy takings; provided, however, that, under (2.) of the Base Charges, the monthly bill shall in no event be less than the sum (a) the base customer charge and (b) 20 percent of the portion of the base demand charge, as adjusted, applicable to the second block (excess over 50kW) of billing demand, multiplied by the higher of the customer's currently effective contract demand or its highest billing demand established during the preceding 12 months.

KUB may require minimum bills higher than those stated above.

Contract Requirements

KUB shall require contracts for service provided under this rate schedule to customers whose demand requirements exceed 1,000 kW and such contracts shall be for an initial term of at least one year. The customer shall contract for its maximum requirements, which shall not exceed the amount of power capable of being used by customer, and KUB shall not be obligated to supply power in greater amount at any time than the customer's currently effective contract demand. If the customer uses any power other than that supplied by KUB under this rate schedule, 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 approved by the Board.

Single - Point Delivery

The charges under this rate 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 at each different voltage shall be separately metered and billed.

Rules and Regulations

OUTDOOR LIGHTING RATE - SCHEDULE LS

Availability

Available for service to street and park lighting systems, traffic signal systems, athletic field lighting installations, and outdoor lighting for individual customers.

Service under this schedule is for a term of not less than one year.

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.

PART A – CHARGES FOR STREET AND PARK LIGHTING SYSTEMS, TRAFFIC SIGNAL SYSTEMS, AND ATHLETIC FIELD LIGHTING INSTALLATIONS

Energy Charge:

L

Summer Period	\$0.08897 per kWh per month
Winter Period	\$0.08897 per kWh per month
Transition Period	\$0.08897 per kWh per month

V. Facility Charge

The annual facility charge shall be **17.02** percent of the installed cost to KUB's electric system of the facilities devoted to street and park lighting service specified in this Part A. Such installed cost shall be recomputed on July 1 of each year, or more often if substantial changes in the facilities are made. Each month, one-twelfth of the then total annual facility charge shall be billed to the customer. If any part of the facilities has not been provided at the electric system's expense or if the installed cost of any portion thereof is reflected on the books of another municipality or agency or department, the annual facility charge shall be adjusted to reflect properly the remaining cost to be borne by the electric system.

Traffic signal systems and athletic field lighting installations shall be provided, owned, and maintained by and at the expense of the customer, except as KUB may agree otherwise in accordance with the provisions of the paragraph next following in this Section II. The facilities necessary to provide service to such systems and installations shall be provided by and at the expense of KUB's electric system, and the annual facility charge provided for first above in this Section II shall apply to the installed cost of such facilities. When so authorized by policy duly adopted by the Board, traffic signal systems and athletic field lighting installations may be provided, owned, and maintained by KUB's electric system for the customer's benefit. In such cases KUB may require reimbursement from the customer for a portion of the initial installed cost of any such system or installation and shall require payment by the customer of a facility charge sufficient to cover all of KUB's costs (except reimbursed costs), including appropriate overheads, of providing, owning, and maintaining such system or installation; provided that, for athletic field lighting installations, such facility charge shall be **15.79** percent per year of such costs. Said facility charge shall be in addition to the annual facility charge on the facilities necessary to provide service to such system or installation as provided for in the preceding paragraph. Replacement of lamps and related glassware for traffic signal systems and athletic field lighting installations provided under this paragraph shall be paid for under the provisions of paragraph A in section IV.

VI. Customer Charge – Traffic Signal Systems and Athletic Field Lighting Installations.

KUB shall apply a uniform **monthly customer charge of \$2.50** for service to each traffic signal system or athletic field lighting installation.

VII. Replacement of Lamps and Related Glassware - Street and Park Lighting

Customer shall be billed and shall pay for replacements as provided in paragraph A below, which shall be applied to all service for street and park lighting.

- C. KUB shall bill the customer monthly for such replacements during each month at KUB's cost of materials, including appropriate storeroom expense.
- D. KUB shall bill the customer monthly for one-twelfth of the amount by which KUB's cost of materials, including appropriate storeroom expenses, exceeds the products of 3 mills multiplied by the number of kilowatt-hours used for street and park lighting during the fiscal year immediately preceding the fiscal year in which such month occurs.

Metering

For any billing month or part of such month in which the energy is not metered or for which a meter reading is found to be in error or a meter is found to have failed, the energy for billing purposes for that billing month or part of such month shall be computed from the rated capacity of the lamps (including ballast) plus 5 percent of such capacity to reflect secondary circuit losses, multiplied by the number of hours of use.

Revenue and Cost Review

KUB's costs of providing service under Part A of this rate schedule are subject to review at any time to determine if KUB's revenues from the charges being applied are sufficient to cover its costs. (Such costs, including applicable overheads, include, but are not limited to, those incurred in the operation and maintenance of the systems provided and those resulting from depreciation and payments for taxes, tax equivalents and interest). If any such review discloses that revenues are either less or more than sufficient to cover said costs, the Board shall revise the above facility charges so that revenues will be sufficient to cover said costs.

PART B-CHARGES FOR OUTDOOR LIGHTING FOR INDIVIDUAL CUSTOMERS

		Charges Per	Fixture P	er Month	
	La	mp Size	Rated	Facility	Total Lamp
		ts) (Lumens)	kWh	Charge	Charge
Mercury Vapor or 175		7,650	70	\$5.32	\$11.55
Incandescent*	400	19,100	155	7.43	21.22
	1,000**	47,500	378	11.89	45.52
High Pressure	100	8,550	42	\$5.32	\$ 9.06
Sodium	250	23,000	105	6.31	15.65
	400	45,000	165	7.43	22.11
	1,000**	126,000	385	11.89	46.14
Decorative	100	8,550	42	\$6.07	\$9.81

* Mercury Vapor and Incandescent fixtures not offered for new service.

** 1,000 watt fixtures not offered for new service.

Light-Emitting Diode (LED) options provided through Schedule LED

(b) Energy Charge: For each lamp size under (a) above,

Summer Period	\$0.08897 per kWh per month
Winter Period	\$0.08897 per kWh per month
Transition Period	\$0.08897 per kWh per month

Additional Facilities

The above charges in this Part B are limited to service from a photoelectrically controlled standard lighting fixture installed on a pole already in place. If the customer wishes to have the fixture installed at a location other than on a pole already in place, the

customer shall pay an **additional monthly charge of \$5.36 per pole** for additional poles required to serve the fixture from KUB's nearest available source. (This section does not apply to Decorative Lighting Fixtures).

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

Lamp Replacements

Replacements of lamps and related glassware will be made in accordance with replacement policies of KUB.

Special Outdoor Lighting Installations

When so authorized by policy duly adopted by the Board, special outdoor lighting installations (other than as provided for under Parts A and B above) may be provided, owned, and maintained by KUB's electric system. In such cases, KUB may require reimbursement from the customer for a portion of the initial installed cost of any such installation and shall require payment by the customer of monthly charges sufficient to cover all of KUB's costs (except reimbursed costs), including appropriate overheads of providing, owning, and maintaining such installations, and making lamp replacements.

Rules and Regulations

LIGHT-EMITTING DIODE (LED) OUTDOOR LIGHTING RATE - SCHEDULE LED

Availability

Available for LED outdoor lighting service to individual customers. Service under this schedule is for a term of not less than one year.

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.

Charges per Fixture Per Month

(a) Lamp Size	Rated kWh	Facility Charge	Total Lamp Charge
100 WE	21	\$6.12	\$ 7.99
250 WE	58	7.57	12.73
400 WE	79	10.40	17.43

(b) Energy Charge: For each lamp size under (a) above,

Summer Period	\$0.08897 per kWh per month
Winter Period	\$0.08897 per kWh per month
Transition Period	\$0.08897 per kWh per month

Additional Facilities

The above charges are limited to service installed on a pole already in place. If the customer wishes to have the fixture installed at a location other than on a pole already in place, the customer shall pay an additional monthly charge of \$5.36 per pole for additional poles required to serve the fixture from KUB's nearest available source.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in

purchased power costs as determined by any purchased power adjustment adopted by the Board.

Lamp Replacements

Replacements of lamps and related glassware will be made in accordance with replacement policies of KUB.

Rules and Regulations

GENERAL POWER RATE SCHEDULE TDGSA

Availability

This rate, subject to availability from TVA, shall be available for firm electric power requirements where the higher of a customer's currently effective onpeak or offpeak contract demand is greater than 1,000 kW but not more than 5,000 kW for electric service to commercial, industrial, and governmental customers, and to institutional customers, including, without limitation, churches, clubs, fraternities, orphanages, nursing homes, rooming or boarding houses, and like customers, provided that the other conditions of this section are met.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

Customer Charge:

\$1,500 per delivery point per month.

Administrative Charge: \$700 per delivery point per month.

Demand Charge: Summer Period: Onpeak Demand

\$10.96 per kW per month of the customer's onpeak billing demand, plus

Maximum Demand \$7.53 per kW per month of the customer's maximum billing demand plus Excess Demand \$18.49 per kW per month for each kW 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 \$10.00 per kW per month of the customer's onpeak billing demand, plus Maximum Demand \$7.53 per kW per month of the customer's maximum billing demand plus Excess Demand \$17.53 per kW per month for each kW 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 \$10.00 per kW per month of the customer's onpeak billing demand, plus Maximum Demand \$7.53 per kW per month of the customer's maximum billing demand plus Excess Demand \$17.53 per kW per month for each kW 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 Charge: Summer Period: Onpeak \$0.11409 per kWh per month for all metered onpeak kWh, plus

Offpeak

Block 1

\$0.08056 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

- Block 2 \$0.03804 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
- Block 3 \$0.03501 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

Winter Period: Onpeak

Offpeak Block 1

1 \$0.08353 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

\$0.09879 per kWh per month for all metered onpeak kWh, plus

- Block 2 \$0.03804 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
- Block 3 \$0.03501 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
- Transition Period:
Onpeak\$0.08472 per kWh per month for all metered onpeak kWh, plusOffpeak
Block 1\$0.08472 per kWh per month for the first 200 hours use of
onpeak metered demand multiplied by the ratio of offpeak
 - Block 2 \$0.03804 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
 - Block 3 \$0.03501 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

energy to total energy, plus

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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 and (2) 40 percent of any kW in excess of 5,000 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 and (2) 40 percent of the first 5,000 kW and (2) 40 percent of the sum of (1) 30 percent of the first 5,000 kW and (2) 40 percent of any kW in excess of 5,000 kW and (2) 40 percent of any kW in e

5,000 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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the Board shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least one year; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than four 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a

single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

GENERAL POWER RATE SCHEDULE GSB

Availability

This rate, subject to availability from TVA, shall be available for firm electric power requirements where the higher of a customer's currently effective onpeak or offpeak contract demand is greater than 5,000 kW but not more than 15,000 kW; provided that the other conditions of this section are met.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

Customer Charge:	\$1,500 per delivery point per month.

Administrative Charge: \$700 per delivery point per month.

Demand Charge: Summer Period:	
Onpeak Demand	\$10.76 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$6.33 per kW per month of the customer's maximum billing demand plus

- Excess Demand \$17.09 per kW per month for each kW 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: \$9.80 per kW per month of the customer's onpeak billing **Onpeak Demand** demand, plus Maximum Demand \$6.33 per kW per month of the customer's maximum billing demand plus Excess Demand \$16.13 per kW per month for each kW 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** \$9.80 per kW per month of the customer's onpeak billing demand, plus Maximum Demand \$6.33 per kW per month of the customer's maximum billing demand plus Excess Demand \$16.13 per kW per month for each kW 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 Charge: Summer Period: Onpeak \$0.08764 per kWh per month for all metered onpeak kWh, plus Offpeak Block 1 \$0.06296 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
 - Block 2 \$0.02872 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

\$0.02534 per kWh per month for the hours use of onpeak Block 3 metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy Winter Period: \$0.07639 per kWh per month for all metered onpeak kWh, plus Onpeak Offpeak Block 1 \$0.06516 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus Block 2 \$0.02872 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus \$0.02534 per kWh per month for the hours use of onpeak Block 3 metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy Transition Period: \$0.06265 per kWh per month for all metered onpeak kWh, plus Onpeak Offpeak Block 1 \$0.06265 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus Block 2 \$0.02872 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus Block 3 \$0.02534 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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 and (2) 40 percent of any kW in excess of 5,000 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 and (2) 40 percent of the first 5,000 kW and (2) 40 percent of any kW in excess of 5,000 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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the Board shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least one year; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than four 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

GENERAL POWER RATE SCHEDULE GSC

Availability

This rate, subject to availability from TVA, shall be available for firm electric power requirements where the higher of a customer's currently effective onpeak or offpeak contract demand is greater than 15,000 kW but not more than 25,000 kW; provided that the other conditions of this section are met.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

Customer Charge:	\$1,500 per delivery point per month.	
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Administrative Charge: \$700 per delivery point per month.

Demand Charge: Summer Period:	
Onpeak Demand	\$10.76 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$6.19 per kW per month of the customer's maximum billing demand plus

Excess Demand	\$16.95 per kW per month for each kW 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	\$9.80 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$6.19 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$15.99 per kW per month for each kW 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	\$9.80 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$6.19 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$15.99 per kW per month for each kW 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 Charge: Summer Period:	
	\$0.08764 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	\$0.06296 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02872 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.02534 per kWh per month for the hours use of onpeak

metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

Winter Period: Onpeak	\$0.07639 per kWh per month for all metered onpeak kWh, plus
Onpeak	
Offpeak	
Block 1	\$0.06516 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02872 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.02534 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Transition Period:	
Onpeak	\$0.06265 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	\$0.06265 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02872 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.02534 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk

transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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, and (3) 50 percent of any kW in excess of 25,000 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, and (3) 50 percent of the first 5,000 kW, (2) 40 percent of the next 20,000 kW, and (3) 50 percent of the first 5,000 kW, (2) 40 percent of the next 20,000 kW, and (3) 50 percent of any kW in excess of 25,000 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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands. Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the Board shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least one year; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than four 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

GENERAL POWER RATE SCHEDULE GSD

Availability

This rate, subject to availability from TVA, shall be available for firm electric power requirements where the higher of a customer's currently effective onpeak or offpeak contract demand is greater than 25,000 kW; provided that the other conditions of this section are met.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

Customer Charge:	\$1,500 per delivery point per month.

Administrative Charge: \$700 per delivery point per month.

Demand Charge: Summer Period:	
Onpeak Demand	\$10.76 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$6.06 per kW per month of the customer's maximum billing demand plus

- Excess Demand \$16.82 per kW per month for each kW 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 \$9.80 per kW per month of the customer's onpeak billing demand, plus

Maximum Demand \$6.06 per kW per month of the customer's maximum billing demand plus

Excess Demand \$15.86 per kW per month for each kW 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

Onpeak Demand \$9.80 per kW per month of the customer's onpeak billing demand, plus

Maximum Demand \$6.06 per kW per month of the customer's maximum billing demand plus

Excess Demand \$15.86 per kW per month for each kW 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 Charge: Summer Period: Onpeak

Transition Period:

\$0.08760 per kWh per month for all metered onpeak kWh, plus

Offpeak Block 1

\$1 \$0.06292 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

Block 2 \$0.02754 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

Block 3	\$0.02530 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Winter Period: Onpeak	\$0.07635 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	\$0.06512 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02754 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.02530 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Transition Period:	
Onpeak	\$0.06261 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	\$0.06261 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02754 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.02530 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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 shall in no case be less than the sum of (1) 30 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 50,000 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 50,000 kW, (6) 80 percent of the next 50,000 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 150,000 kW, (6) 80 percent of the next 150,000 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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the Board shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least five years; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than sixteen 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

MANUFACTURING SERVICE RATE SCHEDULE TDMSA

Availability

This rate, subject to availability from TVA, shall be available for firm electric power requirements where (a) a customer's currently effective onpeak or offpeak contract demand, whichever is higher, is greater than 1,000 kW but not more 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, and 541214.

Prior to initially taking any service under this schedule, and from time to time thereafter as may be required by KUB, a customer shall certify to KUB that it meets the requirements set forth in condition (b) above. The certification form to be used shall be furnished by KUB to the customer, and signed and promptly returned by the customer to KUB. Further, such customer shall promptly certify any change in the status of any of the information contained in the certification form.

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 KUB under, and billed in accordance with, the applicable General Power schedule.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

Customer Charge:	\$1,500 per delivery point per month.
Administrative Charge:	\$700 per delivery point per month.
Demand Charge: Summer Period: Onpeak Demand	\$10.25 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$5.74 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$15.99 per kW per month for each kW 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	\$9.28 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$5.74 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$15.02 per kW per month for each kW 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	\$9.28 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$5.74 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$15.02 per kW per month for each kW 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 Charge: Summer Period: Onpeak	\$0.08839 per kWh per month for all metered onpeak kWh, plus
0.0	
Offpeak Block 1	\$0.06336 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.03591 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.03336 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Winter Period: Onpeak	\$0.07696 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	\$0.06559 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.03591 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.03336 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Transition Period:	
Onpeak	\$0.06648 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	\$0.06648 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.03591 per kWh per month for the next 200 hours use of

onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

Block 3 \$0.03336 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board,

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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 and (2) 40 percent of any kW in excess of 5,000 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 and (2) 40 percent of the first 5,000 kW and (2) 40 percent of any kW in excess of 5,000 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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the Board shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least one year; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than four 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

MANUFACTURING SERVICE RATE SCHEDULE MSB

Availability

This rate, subject to availability from TVA, shall be available for 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 but not more than 15,000 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, and 541214.

Prior to initially taking any service under this schedule, and from time to time thereafter as may be required by KUB, a customer shall certify to KUB that it meets the requirements set forth in condition (b) above. The certification form to be used shall be furnished by KUB to the customer, and signed and promptly returned by the customer to KUB. Further, such customer shall promptly certify any change in the status of any of the information contained in the certification form.

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 KUB under, and billed in accordance with, the applicable General Power schedule.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

Customer Charge:	\$1,500 per delivery point per month.
Administrative Charge:	\$700 per delivery point per month.
Demand Charge: Summer Period: Onpeak Demand	\$10.14 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$3.30 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$13.44 per kW per month for each kW 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	\$9.18 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$3.30 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$12.48 per kW per month for each kW 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	\$9.18 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$3.30 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$12.48 per kW per month for each kW 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 Charge: Summer Period: Onpeak	\$0.08006 per kWh per month for all metered onpeak kWh, plus	
Offpeak Block 1	\$0.05530 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus	
Block 2	\$0.02589 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus	
Block 3	\$0.02337 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy	
Winter Period:		
Onpeak	\$0.06876 per kWh per month for all metered onpeak kWh, plus	
Offpeak		
Block 1	\$0.05751 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus	
Block 2	\$0.02589 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus	
Block 3	\$0.02337 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy	
Transition Period:		
Onpeak	\$0.05837 per kWh per month for all metered onpeak kWh, plus	
Offpeak		
Block 1	\$0.05837 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus	
Block 2	\$0.02589 per kWh per month for the next 200 hours use of	

onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

Block 3 \$0.02337 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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 and (2) 40 percent of any kW in excess of 5,000 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 and (2) 40 percent of the first 5,000 kW and (2) 40 percent of any kW in excess of 5,000 kW of the higher of the currently effective offpeak billing demand or the highest offpeak billing demand established during the preceding 12 months.

Minimum Bill

The monthly bill under this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the Board shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least one year; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than four 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

MANUFACTURING SERVICE RATE SCHEDULE MSC

Availability

This rate, subject to availability from TVA, shall be available for firm electric power requirements where (a) a customer's currently effective onpeak or offpeak contract demand, whichever is higher, is greater than 15,000 kW but not more than 25,000 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, and 541214.

Prior to initially taking any service under this schedule, and from time to time thereafter as may be required by KUB, a customer shall certify to KUB that it meets the requirements set forth in condition (b) above. The certification form to be used shall be furnished by KUB to the customer, and signed and promptly returned by the customer to KUB. Further, such customer shall promptly certify any change in the status of any of the information contained in the certification form.

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 KUB under, and billed in accordance with, the applicable General Power schedule.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

Customer Charge:	\$1,500 per delivery point per month.
Administrative Charge:	\$700 per delivery point per month.
Demand Charge: Summer Period: Onpeak Demand	\$10.14 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$3.18 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$13.32 per kW per month for each kW 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	\$9.18 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$3.18 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$12.36 per kW per month for each kW 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	\$9.18 per kW per month of the customer's onpeak billing
Onpeak Demand	demand, plus
Maximum Demand	\$3.18 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$12.36 per kW per month for each kW 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 Charge:		
Summer Period: Onpeak	\$0.07915 per kWh per month for all metered onpeak kWh, plus	
Опреак		
Offpeak		
Block 1	\$0.05438 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus	
Block 2	\$0.02748 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus	
Block 3	\$0.02748 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy	
Winter Period:	\$0.06704 ner WA/h ner menth for all metered appeals WA/h alve	
Onpeak	\$0.06784 per kWh per month for all metered onpeak kWh, plus	
Offpeak		
Block 1	\$0.05658 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus	
Block 2	\$0.02748 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus	
Block 3	\$0.02748 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy	
Transition Period:		
Onpeak	\$0.05745 per kWh per month for all metered onpeak kWh, plus	
Offpeak		
Block 1	\$0.05745 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus	
Block 2	\$0.02748 per kWh per month for the next 200 hours use of	

onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

Block 3 \$0.02748 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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, and (3) 50 percent of any kW in excess of 25,000 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, and (3) 50 percent of the first 5,000 kW, of the higher of the currently effective off (1) 30 percent of the first 5,000 kW, (2) 40 percent of the next 20,000 kW, and (3) 50 percent of any kW in excess of 25,000 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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the Board shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least one year; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than four 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

MANUFACTURING SERVICE RATE SCHEDULE MSD

Availability

This rate, subject to availability from TVA, shall be available for firm electric power requirements where (a) a customer's currently effective onpeak or offpeak contract demand, whichever is higher, is greater than 25,000 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, and 541214.

Prior to initially taking any service under this schedule, and from time to time thereafter as may be required by KUB, a customer shall certify to KUB that it meets the requirements set forth in condition (b) above. The certification form to be used shall be furnished by KUB to the customer, and signed and promptly returned by the customer to KUB. Further, such customer shall promptly certify any change in the status of any of the information contained in the certification form.

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 KUB under, and billed in accordance with, the applicable General Power schedule.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

Customer Charge:	\$1,500 per delivery point per month.
Administrative Charge:	\$700 per delivery point per month.
Demand Charge: Summer Period: Onpeak Demand	\$10.14 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$2.75 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$12.89 per kW per month for each kW 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	\$9.18 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$2.75 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$11.93 per kW per month for each kW 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	\$9.18 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$2.75 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$11.93 per kW per month for each kW 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

contract demand, whichever is higher
\$0.07568 per kWh per month for all metered onpeak kWh, plus
\$0.05092 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
\$0.02460 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
\$0.02402 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
\$0.06438 per kWh per month for all metered onpeak kWh, plus
\$0.05311 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
\$0.02460 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
\$0.02402 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
\$0.05398 per kWh per month for all metered onpeak kWh, plus
\$0.05398 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
\$0.02460 per kWh per month for the next 200 hours use of

onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

Block 3 \$0.02402 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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 and (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 shall in no case be less than the sum of (1) 30 percent of the next 20,000 kW, (6) 80 percent of the currently effective onpeak contract demand or the highest 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, and (7) 85 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 (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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the Board shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The

contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least five years; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than sixteen 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

ELECTRIC VEHICLE CHARGING POWER RATE - SCHEDULE EVC

Availability

This rate shall exclusively apply to separately metered charging stations for electric vehicles where the charging station's demand is greater than 50 kW but not more than 5,000 kW.

All customers participating under this rate schedule shall agree to a full requirements service from KUB. In addition, customers must agree that the sole use of the electric service is for the purpose of charging electric vehicles used for transportation purposes only.

Unless otherwise provided for in a written agreement between TVA and KUB, 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 rate schedule is being calculated.

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

Customer Charge: \$100 per delivery point per month

Energy Charge: All Seasons:	
Onpeak	\$0.14225 per kWh per month for all metered onpeak kWh, plus
Offpeak	\$0.14225 per kWh per month for all metered offpeak kWh, plus

Distribution Delivery Charge: \$0.08219 per total metered kWh per month

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

Facilities Rental Charge

Where the charging station's demand is greater than 50 kW, but not more than 1,000 kW, there shall be no facilities rental charge under this rate schedule.

Where the charging station's demand is greater than 1,000 kW there shall be no facilities rental charge under this rate schedule 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 37¢ per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97¢ per kW per month for the first 10,000 kW and 76¢ 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 this rate schedule, 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 this rate schedule, 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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule 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 CST or CDT, whichever is then in effect. Said onpeak and offpeak hours are subject to change by KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule as onpeak and offpeak hours; provided, however, that notwithstanding the metered energy amount, the Distribution Delivery energy for any month shall in no case be less than the product of (1) the maximum billing demand as calculated in the paragraph below and (2) 37 hours (reflecting a 5 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 and (2) 40 percent of any kW in excess of 5,000 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 and (2) 40 percent of any kW in excess of 5,000 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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge, (2) the base onpeak energy charge, as adjusted, applied to the customer's onpeak energy takings, (3) the base offpeak energy charge, as adjusted, applied to the customer's offpeak energy takings, and (4) the base distribution delivery charge applied to the higher of the customer's total energy takings or the minimum energy takings amount provided for in the first paragraph of the section of this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts."

KUB may require minimum bills higher than those stated above.

Contract Requirement

All customers shall be required to execute contracts and such contracts shall be for an initial term of at least 1 year. The customer shall contract for its maximum requirements, which shall not exceed the amount of power capable of being used by customer, and KUB shall not be obligated to supply power in greater amount at any time than the customer's currently effective contract demand. The customer is prohibited from using any power other than that supplied by KUB under this rate schedule. 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 approved by the Board.

After having received service for at least 1 year under this rate schedule, the customer, subject to 90 days prior written notice and appropriate amendments in its power contract with KUB, may receive service under the General Power Rate - Schedule GSA. In such case the term of the power contract shall remain the same and the contract demand for service under the General Power Rate - Schedule GSA shall not be less than the contract demand in effect when service was taken under this rate schedule.

Single-Point Delivery

The charges under this rate 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.

Rules and Regulations

INTERRUPTIBLE POWER 5 (IP5)

Availability

KUB provides Interruptible Power 5 (IP5) to qualified power users through its wholesale power supplier, the Tennessee Valley Authority (TVA), in accordance with the power supply contract between KUB and TVA.

IP5 shall be made available to qualified power users pursuant to specific contractual arrangements between KUB and the customer (such contractual arrangements may be contained in one or more written instruments and are hereinafter sometimes referred to as the "Contract").

Charges for IP5

KUB Administrative Charge:

\$350.00 per month

All other IP5-related charges including TVA Administrative Cost Charges shall be established in accordance with the Contract.

Interruptibility

IP5 furnished to a customer under the Contract shall be subject to interruption and to suspension of availability as provided for in the Contract.

Rules and Regulations

INTERRUPTIBLE POWER 30 (IP30)

Availability

KUB provides Interruptible Power 30 (IP30) to qualified power users through its wholesale power supplier, the Tennessee Valley Authority (TVA), in accordance with the power supply contract between KUB and TVA.

IP30 shall be made available to qualified power users pursuant to specific contractual arrangements between KUB and the customer (such contractual arrangements may be contained in one or more written instruments and are hereinafter sometimes referred to as the "Contract").

Charges for IP30

KUB Administrative Charge:

\$350.00 per month

All other IP30-related charges including TVA Administrative Cost Charges shall be established in accordance with the Contract.

Interruptibility

IP30 furnished to a customer under the Contract shall be subject to interruption and to suspension of availability as provided for in the Contract.

Rules and Regulations

TWO-PART REAL TIME PRICING (RTP)

Availability

KUB provides Two-Part Real Time Pricing (Two-Part RTP) to qualified general power users through its wholesale power supplier, the Tennessee Valley Authority (TVA), in accordance with the power supply contract between KUB and TVA.

Two-Part RTP shall be made available to qualified general power users pursuant to specific contractual arrangements between KUB and the customer (such contractual arrangements may be contained in one or more written instruments and are hereinafter sometimes referred to as the "Contract").

Charges for Two-Part RTP

KUB Administrative Charge:

\$350.00 per month

All other Two-Part RTP charges including TVA Administrative Charges shall be established in accordance with the Contract.

Interruptibility

Two-Part RTP furnished to a customer under the Contract may be subject to interruption and to suspension of availability as provided for in the Contract.

Rules and Regulations

START-UP AND TESTING POWER (STP)

Availability

KUB provides Start-up and Testing Power (STP) to qualified power users through its wholesale power supplier, the Tennessee Valley Authority (TVA), in accordance with the power supply contract between KUB and TVA.

STP shall be made available to qualified power users pursuant to specific contractual arrangements between KUB and the customer (such contractual arrangements may be contained in one or more written instruments and are hereinafter sometimes referred to as the "Contract").

Charges for STP

KUB Administrative Charge:

\$350.00 per month

All other STP-related charges including TVA Administrative Cost Charges shall be established in accordance with the Contract.

Interruptibility

STP furnished to a customer under the Contract shall be subject to interruption and to suspension of availability as provided for in the Contract.

Rules and Regulations

PILOT PROGRAM RESIDENTIAL TIME-OF-USE RATE SCHEDULE RS-TOU

Residential Time-Of-Use Rate Pilot Program Description

The purpose of the Residential Time-Of-Use Rate pilot program (RS-TOU pilot) is to enable a phased implementation of Time-Of-Use rates for all KUB Residential customers. The RS-TOU pilot will provide participating customers experience with Time-Of-Use billing processes and the bill impacts of varying usage in response to Time-Of-Use rates. The duration of the RS-TOU pilot shall be determined by KUB at its sole discretion.

Residential Time-Of-Use Rate Pilot Program Availability

This rate shall be available only for electric service through a single meter, or served through a multiple meter configuration designed as a single billing point for the Generation Partner program, or similar TVA program, to a single-family dwelling, where the major use of electricity is for domestic purposes such as lighting, household appliances, and the personal comfort and convenience of those residing therein. This rate shall be available to customers which have an advanced meter and have elected to participate in the RS-TOU pilot. KUB reserves the right to limit participation.

Character of Service

Alternating current, single-phase, 60 hertz. Power shall be delivered at a service voltage available in the vicinity or agreed to by KUB. Multi-phase service shall be supplied in accordance with KUB's standard policy.

Base Charges

Basic Service Charge:

\$20.50 per month

Energy Charge:

Onpeak \$0.20513 per kWh per month for all metered onpeak kWh Offpeak \$0.07337 per kWh per month for all metered offpeak kWh

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

Determination of Onpeak and Offpeak Hours

All hours stated in Eastern Prevailing time

Weekdays (Monday - Friday)

Onpeak 2 p.m. to 8 p.m. calendar months April through October

5 a.m. to 11 a.m. calendar months November through March

Offpeak All other hours

Weekends and Holidays*

All hours Offpeak

*Holidays include:

New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day

Minimum Monthly Bill

The basic service charge constitutes the minimum monthly bill for all customers served under this rate schedule except those customers for which a higher minimum monthly bill is required under KUB's standard policy because of special circumstances affecting the cost of rendering service.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery and metering point, and at a single voltage.

Rules and Regulations

PILOT PROGRAM GENERAL POWER TIME-OF-USE RATE SCHEDULE GSA-TOU

General Power Time-Of-Use Rate Pilot Program Description

The purpose of the General Power Time-Of-Use Rate pilot program (GSA-TOU pilot) is to enable a phased implementation of Time-Of-Use rates for all KUB General Power customers with demand of 1,000 kW or less. The GSA -TOU pilot will provide participating customers experience with Time-Of-Use billing processes and the bill impacts of varying usage in response to Time-Of-Use rates. The duration of the GSA-TOU pilot shall be determined by KUB at its sole discretion.

General Power Time-Of-Use Pilot Program Availability

This rate shall be available for the firm power requirements (where a customer's contract demand is 1,000 kW or less) for electric service to non-residential customers. This rate shall be available to customers which have an advanced meter and have elected to participate in the GSA-TOU pilot. KUB reserves the right to limit participation.

Character of Service

Alternating current, single or three-phase, 60 hertz. Power shall be delivered at a service voltage available in the vicinity or agreed to by KUB.

Base Charges

 If (a) the higher of (i) the customer's currently effective contract demand, if any, or (ii) its highest billing demand during the latest 12-month period is not more than 50 kW:

Customer Charge: \$31.00 per delivery point per month

Demand Charge: \$2.12 per kW of maximum billing demand per month

Energy Charge:

Onpeak	\$0.21232 per kWh per month for all metered onpeak kWh
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Offpeak \$0.08056 per kWh per month for all metered offpeak kWh

2A. If the higher of (i) the customer's currently effective contract demand or (ii) its highest billing demand during the latest 12-month period is greater than 50 kW but not more than 100 kW:

Customer Charge: \$101.00 per delivery point per month

Demand Charge: \$4.77 per kW of maximum billing demand per month

Energy Charge:

Onpeak \$0.22604 per kWh per month for all metered onpeak kWh

Offpeak \$0.09428 per kWh per month for all metered offpeak kWh

2B. If the higher of (a) the customer's currently effective contract demand or (b) its highest billing demand during the latest 12-month period is greater than 100 kW but not more than 1,000 kW:

Customer Charge: \$118.00 per delivery point per month

Demand Charge: \$7.02 per kW of maximum billing demand per month

Energy Charge:

Onpeak \$0.20127 per kWh per month for all metered onpeak kWh

Offpeak \$0.06951 per kWh per month for all metered offpeak kWh

- 3. If the higher of (a) the customer's currently effective contract demand or (b) its highest billing demand during the latest 12-month period is greater than 1,000 kW:
 - C. Customers meeting these requirements are not eligible to enter the GSA-TOU pilot program. The TDGSA and TDMSA (if qualified) rates are available as Time-Of-Use alternatives at this level of demand.
 - D. If customer's demand rises above 1,000 kW while participating in the GSA-TOU pilot program, the customer will be removed from the pilot and billed under General Power Rate Schedule GSA.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes

in purchased power costs as determined by any purchased power adjustment adopted by the Board.

Determination of Onpeak and Offpeak Hours

All hours stated in Eastern Prevailing time

Weekdays (Monday - Friday)

Onpeak 2 p.m. to 8 p.m. calendar months April through October

5 a.m. to 11 a.m. calendar months November through March

Offpeak All other hours

Weekends and Holidays*

All hours Offpeak

*Holidays include:

New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day

Determination of Demand

KUB shall meter the demands in kW of all customers served under the GSA-TOU rate schedule. The Metered Demand for any month shall be the highest average during any 30-minute-consecutive period of the month of the load metered in kW. The Measured Demand for any month shall be the higher of (a) or (b) below:

The Billing Demand for any month shall be the higher of the following:

- d) Metered Demand
- e) 85 percent of the load in kVA
- f) 30 percent of the higher of the currently effective contract demand or the highest billing demand established during the preceding 12 months.

Minimum Bill

The monthly bill under this rate schedule shall not be less than the sum of (a) the customer charge, (b) the demand charge, as adjusted, applied to the customer's billing demand, and (c) the energy charges, as adjusted, applied to the customer's energy takings.

KUB may require minimum bills higher than those stated above.

Contract Requirements

At its sole discretion, KUB may require contracts for service provided under this rate schedule and such contracts shall be for an initial term of at least one year. The customer shall contract for its maximum requirements, which shall not exceed the amount of power capable of being used by customer, and KUB shall not be obligated to supply power in greater amount at any time than the customer's currently effective contract demand. If the customer uses any power other than that supplied by KUB under this rate schedule, 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 approved by the Board.

Single - Point Delivery

The charges under this rate 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 at each different voltage shall be separately metered and billed.

Rules and Regulations

RESOLUTION 1441 EXHIBIT C RATE SCHEDULES OF THE ELECTRIC DIVISION EFFECTIVE APRIL 1, 2024

RESIDENTIAL RATE - SCHEDULE RS

Availability

This rate shall be available only for electric service to a single-family dwelling and its appurtenances, where the major use of electricity is for domestic purposes such as lighting, household appliances, and the personal comfort and convenience of those residing therein.

Character of Service

Alternating current, single-phase, 60 hertz. Power shall be delivered at a service voltage available in the vicinity or agreed to by KUB. Multi-phase service shall be supplied in accordance with KUB's standard policy.

Base Charges

Basic Service Charge: \$20.50 per month

Energy Charge:

Summer Period	\$0.10187 per kWh per month
Winter Period	\$0.10146 per kWh per month
Transition Period	\$0.10146 per kWh per month

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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.

Minimum Monthly Bill

The basic service charge constitutes the minimum monthly bill for all customers served under this rate schedule except those customers for which a higher minimum monthly bill is required under KUB's standard policy because of special circumstances affecting the cost of rendering service.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery and metering point, and at a single voltage.

Rules and Regulations

GENERAL POWER RATE - SCHEDULE GSA

Availability

This rate shall be available for the firm power requirements (where a customer's contract demand is 5,000 kW or less) for electric service to non-residential customers. This rate shall also apply to customers to whom service is not available under any other resale rate schedule.

Character of Service

Alternating current, single or three-phase, 60 hertz. Power shall be delivered at a service voltage available in the vicinity or agreed to by KUB.

Base Charges

1. If (a) the higher of (i) the customer's currently effective contract demand, if any, or (ii) its highest billing demand during the latest 12-month period is not more than 50 kW and (b) the customer's monthly energy takings for any month during such period do not exceed 15,000 kWh:

Customer Charge: \$32.00 per delivery point per month

Energy Charge:

Summer Period	\$0.12190 per kWh per month
Winter Period	\$0.12149 per kWh per month
Transition Period	\$0.12149 per kWh per month

2.

If (a) the higher of (i) the customer's currently effective contract demand or (ii) its highest billing demand during the latest 12-month period is greater than 50 kW but not more than 1,000 kW or (b) the customer's billing demand is less than 50 kW and its energy takings for any month during such period exceed 15,000 kWh:

Customer Charge:	\$104.00 per delivery point per month
Demand Charge:	
Summer Period	First 50 kW of billing demand per month, no demand charge
	Excess over 50 kW of billing demand per month, at \$16.77 per kW
Winter Period	First 50 kW of billing demand per month, no demand charge

	Excess over 50 kW of billing demand per month, at \$15.98 per kW
Transition Period	First 50 kW of billing demand per month, no demand charge
	Excess over 50 kW of billing demand per month, at \$15.98 per kW
Energy Charge:	
Summer Period	First 15,000 kWh per month at \$0.15371 per kWh
	Additional kWh per month at \$0.06790 per kWh
Winter Period	First 15,000 kWh per month at \$0.15330 per kWh
	Additional kWh per month at \$0.06790 per kWh
Transition Period	First 15,000 kWh per month at \$0.15330 per kWh
	Additional kWh per month at \$0.06790 per kWh
	istomer's currently effective contract demand or (b) its luring the latest 12-month period is greater than
	ustomer's currently effective contract demand or (b) its luring the latest 12-month period is greater than \$287.00 per delivery point per month
highest billing demand d 1,000 kW: Customer Charge:	luring the latest 12-month period is greater than
highest billing demand d 1,000 kW: Customer Charge: Demand Charge:	uring the latest 12-month period is greater than \$287.00 per delivery point per month First 1,000 kW of billing demand per month, at \$17.60
highest billing demand d 1,000 kW: Customer Charge: Demand Charge:	 Iuring the latest 12-month period is greater than \$287.00 per delivery point per month First 1,000 kW of billing demand per month, at \$17.60 per kW Excess over 1,000 kW of billing demand per month, at
highest billing demand d 1,000 kW: Customer Charge: Demand Charge:	 Iuring the latest 12-month period is greater than \$287.00 per delivery point per month First 1,000 kW of billing demand per month, at \$17.60 per kW Excess over 1,000 kW of billing demand per month, at \$18.31 per kW, plus an additional \$18.31 per kW per month for each kW, if any, of the amount by which the customer's billing demand exceeds the higher of 2,500 kW or its contract
highest billing demand d 1,000 kW: Customer Charge: Demand Charge: Summer Period	 Iuring the latest 12-month period is greater than \$287.00 per delivery point per month First 1,000 kW of billing demand per month, at \$17.60 per kW Excess over 1,000 kW of billing demand per month, at \$18.31 per kW, plus an additional \$18.31 per kW per month for each kW, if any, of the amount by which the customer's billing demand exceeds the higher of 2,500 kW or its contract demand First 1,000 kW of billing demand per month, at

3.

Q.

Transition Period	First 1,000 kW of billing demand per month, at \$16.84 per kW
	Excess over 1,000 kW of billing demand per month, at \$17.55 per kW, plus an additional
	\$17.55 per kW per month for each kW, if any, of the amount by which the customer's billing demand exceeds the higher of 2,500 kW or its contract demand
Energy Charge:	
Summer Period	\$0.07884 per kWh per month

Summer Penou	po.07664 per kvvn per monun
Winter Period	\$0.07884 per kWh per month
Transition Period	\$0.07884 per kWh per month

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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 Demand

KUB shall meter the demands in kW of all customers having loads in excess of 50 kW. The metered demand for any month shall be the highest average during any 30consecutive-minute period of the month of the load metered in kW. The measured demand for any month shall be the higher of the highest average during any 30consecutive-minute period of the month of (a) the load metered in kW or (b) 85 percent of the load in kVA plus an additional 10 percent for that part of the load over 5,000 kVA, and such measured demand shall be used as the billing demand, except that the billing demand for any month shall in no case be less than 30 percent of the higher of the preceding 12 months.

Minimum Bill

The monthly bill under this rate schedule shall not be less than the sum of (a) the base customer charge, (b) the base demand charge, as adjusted, applied to the customer's billing demand, and (c) the base energy charge, as adjusted, applied to the customer's energy takings; provided, however, that, under (2.) of the Base Charges, the monthly bill shall in no event be less than the sum (a) the base customer charge and (b) 20 percent of the portion of the base demand charge, as adjusted, applicable to the second block (excess over 50kW) of billing demand, multiplied by the higher of the customer's currently effective contract demand or its highest billing demand established during the preceding 12 months.

KUB may require minimum bills higher than those stated above.

Contract Requirements

KUB shall require contracts for service provided under this rate schedule to customers whose demand requirements exceed 1,000 kW and such contracts shall be for an initial term of at least one year. The customer shall contract for its maximum requirements, which shall not exceed the amount of power capable of being used by customer, and KUB shall not be obligated to supply power in greater amount at any time than the customer's currently effective contract demand. If the customer uses any power other than that supplied by KUB under this rate schedule, 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 approved by the Board.

Single - Point Delivery

The charges under this rate 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 at each different voltage shall be separately metered and billed.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

OUTDOOR LIGHTING RATE - SCHEDULE LS

Availability

Available for service to street and park lighting systems, traffic signal systems, athletic field lighting installations, and outdoor lighting for individual customers.

Service under this schedule is for a term of not less than one year.

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.

PART A – CHARGES FOR STREET AND PARK LIGHTING SYSTEMS, TRAFFIC SIGNAL SYSTEMS, AND ATHLETIC FIELD LIGHTING INSTALLATIONS

I. Energy Charge:

Summer Period	\$0.09209 per kWh per month
Winter Period	\$0.09209 per kWh per month
Transition Period	\$0.09209 per kWh per month

VIII. Facility Charge

The annual facility charge shall be **17.62** percent of the installed cost to KUB's electric system of the facilities devoted to street and park lighting service specified in this Part A. Such installed cost shall be recomputed on July 1 of each year, or more often if substantial changes in the facilities are made. Each month, one-twelfth of the then total annual facility charge shall be billed to the customer. If any part of the facilities has not been provided at the electric system's expense or if the installed cost of any portion thereof is reflected on the books of another municipality or agency or department, the annual facility charge shall be adjusted to reflect properly the remaining cost to be borne by the electric system.

Traffic signal systems and athletic field lighting installations shall be provided, owned, and maintained by and at the expense of the customer, except as KUB may agree otherwise in accordance with the provisions of the paragraph next following in this Section II. The facilities necessary to provide service to such systems and installations shall be provided by and at the expense of KUB's electric system, and the annual facility charge provided for first above in this Section II shall apply to the installed cost of such facilities.

When so authorized by policy duly adopted by the Board, traffic signal systems and athletic field lighting installations may be provided, owned, and maintained by KUB's electric system for the customer's benefit. In such cases KUB may require reimbursement from the customer for a portion of the initial installed cost of any such system or installation and shall require payment by the customer of a facility charge sufficient to cover all of KUB's costs (except reimbursed costs), including appropriate overheads, of providing, owning, and maintaining such system or installation; provided that, for athletic field lighting installations, such facility charge shall be **16.34** percent per year of such costs. Said facility charge shall be in addition to the annual facility charge on the facilities necessary to provide service to such system or installation as provided for in the preceding paragraph. Replacement of lamps and related glassware for traffic signal systems and athletic field lighting installations provided under this paragraph shall be paid for under the provisions of paragraph A in section IV.

IX. Customer Charge – Traffic Signal Systems and Athletic Field Lighting Installations.

KUB shall apply a uniform **monthly customer charge of \$2.50** for service to each traffic signal system or athletic field lighting installation.

X. Replacement of Lamps and Related Glassware - Street and Park Lighting

Customer shall be billed and shall pay for replacements as provided in paragraph A below, which shall be applied to all service for street and park lighting.

- E. KUB shall bill the customer monthly for such replacements during each month at KUB's cost of materials, including appropriate storeroom expense.
- F. KUB shall bill the customer monthly for one-twelfth of the amount by which KUB's cost of materials, including appropriate storeroom expenses, exceeds the products of 3 mills multiplied by the number of kilowatt-hours used for street and park lighting during the fiscal year immediately preceding the fiscal year in which such month occurs.

Metering

For any billing month or part of such month in which the energy is not metered or for which a meter reading is found to be in error or a meter is found to have failed, the energy for billing purposes for that billing month or part of such month shall be computed from the rated capacity of the lamps (including ballast) plus 5 percent of such capacity to reflect secondary circuit losses, multiplied by the number of hours of use.

Revenue and Cost Review

KUB's costs of providing service under Part A of this rate schedule are subject to review at any time to determine if KUB's revenues from the charges being applied are sufficient to cover its costs. (Such costs, including applicable overheads, include, but are not limited to, those incurred in the operation and maintenance of the systems provided and those resulting from depreciation and payments for taxes, tax equivalents and interest). If any such review discloses that revenues are either less or more than sufficient to cover said costs, the Board shall revise the above facility charges so that revenues will be sufficient to cover said costs.

PART B-CHARGES FOR OUTDOOR LIGHTING FOR INDIVIDUAL CUSTOMERS

		Charges Per	Fixture P	er Month	
	La	mp Size	Rated	Facility	Total Lamp
(a) Type of Fixtur	e (Wat	ts) (Lumens)	kWh	Charge	Charge
Mercury Vapor	or 175	7,650	70	\$5.51	\$11.96
Incandescent*	400	19,100	155	7.69	21.96
	1,000**	47,500	378	12.31	47.12
High Pressure	100	8,550	42	\$5.51	\$ 9.38
Sodium	250	23,000	105	6.53	16.20
	400	45,000	165	7.69	22.88
	1,000**	126,000	385	12.31	47.76
Decorative	100	8,550	42	\$6.28	\$10.15

* Mercury Vapor and Incandescent fixtures not offered for new service.

** 1,000 watt fixtures not offered for new service.

Light-Emitting Diode (LED) options provided through Schedule LED

(b) Energy Charge: For each lamp size under (a) above,

Summer Period	\$0.09209 per kWh per month
Winter Period	\$0.09209 per kWh per month
Transition Period	\$0.09209 per kWh per month

Additional Facilities

The above charges in this Part B are limited to service from a photoelectrically controlled standard lighting fixture installed on a pole already in place. If the customer wishes to have the fixture installed at a location other than on a pole already in place, the

customer shall pay an **additional monthly charge of \$5.55 per pole** for additional poles required to serve the fixture from KUB's nearest available source. (This section does not apply to Decorative Lighting Fixtures).

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

Lamp Replacements

Replacements of lamps and related glassware will be made in accordance with replacement policies of KUB.

Special Outdoor Lighting Installations

When so authorized by policy duly adopted by the Board, special outdoor lighting installations (other than as provided for under Parts A and B above) may be provided, owned, and maintained by KUB's electric system. In such cases, KUB may require reimbursement from the customer for a portion of the initial installed cost of any such installation and shall require payment by the customer of monthly charges sufficient to cover all of KUB's costs (except reimbursed costs), including appropriate overheads of providing, owning, and maintaining such installations, and making lamp replacements.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

LIGHT-EMITTING DIODE (LED) OUTDOOR LIGHTING RATE - SCHEDULE LED

Availability

Available for LED outdoor lighting service to individual customers. Service under this schedule is for a term of not less than one year.

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.

Charges per Fixture Per Month

(a) Lamp Size	Rated kWh	Facility Charge	Total Lamp Charge
100 WE	21	\$6.34	\$ 8.27
250 WE	58	7.84	13.18
400 WE	79	10.77	18.04

(b) Energy Charge: For each lamp size under (a) above,

Summer Period	\$0.09209 per kWh per month	
Winter Period	\$0.09209 per kWh per month	
Transition Period	\$0.09209 per kWh per month	

Additional Facilities

The above charges are limited to service installed on a pole already in place. If the customer wishes to have the fixture installed at a location other than on a pole already in place, the customer shall pay an additional monthly charge of \$5.55 per pole for additional poles required to serve the fixture from KUB's nearest available source.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in

purchased power costs as determined by any purchased power adjustment adopted by the Board.

Lamp Replacements

Replacements of lamps and related glassware will be made in accordance with replacement policies of KUB.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

GENERAL POWER RATE SCHEDULE TDGSA

Availability

This rate, subject to availability from TVA, shall be available for firm electric power requirements where the higher of a customer's currently effective onpeak or offpeak contract demand is greater than 1,000 kW but not more than 5,000 kW for electric service to commercial, industrial, and governmental customers, and to institutional customers, including, without limitation, churches, clubs, fraternities, orphanages, nursing homes, rooming or boarding houses, and like customers, provided that the other conditions of this section are met.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

Customer Charge:

\$1,500 per delivery point per month.

Administrative Charge: \$700 per delivery point per month.

Demand Charge: Summer Period: Onpeak Demand

\$10.96 per kW per month of the customer's onpeak billing demand, plus

Maximum Demand	\$7.87 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$18.83 per kW per month for each kW 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	\$10.00 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$7.87 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$17.87 per kW per month for each kW 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	\$10.00 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$7.87 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$17.87 per kW per month for each kW 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 Charge:	
Summer Period:	

Onpeak Offpeak

Block 1

\$0.11689 per kWh per month for all metered onpeak kWh, plus

\$0.08336 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

Block 2	\$0.04084 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.03781 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Winter Period: Onpeak	\$0.10159 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	\$0.08633 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.04084 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.03781 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Transition Period:	
Onpeak	\$0.08752 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	\$0.08752 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.04084 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.03781 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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 and (2) 40 percent of any kW in excess of 5,000 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 any kW in excess of 5,000 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 and (2) 40 percent of any kW in excess of the sum of (1) 30 percent of the first 5,000 kW and (2) 40 percent of any kW in excess of the sum of (1) 30 percent of the first 5,000 kW and (2) 40 percent of any kW in excess of the sum of (1) 30 percent of the first 5,000 kW and (2) 40 percent of any kW in excess of the sum of (1) 30 percent of the first 5,000 kW and (2) 40 percent of any kW in excess of the sum of (1) 30 percent of the first 5,000 kW and (2) 40 percent of any kW in excess of the sum of (1) 30 percent of the first 5,000 kW and (2) 40 percent of any kW in excess of the sum of (1) 30 percent of the first 5,000 kW and (2) 40 percent of any kW in excess of the sum of (1) 30 percent of the first 5,000 kW and (2) 40 percent of any kW in excess of the sum of (1) 30 percent of the first 5,000 kW and (2) 40 percent of any kW in excess of the sum of (1) 30 percent of the first 5,000 kW and (2) 40 percent of any kW in excess of the sum of (1) 40 percent of the sum of (1) 40 percent of any kW in excess of the sum of (1) 40 percent of any kW in excess of the sum of (1) 40 percent of the sum of (1) 40 percent of any kW in excess of the sum of (1) 40 percent of the sum of (1) 40 percent of any k

5,000 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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the Board shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least one year; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than four 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a

single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

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Service is subject to Rules and Regulations of KUB.

GENERAL POWER RATE SCHEDULE GSB

Availability

This rate, subject to availability from TVA, shall be available for firm electric power requirements where the higher of a customer's currently effective onpeak or offpeak contract demand is greater than 5,000 kW but not more than 15,000 kW; provided that the other conditions of this section are met.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

Customer Charge: \$1,500 per delivery point per month.

Administrative Charge: \$700 per delivery point per month.

Demand Charge: Summer Period: Onpeak Demand	\$10.76 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$6.42 per kW per month of the customer's maximum billing demand plus

Excess Demand	\$17.18 per kW per month for each kW 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	\$9.80 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$6.42 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$16.22 per kW per month for each kW 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	\$9.80 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$6.42 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$16.22 per kW per month for each kW 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 Charge: Summer Period: Onpeak	\$0.08830 per kWh per month for all metered onpeak kWh, plus
Offpeak Block 1	\$0.06362 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02938 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

Block 3	\$0.02600 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Winter Period: Onpeak	\$0.07705 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	\$0.06582 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02938 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.02600 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Transition Period:	
Onpeak	\$0.06331 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	\$0.06331 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02938 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.02600 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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 and (2) 40 percent of any kW in excess of 5,000 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 and (2) 40 percent of the first 5,000 kW and (2) 40 percent of the first 5,000 kW and (2) 40 percent of the first 5,000 kW and (2) 40 percent of any kW in excess of 5,000 kW of the higher of the currently effective offpeak contract demand or the highest offpeak billing demand or the highest of 5,000 kW of the higher of the currently effective offpeak contract demand or the highest offpeak billing demand

Minimum Bill

The monthly bill under this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing. any fuel cost that is included in any purchased power adjustment adopted by the Board shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least one year; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than four 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

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GENERAL POWER RATE SCHEDULE GSC

Availability

This rate, subject to availability from TVA, shall be available for firm electric power requirements where the higher of a customer's currently effective onpeak or offpeak contract demand is greater than 15,000 kW but not more than 25,000 kW; provided that the other conditions of this section are met.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

Customer Charge: \$1,500 per delivery point per month.

Administrative Charge: \$700 per delivery point per month.

Demand Charge: Summer Period:	
Onpeak Demand	\$10.76 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$6.27 per kW per month of the customer's maximum billing demand plus

\$17.03 per kW per month for each kW of the amount, if Excess Demand 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: \$9.80 per kW per month of the customer's onpeak billing **Onpeak Demand** demand, plus \$6.27 per kW per month of the customer's maximum Maximum Demand billing demand plus \$16.07 per kW per month for each kW of the amount, if Excess Demand 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: \$9.80 per kW per month of the customer's onpeak billing Onpeak Demand demand, plus \$6.27 per kW per month of the customer's maximum Maximum Demand billing demand plus \$16.07 per kW per month for each kW of the amount, if Excess Demand 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 Charge: Summer Period: \$0.08828 per kWh per month for all metered onpeak kWh, plus Onpeak Offpeak Block 1 \$0.06360 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus \$0.02936 per kWh per month for the next 200 hours use of Block 2 onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus \$0.02598 per kWh per month for the hours use of onpeak Block 3

	metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy	
Winter Period: Onpeak	\$0.07703 per kWh per month for all metered onpeak kWh, plus	
Offpeak Block 1	\$0.06580 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus	
Block 2	\$0.02936 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus	
Block 3	\$0.02598 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy	
Transition Period: Onpeak	\$0.06329 per kWh per month for all metered onpeak kWh, plus	
Offpeak Block 1	\$0.06329 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus	
Block 2	\$0.02936 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus	
Block 3	\$0.02598 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy	

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk

transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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, and (3) 50 percent of any kW in excess of 25,000 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, and (3) 50 percent of any kW in excess of 25,000 kW, (2) 40 percent of the next 20,000 kW, and (3) 50 percent of any kW in excess of 25,000 kW of the higher of the currently effective offpeak contract demand or the first 5,000 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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the Board shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least one year; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than four 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

GENERAL POWER RATE SCHEDULE GSD

Availability

This rate, subject to availability from TVA, shall be available for firm electric power requirements where the higher of a customer's currently effective onpeak or offpeak contract demand is greater than 25,000 kW; provided that the other conditions of this section are met.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

Customer Charge: \$1,500 per delivery point per month.

Administrative Charge: \$700 per delivery point per month.

Demand Charge: Summer Period: Onpeak Demand	\$10.76 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$6.14 per kW per month of the customer's maximum billing demand plus

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 \$9.80 per kW per month of the customer's onpeak billing demand, plus Maximum Demand \$6.14 per kW per month of the customer's maximum billing demand plus Excess Demand \$15.94 per kW per month for each kW 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** \$9.80 per kW per month of the customer's onpeak billing demand, plus Maximum Demand \$6.14 per kW per month of the customer's maximum billing demand plus Excess Demand \$15.94 per kW per month for each kW 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 Charge: Summer Period: Onpeak \$0.08826 per kWh per month for all metered onpeak kWh, plus Offpeak Block 1 \$0.06358 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus Block 2 \$0.02820 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

\$16.90 per kW per month for each kW of the amount, if

Excess Demand

Block 3	\$0.02596 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Winter Period: Onpeak	\$0.07701 per kWh per month for all metered onpeak kWh, plus
Offpeak Block 1	\$0.06578 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02820 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.02596 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Transition Period: Onpeak	\$0.06327 per kWh per month for all metered onpeak kWh, plus
Offpeak Block 1	\$0.06327 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02820 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.02596 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands. Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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 shall in no case be less than the sum of (1) 30 percent of the next 20,000 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 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 50,000 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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the **Board** shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least five years; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than sixteen 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

MANUFACTURING SERVICE RATE SCHEDULE TDMSA

Availability

This rate, subject to availability from TVA, shall be available for firm electric power requirements where (a) a customer's currently effective onpeak or offpeak contract demand, whichever is higher, is greater than 1,000 kW but not more 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, and 541214.

Prior to initially taking any service under this schedule, and from time to time thereafter as may be required by KUB, a customer shall certify to KUB that it meets the requirements set forth in condition (b) above. The certification form to be used shall be furnished by KUB to the customer, and signed and promptly returned by the customer to KUB. Further, such customer shall promptly certify any change in the status of any of the information contained in the certification form.

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 KUB under, and billed in accordance with, the applicable General Power schedule.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

Customer Charge:	\$1,500 per delivery point per month.
Administrative Charge:	\$700 per delivery point per month.
Demand Charge: Summer Period: Onpeak Demand	\$10.25 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$6.01 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$16.26 per kW per month for each kW 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	\$9.28 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$6.01 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$15.29 per kW per month for each kW 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	\$9.28 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$6.01 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$15.29 per kW per month for each kW 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 Charge: Summer Period: Onpeak	\$0.09082 per kWh per month for all metered onpeak kWh, plus
Offpeak Block 1	\$0.06579 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.03834 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.03579 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Winter Period: Onpeak	\$0.07939 per kWh per month for all metered onpeak kWh, plus
Offpeak Block 1	\$0.06802 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.03834 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.03579 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Transition Period: Onpeak	\$0.06891 per kWh per month for all metered onpeak kWh, plus
Offpeak Block 1	\$0.06891 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.03834 per kWh per month for the next 200 hours use of

onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

Block 3 \$0.03579 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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 and (2) 40 percent of any kW in excess of 5,000 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 and (2) 40 percent of the first 5,000 kW and (2) 40 percent of any kW in excess of 5,000 kW of the higher of the currently effective offpeak billing demand or the highest offpeak billing demand established during the preceding 12 months.

Minimum Bill

The monthly bill under this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the Board shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least one year; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than four 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

MANUFACTURING SERVICE RATE SCHEDULE MSB

Availability

This rate, subject to availability from TVA, shall be available for 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 but not more than 15,000 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, and 541214.

Prior to initially taking any service under this schedule, and from time to time thereafter as may be required by KUB, a customer shall certify to KUB that it meets the requirements set forth in condition (b) above. The certification form to be used shall be furnished by KUB to the customer, and signed and promptly returned by the customer to KUB. Further, such customer shall promptly certify any change in the status of any of the information contained in the certification form.

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 KUB under, and billed in accordance with, the applicable General Power schedule.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

Customer Charge: \$1,500 per delivery point per month. Administrative Charge: \$700 per delivery point per month. Demand Charge: Summer Period: \$10.14 per kW per month of the customer's onpeak Onpeak Demand billing demand, plus Maximum Demand \$3.34 per kW per month of the customer's maximum billing demand plus Excess Demand \$13.48 per kW per month for each kW 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** \$9.18 per kW per month of the customer's onpeak billing demand, plus Maximum Demand \$3.34 per kW per month of the customer's maximum billing demand plus Excess Demand \$12.52 per kW per month for each kW 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** \$9.18 per kW per month of the customer's onpeak billing demand, plus Maximum Demand \$3.34 per kW per month of the customer's maximum billing demand plus Excess Demand \$12.52 per kW per month for each kW 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 Charge: Summer Period: Onpeak	\$0.08049 per kWh per month for all metered onpeak kWh, plus
Offpeak Block 1	\$0.05573 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02632 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.02380 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Winter Period: Onpeak	\$0.06919 per kWh per month for all metered onpeak kWh, plus
Offpeak Block 1	\$0.05794 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02632 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.02380 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Transition Period: Onpeak	\$0.05880 per kWh per month for all metered onpeak kWh, plus
Offpeak Block 1	\$0.05880 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02632 per kWh per month for the next 200 hours use of

onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

Block 3 \$0.02380 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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 and (2) 40 percent of any kW in excess of 5,000 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 and (2) 40 percent of the first 5,000 kW and (2) 40 percent of any kW in excess of 5,000 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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the Board shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least one year; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than four 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

MANUFACTURING SERVICE RATE SCHEDULE MSC

Availability

This rate, subject to availability from TVA, shall be available for firm electric power requirements where (a) a customer's currently effective onpeak or offpeak contract demand, whichever is higher, is greater than 15,000 kW but not more than 25,000 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, and 541214.

Prior to initially taking any service under this schedule, and from time to time thereafter as may be required by KUB, a customer shall certify to KUB that it meets the requirements set forth in condition (b) above. The certification form to be used shall be furnished by KUB to the customer, and signed and promptly returned by the customer to KUB. Further, such customer shall promptly certify any change in the status of any of the information contained in the certification form.

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 KUB under, and billed in accordance with, the applicable General Power schedule.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

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Customer Charge:	\$1,500 per delivery point per month.
Administrative Charge:	\$700 per delivery point per month.
Demand Charge: Summer Period: Onpeak Demand	\$10.14 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$3.22 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$13.36 per kW per month for each kW 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	\$9.18 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$3.22 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$12.40 per kW per month for each kW 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	\$9.18 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$3.22 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$12.40 per kW per month for each kW 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 Charge: Summer Period: Onpeak \$0.07973 per kWh per month for all metered onpeak kWh, plus Offpeak Block 1 \$0.05496 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus Block 2 \$0.02806 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus Block 3 \$0.02806 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy Winter Period: Onpeak \$0.06842 per kWh per month for all metered onpeak kWh, plus Offpeak Block 1 \$0.05716 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus Block 2 \$0.02806 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus Block 3 \$0.02806 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy Transition Period: Onpeak \$0.05803 per kWh per month for all metered onpeak kWh, plus Offpeak Block 1 \$0.05803 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus Block 2 \$0.02806 per kWh per month for the next 200 hours use of

onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

Block 3 \$0.02806 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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, and (3) 50 percent of any kW in excess of 25,000 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, and (3) 50 percent of the first 5,000 kW, (2) 40 percent of the next 20,000 kW, and (3) 50 percent of the first 5,000 kW, (2) 40 percent of the next 20,000 kW, and (3) 50 percent of any kW in excess of 25,000 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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the Board shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least one year; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than four 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

MANUFACTURING SERVICE RATE SCHEDULE MSD

Availability

This rate, subject to availability from TVA, shall be available for firm electric power requirements where (a) a customer's currently effective onpeak or offpeak contract demand, whichever is higher, is greater than 25,000 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, and 541214.

Prior to initially taking any service under this schedule, and from time to time thereafter as may be required by KUB, a customer shall certify to KUB that it meets the requirements set forth in condition (b) above. The certification form to be used shall be furnished by KUB to the customer, and signed and promptly returned by the customer to KUB. Further, such customer shall promptly certify any change in the status of any of the information contained in the certification form.

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 KUB under, and billed in accordance with, the applicable General Power schedule.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate 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 onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Prior to participation in this rate, contract amendments may be required for continued participation in certain other programs and rate overlays as determined at KUB's sole discretion.

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

Customer Charge:	\$1,500 per delivery point per month.
Administrative Charge:	\$700 per delivery point per month.
Demand Charge: Summer Period: Onpeak Demand	\$10.14 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$2.79 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$12.93 per kW per month for each kW 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	\$9.18 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$2.79 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$11.97 per kW per month for each kW 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	\$9.18 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	\$2.79 per kW per month of the customer's maximum billing demand plus
Excess Demand	\$11.97 per kW per month for each kW 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 Charge: Summer Period:	
Onpeak	\$0.07623 per kWh per month for all metered onpeak kWh, plus
Offpeak Block 1	\$0.05147 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02515 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.02457 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Winter Period: Onpeak	\$0.06493 per kWh per month for all metered onpeak kWh, plus
Offpeak Block 1	\$0.05366 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02515 per kWh per month for the next 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 3	\$0.02457 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy
Transition Period: Onpeak	\$0.05453 per kWh per month for all metered onpeak kWh, plus
Offpeak Block 1	\$0.05453 per kWh per month for the first 200 hours use of onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus
Block 2	\$0.02515 per kWh per month for the next 200 hours use of

onpeak metered demand multiplied by the ratio of offpeak energy to total energy, plus

Block 3 \$0.02457 per kWh per month for the hours use of onpeak metered demand in excess of 400 hours multiplied by the ratio of offpeak energy to total energy

For the Summer Period, Winter Period, and Transition Period, Offpeak Block 1 energy rates less fuel rate of \$0.01851 per kWh per month shall be applied to the portion, if any, of the minimum offpeak energy takings amount that is greater than the metered energy.

Facilities Rental Charge

There shall be no facilities rental charge under this rate schedule for delivery at bulk transmission voltage levels of 161kV or higher. For delivery at less than 161kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be 37 cents per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97 cents per kW per month for the first 10,000 kW and 76 cents 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 higher of the customer's currently effective onpeak or offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

Reactive Demand Charge

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 this rate schedule, including minimum bill charges.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule be 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. All other hours of each day that are not otherwise defined as onpeak hours 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 KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule 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 sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands.

The maximum billing demand for any month shall be the higher of (1) the highest onpeak billing demand in the month or (2) the highest 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 and (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 shall in no case be less than the sum of (1) 30 percent of the next 20,000 kW, (6) 80 percent of the next 150,000 kW, and (7) 85 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, and (7) 85 percent of the next 150,000 kW, (6) 80 percent of the next 100,000 kW, (6) 80 percent of the next 150,000 kW, (3) 50 percent of the next 25,000 kW, (4) 60 percent of the next 50,000 kW, and (7) 85 percent of all kW in excess of 350,000 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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge and administrative charge, (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 onpeak billing demand applied to the customer's onpeak 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 maximum billing demand applied 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 this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts". Notwithstanding the foregoing, any fuel cost that is included in any purchased power adjustment adopted by the Board shall not be applied to any billed offpeak energy that exceeds the metered offpeak energy.

KUB may require minimum bills higher than those stated above.

Contract Requirement

KUB shall require contracts for all service provided under this rate schedule. The

contract shall be for an initial term of at least five years and any renewals or extensions of the initial contract shall be for a term of at least five years; after ten years of service, any such contract for the renewal or extension of service may provide for termination upon not less than sixteen 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 KUB 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 KUB under this rate schedule, 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 approved by the Board.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery 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 point and at each different voltage shall be separately metered and billed.

Rules and Regulations

ELECTRIC VEHICLE CHARGING POWER RATE - SCHEDULE EVC

Availability

This rate shall exclusively apply to separately metered charging stations for electric vehicles where the charging station's demand is greater than 50 kW but not more than 5,000 kW.

All customers participating under this rate schedule shall agree to a full requirements service from KUB. In addition, customers must agree that the sole use of the electric service is for the purpose of charging electric vehicles used for transportation purposes only.

Unless otherwise provided for in a written agreement between TVA and KUB, 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 rate schedule is being calculated.

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

Customer Charge: \$100 per delivery point per month

Energy Charge: All Seasons:	
Onpeak	\$0.14225 per kWh per month for all metered onpeak kWh, plus
Offpeak	\$0.14225 per kWh per month for all metered offpeak kWh, plus

Distribution Delivery Charge: \$0.08219 per total metered kWh per month

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

Facilities Rental Charge

Where the charging station's demand is greater than 50 kW, but not more than 1,000 kW, there shall be no facilities rental charge under this rate schedule.

Where the charging station's demand is greater than 1,000 kW there shall be no facilities rental charge under this rate schedule 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 37¢ per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be 97¢ per kW per month for the first 10,000 kW and 76¢ 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 this rate schedule, 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 this rate schedule, 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. The Seasonal Periods under this rate schedule are subject to change by KUB. In the event KUB determines that changed Seasonal Periods are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed periods, and KUB shall promptly notify customer.

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 this rate schedule 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 CST or CDT, whichever is then in effect. Said onpeak and offpeak hours are subject to change by KUB. In the event KUB determines that such changed onpeak and offpeak hours are appropriate, such decision shall be made at least 11 months prior to the effective date of such changed hours, and KUB shall promptly notify customer.

Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule as onpeak and offpeak hours; provided, however, that notwithstanding the metered energy amount, the Distribution Delivery energy for any month shall in no case be less than the product of (1) the maximum billing demand as calculated in the paragraph below and (2) 37 hours (reflecting a 5 percent load factor applied to the average number of hours in a month).

KUB shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule 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 and (2) 40 percent of any kW in excess of 5,000 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 and (2) 40 percent of any kW in excess of 5,000 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 this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge, (2) the base onpeak energy charge, as adjusted, applied to the customer's onpeak energy takings, (3) the base offpeak energy charge, as adjusted, applied to the customer's offpeak energy takings, and (4) the base distribution delivery charge applied to the higher of the customer's total energy takings or the minimum energy takings amount provided for in the first paragraph of the section of this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts."

KUB may require minimum bills higher than those stated above.

Contract Requirement

All customers shall be required to execute contracts and such contracts shall be for an initial term of at least 1 year. The customer shall contract for its maximum requirements, which shall not exceed the amount of power capable of being used by customer, and KUB shall not be obligated to supply power in greater amount at any time than the customer's currently effective contract demand. The customer is prohibited from using any power other than that supplied by KUB under this rate schedule. 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 approved by the Board.

After having received service for at least 1 year under this rate schedule, the customer, subject to 90 days prior written notice and appropriate amendments in its power contract with KUB, may receive service under the General Power Rate - Schedule GSA. In such case the term of the power contract shall remain the same and the contract demand for service under the General Power Rate - Schedule GSA shall not be less than the contract demand in effect when service was taken under this rate schedule.

Single-Point Delivery

The charges under this rate 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.

Rules and Regulations

INTERRUPTIBLE POWER 5 (IP5)

Availability

KUB provides Interruptible Power 5 (IP5) to qualified power users through its wholesale power supplier, the Tennessee Valley Authority (TVA), in accordance with the power supply contract between KUB and TVA.

IP5 shall be made available to qualified power users pursuant to specific contractual arrangements between KUB and the customer (such contractual arrangements may be contained in one or more written instruments and are hereinafter sometimes referred to as the "Contract").

Charges for IP5

KUB Administrative Charge:

\$350.00 per month

All other IP5-related charges including TVA Administrative Cost Charges shall be established in accordance with the Contract.

Interruptibility

IP5 furnished to a customer under the Contract shall be subject to interruption and to suspension of availability as provided for in the Contract.

Rules and Regulations

INTERRUPTIBLE POWER 30 (IP30)

Availability

KUB provides Interruptible Power 30 (IP30) to qualified power users through its wholesale power supplier, the Tennessee Valley Authority (TVA), in accordance with the power supply contract between KUB and TVA.

IP30 shall be made available to qualified power users pursuant to specific contractual arrangements between KUB and the customer (such contractual arrangements may be contained in one or more written instruments and are hereinafter sometimes referred to as the "Contract").

Charges for IP30

KUB Administrative Charge:

\$350.00 per month

All other IP30-related charges including TVA Administrative Cost Charges shall be established in accordance with the Contract.

Interruptibility

IP30 furnished to a customer under the Contract shall be subject to interruption and to suspension of availability as provided for in the Contract.

Rules and Regulations

TWO-PART REAL TIME PRICING (RTP)

Availability

KUB provides Two-Part Real Time Pricing (Two-Part RTP) to qualified general power users through its wholesale power supplier, the Tennessee Valley Authority (TVA), in accordance with the power supply contract between KUB and TVA.

Two-Part RTP shall be made available to qualified general power users pursuant to specific contractual arrangements between KUB and the customer (such contractual arrangements may be contained in one or more written instruments and are hereinafter sometimes referred to as the "Contract").

Charges for Two-Part RTP

KUB Administrative Charge:

\$350.00 per month

All other Two-Part RTP charges including TVA Administrative Charges shall be established in accordance with the Contract.

Interruptibility

Two-Part RTP furnished to a customer under the Contract may be subject to interruption and to suspension of availability as provided for in the Contract.

Rules and Regulations

START-UP AND TESTING POWER (STP)

Availability

KUB provides Start-up and Testing Power (STP) to qualified power users through its wholesale power supplier, the Tennessee Valley Authority (TVA), in accordance with the power supply contract between KUB and TVA.

STP shall be made available to qualified power users pursuant to specific contractual arrangements between KUB and the customer (such contractual arrangements may be contained in one or more written instruments and are hereinafter sometimes referred to as the "Contract").

Charges for STP

KUB Administrative Charge:

\$350.00 per month

All other STP-related charges including TVA Administrative Cost Charges shall be established in accordance with the Contract.

Interruptibility

STP furnished to a customer under the Contract shall be subject to interruption and to suspension of availability as provided for in the Contract.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

PILOT PROGRAM RESIDENTIAL TIME-OF-USE RATE SCHEDULE RS-TOU

Residential Time-Of-Use Rate Pilot Program Description

The purpose of the Residential Time-Of-Use Rate pilot program (RS-TOU pilot) is to enable a phased implementation of Time-Of-Use rates for all KUB Residential customers. The RS-TOU pilot will provide participating customers experience with Time-Of-Use billing processes and the bill impacts of varying usage in response to Time-Of-Use rates. The duration of the RS-TOU pilot shall be determined by KUB at its sole discretion.

Residential Time-Of-Use Rate Pilot Program Availability

This rate shall be available only for electric service through a single meter, or served through a multiple meter configuration designed as a single billing point for the Generation Partner program, or similar TVA program, to a single-family dwelling, where the major use of electricity is for domestic purposes such as lighting, household appliances, and the personal comfort and convenience of those residing therein. This rate shall be available to customers which have an advanced meter and have elected to participate in the RS-TOU pilot. KUB reserves the right to limit participation.

Character of Service

Alternating current, single-phase, 60 hertz. Power shall be delivered at a service voltage available in the vicinity or agreed to by KUB. Multi-phase service shall be supplied in accordance with KUB's standard policy.

Base Charges

Basic Service Charge:

\$20.50 per month

Energy Charge:

Onpeak Offpeak

\$0.20866 per kWh per month for all metered onpeak kWh \$0.07690 per kWh per month for all metered offpeak kWh

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes in purchased power costs as determined by any purchased power adjustment adopted by the Board.

Determination of Onpeak and Offpeak Hours

All hours stated in Eastern Prevailing time

Weekdays (Monday - Friday)

Onpeak 2 p.m. to 8 p.m. calendar months April through October

5 a.m. to 11 a.m. calendar months November through March

Offpeak All other hours

Weekends and Holidays*

All hours Offpeak

*Holidays include:

New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day

Minimum Monthly Bill

The basic service charge constitutes the minimum monthly bill for all customers served under this rate schedule except those customers for which a higher minimum monthly bill is required under KUB's standard policy because of special circumstances affecting the cost of rendering service.

Single Point Delivery

The charges under this rate schedule are based upon the supply of service through a single delivery and metering point, and at a single voltage.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

PILOT PROGRAM GENERAL POWER TIME-OF-USE RATE SCHEDULE GSA-TOU

General Power Time-Of-Use Rate Pilot Program Description

The purpose of the General Power Time-Of-Use Rate pilot program (GSA-TOU pilot) is to enable a phased implementation of Time-Of-Use rates for all KUB General Power customers with demand of 1,000 kW or less. The GSA -TOU pilot will provide participating customers experience with Time-Of-Use billing processes and the bill impacts of varying usage in response to Time-Of-Use rates. The duration of the GSA-TOU pilot shall be determined by KUB at its sole discretion.

General Power Time-Of-Use Pilot Program Availability

This rate shall be available for the firm power requirements (where a customer's contract demand is 1,000 kW or less) for electric service to non-residential customers. This rate shall be available to customers which have an advanced meter and have elected to participate in the GSA-TOU pilot. KUB reserves the right to limit participation.

Character of Service

Alternating current, single or three-phase, 60 hertz. Power shall be delivered at a service voltage available in the vicinity or agreed to by KUB.

Base Charges

 If (a) the higher of (i) the customer's currently effective contract demand, if any, or (ii) its highest billing demand during the latest 12-month period is not more than 50 kW:

Customer Charge: \$32.00 per delivery point per month

Demand Charge: \$2.18 per kW of maximum billing demand per month

Energy Charge:

Onpeak \$0.21557 per kWh per month for all metered onpeak kW	Onpeak	Wh per month for all metered onpeak	k kWh
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Offpeak \$0.08381 per kWh per month for all metered offpeak kWh

2A. If the higher of (i) the customer's currently effective contract demand or (ii) its highest billing demand during the latest 12-month period is greater than 50 kW but not more than 100 kW:

Customer Charge: \$104.00 per delivery point per month Demand Charge: \$4.94 per kW of maximum billing demand per month Energy Charge: Onpeak \$0.23031 per kWh per month for all metered onpeak kWh

Offpeak \$0.09855 per kWh per month for all metered offpeak kWh

2B. If the higher of (a) the customer's currently effective contract demand or (b) its highest billing demand during the latest 12-month period is greater than 100 kW but not more than 1,000 kW:

Customer Charge: \$122.00 per delivery point per month

Demand Charge: \$7.25 per kW of maximum billing demand per month

Energy Charge:

Onpeak \$0.20436 per kWh per month for all me	ered onpeak kWh
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Offpeak \$0.07260 per kWh per month for all metered offpeak kWh

- If the higher of (a) the customer's currently effective contract demand or (b) its highest billing demand during the latest 12-month period is greater than 1,000 kW:
 - E. Customers meeting these requirements are not eligible to enter the GSA-TOU pilot program. The TDGSA and TDMSA (if qualified) rates are available as Time-Of-Use alternatives at this level of demand.
 - F. If customer's demand rises above 1,000 kW while participating in the GSA-TOU pilot program, the customer will be removed from the pilot and billed under General Power Rate Schedule GSA.

Adjustment

Charges under this rate schedule may be increased or decreased to reflect changes

in purchased power costs as determined by any purchased power adjustment adopted by the Board.

Determination of Onpeak and Offpeak Hours

All hours stated in Eastern Prevailing time

Weekdays (Monday - Friday)

Onpeak 2 p.m. to 8 p.m. calendar months April through October

5 a.m. to 11 a.m. calendar months November through March

Offpeak All other hours

Weekends and Holidays*

All hours Offpeak

*Holidays include:

New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day

Determination of Demand

KUB shall meter the demands in kW of all customers served under the GSA-TOU rate schedule. The Metered Demand for any month shall be the highest average during any 30-minute-consecutive period of the month of the load metered in kW. The Measured Demand for any month shall be the higher of (a) or (b) below:

The Billing Demand for any month shall be the higher of the following:

- g) Metered Demand
- h) 85 percent of the load in kVA
- i) 30 percent of the higher of the currently effective contract demand or the highest billing demand established during the preceding 12 months.

Minimum Bill

The monthly bill under this rate schedule shall not be less than the sum of (a) the customer charge, (b) the demand charge, as adjusted, applied to the customer's billing demand, and (c) the energy charges, as adjusted, applied to the customer's energy takings.

KUB may require minimum bills higher than those stated above.

Contract Requirements

At its sole discretion, KUB may require contracts for service provided under this rate schedule and such contracts shall be for an initial term of at least one year. The customer shall contract for its maximum requirements, which shall not exceed the amount of power capable of being used by customer, and KUB shall not be obligated to supply power in greater amount at any time than the customer's currently effective contract demand. If the customer uses any power other than that supplied by KUB under this rate schedule, 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 approved by the Board.

Single – Point Delivery

The charges under this rate 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 at each different voltage shall be separately metered and billed.

Rules and Regulations

Service is subject to Rules and Regulations of KUB.

RESOLUTION NO. 1442

A Resolution Requesting the Council of the City of Knoxville, Tennessee to Provide for the Issuance of Not to Exceed Fifty-Five Million and No/100 Dollars (\$55,000,000) In Aggregate Principal Amount of Electric System Revenue Bonds, Series MM-2021

Whereas, by the provisions of the City Charter of the City of Knoxville, Tennessee (the "City"), the management and operation of City's electric system (the "Electric System") have been placed under the jurisdiction of the Board of Commissioners (the "Board") of the Knoxville Utilities Board ("KUB"); and

Whereas, the Board, after due investigation and consideration, deems it in the best interest of the City for the City to issue and sell not to exceed \$55,000,000 in aggregate principal amount of Electric System Revenue Bonds, Series MM-2021 (the "Electric Bonds") for the purpose of providing funds to finance the cost of improvements and extensions to the electric power distribution system of the City, including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the Electric Bonds; and

Whereas, the Board has had prepared for passage by the Council of the City a resolution authorizing the issuance of the Electric Bonds, a copy of which is attached hereto and made a part hereof (the "Electric Resolution").

Now, Therefore, Be It Hereby Resolved by the Board of Commissioners of the Knoxville Utilities Board:

Section 1. The Board hereby determines and finds that it is in the best interest of the City that the Council of the City adopt the Electric Resolution, in substantially the form presented to this meeting with only such changes as the Chief Financial Officer of KUB shall deem necessary, and authorize the issuance and sale of the Electric Bonds pursuant thereto, the description of the Electric Bonds, the security therefor and the purposes for which said Electric Bonds are to be issued, being more fully stated in the Electric Resolution.

Section 2. As required by the State Funding Board of the State of Tennessee, KUB has heretofore adopted its Debt Management Policy. The Board hereby finds that the issuance of the Electric Bonds, as proposed herein, is consistent with the Debt Management Policy.

Section 3. The Board hereby formally requests the Council of the City to pass the Electric Resolution, and the Board does hereby adopt, ratify, approve, consent and agree to each and every provision contained in the Electric Resolution upon adoption.

Section 4. The Board has elected and does hereby elect that the Electric Bonds be issued under the Electric Resolution.

Section 5. The Secretary of the Board shall deliver a certified copy of this Resolution to the Mayor and the Council of the City as formal evidence of this Board's action in connection therewith.

Section 6. The Board hereby states its intent to reimburse itself from the proceeds of the Electric Bonds for expenditures made on or after the date that is sixty (60) days prior to the date of this resolution to make improvements to the Electric System.

Section 7. This Resolution shall take effect from and after its passage.

Jerry Askew/s

Jerry Askew, Chair

Mark Walker/s Mark Walker, Board Secretary

APPROVED ON 1st & FINAL READING: <u>08-19-21</u> EFFECTIVE DATE: <u>08-19-21</u> MINUTE BOOK <u>44</u> PAGE <u>10942-10979</u> A RESOLUTION SUPPLEMENTING RESOLUTION NO. 1644 ADOPTED BY THE CITY COUNCIL OF THE CITY OF KNOXVILLE, TENNESSEE ON JANUARY 4, 1949 ENTITLED "A RESOLUTION PROVIDING FOR THE ISSUANCE OF ELECTRIC SYSTEM REVENUE BONDS" SO AS TO PROVIDE FOR THE ISSUANCE OF NOT TO EXCEED FIFTY-FIVE MILLION AND NO/100 DOLLARS (\$55,000,000) OF ELECTRIC SYSTEM REVENUE BONDS, SERIES MM-2021.

RESOLUTION NO:

REQUESTED BY: PREPARED BY: APPROVED AS TO FORM CORRECTNESS:

Law Director

FINANCIAL IMPACT STATEMENT:

Director of Finance

APPROVED:

APPROVED AS AN EMERGENCY MEASURE:_____

MINUTE BOOK _____ PAGE _____

WHEREAS, the City of Knoxville (the "City"), pursuant to a resolution entitled "A Resolution Providing for the Issuance of Electric System Revenue Bonds," being Resolution No. 1644 of the City Council adopted January 4, 1949 (which resolution as heretofore amended is hereinafter sometimes referred to as the "1949 Resolution"), authorized an issue of Electric System Revenue Bonds; and

WHEREAS, pursuant to the 1949 Resolution, and for the purpose of financing the cost of the extensions and improvements to the City's electrical power distribution system (the "System") and the refinancing of indebtedness issued for that purpose, the City issued Electric System Revenue Bonds, the series of which, the amount issued, and the amount outstanding as of August 1, 2021, are as follows:

	Amount	Amount
Series	Issued	Outstanding
EE-2015	\$28,550,000	\$21,530,000
FF-2015	\$35,000,000	\$30,575,000
GG-2016	\$55,000,000	\$35,700,000
HH-2017	\$23,445,000	\$15,225,000
II-2017	\$55,000,000	\$36,885,000
JJ-2018	\$39,995,000	\$37,550,000
KK-2020	\$14,380,000	\$13,225,000
LL-2021	\$70,180,000	\$70,180,000

WHEREAS, it is desirable that an additional series of bonds be issued to finance the costs of the extensions and improvements to the System, including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the bonds, pursuant to the authority of the 1949 Resolution and pursuant to the authority of this resolution; and

WHEREAS, the Board of Commissioners (the "Board") of the Knoxville Utilities Board ("KUB") has duly adopted a resolution requesting the City Council of the City to adopt this resolution authorizing the issuance of bonds for the purposes and in the manner hereinafter more fully stated; and

WHEREAS, it is the intention of the City Council of the City to adopt this resolution for the purpose of authorizing not to exceed \$55,000,000 in aggregate principal amount of electric system revenue bonds for the purposes described above, establishing the terms of such bonds, providing for the issuance, sale and payment of the bonds and disposition of proceeds therefrom, and collection of revenues from the System and the application thereof to the payment of principal of, premium, if any, and interest on said bonds.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Knoxville, Tennessee, as follows:

Section 1. Authority. The bonds authorized by this resolution are issued pursuant to Sections 7-34-101 et seq. and 9-21-101 et seq., Tennessee Code Annotated, and other applicable provisions of law.

<u>Section 2.</u> <u>Definitions</u>. Capitalized terms used herein and not defined in this Section 2 shall have the meanings ascribed to them in the 1949 Resolution (as hereinbelow defined). The following terms shall have the following meanings in this resolution unless the text expressly or by necessary implication requires otherwise.

(a) "Board" shall mean the Board of Commissioners of the Knoxville Utilities Board;

(b) "Bond Purchase Agreement" means a Bond Purchase Agreement, dated as of the sale of the Series MM-2021 Bonds, entered into by and between KUB and the Underwriter, in substantially the form of the document attached hereto as <u>Exhibit A</u>, subject to such changes as permitted by Section 9 hereof, as approved by the President and Chief Executive Officer of KUB, consistent with the terms of this resolution;

(c) "Book-Entry Form" or "Book-Entry System" means a form or system, as applicable, under which physical Bond certificates in fully registered form are issued to a Depository, or to its nominee as Registered Owner, with the certificated Bonds being held by and "immobilized" in the custody of such Depository, and under which records maintained by persons, other than the City, KUB or the Registration Agent, constitute the written record that identifies, and records the transfer of, the beneficial "book-entry" interests in those Bonds;

(d) "City" shall mean the City of Knoxville, Tennessee;

(e) "Code" shall mean the Internal Revenue Code of 1986, as amended, and any lawful regulations promulgated or proposed thereunder;

(f) "Depository" means any securities depository that is a clearing agency under federal laws operating and maintaining, with its participants or otherwise, a Book-Entry System, including, but not limited to, DTC;

(g) "Direct Payment Credit" means any refundable direct payment credit received by the City or KUB from the United States Treasury or other agency or instrumentality of the United States pursuant to the American Infrastructure Bonds Act of 2021 (if enacted) or other similar federal law with respect to any emission of Bonds qualifying as Federally Taxable Bonds for which the City or KUB makes an irrevocable election as set forth herein;

(h) "DTC" means the Depository Trust Company, a limited purpose company organized under the laws of the State of New York, and its successors and assigns;

(i) "DTC Participant(s)" means securities brokers and dealers, banks, trust companies and clearing corporations that have access to the DTC system;

(j) "Federally Taxable Bonds" means for purposes of this resolution, any emission of Bonds, the interest on which is includable in gross income of the holders thereof for federal income tax purposes and that, when issued, qualify to receive Direct Payment Credits;

(k) "Federally Tax-Exempt Bonds" means any emission of Bonds, the interest on which is intended to be excludable from gross income of the holders thereof for federal income tax purposes;

(1) "Financial Adviser" means Cumberland Securities Company, Inc.;

(m) "Governing Body" shall mean the City Council of the City;

(n) "KUB shall mean the Knoxville Utilities Board;

(o) "1949 Resolution" shall mean Resolution No. 1644 of the Governing Body, adopted January 4, 1949, as amended and supplemented by Resolution No. 2171, Resolution No. 3491, Resolution No. R-317-90, Resolution No. R-422-98, Resolution No. R-149-01, Resolution No. R-332-2010 and Resolution R-230-2018, and as otherwise supplemented prior to the date hereof;

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(p) "Outstanding Bonds" shall mean the City's outstanding Electric System Revenue Refunding Bonds, Series EE-2015, dated May 1, 2015, maturing July 1, 2022 and thereafter, the City's outstanding Electric System Revenue Bonds, Series FF-2015, dated May 20, 2015, maturing July 1, 2022 and thereafter, the City's outstanding Electric System Revenue Bonds, Series GG-2016, dated August 5, 2016, maturing July 1, 2022 and thereafter, the City's outstanding Electric System Revenue Refunding Bonds, Series HH-2017, dated April 7, 2017, maturing July 1, 2022 and thereafter, the City's outstanding Electric System Revenue Bonds, Series JJ-2018, dated September 15, 2017, maturing July 1, 2022 and thereafter, the City's outstanding Electric System Revenue Bonds, Series JJ-2018, dated September 14, 2018, maturing July 1, 2022 and thereafter, the City's outstanding Electric System Revenue Refunding Bonds, Series KK-2020, dated May 22, 2020, maturing July 1, 2022 and thereafter, and the City's outstanding Electric System Revenue Refunding July 1, 2022 and thereafter, and the City's outstanding Electric System Revenue Refunding July 1, 2022 and thereafter, and the City's outstanding Electric System Revenue Refunding Bonds, Series JJ-2018, dated April 19, 2021, maturing July 1, 2022 and thereafter; 3018, 301

(q) "Parity Bonds" shall mean any bonds issued on a parity with the Series MM-2021 Bonds and the Outstanding Bonds pursuant to the 1949 Resolution;

(r) "Project" shall mean extensions and improvements to the System;

(s) "Registration Agent" shall mean the registration and paying agent for the Series MM-2021 Bonds designated by the President and Chief Executive Officer of KUB, or any successor as designated by the Board;

(t) "Series MM-2021 Bonds" shall mean the City's Electric System Revenue Bonds, Series MM-2021, dated the date of their issuance or such other date as shall be determined by the Board pursuant to Section 9 hereof, authorized to be issued by the 1949 Resolution and this resolution in an aggregate principal amount not to exceed \$55,000,000;

(u) "State" shall mean the State of Tennessee; and

(v) "Underwriter" shall mean an investment banking firm qualified to underwrite bonds such as the Series MM-2021 Bonds in the State of Tennessee selected by the President and Chief Executive Officer of KUB.

<u>Section 3.</u> <u>Declarations</u>. It is hereby determined that all requirements of the 1949 Resolution have been or will have been met upon the issuance of the Series MM-2021 Bonds so that the Series MM-2021 Bonds will be issued as Parity Bonds.

<u>Section 4</u>. <u>Authorization and Terms of the Series MM-2021 Bonds</u>. (a) For the purpose of providing funds to finance the costs of construction of the Project, including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the Series MM-2021 Bonds as more fully set out in Section 9 hereof, there are hereby authorized to be issued revenue bonds of the City in the aggregate principal amount of not to exceed \$55,000,000. The Series MM-2021 Bonds shall be issued in fully registered form, without coupons, shall be known as "Electric System Revenue Bonds, Series MM-2021" and shall be dated the date of their issuance or such other date as shall be determined by the Board or the President and Chief Executive Officer of KUB as its designee pursuant to Section 9 hereof. The Series MM-2021 Bonds shall bear interest at a rate or rates not to exceed five percent (5.00%) per annum, payable semi-annually on January 1 and July 1 in each year, commencing July 1, 2022 or such later date as is permitted pursuant to Section 9 hereof. The Series MM-2021 Bonds shall be initially issued in \$5,000 denominations or integral multiples thereof as shall be requested by the purchaser thereof. The Series MM-2021 Bonds shall mature and be payable either serially or through

mandatory redemption on each July 1 in such years as is established by the Board or the President and Chief Executive Officer of KUB as its designee pursuant to Section 9, provided that the final maturity date shall not be later than July 1, 2052. The final maturity schedule shall be established by the award resolution or certificate awarding the Series MM-2021 Bonds to the successful purchaser thereof or in the Bond Purchase Agreement provided for in Section 9 if the Series MM-2021 Bonds are sold by negotiated sale.

(b) Subject to adjustment pursuant to Section 9 hereof, the Series MM-2021 Bonds maturing on or before July 1, 2030 shall mature without option of prior redemption, and Series MM-2021 Bonds maturing on July 1, 2031 and thereafter shall be subject to redemption prior to maturity at the option of the City, acting through the Board, on or after July 1, 2030, as a whole or in part at any time at a redemption price equal to the principal amount plus interest accrued to the redemption date.

If less than all the Series MM-2021 Bonds shall be called for redemption, the maturities to be redeemed shall be selected by the Board in its discretion. If less than all the Series MM-2021 Bonds within a single maturity shall be called for redemption, the interests within the maturity to be redeemed shall be selected as follows:

(i) if the Series MM-2021 Bonds are being held under a Book-Entry System by DTC, or a successor Depository, the amount of the interest of each DTC Participant in the Series MM-2021 Bonds to be redeemed shall be determined by DTC, or such successor Depository, by lot or such other manner as DTC, or such successor Depository, shall determine; or

(ii) if the Series MM-2021 Bonds are not being held under a Book-Entry System by DTC, or a successor Depository, the Series MM-2021 Bonds within the maturity to be redeemed shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall determine.

(c) Pursuant to Section 9 hereof, KUB is authorized to sell the Series MM-2021 Bonds, or any maturities thereof, as term bonds with mandatory redemption requirements corresponding to the maturities set forth herein or as determined by KUB. In the event any or all the Series MM-2021 Bonds are sold as term bonds, KUB shall redeem such term bonds on redemption dates corresponding to the maturity dates set forth in the award resolution or certificate awarding the Series MM-2021 Bonds, in amounts so as to achieve an amortization of the indebtedness approved by the Board or the President and Chief Executive Officer of KUB as its designee. DTC, as Depository for the Series MM-2021 Bonds, or any successor Depository for the Series MM-2021 Bonds, shall determine the interest of each Participant in the Series MM-2021 Bonds to be redeemed using its procedures generally in use at that time. If DTC or another securities depository is no longer serving as Depository for the Series MM-2021 Bonds, the Series MM-2021 Bonds to be redeemed within a maturity shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall select.

At its option, to be exercised on or before the forty-fifth (45th) day next preceding any such redemption date, KUB may (i) deliver to the Registration Agent for cancellation Series MM-2021 Bonds to be redeemed, in any aggregate principal amount desired, and/or (ii) receive a credit in respect of its redemption obligation under this mandatory redemption provision for any Series MM-2021 Bonds of the maturity to be redeemed which prior to said date have been purchased or redeemed (otherwise than through the operation of this mandatory sinking fund redemption provision) and canceled by the Registration Agent and not theretofore applied as a credit against any redemption obligation under this mandatory sinking fund provision. Each Series MM-2021 Bond so delivered or previously purchased or redeemed shall be credited by the Registration Agent at 100% of the principal amount thereof on the obligation of KUB on such payment date and any excess shall be credited on future redemption

obligations in chronological order, and the principal amount of Series MM-2021 Bonds to be redeemed by operation of this mandatory sinking fund provision shall be accordingly reduced. KUB shall on or before the forty-fifth (45th) day next preceding each payment date furnish the Registration Agent with its certificate indicating whether or not and to what extent the provisions of clauses (i) and (ii) of this subsection are to be availed of with respect to such payment and confirm that funds for the balance of the next succeeding prescribed payment will be paid on or before the next succeeding payment date.

Notice of call for redemption, whether optional or mandatory, shall be given by the (d) Registration Agent not less than twenty (20) nor more than sixty (60) days prior to the date fixed for redemption by sending an appropriate notice to the registered owners of the Series MM-2021 Bonds to be redeemed by first-class mail, postage prepaid, at the addresses shown on the bond registration records of the Registration Agent as of the date of the notice; but neither failure to mail such notice nor any defect in any such notice so mailed shall affect the sufficiency of the proceedings for redemption of any of the Series MM-2021 Bonds for which proper notice was given. The notice may state that it is conditioned upon the deposit of moneys in an amount equal to the amount necessary to affect the redemption with the Registration Agent no later than the redemption date ("Conditional Redemption"). As long as DTC, or a successor Depository, is the registered owner of the Series MM-2021 Bonds, all redemption notices shall be mailed by the Registration Agent to DTC, or such successor Depository, as the registered owner of the Series MM-2021 Bonds, as and when above provided, and neither KUB, the City, nor the Registration Agent shall be responsible for mailing notices of redemption to DTC Participants or Beneficial Owners. Failure of DTC, or any successor Depository, to provide notice to any DTC Participant or Beneficial Owner will not affect the validity of such redemption. The Registration Agent shall mail said notices, in the case of term bonds with mandatory redemption requirements as and when provided herein and in the Series MM-2021 Bonds and, in the case of optional redemption, as and when directed by the Board pursuant to written instructions from an authorized representative of the Board given at least forty-five (45) days prior to the redemption date (unless a shorter notice period shall be satisfactory to the Registration Agent). From and after the redemption date, all Series MM-2021 Bonds called for redemption shall cease to bear interest if funds are available at the office of the Registration Agent for the payment thereof and if notice has been duly provided as set forth herein. In the case of a Conditional Redemption, the failure of the City or KUB to make funds available in part or in whole on or before the redemption date shall not constitute an event of default, and the Registration Agent shall give immediate notice to the Depository or the affected Bondholders that the redemption did not occur and that the Bonds called for redemption and not so paid remain outstanding.

(e) The Series MM-2021 Bonds shall be executed in such manner as may be prescribed by applicable law, in the name, and on behalf, of the City with the manual or facsimile signature of the Chair of the Board and attested by the manual or facsimile signature of the Secretary of the Board.

(f) The City hereby authorizes and directs the Board to appoint a Registration Agent and paying agent for the Series MM-2021 Bonds, and the Registration Agent so appointed is authorized and directed to maintain Bond registration records with respect to the Series MM-2021 Bonds, to authenticate and deliver the Series MM-2021 Bonds as provided herein, either at original issuance, upon transfer, or as otherwise directed by the Board, to effect transfers of the Series MM-2021 Bonds, to give all notices of redemption as required herein, to make all payments of principal and interest with respect to the Series MM-2021 Bonds as provided herein, to cancel and destroy Series MM-2021 Bonds which have been paid at maturity or upon earlier redemption or submitted for exchange or transfer, to furnish KUB at least annually a certificate of destruction with respect to Series MM-2021 Bonds canceled and destroyed, and to furnish KUB at least annually an audit confirmation of Bonds paid, Bonds outstanding and payments made with respect to interest on the Series MM-2021 Bonds. The Chair of the Board is hereby authorized to execute and the Secretary of the Board is hereby authorized to attest such written agreement between KUB and the Registration Agent as they shall deem necessary or proper with respect to the obligations,

duties and rights of the Registration Agent. The payment of all reasonable fees and expenses of the Registration Agent for the discharge of its duties and obligations hereunder or under any such agreement is hereby authorized and directed. The Board hereby delegates to the President and Chief Executive Officer of KUB the authority to select and appoint the Registration Agent and any paying agents for the Series MM-2021 Bonds.

The Series MM-2021 Bonds shall be payable, principal and interest, in lawful money of (g) the United States of America at the designated trust office of the Registration Agent. The Registration Agent shall make all interest payments with respect to the Bonds on each interest payment date directly to the registered owners as shown on the Bond registration records maintained by the Registration Agent as of the close of business on the fifteenth day of the month next preceding the interest payment date (the "Regular Record Date") by check or draft mailed to such owners at their addresses shown on said Bond registration records, without, except for final payment, the presentation or surrender of such registered Series MM-2021 Bonds, and all such payments shall discharge the obligations of KUB in respect of such Series MM-2021 Bonds to the extent of the payments so made. Payment of principal of the Series MM-2021 Bonds shall be made upon presentation and surrender of such Series MM-2021 Bonds to the Registration Agent as the same shall become due and payable. All rates of interest specified herein shall be computed on the basis of a three hundred sixty (360) day year composed of twelve (12) months of thirty (30) days each. In the event the Series MM-2021 Bonds are no longer registered in the name of DTC, or a successor Depository, if requested by the Owner of at least \$1,000,000 in aggregate principal amount of the Series MM-2021 Bonds, payment of interest on such Series MM-2021 Bonds shall be paid by wire transfer to a bank within the continental United States or deposited to a designated account if such account is maintained with the Registration Agent and written notice of any such election and designated account is given to the Registration Agent prior to the record date.

(h) Any interest on any Series MM-2021 Bond which is payable but is not punctually paid or duly provided for on any interest payment date (hereinafter "Defaulted Interest") shall forthwith cease to be payable to the registered owner on the relevant Regular Record Date; and, in lieu thereof, such Defaulted Interest shall be paid to the persons in whose names the Series MM-2021 Bonds are registered at the close of business on a date (the "Special Record Date") for the payment of such Defaulted Interest, which shall be fixed in the following manner: KUB shall notify the Registration Agent in writing of the amount of Defaulted Interest proposed to be paid on each Series MM-2021 Bond and the date of the proposed payment, and at the same time KUB shall deposit with the Registration Agent an amount of money equal to the aggregate amount proposed to be paid in respect of such Defaulted Interest or shall make arrangements satisfactory to the Registration Agent for such deposit prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the persons entitled to such Defaulted Interest as in this Section 4 provided. Thereupon, not less than ten (10) days after the receipt by the Registration Agent of the notice of the proposed payment, the Registration Agent shall fix a Special Record Date for the payment of such Defaulted Interest which Date shall be not more than fifteen (15) nor less than ten (10) days prior to the date of the proposed payment to the registered owners. The Registration Agent shall promptly notify KUB of such Special Record Date and, in the name and at the expense of KUB, not less than ten (10) days prior to such Special Record Date, shall cause notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor to be mailed, first class postage prepaid, to each registered owner at the address thereof as it appears in the Bond registration records maintained by the Registration Agent as of the date of such notice. Nothing contained in this Section 4 or in the Series MM-2021 Bonds shall impair any statutory or other rights in law or in equity of any registered owner arising as a result of the failure of KUB to punctually pay or duly provide for the payment of principal of, premium, if any, and interest on the Series MM-2021 Bonds when due.

(i) The Series MM-2021 Bonds are transferable only by presentation to the Registration Agent by the registered owner, or his legal representative duly authorized in writing, of the registered Series MM-2021 Bond(s) to be transferred with the form of assignment on the reverse side thereof completed in full and signed with the name of the registered owner as it appears upon the face of the Series MM-2021 Bond(s) accompanied by appropriate documentation necessary to prove the legal capacity of any legal representative of the registered owner. Upon receipt of the Series MM-2021 Bond(s) in such form and with such documentation, if any, the Registration Agent shall issue a new Series MM-2021 Bond or Series MM-2021 Bonds to the assignee(s) in \$5,000 denominations, or integral multiples thereof, as requested by the registered owner requesting transfer. The Registration Agent shall not be required to transfer or exchange any Series MM-2021 Bond during the period commencing on a Regular or Special Record Date and ending on the corresponding interest payment date of such Series MM-2021 Bond, nor to transfer or exchange any Series MM-2021 Bond after notice calling such Series MM-2021 Bond for redemption has been made, nor to transfer or exchange any Series MM-2021 Bond during the period following the receipt of instructions from KUB to call such Series MM-2021 Bond for redemption; provided, the Registration Agent, at its option, may make transfers after any of said dates. No charge shall be made to any registered owner for the privilege of transferring any Series MM-2021 Bond, provided that any transfer tax relating to such transaction shall be paid by the registered owner requesting transfer. The person in whose name any Series MM-2021 Bond shall be registered shall be deemed and regarded as the absolute owner thereof for all purposes and neither KUB nor the Registration Agent shall be affected by any notice to the contrary whether or not any payments due on the Series MM-2021 Bonds shall be overdue. Series MM-2021 Bonds, upon surrender to the Registration Agent, may, at the option of the registered owner, be exchanged for an equal aggregate principal amount of Series MM-2021 Bonds of the same maturity in any authorized denomination or denominations. This subsection shall be applicable only if the Series MM-2021 Bonds are no longer held by a Depository, and as long as the Series MM-2021 Bonds are held by a Depository, transfers of ownership interests in the Series MM-2021 Bonds shall be governed by the rules of the Depository.

(j) Except as otherwise authorized herein, the Series MM-2021 Bonds shall be registered in the name of Cede & Co., as nominee of DTC, which will act as the Depository for the Series MM-2021 Bonds except as otherwise provided herein. References in this Section 4 to a Series MM-2021 Bond or the Series MM-2021 Bonds shall be construed to mean the Series MM-2021 Bond or the Series MM-2021 Bonds that are held under the Book-Entry System. One Series MM-2021 Bond for each maturity of the Series MM-2021 Bonds shall be issued to DTC and immobilized in its custody or a custodian of DTC. The Registration Agent is a custodian and agent for DTC, and the Series MM-2021 Bond will be immobilized in its custody. A Book-Entry System shall be employed, evidencing ownership of the Series MM-2021 Bonds in authorized denominations, with transfers of beneficial ownership effected on the records of DTC and the DTC Participants pursuant to rules and procedures established by DTC.

Each DTC Participant shall be credited in the records of DTC with the amount of such DTC Participant's interest in the Series MM-2021 Bonds. Beneficial ownership interests in the Series MM-2021 Bonds may be purchased by or through DTC Participants. The holders of these beneficial ownership interests are hereinafter referred to as the "Beneficial Owners." The Beneficial Owners shall not receive the Series MM-2021 Bonds representing their beneficial ownership interests. The ownership interests of each Beneficial Owner shall be recorded through the records of the DTC Participant from which such Beneficial Owner purchased its Series MM-2021 Bonds. Transfers of ownership interests in the Series MM-2021 Bonds shall be accomplished by book entries made by DTC and, in turn, by DTC Participants acting on behalf of Beneficial Owners. SO LONG AS CEDE & CO., AS NOMINEE FOR DTC, IS THE REGISTERED OWNER OF THE SERIES MM-2021 BONDS, THE REGISTRATION AGENT SHALL TREAT CEDE & CO., AS THE ONLY HOLDER OF THE SERIES MM-2021 BONDS FOR ALL PURPOSES UNDER THIS RESOLUTION, INCLUDING RECEIPT OF ALL PRINCIPAL OF, PREMIUM, IF ANY, AND INTEREST ON THE SERIES MM-2021 BONDS, RECEIPT OF NOTICES, VOTING AND TAKING OR NOT TAKING, OR CONSENTING TO, CERTAIN ACTIONS UNDER THIS RESOLUTION.

Payments of principal, interest, and redemption premium, if any, with respect to the Series MM-2021 Bonds, so long as DTC is the only owner of the Series MM-2021 Bonds, shall be paid by the Registration Agent directly to DTC or its nominee, Cede & Co. as provided in the Letter of Representation relating to the Series MM-2021 Bonds from the City, acting by and through KUB, and the Registration Agent to DTC (the "Letter of Representation"). DTC shall remit such payments to DTC Participants, and such payments thereafter shall be paid by DTC Participants to the Beneficial Owners. Neither the City, KUB nor the Registration Agent shall be responsible or liable for payment by DTC or DTC Participants, for sending transaction statements or for maintaining, supervising or reviewing records maintained by DTC or DTC Participants.

In the event that (1) DTC determines not to continue to act as Depository for the Series MM-2021 Bonds or (2) to the extent permitted by the rules of DTC, the Board determines to discontinue the Book-Entry System, the Book-Entry System with DTC shall be discontinued. If the Board fails to identify another qualified securities depository to replace DTC, the Board shall cause the Registration Agent to authenticate and deliver replacement Series MM-2021 Bonds in the form of fully registered Series MM-2021 Bonds to each Beneficial Owner.

NEITHER THE CITY, KUB NOR THE REGISTRATION AGENT SHALL HAVE ANY RESPONSIBILITY OR OBLIGATIONS TO ANY DTC PARTICIPANT OR ANY BENEFICIAL OWNER WITH RESPECT TO (i) THE SERIES MM-2021 BONDS; (ii) THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC OR ANY DTC PARTICIPANT; (iii) THE PAYMENT BY DTC OR ANY DTC PARTICIPANT OF ANY AMOUNT DUE TO ANY BENEFICIAL OWNER IN RESPECT OF THE PRINCIPAL OF AND INTEREST ON THE SERIES MM-2021 BONDS; (iv) THE DELIVERY OR TIMELINESS OF DELIVERY BY DTC OR ANY DTC PARTICIPANT OF ANY NOTICE DUE TO ANY BENEFICIAL OWNER THAT IS REQUIRED OR PERMITTED UNDER THE TERMS OF THIS RESOLUTION TO BE GIVEN TO BENEFICIAL OWNERS, (v) THE SELECTION OF BENEFICIAL OWNERS TO RECEIVE PAYMENTS IN THE EVENT OF ANY PARTIAL REDEMPTION OF THE SERIES MM-2021 BONDS; OR (vi) ANY CONSENT GIVEN OR OTHER ACTION TAKEN BY DTC, OR ITS NOMINEE, CEDE & CO., AS OWNER.

If the purchaser or Underwriter certifies that it intends to hold the Series MM-2021 Bonds for its own account, then the City may issue, acting by and through KUB, certificated Bonds without the utilization of DTC and the Book-Entry System.

(k) In case any Series MM-2021 Bond shall become mutilated, or be lost, stolen, or destroyed, the City, acting by and through KUB, in its discretion, shall issue, and the Registration Agent, upon written direction from KUB, shall authenticate and deliver, a new Series MM-2021 Bond of like tenor, amount, maturity and date, in exchange and substitution for, and upon the cancellation of, the mutilated Series MM-2021 Bond, or in lieu of and in substitution for such lost, stolen or destroyed Series MM-2021 Bond, or if any such Series MM-2021 Bond shall have matured or shall be about to mature, instead of issuing a substituted Series MM-2021 Bond KUB may pay or authorize payment of such Series MM-2021 Bond without surrender thereof. In every case the applicant shall furnish evidence satisfactory to KUB and the Registration Agent; and KUB may charge the applicant for the issue of such new Series MM-2021 Bond an amount sufficient to reimburse KUB for the expense incurred by it in the issue thereof.

(l) The Registration Agent is hereby authorized to authenticate and deliver the Series MM-2021 Bonds to DTC, on behalf of the initial purchaser thereof, or an agent of DTC, upon receipt by KUB of the proceeds of the sale thereof, subject to the rules of the depository, and to authenticate and deliver

Series MM-2021 Bonds in exchange for Series MM-2021 Bonds of the same principal amount delivered for transfer upon receipt of the Series MM-2021 Bond(s) to be transferred in proper form with proper documentation as hereinabove described. The Series MM-2021 Bonds shall not be valid for any purpose unless authenticated by the Registration Agent by the manual signature of an authorized representative thereof on the certificate set forth herein on the Series MM-2021 Bond form.

(m) The Registration Agent is hereby authorized to take such action as may be necessary from time to time to qualify and maintain the Series MM-2021 Bonds for deposit with DTC, including but not limited to, wire transfers of interest and principal payments with respect to the Series MM-2021 Bonds, utilization of electronic book entry data received from DTC in place of actual delivery of Series MM-2021 Bonds and provision of notices with respect to Series MM-2021 Bonds registered by DTC (or any of its designees identified to the Registration Agent) by overnight delivery, courier service, telegram, telecopy or other similar means of communication. No such arrangements with DTC may adversely affect the interest of any of the Beneficial Owners of the Series MM-2021 Bonds, provided, however, that the Registration Agent shall not be liable with respect to any such arrangements it may make pursuant to this Section 4.

Section 5. Source of Payment. The Series MM-2021 Bonds shall be payable solely from and be secured by a pledge of the Net Revenues of the System as hereinafter provided and as provided in the 1949 Resolution on a parity and equality of lien with the Outstanding Bonds. The punctual payment of principal of and interest on the Series MM-2021 Bonds, the Outstanding Bonds and any Parity Bonds shall be secured equally and ratably by the Net Revenues of the System, without priority by reason of series, number or time of sale and delivery. The owners of the Series MM-2021 Bonds shall have no recourse to the power of taxation of the City.

<u>Section 6</u>. Form of Series MM-2021 Bonds. The Series MM-2021 Bonds shall be in substantially the following form, the omissions to be appropriately completed when the Series MM-2021 Bonds are prepared and delivered:

(Form of Series MM-2021 Bond)

REGISTERED Number REGISTERED \$

UNITED STATES OF AMERICA STATE OF TENNESSEE COUNTY OF KNOX CITY OF KNOXVILLE ELECTRIC SYSTEM REVENUE BOND, SERIES MM-2021

Interest Rate:

Maturity Date:

Date of Bond:

CUSIP No.:

Registered Owner: Principal Amount:

KNOW ALL PERSONS BY THESE PRESENTS: That the City of Knoxville, a municipal corporation lawfully organized and existing in Knox County, Tennessee (the "City"), acting by and through the Knoxville Utilities Board ("KUB"), for value received hereby promises to pay to the registered owner hereof, hereinabove named, or registered assigns, in the manner hereinafter provided, the principal amount hereinabove set forth on the maturity date hereinabove set forth, or upon earlier

redemption, as set forth herein, and to pay interest (computed on the basis of a 360-day year of twelve 30day months) on said principal amount at the annual rate of interest hereinabove set forth from the date hereof until said maturity date or redemption date, said interest being payable on July 1, 2022, and semiannually thereafter on the first day of January and July in each year until this Bond matures or is redeemed. Both principal hereof and interest hereon are payable in lawful money of the United States of America by check or draft at the designated trust office of

Tennessee, as registration agent and paying agent (the "Registration Agent"). The Registration Agent shall make all interest payments with respect to this Bond by check or draft on each interest payment date directly to the registered owner hereof shown on the bond registration records maintained by the Registration Agent as of the close of business on the day which is the fifteenth (15th) day of the month next preceding the interest payment date (the "Regular Record Date") by depositing said payment in the United States mail, postage prepaid, addressed to such owner at such owner's address shown on said bond registration records, without, except for final payment, the presentation or surrender of this Bond, and all such payments shall discharge the obligations of the City and KUB to the extent of the payments so made. Any such interest not so punctually paid or duly provided for on any interest payment date shall forthwith cease to be payable to the registered owner on the relevant Regular Record Date; and, in lieu thereof, such defaulted interest shall be payable to the person in whose name this Bond is registered at the close of business on the date (the "Special Record Date") for payment of such defaulted interest to be fixed by the Registration Agent, notice of which shall be given to the owners of the Bonds of the issue of which this Bond is one not less than ten (10) days prior to such Special Record Date. Payment of principal of and premium, if any, on the Bonds shall be made when due upon presentation and surrender of this Bond to the Registration Agent.

Except as otherwise provided herein or in the Resolution, as hereinafter defined, this Bond shall be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"), which will act as securities depository for the Bonds of the series of which this Bond is one. One Bond for each maturity of the Bonds shall be issued to DTC and immobilized in its custody or a custodian of DTC. The Registration Agent is a custodian and agent for DTC, and the Bond will be immobilized in its custody. A book-entry system (the "Book-Entry System") shall be employed, evidencing ownership of the Bonds in \$5,000 denominations, or multiples thereof, with transfers of beneficial ownership effected on the records of DTC and the DTC Participants, as defined in the Resolution, pursuant to rules and procedures established by DTC. So long as Cede & Co., as nominee for DTC, is the registered owner of the Bonds, the City, KUB and the Registration Agent shall treat Cede & Co., as the only owner of the Bonds for all purposes under the Resolution, including receipt of all principal of, premium, if any, and interest on the Bonds, receipt of notices, voting and requesting or taking or not taking, or consenting to, certain actions hereunder. Payments of principal, maturity amounts, interest, and redemption premium, if any, with respect to the Bonds, so long as DTC is the only owner of the Bonds, shall be paid directly to DTC or its nominee, Cede & Co. DTC shall remit such payments to DTC Participants, and such payments thereafter shall be paid by DTC Participants to the Beneficial Owners, as defined in the Resolution. Neither the City, KUB, nor the Registration Agent shall be responsible or liable for payment by DTC or DTC Participants, for sending transaction statements or for maintaining, supervising or reviewing records maintained by DTC or DTC Participants. In the event that (1) DTC determines not to continue to act as securities depository for the Bonds or (2) to the extent permitted by the rules of DTC, the Board of Commissioners of KUB (the "Board") determines to discontinue the Book-Entry System, the Book-Entry System with DTC shall be discontinued. If the Board fails to identify another qualified securities depository to replace DTC, the Board shall cause the Registration Agent to authenticate and deliver replacement Bonds in the form of fully registered Bonds to each Beneficial Owner. Neither the City, KUB nor the Registration Agent shall have any responsibility or obligations to any DTC Participant or any Beneficial Owner with respect to (i) the Bonds; (ii) the accuracy of any records maintained by DTC or any DTC Participant; (iii) the payment by DTC or any DTC Participant of any amount due to any Beneficial Owner in respect of the principal or maturity

amounts of and interest on the Bonds; (iv) the delivery or timeliness of delivery by DTC or any DTC Participant of any notice due to any Beneficial Owner that is required or permitted under the terms of the Resolution to be given to Beneficial Owners, (v) the selection of Beneficial Owners to receive payments in the event of any partial redemption of the Bonds; or (vi) any consent given or other action taken by DTC, or its nominee, Cede & Co., as owner.

The Bonds of the issue of which this Bond is one maturing on or before July 1, 2030 shall mature without option of prior redemption. The Bonds maturing on July 1, 2031 and thereafter shall be subject to redemption prior to maturity at the option of the City, acting through the Board, on or after July 1, 2030, as a whole or in part at any time at a redemption price equal to the principal amount plus interest accrued to the redemption date.

[If less than all the Bonds shall be called for redemption, the maturities to be redeemed shall be selected by the Board in its discretion. If less than all of the Bonds within a single maturity shall be called for redemption, the interests within the maturity to be redeemed shall be selected as follows:

(i) if the Bonds are being held under a Book-Entry System by DTC, or a successor Depository, the amount of the interest of each DTC Participant in the Bonds to be redeemed shall be determined by DTC, or such successor Depository, by lot or such other manner as DTC, or such successor Depository, shall determine; or

(ii) if the Series Bonds are not being held under a Book-Entry System by DTC, or a successor Depository, the Bonds within the maturity to be redeemed shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall determine.]

[Subject to the credit hereinafter provided, the City acting by and through KUB, shall redeem Bonds maturing on the redemption dates set forth below opposite such maturity date, in aggregate principal amounts equal to the respective dollar amounts set forth below opposite the redemption dates at a price of par plus accrued interest thereon to the date of redemption. DTC, as securities depository for the series of Bonds of which this Bond is one, or any successor Depository for the Bonds, shall determine the interest of each Participant in the Bonds to be redeemed using its procedures generally in use at that time. If DTC, or another securities depository is no longer serving as securities depository for the Bonds, the Bonds to be redeemed within a maturity shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall select. The dates of redemption and amount of Bonds to be redeemed on said dates are as follows:

Maturity

Redemption Date

Principal Amount of Bonds to be Redeemed

*final maturity

At its option, to be exercised on or before the forty-fifth (45th) day next preceding any such redemption date, the City, acting through KUB, may (i) deliver to the Registration Agent for cancellation Bonds to be redeemed, in any aggregate principal amount desired, and/or (ii) receive credit in respect of its redemption obligation under the mandatory redemption provision for any Bonds to be redeemed which prior to said date have been purchased or redeemed (otherwise than by mandatory redemption) and

canceled by the Registration Agent and not theretofore applied as a credit against any redemption obligation under the mandatory redemption provision. Each Bond so delivered or previously purchased or redeemed shall be credited by the Registration Agent at 100% of the principal amount thereof on the obligation of KUB on such payment date and any excess shall be credited on future redemption obligations in chronological order, and the principal amount of the Bonds to be redeemed by operation of the mandatory redemption provision shall be accordingly reduced. KUB shall on or before the forty-fifth (45th) day next preceding each payment date furnish the Registration Agent with its certificate indicating whether or not and to what extent the provisions of clauses (i) and (ii) of this paragraph are to be availed of with respect to such payment and confirm that funds for the balance of the next succeeding prescribed payment will be paid on or before the next succeeding payment date.

Notice of call for redemption, whether optional or mandatory shall be given by the Registration Agent on behalf of the City, but only upon direction of the Board, not fewer than twenty (20) nor more than sixty (60) days prior to the date fixed for redemption by sending an appropriate notice to the registered owners of the Bonds to be redeemed by first-class mail, postage prepaid, at the addresses shown on the Bond registration records of the Registration Agent as of the date of the notice; but neither failure to mail such notice nor any defect in any such notice so mailed shall affect the sufficiency of the proceedings for the redemption of any of the Bonds for which proper notice was given. The notice may state that it is conditioned upon the deposit of moneys in an amount equal to the amount necessary to affect the redemption with the Registration Agent no later than the redemption date ("Conditional Redemption"). From and after any redemption date, all Bonds called for redemption shall cease to bear interest if funds are available at the office of the Registration Agent for the payment thereof and if notice has been duly given as set forth in the Resolution, as hereafter defined. In the case of a Conditional Redemption, the failure of the City or KUB to make funds available in part or in whole on or before the redemption date shall not constitute an event of default, and the Registration Agent shall give immediate notice to the Depository or the affected Bondholders that the redemption did not occur and that the Bonds called for redemption and not so paid remain outstanding.]

The Bonds of the issue of which this Bond is one are issuable only as fully registered Bonds, without coupons, in the denomination of Five Thousand Dollars (\$5,000) or any authorized integral multiple thereof. At the designated trust office of the Registration Agent, in the manner and subject to the limitations, conditions and charges provided in the Resolution, fully registered Bonds may be exchanged for an equal aggregate principal amount of fully registered Bonds of the same maturity, of authorized denominations, and bearing interest at the same rate. The Bonds shall be numbered consecutively from one upwards and will be made eligible for the Book-Entry System of DTC. Except as otherwise provided in this paragraph and the Resolution, as hereinafter defined, the Bonds shall be registered in the name of Cede & Co., as nominee of DTC. The Board may discontinue use of DTC for Bonds at any time upon determination by the Board that the use of DTC is no longer in the best interest of the beneficial owners of the Bonds. Upon such determination, registered ownership of the Bonds may be transferred on the registration books maintained by the Registration Agent, and the Bonds may be delivered in physical form to the following:

i. any successor of DTC or its nominee;

ii. any substitute depository to which the Registration Agent does not unreasonably object, upon (a) the resignation of DTC or its successor (or any substitute depository or its successor) from its functions as depository, or (b) a determination by the Board that DTC or its successor (or any substitute depository or its successor) is no longer able to carry out its functions as depository; or

iii. any person, upon (a) the resignation of DTC or its successor (or substitute depository or its successor) from its functions as depository, or (b) termination by the Board of the use of DTC (or substitute depository or its successor).

In the event that this Bond is no longer held in a Book-Entry System by DTC, this Bond shall be transferable by the registered owner hereof in person or by such owner's attorney duly authorized in writing at the designated trust office of the Registration Agent set forth on the front side hereof, but only in the manner, subject to limitations and upon payment of the charges provided in the Resolution and upon surrender and cancellation of this Bond. Upon such transfer a new Bond or Bonds of authorized denomination or denominations of the same maturity and interest rate for the same aggregate principal amount will be issued to the transferee in exchange therefor. The person in whose name this Bond is registered shall be deemed and regarded as the absolute owner thereof for all purposes and neither the City, KUB nor the Registration Agent shall be affected by any notice to the contrary whether or not any payments due on the Bond shall be overdue. Bonds, upon surrender to the Registration Agent, may, at the option of the registered owner thereof, be exchanged for an equal aggregate principal amount of the Bonds of the same maturity in authorized denomination or denominations, upon the terms set forth in the Resolution. The Registration Agent shall not be required to transfer or exchange any Bond during the period commencing on a Regular Record Date or Special Record Date and ending on the corresponding interest payment date of such Bond, nor to transfer or exchange any Bond after the notice calling such Bond for redemption has been made, nor during a period following the receipt of instructions from the Board to call such Bond for redemption.

This Bond is one of a total authorized issue aggregating \$55,000,000 and issued by the City, acting by and through KUB, for the purpose of providing funds to finance the construction of extensions and improvements to the City's electrical power distribution system (the "System"), including the payment of legal, fiscal and administrative costs incident thereto and costs incident to the issuance of the Bonds, under and in full compliance with the Constitution and statutes of the State of Tennessee, including Sections 7-34-101 et seq. and Section 9-21-101 et seq., Tennessee Code Annotated, and pursuant to Resolution No. 1644 duly adopted by the City Council of the City on January 4, 1949, as supplemented and amended by Resolution No. 2171 Resolution No. 2171, Resolution No. 3491, Resolution No. R-317-90, Resolution No. R-422-98, Resolution No. R-149-01, Resolution No. R-332-2010 and Resolution No. R-230-2018, and as supplemented by Resolution No. R-2021 and as otherwise supplemented prior to the date hereof (as supplemented and amended, the "Resolution").

This Bond, and interest hereon, are payable solely from and secured by a pledge of the income and revenues to be derived from the operation of the System, subject only to the payment of the reasonable and necessary costs of operating, maintaining, repairing, and insuring the System. The Bonds of the series of which this Bond is one shall enjoy complete parity and equality of lien with the City's outstanding Electric System Revenue Refunding Bonds, Series EE-2015, dated May 1, 2015, maturing July 1, 2022 and thereafter, the City's outstanding Electric System Revenue Bonds, Series FF-2015, dated May 20, 2015, maturing July 1, 2022 and thereafter, the City's outstanding Electric System Revenue Bonds. Series GG-2016, dated August 5, 2016, maturing July 1, 2022 and thereafter, the City's outstanding Electric System Revenue Refunding Bonds, Series HH-2017, dated April 7, 2017, maturing July 1, 2022 and thereafter, the City's outstanding Electric System Revenue Bonds, Series II-2017, dated September 15, 2017, maturing July 1, 2022 and thereafter, the City's outstanding Electric System Revenue Bonds, Series JJ-2018, dated September 14, 2018, maturing July 1, 2022 and thereafter, the City's outstanding Electric System Revenue Refunding Bonds, Series KK-2020, dated May 22, 2020, maturing July 1, 2022 and thereafter, and the City's outstanding Electric System Revenue Refunding Bonds, Series LL-2021, dated April 19, 2021, maturing July 1, 2022 and thereafter (collectively, the "Outstanding Bonds"). As provided in the Resolution, the punctual payment of principal of, premium, if any, and interest on the series of Bonds of which this Bond is one, the Outstanding Bonds, and any other bonds issued on a parity therewith pursuant to the terms of the Resolution shall be secured equally and ratably by said revenues without priority by reason of series, number or time of sale or delivery. The owner of this Bond shall have no recourse to the power of taxation of the City. The Board has covenanted that it will fix and impose such rates and charges for the services rendered by the System and will collect and account for sufficient revenues to pay promptly the principal of and interest on this Bond and the issue of which it is a part, as each payment becomes due. For a more complete statement of the revenues from which and conditions under which this Bond is payable, a statement of the conditions on which obligations may hereafter be issued on a parity with this Bond, the general covenants and provisions pursuant to which this Bond is issued and the terms upon which the Resolution may be modified, reference is hereby made to the Resolution.

Under existing law, this Bond and the income therefrom are exempt from all present state, county and municipal taxation in Tennessee except (a) Tennessee excise taxes on all or a portion of the interest on this Bond during the period such Bond is held or beneficially owned by any organization or entity, other than a sole proprietorship or general partnership, doing business in the State of Tennessee, and (b) Tennessee franchise taxes by reason of the inclusion of the book value of this Bond in the Tennessee franchise tax base or any organization or entity, other than a sole proprietorship or general partnership, doing business in the State of Tennessee.

It is hereby certified, recited, and declared that all acts, conditions and things required to exist, happen and be performed precedent to and in the issuance of this Bond exist, have happened and have been performed in due time, form and manner as required by law, and that the amount of this Bond, together with all other indebtedness of either the City or KUB, does not exceed any limitation prescribed by the constitution and statutes of the State of Tennessee.

IN WITNESS WHEREOF, the City acting by and through the Board has caused this Bond to be signed by the Chair of the Board by his manual or facsimile signature and attested by the Secretary of the Board by his manual or facsimile signature, all as of the date hereinabove set forth.

CITY OF KNOXVILLE by and through the KNOXVILLE UTILITIES BOARD

By: _

Chair

ATTESTED:

Secretary

Transferable and payable at the trust office of:

, Tennessee

Date of Registration:

This Bond is one of the issue of Bonds issued pursuant to the Resolution hereinabove described.

Registration Agent

By:

Authorized Representative

FORM OF ASSIGNMENT

FOR VALUE RECEIVED, the undersigned sells, assigns, and transfers unto [Please insert Federal Tax Identification Number or Social Security] Number of Assignee _____] whose address is ______, the within bond of the City of Knoxville, Tennessee, and does hereby irrevocably constitute and appoint

Tennessee, attorney, to transfer the said bond on the records kept for registration thereof with full power of substitution in the premises.

Dated:

<u>NOTICE</u>: The signature to this assignment must correspond with the name of the registered owner as it appears on the face of the within Bond in every particular, without alteration or enlargement or any change whatsoever.

Signature guaranteed:

NOTICE: Signature(s) must be guaranteed by a member firm of a Medallion Program acceptable to the Registration Agent.

<u>Section 7</u>. Equality of Lien; Pledge of Net Revenues. The punctual payment of principal of, premium, if any, and interest on the Series MM-2021 Bonds, the Outstanding Bonds and any Parity Bonds shall be secured equally and ratably by the Net Revenues of the System without priority by reason of series, number or time of sale or execution or delivery, and the Net Revenues of the System are hereby irrevocably pledged to the punctual payment of such principal, premium and interest as the same become due.

Section 8. Applicability of the 1949 Resolution. The Series MM-2021 Bonds are issued in compliance with the 1949 Resolution so as to be on a parity with the Outstanding Bonds, and, when duly delivered, the Series MM-2021 Bonds shall constitute a series of bonds issued under the authority of the 1949 Resolution. All recitals, provisions, covenants and agreements contained in the 1949 Resolution, as supplemented and amended herein (except insofar as any of said recitals, provisions, covenants and agreements necessarily relate exclusively to any series of the Outstanding Bonds) are hereby ratified and confirmed and incorporated herein by reference and, for so long as any of the Series MM-2021 Bonds shall be outstanding and unpaid either as to principal or interest, or until discharge and satisfaction of the Series MM-2021 Bonds as provided in Section 12 hereof, shall be applicable to the Series MM-2021

Bonds, shall inure to the benefit of owners of the Series MM-2021 Bonds as if set out in full herein, and shall be fully enforceable by the owner of any Series MM-2021 Bond.

All references to "holder" or "holders" in the 1949 Resolution shall be deemed to include owners of the Series MM-2021 Bonds, and all references to "Bonds" in the 1949 Resolution shall be deemed to include the Series MM-2021 Bonds.

Section 9. Sale of Series MM-2021 Bonds.

(a) The Series MM-2021 Bonds or any emission thereof may be sold at negotiated sale to the Underwriter or at public sale as determined by the President and Chief Executive Officer of KUB at a price of not less than 98.00% of par, exclusive of original issue discount, plus accrued interest, if any, provided, however, that no emission of Series MM-2021 Bonds may be sold at negotiated sale unless the Audit and Finance Committee of the Board has previously approved the sale of such emission at negotiated sale. The sale of any emission of the Series MM-2021 Bonds to the Underwriter or by public sale shall be binding on the City and KUB, and no further action of the Board with respect thereto shall be required.

(b) The President and Chief Executive Officer of KUB, as the designee of the Board, is further authorized with respect to each emission of Series MM-2021 Bonds to:

(1) change the dated date to a date other than the date of issuance;

(2) specify or change the series designation of the Series MM-2021 Bonds to a designation other than "Electric System Revenue Bonds, Series MM-2021";

(3) change the first interest payment date to a date other than July 1, 2022, provided that such date is not later than twelve months from the dated date of such emission of Series MM-2021 Bonds;

(4) establish and adjust the principal and interest payment dates and determine maturity or mandatory redemption amounts of the Series MM-2021 Bonds or any emission thereof, provided that (A) the total principal amount of all emissions of the Series MM-2021 Bonds does not exceed the total amount of Series MM-2021 Bonds authorized herein, (B) the final maturity date of each emission shall be not later than July 1, 2052 and (C) the debt service payable in each fiscal year after the completion of the Project shall be approximately level;

(5) modify or remove the optional redemption provisions contained herein, provided that the premium amount to be paid in connection with any redemption provision shall not exceed two percent (2%) of the principal amount thereof;

(6) sell the Series MM-2021 Bonds, or any emission thereof, or any maturities thereof as term bonds with mandatory redemption requirements as determined by the Board, as it shall deem most advantageous to KUB; and

(7) cause all or a portion of the Series MM-2021 Bonds to be insured by a bond insurance policy issued by a nationally recognized bond insurance company to achieve the purposes set forth herein and to serve the best interests of KUB and to enter into agreements with such insurance company to the extent not inconsistent with this resolution.

(c) If any emission of Series MM-2021 Bonds is sold at negotiated sale, the President and Chief Executive Officer of KUB is authorized to execute a Bond Purchase Agreement with respect to such emission of Series MM-2021 Bonds, providing for the purchase and sale of the Series MM-2021 Bonds, or any emission thereof. Each Bond Purchase Agreement shall be in substantially the form attached hereto as Exhibit A, with such changes as the President and Chief Executive Officer deems necessary or advisable in connection with the sale of such Series MM-2021 Bonds, provided any such changes are not inconsistent with the terms of this Section 9. If the Underwriter does not intend to reoffer the Series MM-2021 Bonds to the public, then the Bond Purchase Agreement shall be conformed to reflect any changes made pursuant to this Section 9.

(d) The President and Chief Executive Officer and the Chief Financial Officer of KUB, or either of them, are authorized to cause the Series MM-2021 Bonds, in book-entry form (except as otherwise authorized herein), to be authenticated and delivered by the Registration Agent to the purchaser(s), and to execute, publish, and deliver all certificates and documents, including an official statement, the Bond Purchase Agreement and closing certificates, as they shall deem necessary in connection with the sale and delivery of each emission of the Bonds.

(e) If the Series MM-2021 Bonds are sold at public sale, the Series MM-2021 Bonds shall be awarded by the President and Chief Executive Officer of KUB to the bidder that offers to purchase the Bonds for the lowest true interest cost to KUB.

(f) Each emission of Series MM-2021 Bonds shall be offered for sale as either Federally Tax-Exempt Bonds or as Federally Taxable Bonds as determined by KUB, in consultation with the Financial Advisor, by taking into account which type of Series MM-2021 Bond will result in the lowest cost to KUB with respect to such emission of Series MM-2021 Bonds taking into consideration the Direct Payment Credit projected to be received if such emission of Series MM-2021 Bonds is issued as Federally Taxable Bonds and such other factors affecting the cost of KUB, including redemption provisions relating to each such emission. KUB will cause to be filed with the transcript of proceedings for any emission of Federally Taxable Bonds, a report of the Financial Adviser as to the factors taken into account by the Financial Advisor in recommending that any emission be issued as Federally Taxable Bonds. If issued as Federally Taxable Bonds, the President and Chief Executive Officer of KUB, on behalf of the City and KUB, is directed to make any election required under applicable law to qualify such emission of Bonds for Direct Payment Credits on each interest payment date. KUB is further authorized to submit any required forms to the Internal Revenue Service or other applicable governmental agency for the purpose of receiving the Direct Payment Credit with respect to each interest payment date, or take such other actions required for receipt of the Direct Payment Credit required by the Internal Revenue Service of the United States Treasury or other governmental agency. KUB is authorized to direct the deposit of the Direct Payment Credit as KUB deems appropriate, and such Direct Payment Credits shall be deemed funds of KUB when paid. All decisions by KUB made pursuant to this subsection shall be binding on the City, and no further action of the Governing Body with respect thereto shall be required. The President and Chief Executive Officer of KUB, as the designee of the Board, is authorized to take all actions required or authorized by this subsection.

Section 10. Disposition of Series MM-2021 Bond Proceeds. The proceeds of the sale of the Series MM-2021 Bonds shall be paid to KUB and used and applied by KUB as follows:

(a) All accrued interest, if any, shall be deposited to the Debt Service Fund created under the 1949 Resolution and used to pay interest on the Series MM-2021 Bonds on the first interest payment date following delivery of the Series MM-2021 Bonds; and

(b) The remainder of the proceeds of the sale of the Series MM-2021 Bonds shall be deposited with a financial institution regulated by the Federal Deposit Insurance Corporation or similar federal agency, in the "Electric System Expansion and Replacement Fund" (the "Construction Fund") to be kept separate and apart from all other funds of KUB. The funds in the Construction Fund shall be disbursed solely to pay the costs of constructing the Project and costs related to the issuance and sale of the Series MM-2021 Bonds, including necessary legal, accounting, and fiscal expenses, printing, engraving, advertising and similar expenses, administrative and clerical costs, rating agency fees, Registration Agent fees, and other necessary miscellaneous expenses incurred in connection with the Project and the issuance and sale of the Series MM-2021 Bonds. Money in the Construction Fund shall be secured in the manner prescribed by applicable statutes relative to the securing of public or trust funds, if any, or, in the absence of such a statute, by a pledge of readily marketable securities having at all times a market value of not less than the amount in said Construction Fund. Money in the Construction Fund shall be expended only for the purposes authorized by this resolution. Any funds remaining in the Construction Fund after completion of the Project and payment of authorized expenses shall be deposited to the Bond Fund and used to retire Series MM-2021 Bonds on the earliest date possible. Moneys in the Construction Fund shall be invested as directed by the Chief Financial Officer of KUB in such investments as shall be permitted by applicable law. All income derived from such investments shall be deposited to the Construction Fund.

Section 11. Discharge and Satisfaction of Series MM-2021 Bonds. If KUB, on behalf of the City, shall pay and discharge the indebtedness evidenced by any of the Series MM-2021 Bonds or Parity Bonds (referred to hereinafter, collectively, in this Section 11 as the "Bonds") in any one or more of the following ways:

(a) By paying or causing to be paid, by deposit of sufficient funds as and when required with the Registration Agent, the principal of and interest on such Bonds as and when the same become due and payable;

(b) By depositing or causing to be deposited with any financial institution which has trust powers and which is regulated by and the deposits of which are insured by the Federal Deposit Insurance Corporation or similar federal agency ("an Agent"; which Agent may be the Registration Agent), in trust or escrow, on or before the date of maturity or redemption, sufficient money or Defeasance Obligations, the principal of and interest on which, when due and payable, will provide sufficient moneys to pay or redeem such Bonds and to pay premium, if any, and interest thereon when due until the maturity or redemption date (provided, if such Bonds are to be redeemed prior to maturity thereof, proper notice of such redemption shall have been given or adequate provision shall have been made for the giving of such notice); or

(c) By delivering such Bonds to the Registration Agent, for cancellation by it;

and if KUB, on behalf of the City, shall also pay or cause to be paid all other sums payable hereunder by KUB, on behalf of the City with respect to such Bonds or make adequate provision therefor, and by resolution of the Board instruct any such Agent to pay amounts when and as required to the Registration Agent for the payment of principal of and interest and redemption premiums, if any, on such Bonds when due, then and in that case the indebtedness evidenced by such Bonds shall be discharged and satisfied and all covenants, liens, pledges, agreements and obligations entered into, created, or imposed hereunder, including the pledge of and lien on the Net Revenues of the System set forth herein, shall be fully discharged and satisfied with respect to such Bonds and the owners thereof and shall thereupon cease, terminate and become void.

If KUB, on behalf of the City, shall pay and discharge or cause to be paid and discharged the indebtedness evidenced by any of the Bonds in the manner provided in either clause (a) or clause (b) above, then the registered owners thereof shall thereafter be entitled only to payment out of the money or Defeasance Obligations deposited as aforesaid.

Except as otherwise provided in this Section 11, neither Defeasance Obligations nor moneys deposited with the Agent pursuant to this Section 11 nor principal or interest payments on any such Defeasance Obligations shall be withdrawn or used for any purpose other than, and shall be held in trust for, the payment of the principal of and premium, if any, and interest on said Bonds; provided that any cash received from such principal or interest payments on such Defeasance Obligations deposited with the Agent, (A) to the extent such cash will not be required at any time for such purpose, shall be paid over to KUB as received by the Agent and (B) to the extent such cash will be required for such purpose at a later date, shall, to the extent practicable, be reinvested in Defeasance Obligations maturing at times and in amounts sufficient to pay when due the principal and premium, if any, and interest to become due on said Bonds on or prior to such redemption date or maturity date thereof, as the case may be, and interest earned from such reinvestments, to the extent not needed for the payment of such principal, premium and interest, shall be paid over to KUB, as received by the Agent. For the purposes of this Section 11, Defeasance Obligations shall mean direct obligations of, or obligations, the principal of and interest on which are guaranteed by, the United States of America, or any agency thereof, obligations of any agency or instrumentality of the United States or any other obligations at the time of the purchase thereof are permitted investments under Tennessee law for the purposes described in this Section 11, which bonds or other obligations shall not be subject to redemption prior to their maturity other than at the option of the registered owner thereof.

No redemption privilege shall be exercised with respect to the Series MM-2021 Bonds or any Parity Bonds except at the option and election of the Board. The right of redemption set forth herein shall not be exercised by any Registration Agent or Agent unless expressly so directed in writing by an authorized representative of the Board.

Section 12. Federal Tax Matters. The City and KUB recognize that the purchasers and owners of the Series MM-2021 Bonds that are intended to be Federally Tax-Exempt Bonds will have accepted them on, and paid therefor a price that reflects, the understanding that interest thereon will not be included in gross income for purposes of federal income taxation under laws in force on the date of delivery of the Series MM-2021 Bonds. In this connection, KUB, on behalf of the City, agrees that it shall take no action which may render the interest on any of the Series MM-2021 Bonds that are intended to be Federally Tax-Exempt Bonds includable in gross income for purposes of federal income taxation. It is the reasonable expectation of the City and KUB that the proceeds of the Series MM-2021 Bonds that are intended to be Federally Tax-Exempt Bonds will not be used in a manner which will cause the Series MM-2021 Bonds to be "arbitrage bonds" within the meaning of Section 148 of the Code, and to this end the said proceeds of the Series MM-2021 Bonds and other related funds established for the purposes herein set out, shall be used and spent expeditiously for the purposes described herein. In the event Section 148(f) of the Code shall require the payment of any investment proceeds of the Series MM-2021 Bonds that are intended to be Federally Tax-Exempt Bonds to the United States government, KUB will make such payments as and when required by said Section 148(f) and will take such other actions as shall be necessary or permitted to prevent the interest on the Series MM-2021 Bonds that are intended to be Federally Tax-Exempt Bonds from becoming taxable. The Chair of the Board, the Secretary of the Board, the President and Chief Executive Officer of KUB and Chief Financial Officer of KUB, or any of them, are authorized and directed to make such certifications in this regard in connection with the sale of the Series MM-2021 Bonds that are intended to be Federally Tax-Exempt Bonds as any or all shall deem appropriate, and such certifications shall constitute a representation and certification of the City and KUB.

Section 13. Official Statement. The President and Chief Executive Officer of KUB, or his designee, is hereby authorized and directed to provide for the preparation and distribution of a Preliminary Official Statement describing the Series MM-2021 Bonds. After the Series MM-2021 Bonds have been awarded, the President and Chief Executive Officer of KUB, or his designee, shall make such completions, omissions, insertions and changes in the Preliminary Official Statement not inconsistent with this resolution as are necessary or desirable to complete it as a final Official Statement for purposes of Rule 15c2-12(e)(3) of the Securities and Exchange Commission. The President and Chief Executive Officer of KUB, or his designee, shall arrange for the delivery to the purchaser of the Series MM-2021 Bonds of a reasonable number of copies of the Official Statement within seven business days after the Series MM-2021 Bonds have been awarded for subsequent delivery by the purchaser to each potential investor requesting a copy of the Official Statement and to each person to whom such purchaser and members of his group initially sell the Series MM-2021 Bonds.

The President and Chief Executive Officer of KUB, or his designee is authorized, on behalf of the Board, to deem the Preliminary Official Statement and the Official Statement in final form, each to be final as of its date within the meaning of Rule 15c2-12(b)(1), except for the omission in the Preliminary Official Statement of certain pricing and other information allowed to be omitted pursuant to such Rule 15c2-12(b)(1). The distribution of the Preliminary Official Statement and the Official Statement in final form shall be conclusive evidence that each has been deemed in final form as of its date by the Board except for the omission in the Preliminary Official Statement of such pricing and other information.

Section 14. Continuing Disclosure. The City hereby covenants and agrees that KUB will provide annual financial information and material event notices for the Series MM-2021 Bonds as required by Rule 15c2-12 of the Securities and Exchange Commission. The Chief Financial Officer of KUB is authorized to execute at the closing of the sale of the Series MM-2021 Bonds, an agreement for the benefit of and enforceable by the owners of the Series MM-2021 Bonds specifying the details of the financial information and material event notices to be provided and its obligations relating thereto. Failure of KUB to comply with the undertaking herein described and to be detailed in said closing agreement, shall not be a default hereunder, but any such failure shall entitle the owner or owners of any of the Bonds to take such actions and to initiate such proceedings as shall be necessary and appropriate to cause KUB to comply with its undertaking as set forth herein and in said agreement, including the remedies of mandamus and specific performance.

<u>Section 15</u>. <u>Separability</u>. If any section, paragraph or provision of this resolution shall be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph or provision shall not affect any of the remaining provisions of this resolution.

Section 16. Repeal of Conflicting Resolutions and Effective Date. All other resolutions and orders, or parts thereof, in conflict with the provisions of this resolution, are, to the extent of such conflict, hereby repealed and this resolution shall be in immediate effect from and after its adoption.

Adopted and approved this _____ day of ______, 2021.

Mayor

ATTEST:

1

City Recorder

STATE OF TENNESSEE)) COUNTY OF KNOX)

I, Will Johnson, hereby certify that I am the duly qualified and acting City Recorder of the City of Knoxville, Tennessee, and as such official I further certify that attached hereto is a copy of excerpts from the minutes of a regular meeting of the governing body of the City Council held on ______,

______, 2021; that these minutes were promptly and fully recorded and are open to public inspection; that I have compared said copy with the original minute record of said meeting in my official custody; and that said copy is a true, correct and complete transcript from said original minute record insofar as said original records relate to an amount not to exceed \$55,000,000 Electric System Revenue Bonds, Series MM-2021.

WITNESS my official signature of the City of Knoxville, Tennessee, this _____ day of

, 2021.

City Recorder

EXHIBIT A

\$55,000,000

CITY OF KNOXVILLE, TENNESSEE ACTING ON BEHALF OF KNOXVILLE UTILITIES BOARD ELECTRIC SYSTEM REVENUE BONDS, SERIES MM-2021

BOND PURCHASE AGREEMENT

, 2021

Knoxville Utilities Board 445 South Gay Street Knoxville, Tennessee 37902

Ladies and Gentlemen:

The undersigned (the "Underwriter") offers to enter into this agreement with Knoxville Utilities Board ("KUB") which, upon your acceptance of this offer, will be binding upon you and upon us.

This offer is made subject to your acceptance of this agreement on or before 5:00 p.m., Eastern Standard Time, on , 2021.

1. Purchase Price.

Upon the terms and conditions and upon the basis of the respective representations, warranties and covenants set forth herein, the Underwriter hereby agrees to purchase from KUB, and KUB hereby agrees to sell to the Underwriter, all (but not less than all) of \$55,000,000 aggregate principal amount of KUB's Electric System Revenue Bonds, Series MM-2021 (the "Bonds"). The purchase price is \$______ plus accrued interest and shall be paid in accordance with paragraph 6 hereof. The purchase price is equal to the par amount of the Bonds less \$______ original issue discount, less \$______ underwriter's discount and plus accrued interest. The Bonds are to be issued under and pursuant to, and are to be secured by the Resolution (the "Bond Resolution") adopted on _______, 2021, by the City Council of the City of Knoxville (the "City") at the request of KUB. The Bonds shall mature on the dates and shall bear interest at the rates all as described in the Official

Statement referred to in Section 3 hereof. The maturities, rates and discount at which the Bonds are being sold are more fully described on **Schedule I** attached hereto.

The Bonds are being issued to provide funds to finance the cost of extensions and improvements to the electrical power distribution system operated by KUB on behalf of the City (the "System"), including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the Bonds.

2. Public Offering.

The Underwriter intends to make an initial bona fide public offering of all of the Bonds at not in excess of the public offering prices set forth on the cover of the Official Statement and may subsequently change such offering price without any requirement of prior notice. The Underwriter may offer and sell Bonds to certain dealers (including dealers depositing bonds into investment trusts) and others at prices lower than the public offering prices stated on the cover of the Official Statement. The Underwriter reserves the right (i) to over-allot or effect transactions that stabilize or maintain the market prices of the Bonds at levels above those which might otherwise prevail in the open market; and (ii) to discontinue such stabilizing, if commenced at any time without prior notice.

3. Official Statement.

(a) KUB has provided the Underwriter with information that constitutes a "deemed final" official statement for purposes of Rule 15c2-12 under the Securities Exchange Act of 1934 ("Rule 15c2-12"). Concurrently with KUB's acceptance of this Bond Purchase Agreement, KUB shall deliver or cause to be delivered to the Underwriter two copies of the Official Statement (as hereinafter defined) relating to the Bonds dated the date hereof substantially in the same form as the Preliminary Official Statement with only such changes as shall have been accepted by the Underwriter.

(b) Within seven (7) business days from the date hereof and within sufficient time to accompany any confirmation requesting payment from any customers of the Underwriter, KUB shall deliver to the Underwriter copies of the Official Statement of KUB, dated the date hereof, relating to the Bonds, in sufficient quantity as may reasonably be requested by the Underwriter in order to comply with Rule 15c2-12 and any applicable rules of the Municipal Securities Rulemaking Board, in substantially the form approved by KUB (which, together with the cover page, and all exhibits, appendices, and statements included therein or attached thereto and any amendments and supplements that may be authorized for use with respect to the Bonds is herein called the "Official Statement"), executed on behalf of KUB by a duly authorized officer of KUB. You hereby authorize and approve the Official Statement and other pertinent documents referred to in Section 6 hereof to be lawfully used in connection with the offering and sale of the Bonds. You also acknowledge and ratify the use by the Underwriter, prior to the date hereof, of the Preliminary Official Statement in connection with a public offering of the Bonds.

(c) If, prior to the Closing (as defined in Section 5 below) or within twenty-five (25) days subsequent to the end of the underwriting period as such term is used for purposes of Rule 15c2-12, any event shall occur with respect to KUB or KUB shall receive notice of the occurrence of any other event that might or would cause the information contained in the Official Statement to contain any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading, KUB shall so notify the Underwriter. KUB agrees to amend or supplement the Official Statement whenever requested by the Underwriter when in the reasonable judgment of the Underwriter such amendment or supplementation is required and to furnish the Underwriter with sufficient quantities of such amendment or supplement in order to permit the Underwriter to comply with Rule 15c2-12.

4. Representations and Warranties.

KUB hereby represents and warrants to the Underwriter that:

(a) KUB is duly existing pursuant to the Charter of the City and is authorized by such Charter to operate and manage the System. KUB has duly authorized all necessary action to be taken by it for: (i) the issuance and sale of the Bonds upon the terms set forth herein and in the Official

Statement; (ii) the approval of the Official Statement and the signing of the Official Statement by a duly authorized officer; (iii) the execution, delivery and receipt of this Bond Purchase Agreement, the Bonds and any and all such other agreements and documents as may be required to be executed, delivered and received by KUB in order to carry out, give effect to, and consummate the transactions contemplated hereby, by the Bonds, the Official Statement and the Bond Resolution;

(b) When executed by the respective parties thereto, this Bond Purchase Agreement will constitute a legal, valid and binding obligation of KUB enforceable in accordance with its terms;

(c) The information and statements contained in the Preliminary Official Statement, as of its date and as of the date hereof, did not and do not contain any untrue statement of a material fact or omit to state any material fact which was necessary in order to make such information and statements, in the light of the circumstances under which they were made, not misleading;

(d) The information and statements contained in the Official Statement, as of its date and as of the Closing, are and will be correct and complete in all material respects and do not and will not contain any untrue statement of a material fact or omit to state any material fact which is necessary in order to make such information and statements, in the light of the circumstances under which they were made, not misleading;

(e) KUB has complied, and will at the Closing be in compliance, in all respects with the obligations on its part contained in the Bond Resolution and the laws of the State of Tennessee (the "State"), including the Act;

(f) The City has duly adopted the Bond Resolution, and the City and KUB have (a) duly authorized and approved the distribution of the Preliminary Official Statement, (b) duly authorized and approved the execution and delivery of the Official Statement, (c) duly authorized and approved the execution and delivery of, and the performance by KUB of the obligations on its part contained in, the Bonds, the Bond Resolution and this Bond Purchase Agreement, and (d) duly authorized and approved the consummation by it of all other transactions contemplated by this Bond Purchase Agreement and the Official Statement;

(g) KUB is not in breach of or default under any applicable law or administrative regulation of the State or the United States in any manner related to or affecting the transactions contemplated hereby or in breach of or default under any applicable judgment or decree or any loan agreement, note, resolution, ordinance, agreement or other instrument to which KUB is a party or to which it or any of its property is otherwise subject; and the execution and delivery of this Bond Purchase Agreement, the Bonds and the adoption of the Bond Resolution, and compliance with the provisions of each thereof, will not conflict with or constitute a breach of or default under any law, administrative regulation, judgment, decree, loan agreement, note, resolution, ordinance, agreement or other instrument to which KUB is a party or to which it or any of its property is otherwise subject;

(h) Except as may be required under the securities or "blue sky" laws of any state, all approvals, consents, authorizations and orders of, filings with or certifications by any governmental authority, board, agency or commission having jurisdiction, which would constitute a condition precedent to the performance by KUB of its obligations hereunder and under the Bond Resolution and the Bonds, have been obtained;

(i) There is no action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, public board or body, pending or, to the knowledge of KUB, threatened against KUB or others (a) affecting KUB or the corporate existence of KUB or the titles of its officers to their

respective offices, (b) seeking to prohibit, restrain or enjoin the sale, issuance or delivery of the Bonds or the collection of Net Revenues pledged to pay the principal of and interest on the Bonds, or the pledge thereof, (c) in any way contesting or affecting the transactions contemplated hereby or by the Official Statement or by the validity or enforceability of the Bonds, the Bond Resolution or this Bond Purchase Agreement, (d) contesting in any way the completeness or accuracy of the Preliminary Official Statement or the Official Statement, or (e) contesting the powers or authority of KUB for the issuance of the Bonds, the adoption of the Bond Resolution or the execution and delivery of this Bond Purchase Agreement;

(j) KUB will not take or omit to take any action that will in any way cause the proceeds from the sale of the Bonds and other moneys of KUB to be transferred on the date of issuance of the Bonds to be applied or result in such proceeds and other moneys being applied in a manner other than as provided in or permitted by the Bond Resolution and consistent with the utilization described in the Official Statement;

(k) KUB agrees reasonably to cooperate with the Underwriter and its counsel in any endeavor to qualify the Bonds for offering and sale under the securities or "blue sky" laws of such jurisdictions of the United States as the Underwriter may request. KUB hereby consents to the use of the Official Statement and the Bond Resolution by the Underwriter in obtaining any qualification required;

(I) If at any time from the date of this Bond Purchase Agreement through 25 days following the "end of the underwriting period" (as defined in Rule 15c2-12 described below) any event shall occur that might or would cause the Official Statement to contain any untrue statement of a material fact or to omit to state any material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, KUB shall notify the Underwriter and if, in the opinion of the Underwriter, such event requires the preparation and publication of a supplement or amendment to the Official Statement, KUB will supplement or amend the Official Statement in a form and in a manner approved by the Underwriter. If the Official Statement is so supplemented or amended prior to the Closing, such approval by the Underwriter of a supplement or amendment to the Official Statement is so amended or supplemented subsequent to the date hereof and prior to the Closing, the Underwriter may terminate this Bond Purchase Agreement by notification to KUB at any time prior to the Closing if, in the judgment of the Underwriter, such amendment or supplement has or will have a material adverse effect on the marketability of the Bonds;

(m) KUB has duly authorized and approved the execution and delivery of this Bond Purchase Agreement and the performance by KUB of the obligations on its part contained herein;

(n) KUB is not, nor has it at any time, been in default in the payment of principal of or interest on any obligation issued or guaranteed by KUB;

(o) Any certificate signed by an authorized officer of KUB and delivered to the Underwriter at or prior to the Closing shall be deemed a representation and warranty by KUB in connection with this Bond Purchase Agreement to the Underwriter as to the statements made therein upon which the Underwriter shall be entitled to rely. KUB covenants that between the date hereof and the Closing, it will not take any action that will cause the representations and warranties made herein to be untrue as of the Closing;

(p) The Bonds, when issued, authenticated and delivered in accordance with the Bond Resolution and sold to the Underwriter as provided herein, will be validly issued and outstanding special obligations of KUB entitled to the benefits of the Bond Resolution;

(q) KUB has lawful authority to operate the System, to consummate the transactions contemplated by the Official Statement and collect revenues, fees and other charges in connection with the System and through its Board of Commissioners, to fix the rates, fees and other charges with respect to the System; and

(r) KUB hereby covenants and agrees to enter into a written agreement or contract, constituting an undertaking (the "Undertaking") to provide ongoing disclosure about KUB, for the benefit of the beneficial owners of the Bonds on or before the date of delivery of the Bonds as required under paragraph (b)(5) of Rule 15c2-12. The Undertaking shall be as described in the Preliminary Official Statement, with such changes as may be agreed in writing by the Underwriter. KUB represents that it has complied in all respects with its obligations to provide continuing disclosure of certain information as described in that certain Continuing Disclosure Certificate entered into in connection with the issuance of the Bonds.

5. Delivery of, and Payment for, the Bonds.

At 10:00 a.m. on or about _______, 2021, or at such other time or date as shall have been mutually agreed upon by KUB and the Underwriter, KUB will deliver, or cause to be delivered, to the Underwriter the other documents hereinafter mentioned and, subject to the conditions contained herein, the Underwriter will accept such delivery and pay the purchase price of the Bonds plus accrued interest payable to the order of KUB, in federal funds or other immediately available funds by delivering to KUB such funds by wire transfer to KUB or its designated agent except that physical delivery of the Bonds shall be made through the facilities of the Depository Trust Company.

Payment for the Bonds shall be confirmed and delivery of the documents as aforesaid shall be made at the offices of KUB, or such other place as may be agreed upon by the Underwriter and KUB. Such payment and delivery is herein called the "Closing." The Bonds will be delivered as fully registered bonds in such names and in such denominations as shall be designated in writing by the Underwriter to KUB at Closing.

6. Certain Conditions to Underwriter's Obligations.

The obligations of the Underwriter hereunder shall be subject to (i) the performance by KUB of its obligations to be performed hereunder, (ii) the accuracy in all material respects of the representations and warranties of KUB herein as of the date hereof and as of the date of the Closing, and (iii) to the following conditions:

(a) At the time of Closing, (i) the Bond Resolution shall be in full force and effect and shall not have been amended, modified or supplemented except as may have been agreed to in writing by the Underwriter, (ii) the proceeds of the sale of the Bonds shall be applied as described in the Official Statement, and (iii) KUB shall have duly adopted and there shall be in full force and effect such other resolutions as, in the opinion of Bass, Berry & Sims PLC, Knoxville, Tennessee ("Bond Counsel"), shall be necessary in connection with the transactions contemplated hereby;

(b) At or prior to the Closing, the Underwriter shall have received an executed copy of each of the following documents:

(1) the approving opinion dated the date of the Closing, of Bond Counsel addressed to KUB and the Underwriter, relating to, among other things, the validity of the Bonds [and the exclusion from gross income of the interest on the Bonds for federal and State of Tennessee income tax purposes,] in substantially the form set forth as Appendix _ to the Official Statement; (2) a supplemental opinion, dated the date of the Closing, of Bond Counsel addressed to the Underwriter in substantially the form of <u>Exhibit A</u> hereto;

(3) an opinion, dated the date of the Closing, of Hodges, Doughty & Carson, Knoxville, Tennessee, counsel to KUB, addressed to KUB, Bond Counsel and the Underwriter in substantially the form of <u>Exhibit B</u> hereto;

(4) a certificate of KUB, dated the date of the Closing and signed by a duly authorized officer of KUB and in form and substance reasonably satisfactory to the Underwriter, to the effect that (i) since the execution of the Bond Purchase Agreement no material and adverse change has occurred in the financial position of the System or results of operations of the System; (ii) KUB has not incurred any material liabilities secured by the Net Revenues of the System other than in the ordinary course of business or as set forth in or contemplated by the Official Statement; and (iii) no event affecting KUB has occurred since the date of the Official Statement which should be disclosed in the Official Statement for the purpose for which it is to be used or which is necessary to be disclosed therein in order to make the statements and information therein not misleading as of the date of Closing;

(5) the Official Statement executed on behalf of KUB by a duly authorized officer thereof;

(6) the Bond Resolution and the Bonds;

(7) a certificate of a duly authorized officer of KUB, satisfactory to the Underwriter, dated the date of Closing, stating that such officer is charged, either alone or with others, with the responsibility for issuing the Bonds; setting forth, in the manner permitted by Section 148 of the Internal Revenue Code of 1986, as amended (the "Code"), the reasonable expectations of KUB as of such date as to the use of proceeds of the Bonds and of any other funds of KUB expected to be used to pay principal or interest on the Bonds and the facts and estimates on which such expectations are based; and stating that, to the best of the knowledge and belief of the certifying officer, KUB's expectations are reasonable;

(8) evidence indicating a rating on the Bonds of "____" by [rating agency];

(9) other certificates of KUB listed on a Closing Memorandum to be approved by counsel to KUB, Bond Counsel and counsel to the Underwriter, including any certificates or representations required in order for Bond Counsel to deliver the opinion referred to in Paragraph 6(b)(1) of this Bond Purchase Agreement; and such additional legal opinions, certificates, proceedings, instruments and other documents as the counsel to the Underwriter or Bond Counsel may reasonably request to evidence compliance by KUB with legal requirements, the truth and accuracy, as of the time of Closing, of the representations of KUB contained herein and the due performance or satisfaction by KUB at or prior to such time of all agreements then to be performed and all conditions then to be satisfied by KUB.

All such opinions, certificates, letters, agreements and documents will be in compliance with the provisions hereof only if they are satisfactory in form and substance to the Underwriter and counsel to the Underwriter. KUB will furnish the Underwriter with such conformed copies or photocopies of such opinions, certificates, letters, agreements and documents as the Underwriter may reasonably request. (c) The Underwriter shall have received within seven (7) business days from the date hereof and within sufficient time to accompany any confirmation requesting payment from any customers of the Underwriter, the Official Statement in sufficient quantity as may be reasonably requested by the Underwriter in order to comply with Rule 15(c) 2-12.

7. <u>Termination</u>.

The Underwriter shall have the right to cancel its obligation to purchase the Bonds if (i) between the date hereof and the Closing, legislation shall be enacted or recommended to the Congress or otherwise endorsed for passage (by press release, other form of notice or otherwise) by the President of the United States, the Treasury Department of the United States, the Internal Revenue Service or the Chairman or ranking minority member of the Committee on Finance of the United States Senate or the Committee on Ways and Means of the United States House of Representatives or favorably reported for passage to either House of the Congress by any committee of such House to which such legislation has been referred for consideration, or a bill to amend the Internal Revenue Code (which, if enacted, would take effect in whole or in part prior to the Closing) shall be filed in either house, or recommended for passage by the Congress by any joint or conference committee thereof, or a decision by a court of the United States or the United States Tax Court shall be rendered, or a ruling, regulation or statement by or on behalf of the Treasury Department of the United States, the Internal Revenue Service or other governmental agency shall be made or proposed to be made, with respect to the federal taxation upon interest on obligations of the general character of the Bonds, or other action or events shall have transpired which may have the purpose or effect, directly or indirectly of changing the federal income tax consequences of any of the transactions contemplated in connection herewith, including the tax-exempt status of KUB and, in the opinion of the Underwriter, materially adversely affects the market price of the Bonds, or the market price generally of obligations of the general character of the Bonds, or (ii) there shall exist any event which in the Underwriter's judgment either (a) makes untrue or incorrect in any material respect any statement or information contained in the Official Statement or (b) is not reflected in the Official Statement but should be reflected therein in order to make the statements and information contained therein not misleading in any material respect, or (iii) there shall have occurred any outbreak of hostilities or any national or international calamity or crisis including financial crisis, or a financial crisis or a default with respect to the debt obligations of, or the institution of proceedings under the federal or the state bankruptcy laws by or against the State of Tennessee or any subdivision, agency or instrumentality of such State, the effect of which on the financial markets of the United States being such as, in the reasonable judgment of the Underwriter, would make it impracticable for the Underwriter to market the Bonds or to enforce contracts for the sale of the Bonds, or (iv) there shall be in force a general suspension of trading on the New York Stock Exchange, or (v) a general banking moratorium shall have been declared by either federal, Tennessee or New York authorities, or (vi) there shall have occurred since the date of this Bond Purchase Agreement any material adverse change in the financial position of the System, except for changes which the Official Statement discloses have occurred or may occur, or (vii) legislation shall be enacted or any action shall be taken by the Securities and Exchange Commission which, in the opinion of counsel for the Underwriter, has the effect of requiring the contemplated distribution of the Bonds to be registered under the Securities Act of 1933, as amended, or the Bond Resolution or any other document executed in connection with the transactions contemplated hereof to be qualified under the Trust Indenture Act of 1939, as amended, or (viii) a stop order, ruling, regulation or official statement by or on behalf of the Securities and Exchange Commission shall be issued or made to the effect that the issuance, offering or sale of the Bonds, or of obligations of the general character of the Bonds as contemplated hereby, or the offering of any other obligation which may be represented by the Bonds is in violation of any provision of the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, or the Trust Indenture Act of 1939, as amended, or (ix) any state blue sky or securities commission shall have withheld registration, exemption or clearance of the offering, and in the reasonable judgment of the Underwriter the market for the Bonds is materially affected thereby.

If KUB shall be unable to satisfy any of the conditions to the obligations of the Underwriter contained in this Bond Purchase Agreement and such condition is not waived by the Underwriter, or if the obligations of the Underwriter to purchase and accept delivery of the Bonds shall be terminated or canceled for any reason permitted by this Bond Purchase Agreement, this Bond Purchase Agreement shall terminate and neither the Underwriter nor KUB shall be under further obligation hereunder; except that the respective obligations to pay expenses, as provided in Section 10 hereof, shall continue in full force and effect.

8. Particular Covenants.

KUB covenants and agrees with the Underwriter as follows:

(a) KUB shall use its best efforts to furnish or cause to be furnished to the Underwriter, without charge, as many copies of the Official Statement as the Underwriter may reasonably request;

(b) Before revising, amending or supplementing the Official Statement, KUB shall furnish a copy of the revised Official Statement or such amendment or supplement to the Underwriter. If in the opinion of KUB and the Underwriter a supplement or amendment to the Official Statement is required, KUB will supplement or amend the Official Statement in a form and in a manner approved by the Underwriter and its counsel.

9. Survival of Representations.

All representations, warranties and agreements of KUB hereunder shall remain operative and in full force and effect, regardless of any investigation made by or on behalf of the Underwriter and shall survive the delivery of the Bonds.

10. Payment of Expenses.

Whether or not the Bonds are sold to the Underwriter by KUB, KUB shall pay, but only out of the proceeds of the sale of the Bonds or other funds made available by KUB, any expenses incident to the performance of its obligations hereunder, including but not limited to: (i) the cost of the preparation and printing of the Official Statement and any supplements thereto, together with a number of copies which the Underwriter deems reasonable; (ii) the cost of the preparation and printing of the definitive Bonds; (iii) the rating agency fees; and (iv) the fees and disbursements of Counsel to KUB and Bond Counsel and any other experts or consultants retained by KUB.

Whether or not the Bonds are sold to the Underwriter, the Underwriter shall pay (i) all advertising expenses in connection with the public offering of the Bonds; (ii) the cost of preparing and printing the blue sky memorandum, if any, and filing fees in connection with the aforesaid blue sky memorandum other than the costs of preparation of the Preliminary Official Statement and the Official Statement; and (iii) all other expenses incurred by the Underwriter in connection with its public offering and distribution of the Bonds, including the fees and expenses of the Underwriter's counsel.

11. No Advisory or Fiduciary Role.

KUB acknowledges and agrees that (i) the purchase and sale of the Bonds pursuant to this Bond Purchase Agreement is an arm's-length commercial transaction between KUB and the Underwriter, (ii) in connection therewith and with the discussions, undertakings and procedures leading up to the consummation of such transaction, the Underwriter is and has been acting solely as principal and is not acting as the agent, advisor or fiduciary of KUB, (iii) the Underwriter has not assumed an advisory or fiduciary responsibility in favor of KUB with respect to the offering contemplated hereby or the discussions, undertakings and procedures leading thereto (irrespective of whether the Underwriter, or any affiliates of the Underwriter, has provided other services or are currently providing other services to KUB on other matters) and the Underwriter has no obligation to KUB with respect to the offering contemplated hereby except the obligations expressly set forth in this Bond Purchase Agreement, (iv) the Underwriter has financial and other interests that differ from those of KUB and (v) KUB has consulted its own legal, financial and other advisors to the extent it has deemed appropriate.

KUB and the Underwriter represent and warrant that no finder or other agent has been employed by either KUB or the Underwriter in connection with this transaction.

12. Notices.

Any notice or other communication to be given to KUB under this Bond Purchase Agreement may be given by delivering the same in writing at its address set forth above, and any notice or other communication to be given to the Underwriter under this Bond Purchase Agreement may be given by delivering the same in writing to , , , ,

13. Parties.

This Bond Purchase Agreement is made solely for the benefit of KUB and the Underwriter (including the successors or assigns of the Underwriter) and no other person shall acquire or have any right hereunder or by virtue hereof.

14. Governing Law.

This Bond Purchase Agreement shall be governed by and construed in accordance with the laws of the State of Tennessee.

15. General.

This Bond Purchase Agreement may be executed in several counterparts, each of which shall be regarded as an original and all of which will constitute one and the same instrument. The section headings of this Bond Purchase Agreement are for convenience of reference only and shall not affect its interpretation. This Bond Purchase Agreement shall become effective upon your acceptance hereof.

Very truly yours,

 Accepted and agreed to as of the date first above written:

KNOXVILLE UTILITIES BOARD

By:

President and Chief Executive Officer

EXHIBIT A TO BOND PURCHASE AGREEMENT

[LETTERHEAD OF BASS BERRY & SIMS PLC]

[Closing Date]

Ladies and Gentlemen:

This opinion is being rendered to you pursuant to Paragraph 6(b)(2) of the Bond Purchase Agreement, dated ______, 2021 (the "Bond Purchase Agreement"), between (the "Underwriter"), and Knoxville Utilities Board ("KUB"), relating to the sale by KUB of its Electric System Revenue Bonds, Series MM-2021, in the aggregate principal amount of \$55,000,000 (the "Bonds"). Terms which are used herein and not otherwise defined shall have the meanings assigned to them in the Bond Purchase Agreement.

Of even date herewith, we have delivered our approving opinion in connection with the issuance of the Bonds. In our capacity as Bond Counsel, we have reviewed a record of proceedings in connection with the issuance of the Bonds and we have participated in conferences from time to time with counsel to KUB, representatives of the Underwriter and counsel to the Underwriter, relative to the Official Statement, dated ______, 2021, relating to the Bonds, and the related documents described below. We have also examined such other agreements, documents and certificates, and have made such investigations of law, as we have deemed necessary or appropriate in rendering the opinions set forth below.

Based on the foregoing, we are of the opinion that, as of the date hereof:

1. The offer and sale of the Bonds to the public do not require any registration under the Securities Act of 1933, as amended, and, in connection therewith, the Bond Resolution does not need to be qualified under the Trust Indenture Act of 1939, as amended.

2. The statements contained in the Official Statement under the captions "Introduction" to the extent the narrative thereunder purports to describe the terms of the Bonds and the legal authority by which they are issued, "The Bonds," and in Appendix A to the Official Statement, insofar as such statements purport to summarize certain provisions of the Bonds and the Bond Resolution, fairly summarize such provisions. The statements contained in the Official Statement under the caption "Opinion of Bond Counsel" are correct as to matters of law.

This opinion may be relied upon only by the Underwriter and by other persons to whom written permission to rely hereon is granted by us.

Very truly yours,

EXHIBIT B TO BOND PURCHASE AGREEMENT

, 2021

Bass Berry & Sims PLC 900 South Gay Street, Suite 1700 Knoxville, Tennessee 37902

Ladies and Gentlemen:

Re: City of Knoxville, Tennessee acting on behalf of the Knoxville Utilities Board \$55,000,000 Electric System Revenue Bonds, Series MM-2021

Ladies and Gentlemen:

You have requested that the undersigned, General Counsel to the Knoxville Utilities Board of the City of Knoxville, Tennessee ("KUB"), render this opinion in connection with the execution, delivery and sale of the captioned bonds (the "Bonds"), the proceeds of which will be used to finance extensions and improvements to the electrical power distribution system described herein.

It is our opinion that KUB is duly established and validly existing pursuant to the Charter of the City of Knoxville, Tennessee (the "Municipality"), and, pursuant to said Charter, the electrical power distribution system of the Municipality (the "System") is under the jurisdiction, control and management of KUB.

The undersigned does hereby certify that no litigation of any nature is now pending or, to our knowledge, threatened

(1) seeking to restrain or enjoin the issuance, sale, execution or delivery of the Bonds;

(2) seeking to restrain or enjoin the charging of sufficient rates to pay the cost of operating, maintaining, repairing and insuring the System and to pay principal of and interest on the Bonds and all outstanding obligations payable from the revenues of the System;

(3) in any manner questioning the proceedings or authority pursuant to which the Bonds are authorized or issued or such rates are charged;

(4) in any manner questioning or relating to the validity of the Bonds;

(5) contesting in any way the completeness or accuracy of the Official Statement prepared and distributed in connection with the sale of the Bonds;

(6) in any way contesting the corporate existence or boundaries of the Municipality, except for various pending actions challenging past or present annexation efforts of the Municipality, which will have no material adverse effect on the revenues of the System;

(7) contesting the title of the present officers of KUB to their respective offices; or

(8) contesting the powers of KUB or the authority of KUB with respect to the Bonds, or proceedings authorizing the Bonds, or any act to be done or document or certificate to be executed or delivered in connection with the issuance and delivery of the Bonds.

Neither the voters of the Municipality nor its governing body nor the Board of Commissioners of KUB have approved any special, local or private act or legislation passed by the General Assembly of the State of Tennessee at its most recent session or any amendments to the Charter of the Municipality affecting the power of the Municipality to issue the Bonds or pay the principal of, premium, if any, and interest on the Bonds when due or affecting the power of the Board of Commissioners of KUB to manage and control the System.

I hereby certify that ______ and _____ are the duly qualified, appointed and acting Chair and Secretary, respectively, of the Board of Commissioners of KUB with full power to act as such officers on behalf of KUB in connection with the execution and delivery of the Bonds.

Yours truly,

31193729.2

RESOLUTION NO. 1443

A Resolution to Amend Resolution No. 1436, the Caption of Which is as Follows: "A Resolution Making and Fixing the Annual Budget Appropriations of the Knoxville Utilities Board from the Funds of the Electric Division, the Gas Division, the Water Division, and the Wastewater Division for the Fiscal Year Beginning July 1, 2021, Providing for Expenditures Paid for the Period Beginning July 1, 2021 and Ending June 30, 2022"

Whereas, Section 1109 of the Charter of the City of Knoxville provides that "No money shall be drawn from the treasury of the system nor shall any obligation for the expenditure of money be incurred except in pursuance of appropriations made by the board"; and

Whereas, the Knoxville Utilities Board of Commissioners (hereinafter referred to as the "Board") adopted Resolution No. 1436 on May 20, 2021, making and fixing the annual budget appropriations for the Electric, Gas, Water, and Wastewater Divisions of the Knoxville Utilities Board (hereinafter referred to as "KUB") for the fiscal year beginning July 1, 2021; and

Whereas, the Board has determined it is appropriate to amend the budget appropriations for the Electric Division for the current fiscal year, by increasing the amount of expenditures authorized to be paid on or before June 30, 2022 by a total amount of \$43,080,000; and

Whereas, the Chief Financial Officer has certified to the Board the availability of funds to fund the proposed increase in budget appropriations, and

Whereas, the Board has determined it is appropriate to authorize the KUB Electric Division to loan funds to the KUB Fiber Division to acquire, construct and provide working capital for the KUB fiber system communication network, plant and equipment necessary to provide broadband services in accordance with Tennessee Code Annotated § 7-52-603; and

Whereas, pursuant to KUB's power supply contract with the Tennessee Valley Authority ("TVA), the loan from the Electric Division to the Fiber Division has been approved by TVA; and

Whereas, the Resolution will amend Resolution 1436 by deleting Section 1 and replacing it with a new Section 1 as provided for herein and by adding an additional paragraph to authorize the KUB Electric Division to lend funds to the KUB Fiber Division in accordance with Tennessee Code Annotated § 7-52-603.

Now, Therefore, Be It Hereby Resolved by the Board of Commissioners of the Knoxville Utilities Board: **Section 1.** Resolution 1436 shall be amended by deleting <u>Section 1</u> in its entirety and replacing it with the following:

"<u>Section 1</u>. The budget appropriations for the fiscal year beginning July 1, 2021, and ending June 30, 2022, providing for expenditures paid for said fiscal year, be and the same are hereby made from the funds of the Electric Division, for the purposes and in the amounts as follows:

Appropriations of the Electric Division (including appropriations for operating, maintenance, construction, administrative expenses, interest, bond retirements, bond funds, and payments in lieu of taxes), of which amount funds for construction may be taken from the proceeds from the sale of any electric system revenue bonds or notes, in the amount of \$639,045,000".

Section 2. That funds will be available for the Electric Division to fund the expenditures to be paid for the fiscal year beginning July 1, 2021, as noted in Section 1 of this resolution. The availability of funds has been certified by letter from the Senior Vice President and Chief Financial Officer, whereby said letter is attached to and incorporated by reference as part of this Resolution.

Section 3. Resolution 1436 shall be further amended by adding the following as Section 13, and renumbering current Section 13 as Section 14:

"<u>Section 13.</u> In accordance with Tennessee Code Annotated §7-52-603, the Electric Division is hereby authorized to lend to the Fiber Division funds in the amount of Ten Million Dollars (\$10,000,000) to acquire, construct and provide working capital for the KUB fiber system communications network, plant and equipment necessary to provide broadband services, with such loan to be included in the appropriations of the Electric Division set forth in Section 1 hereof."

Section 4. That this Resolution shall take effect from and after its passage.

Jerry Askew/s Jerry Askew, Chair

Mark Walker/s Mark Walker, Board Secretary

APPROVED ON 1st & FINAL READING: <u>08-19-21</u> EFFECTIVE DATE: <u>08-19-21</u> MINUTE BOOK <u>44</u> PAGE <u>10980-10983</u>



August 13, 2021

Knoxville Utilities Board 445 S. Gay Street Knoxville, Tennessee 37902-1109

Commissioners,

I hereby certify that within the meaning of Section 1109 of the City of Knoxville Charter and Article IX.B.2.e. of the Board's By-Laws there are sufficient funds adequate to fund the proposed additional budget appropriations.

\$43,080,000 for the Electric Division, thereby increasing the existing budget appropriations from \$595,965,000 to \$639,045,000 for the fiscal year beginning July 1, 2021.

The availability of funds for budget appropriations is based on general fund cash and all available cash reserves of the Electric Division as of July 1, 2021, and all monies anticipated to come into the general fund of the Electric Division on or before June 30, 2022 from utility sales at rates approved by the KUB Board; from other fees, charges, sales proceeds, accounts and notes receivable, or other credits in the process of collection; and from proceeds of authorized debt issues.

Please see the enclosed worksheet which demonstrates the availability of funds to support the proposed additional budget appropriations.

Respectfully submitted,

Mark Willin

Mark A. Walker Senior Vice President and CFO

Enclosure

August 2021: Certification of Available Funds - FY 2022 Additional Budget Appropriations

Lectric Division: Certification of Available Funds

	FY 2022
Beginning General Fund Cash	\$18,662,000
Sales Revenues	\$555,675,000
Other Revenues/Receipts	\$23,922,000
Cash Reserves	\$38,366,000
Bond Proceeds	\$55,000,000
Total	\$691,625,000
FY 2022 Budget Appropriations (Res. 1436)	\$595,965,000
FY 2022 Budget Additional Appropriations (Res. 1443)	\$43,080,000
Available Funds	\$52,580,000

If positive, there are available funds to fund appropriations.

RESOLUTION NO. 1444

A Resolution Making and Fixing the Annual Budget Appropriations of the Knoxville Utilities Board from the Funds of the Fiber Division Beginning August 19, 2021, Providing for Expenditures Paid for the Period Beginning August 19, 2021, and Ending June 30, 2022

Whereas, on June 17, 2021, the Knoxville Utilities Board of Commissioners passed Resolution 1439, a Resolution Authorizing the Knoxville Utilities Board to Provide Broadband Services to the Fullest Extent Permitted by Tennessee Code Annotated, Title 7, Chapter 52, Part 6 and Other Applicable Law and Requesting the Council of the City of Knoxville, Tennessee to Authorize KUB to Provide Broadband Services to the Fullest Extent Permitted by Tennessee To the Fullest Extent Permitted by Tennessee to Authorize KUB to Provide Broadband Services to the Fullest Extent Permitted by Tennessee Code Annotated, Title 7, Chapter 52, Part 6 and Other Applicable Law (the "KUB Broadband Resolution"); and

Whereas, On June 29, 2021 the Knoxville City Council passed A Resolution of the Council of the City of Knoxville, Tennessee, Authorizing the Knoxville Utilities Board to Provide Broadband Services to the Fullest Extent Permitted by Tennessee Code Annotated, Title 7, Chapter 52, Part 6 and Other Applicable Law (the "City Broadband Resolution"); and

Whereas, together the KUB Broadband Resolution and the City Broadband Resolution established the KUB Fiber Division for the provision of broadband services to customers within the KUB electric service area; and

Whereas, to fund the operations of the Fiber Division for the period beginning August 19, 2021 and ending June 30, 2022, KUB Staff has presented to the Board a proposed budget for the Fiber Division which fairly projects anticipated revenues and expenditures for the period for the operation and maintenance of the fiber system communication network and the provision of broadband services; and

Whereas, the Fiber Division will pay access and utilization fees to the Electric Division for use of the electric system fiber network to enable the fiber system communication network to provide broadband services; and

Whereas, Section 1109 of the Charter of the City of Knoxville provides that "No money shall be drawn from the treasury of the system nor shall any obligation for the expenditure of money be incurred except in pursuance of appropriations made by the board"; and

Whereas, the Chief Financial Officer (CFO) of the Knoxville Utilities Board ("KUB") has certified the availability of funds to support the proposed budget appropriations pursuant to the Board's By-Laws.

Now, Therefore, Be It Hereby Resolved by the Board of Commissioners of the Knoxville Utilities Board:

Section 1. That budget appropriations for the fiscal year beginning today, and ending June 30, 2022, providing for expenditures paid for said fiscal year, be and the same are hereby made from the funds of the Fiber Division, for the purposes and in the amount as follows:

Appropriations of the Fiber Division (including appropriations for operation, maintenance, construction, administrative expenses, interest, bond retirements, bond funds, interdivisional loan repayments and payments in lieu of taxes), of which amount funds for construction may be taken from the proceeds from the sale of any fiber system revenue bonds or notes, in the amount of **\$6,000,000**.

Section 2. That expenditures for the sole benefit of the fiber system shall be charged to the foregoing appropriations and from the funds of the Fiber Division. All expenditures for the joint benefit of the fiber system, electric system, natural gas system, water system, and/or wastewater system shall be charged to the foregoing appropriations and from the funds of such divisions in accordance with the applicable division cost allocations in effect at the time of said expenditure.

Section 3. That in addition to the foregoing appropriations, whenever any sums are due and payable under agreements providing for refundable advances to the system in connection with the construction of additions to a system, or for refunds associated with overpayments by customers, the President and CEO of KUB, or his designee, is authorized to refund any or all such sums that are or become due and payable; and all sums necessary to make such refunds shall be and the same are hereby appropriated from the funds of the divisions properly chargeable therewith.

Section 4. That in addition to the foregoing appropriations, whenever any sums are due and payable during the fiscal year beginning today, and ending June 30, 2022, for the entire principal amount of any debt issued during the fiscal year beginning today, and ending June 30, 2022, the President and CEO of KUB, or his designee, is authorized to pay any or all such sums that are or become due and payable, and all sums necessary to make such payments shall be and the same are hereby appropriated from the funds of the divisions properly chargeable therewith.

Section 5. That in addition to the foregoing appropriations, whenever any sums are received by a division on behalf of an external entity, including but not limited to the collection of sales tax, such sums shall be and the same are hereby appropriated from the funds of said division, for the purpose of paying the cost of the functions in connection with which such sums are received.

Section 6. That in addition to the foregoing appropriations, whenever any sums are received by a division on behalf of another division, or through the misapplication of division cost allocations, such sums shall be and the same are hereby appropriated from the funds of said division, for the purpose of paying such sums received to the appropriate division.

Section 7. That the KUB organizational structure, as determined by the President and CEO, which supports the fiber, electric, natural gas, water, and wastewater systems that will benefit from expenditures charged to the foregoing appropriations, is hereby approved and ratified by the Board.

Section 8. That all appropriations made herein shall terminate effective July 1, 2022, and any unexpended balances of such appropriations shall revert to the general funds of the division from which originally appropriated.

Section 9. That funds will be available for each division to fund the expenditures to be paid for the fiscal year beginning today, as noted in Section 1 of this Resolution. The availability of funds has been certified by letter from the Senior Vice President and Chief Financial Officer, whereby said letter is attached to and incorporated by reference as part of this Resolution.

Section 10. Be it Further Resolved that this Resolution shall take effect from and after its passage.

> Jerry Askew/s Jerry Askew, Chair

Mark Walker/s Mark Walker, Board Secretary

APPROVED ON 1st & FINAL READING: <u>08-19-21</u> EFFECTIVE DATE: <u>08-19/21</u> MINUTE BOOK 44 PAGE <u>10984-10988</u>



August 13, 2021

Knoxville Utilities Board 445 S. Gay Street Knoxville, Tennessee 37902-1109

Commissioners,

I hereby certify that within the meaning of Section 1109 of the City of Knoxville Charter and Article IX.B.2.c. of the Board's By-Laws there are sufficient funds adequate to fund the proposed budget appropriations for the fiscal year beginning July 1, 2021, as provided for in Resolution 1444, as follows:

Division

Amount

Fiber

\$ 6,000,000

The availability of funds for budget appropriations is based on general fund cash and all available cash reserves of the Fiber Division as of August 19, 2021, and all monies anticipated to come into the general fund on or before June 30, 2022 from utility sales at rates approved by the KUB Board; from other fees, charges, sales proceeds, accounts and notes receivable, or other credits in the process of collection; and from proceeds of authorized debt issues and interdivisional loans.

Please see the enclosed worksheet which demonstrates the availability of funds to support the proposed budget appropriations.

Respectfully submitted,

Mouth Willim

Mark A. Walker Senior Vice President and CFO

Enclosure

August 2021: Certification of Available Funds - FY 2022 Budget Appropriations

Fiber Division: Certification of Available Funds

00
\$0
\$0
\$0
\$10,000,000
\$0
\$10,000,000
\$6,000,000
\$4,000,000

If positive, there are available funds to fund appropriations.

RESOLUTION NO. 1445

A Resolution Approving Commitment Appropriations for the Period Beginning August 19, 2021, Thereby Authorizing the Commitment of Expenditures to be Paid Subsequent to June 30, 2022, for Contractual Commitments Executed and Other Obligations Incurred on or Before June 30, 2022

Whereas, Section 1109 of the Charter of the City of Knoxville provides that "No money shall be drawn from the treasury of the system nor shall any obligation for the expenditure of money be incurred except in pursuance of appropriations made by the board"; and

Whereas, KUB staff anticipates KUB's Fiber Division will enter into contracts and obligations during the period beginning August 19, 2021, and ending June 30, 2022, for goods and services to be received subsequent to June 30, 2022, resulting in the commitment of expenditures to be paid subsequent to June 30, 2022; and

Whereas, the appropriations provided for in this Resolution shall provide for the commitment of expenditures from KUB subsequent to June 30, 2022, for goods and services to be received by KUB subsequent to June 30, 2022, resulting from contractual commitments executed and other obligations incurred by KUB on or before June 30, 2022; and

Whereas, the Chief Financial Officer (CFO) has certified the availability of funds to support the proposed commitment appropriations; and

Whereas, the Board has found the adoption of the proposed commitment appropriations to be in the best interest of KUB and its customers.

Now, Therefore Be It Hereby Resolved by the Board of Commissioners of the Knoxville Utilities Board:

Section 1. That commitment appropriations for the period beginning August 19, 2021, and ending June 30, 2022, providing for the commitment of expenditures to be paid subsequent to June 30, 2022, for goods and services to be received subsequent to June 30, 2022, resulting from contractual commitments and other obligations incurred on or before June 30, 2022, be and the same are hereby made from the funds of the Fiber Division, in the amount of **\$3,000,000**.

Section 2. That funds will be available for the Fiber Division to fund the expenditures to be paid subsequent to June 30, 2022, for contractual commitments executed and other obligations incurred on or before June 30, 2022, as noted in Sections 1 of this Resolution. The availability of funds has been certified by letter from the Senior Vice President and Chief Financial Officer, whereby said letter is attached to and incorporated by reference as part of this Resolution.

Section 3. That all appropriations made herein shall terminate effective July 1, 2022.

Section 4. Be it Further Resolved that this Resolution shall take effect from and after its passage.

Jerry Askew/s

Jerry Askew, Chair

Mark Walker/s Mark Walker, Board Secretary

APPROVED ON 1st & FINAL READING: <u>08-19-21</u> EFFECTIVE DATE: <u>08-19-21</u> MINUTE BOOK <u>44</u> PAGE <u>10989-10993</u>



August 13, 2021

Knoxville Utilities Board 445 S. Gay Street Knoxville, Tennessee 37902-1109

Commissioners,

I hereby certify that within the meaning of Section 1109 of the City of Knoxville Charter and Article IX.B.3.c. of the Board's By-Laws there are sufficient funds adequate to fund the proposed commitment appropriations for the period beginning August 19, 2021, as provided for in Resolution 1445 as follows:

Division	Amount	
Fiber	\$3,000,000	

The availability of funds for commitment appropriations is based on general fund cash and all available cash reserves of the Fiber Division as of July 1, 2022, and all monies anticipated to come into the general fund of the Fiber Division prior to the maturity of the contractual commitments and other obligations from utility sales at rates approved by the KUB Board; from other fees, charges, sales proceeds, accounts and notes receivable, or other credits in the process of collection; and from proceeds of authorized debt issues.

Please see the enclosed worksheet which demonstrates the availability of funds to support the proposed commitment appropriations.

Respectfully submitted,

Moch Walt

Mark A. Walker Senior Vice President and CFO

Enclosure

August 2021: Certification of Available Funds - FY 2022 Commitment Appropriations

Fiber Division: Certification of Available Funds

	FY 2022	FY 2023
Available Funds (as of July 1, 2022)	1	\$4,000,000
Sales Revenues	\$0	\$0
Other Revenues	\$0	\$0
Total	\$10,000,000	\$4,000,000
FY 2022 Budget Appropriations (Res. 1444)	\$6,000,000	
FY 2022 Commitment Appropriations (Res. 1445)		\$3,000,000
Available Funds (as of June 30, 2023)	\$4,000,000	\$1,000,000

If positive, there are available funds to fund appropriations.

August 2021 - Commitments for Future Year Expenditures

FY 2023
\$ 1,020,000
\$ 1,140,000
\$ 600,000
\$ 240,000
\$ 3,000,000
\$ \$

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