Knoxville Utilities Board
Board Meeting
Minutes
Thursday, May 21, 2020 Noon

Call to Order

The Knoxville Utilities Board met in regular session on Thursday, May 21, 2020, pursuant to the public notice published in the January 4, 2020, edition of the *News Sentinel*. Due to social distancing safeguards related to the COVID-19 pandemic, KUB's May 21, 2020 Board of Commissioners meeting was held electronically, using the Microsoft Teams Live Meeting video conferencing platform. Public Notice that the meeting was to be held electronically was published on the Knoxville Utilities Board website on May 8, 2020. Chair Kathy Hamilton called the meeting to order at 12 p.m.

Roll Call

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

Commissioner Absent: None

Determination to Conduct Board Meeting Electronically

Chair Hamilton advised the Board that pursuant to Executive Orders 16 and 34 issued by Governor Bill Lee which allows for this public meeting to be conducted by electronic means to protect the health, safety, and welfare of Tennesseans in light of the COVID-19 outbreak, she would entertain a motion that the Board make the determination for the meeting to be conducted electronically. She asked for a motion and a second.

Upon a motion by Commissioner Askew and a second by Commissioner Herbert, the Board made the determination that the May 21, 2020 Board meeting would be conducted electronically. The following Commissioners voted "aye": Askew, Hamilton, Herbert, Pinnell, Small, Simpson-Brown, and Worden. No Commissioner voted "nay".

Approval of Minutes

Upon a motion by Commissioner Small and a second by Commissioner Herbert, the April 16, 2020 Board Meeting minutes were approved by a roll call vote. The following Commissioners voted "aye": Askew, Hamilton, Herbert, Pinnell, Simpson-Brown, Small, and Worden. No Commissioner voted "nay".

Old Business

None

New Business

Resolution 1411, A Resolution Requesting the Council of the City of Knoxville, Tennessee to Provide for the Issuance of Not to Exceed Seventeen Million and No/100 Dollars ($17,000,000) In Aggregate Principal Amount of Water System Revenue Bonds, Series KK-2020; and Issuance of Not to Exceed Thirty Million and No/100 Dollars ($30,000,000) In Aggregate Principal Amount of Wastewater System Revenue Bonds, Series 2020B

Resolution 1412, 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, 2020, Providing for Expenditures Paid for the Period Beginning July 1, 2020, and Ending June 30, 2021

Resolution 1413, A Resolution Approving Commitment Appropriations for the Fiscal Year Beginning July 1, 2020, Thereby Authorizing the Commitment of Expenditures to be Paid Subsequent to June 30, 2021, for Contractual Commitments Executed and Other Obligations Incurred on or Before June 30, 2021

Chair Hamilton stated that Resolutions 1411, 1412, and 1413 are related to the fiscal year 2021 budget and therefore would be discussed in a single presentation before being considered individually.

President Gabriel Bolas recognized Mark Walker, Senior Vice President and Chief Financial Officer, who provided a presentation of the proposed budget for fiscal year 2021 and funding of the proposed budget. The proposed total budget for fiscal year 2021 is $962 million, including $600.7 million for the Electric Division, $128.6 million for the Gas Division, $94.3 million for the Water Division, and $138.5 million for the Wastewater Division. He also reviewed the major cost components of the proposed $962 million budget and advised the Board the proposed budget will be funded by $857 million in system revenue, $47 million in bond proceeds, and $58 million in general fund cash.

Mr. Walker also reviewed the request for the issuance of up to $47 million in new bonds to help fund the systems' capital budgets in fiscal year 2021, including $17 million in water bonds, and $30 million in wastewater bonds.

Mr. Walker then reviewed the request for commitment appropriations for fiscal year 2021, authorizing the commitment of expenditures for each division to be paid subsequent to fiscal year 2021.

President Bolas recommended adoption of Resolutions 1411, 1412, and 1413 on first and final reading. His written recommendation is included in Attachment 1.

Upon a motion by Commissioner Herbert and a second by Commissioner Pinnell, Resolution 1411 *(Attachment 1)* was adopted by a roll call vote on first and final reading. The following Commissioners voted "aye": Askew, Hamilton, Herbert, Pinnell, Simpson-Brown, Small, and Worden. No Commissioner voted "nay".

Upon a motion by Commissioner Small and a second by Commissioner Simpson-Brown, Resolution 1412 *(Attachment 2)* was adopted by a roll call vote on first and final reading. The following Commissioners voted "aye": Askew, Hamilton, Herbert, Pinnell, Simpson-Brown, Small, and Worden. No Commissioner voted "nay".

Upon a motion by Commissioner Pinnell and a second by Commissioner Worden, Resolution 1413 *(Attachment 3)* was adopted by a roll call vote on first and final reading. The following Commissioners voted "aye": Askew, Hamilton, Herbert, Pinnell, Simpson-Brown, Small, and Worden. No Commissioner voted "nay".

Resolution 1414, A Resolution Replacing or Amending the Existing Rate Schedules of the Electric, Gas, Water and Wastewater Divisions, as Previously Established by Resolution No. 1060, as Heretofore Amended, and Replacing the Existing Purchased Power Adjustment of the Electric Division, as Previously Established by Resolution No. 1065, as Heretofore Amended

This Resolution Replaces the Existing Rate Schedules of the Electric Division, Updating as Needed for Simplification and Agreement with Wholesale Rate Language, Providing for Updated Power Cost Rates for all Rate Schedules Effective November 1, 2020, and Implementing Pilot Time of Use Rate Schedules for Residential and GSA Rate Schedules Effective November 1, 2020

This Resolution Replaces the Existing Purchased Power Adjustment of the Electric Division Effective July 1, 2020 and Replaces Appendix A Effective November 1, 2020

This Resolution Amends the Existing Rate Schedule, G2-Residential, of the Gas Division Effective November 1, 2020

This Resolution Amends the Existing Rate Schedule, Water General Service – Residential, of the Water Division Effective November 1, 2020

This Resolution Amends the Existing Rate Schedule, Wastewater General Service – Residential Rate Schedule, of the Wastewater Division Effective November 1, 2020

President Bolas advised Commissioners that although there are no rate increases in fiscal year 2021, there are several rate action items for the Board's consideration on first reading. Including new pilot time of use electric rates and amendments to the Purchase Power Adjustment mechanism. He recognized Sherri Ottinger, Manager of Rates and Analytical Services, for details on the proposed resolution.

President Bolas recommended adoption of Resolutions 1414 on first reading. His written recommendation is included in Attachment 4.

Upon a motion by Commissioner Herbert and a second by Commissioner Pinnell, Resolution 1414 *(Attachment 4)* was adopted by a roll call vote on first reading. The following Commissioners voted "aye": Askew, Hamilton, Herbert, Pinnell, Simpson-Brown, Small, and Worden. No Commissioner voted "nay".

Resolution 1415, A Resolution Authorizing Participation in the Tennessee Valley Authority's Back to Business Credit Program

President Bolas reminded Commissioners of the tremendous impact the COVID-19 pandemic is having on the community. He recognized Tiffany Martin, Director of Customer Experience, to share the details of an opportunity to partner with TVA to provide some financial relief to large commercial and industrial electric customers partially or fully shut down due to the pandemic. The TVA Back to Business Credit Program is fully funded by TVA.

President Bolas recommended adoption of Resolutions 1415 on first and final reading. His written recommendation is included in Attachment 5.

Upon a motion by Commissioner Small and a second by Commissioner Worden, Resolution 1415 *(Attachment 5)* was adopted by a roll call vote on first and final reading. The following Commissioners voted "aye": Askew, Hamilton, Herbert, Pinnell, Simpson-Brown, Small, and Worden. No Commissioner voted "nay".

May 21, 2020

President's Report

Bond Refinancing Results

President Bolas recognized Chris Hood, Controller, to provide the details of KUB's recent bond refinancing. Mr. Hood advised the Board that KUB recently completed a successful refinancing of approximately $77 million in outstanding bonds, with a debt service savings of approximately $27 million over the life of the bonds.

Other Business

None

Public Comment

None

Adjournment

There being nothing further to come before the Board, Chair Hamilton declared the Board meeting adjourned at 1:25 p.m.

Kathy Hamilton

Kathy Hamilton, Chair

Mark Walker

Mark Walker, Board Secretary

Attachments

Attachment 1	Recommendation Letter and Resolution 1411 – A Resolution Replacing or Amending the Existing Rate Schedules of the Electric, Gas, Water and Wastewater Divisions, as Previously Established by Resolution No. 1060, as Heretofore Amended, and Replacing the Existing Purchased Power Adjustment of the Electric Division, as Previously Established by Resolution No. 1065, as Heretofore Amended	**Page(s)** 9894 – 9968
Attachment 2	Resolution 1412 – 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, 2020, Providing for Expenditures Paid for the Period Beginning July 1, 2020, and Ending June 30, 2021	9969 – 9974
Attachment 3	Resolution 1413 – A Resolution Approving Commitment Appropriations for the Fiscal Year Beginning July 1, 2020, Thereby Authorizing the Commitment of Expenditures to be Paid Subsequent to June 30, 2021, for Contractual Commitments Executed and Other Obligations Incurred on or Before June 30, 2021	9975 – 9980
Attachment 4	Resolution 1414 – A Resolution Replacing or Amending the Existing Rate Schedules of the Electric, Gas, Water and Wastewater Divisions, as Previously Established by Resolution No. 1060, as Heretofore Amended, and Replacing the Existing Purchased Power Adjustment of the Electric Division, as Previously Established by Resolution No. 1065, as Heretofore Amended This Resolution Replaces the Existing Rate Schedules of the Electric Division, Updating as Needed for Simplification and Agreement with Wholesale Rate Language, Providing for Updated Power Cost Rates for all Rate Schedules Effective November 1, 2020, and Implementing Pilot Time of Use Rate Schedules for Residential and GSA Rate Schedules Effective November 1, 2020 This Resolution Replaces the Existing Purchased Power Adjustment of the Electric Division Effective July 1, 2020 and Replaces Appendix A Effective November 1, 2020 This Resolution Amends the Existing Rate Schedule, G2-Residential, of the Gas Division Effective November 1, 2020	9981 – 10077

	This Resolution Amends the Existing Rate Schedule, Water General Service – Residential, of the Water Division Effective November 1, 2020 This Resolution Amends the Existing Rate Schedule, Wastewater General Service – Residential Rate Schedule, of the Wastewater Division Effective November 1, 2020	
Attachment 5	Resolution 1415 – A Resolution Authorizing Participation in the Tennessee Valley Authority's Back to Business Credit Program	10078 – 10079

Knoxville Utilities Board

May 15, 2020

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

Commissioners:

As discussed at the budget workshop in April, the May 21 Board meeting agenda includes official action items for proposed budget and commitment appropriations for fiscal year 2021, two new bond issues to help fund system capital budgets, and several rate action recommendations, although no rate increases are being recommended for fiscal year 2021. One additional action item is the authorization for KUB to participate in a new TVA credit program for large commercial and industrial electric customers impacted by the COVID-19 pandemic.

An overview of each official action item is provided below:

Resolution 1411
Resolution 1411 requests City Council approval for the issuance of up to $47 million in revenue bonds, including $17 million for the Water Division and $30 million for the Wastewater Division.

The proceeds of the bonds will be used to help fund the water and wastewater system capital improvement programs in fiscal year 2021 and cover issuance costs and underwriters' fees. A summary of the major provisions of the proposed City Council bond resolutions is enclosed for your information.

Resolution 1412
Resolution 1412 adopts budget appropriations for fiscal year 2021 totaling $962.1 million, including $600.7 million for the Electric Division, $128.6 million for the Gas Division, $94.3 million for the Water Division, and $138.5 million for the Wastewater Division.

The proposed budget request provides $467.8 million for wholesale energy purchases, $158.1 million for operating and maintenance expenditures, $211.2 million for system capital investments, $85.9 million for debt service payments, and $39.1 million for taxes and tax equivalent payments. Senior Vice President and Chief Financial Officer Mark Walker has prepared a letter certifying the availability of funds for the proposed budget.

A white paper on the proposed budget for fiscal year 2021 is also enclosed for your information.

Resolution 1413
Resolution 1413 adopts commitment appropriations for fiscal year 2021. The resolution authorizes KUB to execute contracts and incur obligations on or before June 30, 2021, that commit KUB to expenditures after June 30, 2021. The commitments total $120.7 million, including $25.4 million for the Electric Division, $9 million for the Gas Division, $50.7 million for the Water Division, and $35.6 million for the Wastewater Division. Mr. Walker has also prepared a letter certifying the availability of funds for the commitment appropriations.

Resolution 1414
Resolution 1414 amends the rate schedules of the Electric, Gas, Water and Wastewater Divisions and replaces the existing Purchased Power Adjustment of the Electric Division.

The rate schedules of the Electric Division are being amended to add new pilot Time of Use (TOU) rates for residential and business electric customers. The optional pilot rate offerings will provide opportunities for participating customers to realize savings on their monthly electric bills by shifting usage from costlier on-peak hours to less expensive off-peak hours. The residential rate schedules of all divisions are being amended to replace the term "Customer Charge" with "Basic Service Charge", matching the terminology reflected on residential customers' monthly bills. In addition, there are a few minor housekeeping changes on several electric rate schedules. Finally, the Purchased Power Adjustment is being amended to reflect current wholesale power costs, the new TOU pilot rate programs, and the TVA wholesale power cost credit associated with the recently executed Long-Term Partnership Agreement with TVA.

Resolution 1414 requires two readings. If approved on first reading at the May 21 meeting, the resolution will be presented for Board consideration on second and final reading at the June 18 meeting.

Resolution 1415
Resolution 1415 authorizes KUB's participation in TVA's Back to Business Credit Program. TVA has developed a new program to provide economic relief for large commercial and industrial electric customers that shut down or operated at reduced levels due to the COVID-19 pandemic. A bill reduction in the form of a monthly on-peak demand credit also supports customers returning to normal operations more quickly, as it removes a dis-incentive to restarting in the middle of a month. The Back to Business Credit Program will be funded solely by TVA revenues and is effective for the months of April through September 2020.

Drafts of Resolutions 1411, 1412, 1413, 1414 and 1415 are also enclosed for your review. I recommend the adoption of Resolutions 1411, 1412, 1413, and 1415 on first and final reading, and Resolution 1414 on first reading.

Respectfully submitted,



Gabriel J. Bolas II
President and CEO

Enclosures

RESOLUTION NO. 1411

A Resolution Requesting the Council of the City of Knoxville, Tennessee to Provide for the Issuance of Not to Exceed Seventeen Million and No/100 Dollars ($17,000,000) In Aggregate Principal Amount of Water System Revenue Bonds, Series KK-2020; and Issuance of Not to Exceed Thirty Million and No/100 Dollars ($30,000,000) In Aggregate Principal Amount of Wastewater System Revenue Bonds, Series 2020B

Whereas, by the provisions of the City Charter of the City of Knoxville, Tennessee (the "City"), the management and operation of the City's water system (the "Water System"); and the City's wastewater system (the "Wastewater 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 $17,000,000 in aggregate principal amount of Water System Revenue Bonds, Series KK-2020 (the "Water Bonds") for the purpose of providing funds to finance the cost of improvements and extensions to the water distribution and treatment system of the City, including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the Water Bonds; 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 $30,000,000 in aggregate principal amount of Wastewater System Revenue Bonds, Series 2020B (the "Wastewater Bonds") for the purpose of providing funds to finance the cost of improvements and extensions to the wastewater collection and treatment system of the City, including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the Wastewater Bonds; and

Whereas, the Board has had prepared for passage by the Council of the City a resolution authorizing the issuance of the Water Bonds, a copy of which is attached hereto and made a part hereof (the "Water Resolution"); and a resolution authorizing the issuance of the Wastewater Bonds, a copy of which is attached hereto and made a part hereof (the "Wastewater 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 Water 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 Water Bonds pursuant thereto, the description of the Water Bonds, the security therefor and the purposes for which said Water Bonds are to be issued, being more fully stated in the Water Resolution.

Section 2. The Board hereby determines and finds that it is in the best interest of the City that the Council of the City adopt the Wastewater 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 Wastewater Bonds pursuant thereto, the description of the Wastewater Bonds, the security therefor and the purposes for which said Wastewater Bonds are to be issued, being more fully stated in the Wastewater Resolution.

Section 3. 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 Water Bonds and Wastewater Bonds, as proposed herein, is consistent with the Debt Management Policy.

Section 4. The Board hereby formally requests the Council of the City to pass the Water Resolution and the Wastewater Resolution, and the Board does hereby adopt, ratify, approve, consent and agree to each and every provision contained in the Water Resolution and the Wastewater Resolution upon adoption.

Section 5. The Board has elected and does hereby elect that the Water Bonds be issued under the Water Resolution and the Wastewater Bonds be issued under the Wastewater Resolution.

Section 6. 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 7. The Board hereby states its intent to reimburse itself from the proceeds of the Water Bonds and the Wastewater Bonds, respectively, 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 Water System and the Wastewater System, respectively.

Section 8. This Resolution shall take effect from and after its passage.

Kathy Hamilton/s
Kathy Hamilton, Chair

Mark Walker/s
Mark Walker, Board Secretary

APPROVED ON 1st
& FINAL READING: 5-21-20
EFFECTIVE DATE: 5-21-20
MINUTE BOOK 42 PAGE 9896-9968

A RESOLUTION SUPPLEMENTING RESOLUTION NO. 2075 ADOPTED BY THE CITY COUNCIL OF THE CITY OF KNOXVILLE, TENNESSEE ON APRIL 20, 1954 ENTITLED "A RESOLUTION PROVIDING FOR THE ISSUANCE OF WATER REVENUE BONDS" SO AS TO PROVIDE FOR THE ISSUANCE OF NOT TO EXCEED SEVENTEEN MILLION DOLLARS ($17,000,000) OF WATER SYSTEM REVENUE BONDS, SERIES KK-2020.

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 Water Revenue Bonds," being Resolution No. 2075 of the City Council adopted April 20, 1954 (which resolution as heretofore amended is hereinafter sometimes referred to as "Resolution No. 2075"), authorized an issue of Water Revenue Bonds; and

WHEREAS, pursuant to Resolution No. 2075, and for the purpose of financing the cost of the extensions and improvements to the City's water distribution and treatment system (the "System") and the refinancing of indebtedness issued for that purpose, the City issued Water Revenue Bonds, the series of which, the amount issued, and the amount outstanding as of June 1, 2020 are as follows:

Series	Amount Issued	Amount Outstanding
X-2012	$10,050,000	$ 6,460,000
Y-2013	$ 9,285,000	$ 7,730,000
Z-2013	$25,000,000	$21,600,000
AA-2014	$ 8,000,000	$ 7,100,000
BB-2015	$23,005,000	$20,035,000
CC-2015	$20,000,000	$18,025,000
DD-2016	$25,000,000	$23,225,000
EE-2016	$20,875,000	$19,585,000
FF-2017	$ 5,310,000	$ 3,900,000
GG-2017	$20,000,000	$19,025,000
HH-2018	$19,995,000	$19,090,000
II-2019	$19,995,000	$19,595,000
JJ-2020	$19,520,000	$19,520,000

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 Resolution No. 2075 and pursuant to the authority of this resolution; and

WHEREAS, the Board of Commissioners (the "Board") of the Knoxville Utilities Board 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 $17,000,000 in aggregate principal amount of water 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.

Section 2. Definitions. Capitalized terms used herein and not defined in this Section 2 shall have the meanings ascribed to them in the 1954 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 KK-2020 Bonds, entered into by and between KUB and the Underwriter, in substantially the form of the document attached hereto as Exhibit A, 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) "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;

(h) "DTC Participant(s)" means securities brokers and dealers, banks, trust companies and clearing corporations that have access to the DTC system;

(i) "Governing Body" shall mean the City Council of the City;

(j) "KUB" shall mean the Knoxville Utilities Board;

(k) "1954 Resolution" shall mean Resolution No. 2075 of the Governing Body, adopted April 20, 1954, as amended and supplemented by Resolution No. 3633, Resolution No. R-26-88, Resolution No. R-8-98, Resolution No. R-151-01 and Resolution No. R-228-2018 and as otherwise supplemented prior to the date hereof;

(l) "Outstanding Bonds" shall mean the City's outstanding Water System Revenue Refunding Bonds, Series X-2012, dated April 20, 2012, maturing March 1, 2021 and thereafter, the City's outstanding Water System Revenue Refunding Bonds, Series Y-2013, dated March 15, 2013, maturing March 1, 2021 and thereafter, the City's outstanding Water System Revenue Bonds, Series Z-2013, dated October 1, 2013, maturing March 1, 2021 and thereafter, the City's outstanding Water System Revenue Bonds, Series AA-2014, dated September 18, 2014, maturing March 1, 2021 and thereafter, the City's outstanding Water System Revenue Refunding Bonds, Series BB-2015, dated May 1, 2015, maturing March 1, 2021 and thereafter, the City's outstanding Water System Revenue Bonds, Series CC-2015, dated May 20, 2015, maturing March 1, 2021 and thereafter, the City's outstanding Water System

Revenue Bonds, Series DD-2016, dated August 5, 2016, maturing March 1, 2021 and thereafter, the City's outstanding Water System Revenue Refunding Bonds, Series EE-2016, dated August 5, 2016, maturing March 1, 2021 and thereafter, the City's outstanding Water System Revenue Refunding Bonds, Series FF-2017, dated April 7, 2017, maturing March 1, 2021 and thereafter, the City's outstanding Water System Revenue Bonds, Series GG-2017, dated September 15, 2017, maturing March 1, 2021 and thereafter, the City's outstanding Water System Revenue Bonds, Series HH-2018, dated September 14, 2018, maturing March 1, 2021 and thereafter, the City's outstanding Water System Revenue Bonds, Series II-2019, dated August 20, 2019, maturing March 1, 2021 and thereafter, and the City's outstanding Water System Revenue Refunding Bonds, Series JJ-2020, dated May 22, 2020, maturing March 1, 2021 and thereafter;

(m) "Parity Bonds" shall mean any bonds issued on a parity with the Series KK-2020 Bonds and the Outstanding Bonds pursuant to the 1954 Resolution;

(n) "Project" shall mean extensions and improvements to the System;

(o) "Registration Agent" shall mean the registration and paying agent for the Series KK-2020 Bonds designated by the President and Chief Executive Office of KUB, or any successor as designated by the Board;

(p) "Series KK-2020 Bonds" shall mean the City's Water System Revenue Bonds, Series KK-2020, 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 1954 Resolution and this resolution in an aggregate principal amount not to exceed $17,000,000;

(q) "State" shall mean the State of Tennessee; and

(r) "Underwriter" shall mean an investment banking firm qualified to underwrite bonds such as the Series KK-2020 Bonds in the State of Tennessee selected by the President and Chief Executive Officer of KUB.

Section 3. Declarations. It is hereby determined that all requirements of the 1954 Resolution have been or will have been met upon the issuance of the Series KK-2020 Bonds so that the Series KK-2020 Bonds will be issued as Parity Bonds.

Section 4. Authorization and Terms of the Series KK-2020 Bonds. (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 KK-2020 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 $17,000,000. The Series KK-2020 Bonds shall be issued in fully registered form, without coupons, shall be known as "Water System Revenue Bonds, Series KK-2020," 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 KK-2020 Bonds shall bear interest at a rate or rates not to exceed five percent (5.00%) per annum, payable semi-annually on March 1 and September 1 in each year, commencing September 1, 2020 or such other date as is permitted pursuant to Section 9 hereof. The Series KK-2020 Bonds shall be initially issued in $5,000 denominations or integral multiples thereof as shall be requested by the purchaser thereof. The Series KK-2020 Bonds shall mature and be payable either serially or through mandatory redemption on each March 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 March 1, 2050. The final maturity schedule

shall be established by the award resolution or certificate awarding the Series KK-2020 Bonds to the successful purchaser thereof or in the Bond Purchase Agreement provided for in Section 9 if the Series KK-2020 Bonds are sold by negotiated sale.

(b) Subject to adjustment pursuant to Section 9 hereof, the Series KK-2020 Bonds maturing on or before March 1, 2030 shall mature without option of prior redemption. Series KK-2020 Bonds maturing on March 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 March 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 KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 Bonds are not being held under a Book-Entry System by DTC, or a successor Depository, the Series KK-2020 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 KK-2020 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 of the Series KK-2020 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 KK-2020 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 KK-2020 Bonds, or any successor Depository for the Series KK-2020 Bonds, shall determine the interest of each Participant in the Series KK-2020 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 KK-2020 Bonds, the Series KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 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.

(d) Notice of call for redemption, whether optional or mandatory, shall be given by the 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 KK-2020 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 KK-2020 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 KK-2020 Bonds, all redemption notices shall be mailed by the Registration Agent to DTC, or such successor Depository, as the registered owner of the Series KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 Bonds, and the Registration Agent so appointed is authorized and directed to maintain Bond registration records with respect to the Series KK-2020 Bonds, to authenticate and deliver the Series KK-2020 Bonds as provided herein, either at original issuance, upon transfer, or as otherwise directed by the Board, to effect transfers of the Series KK-2020 Bonds, to give all notices of redemption as required herein, to make all payments of principal and interest with respect to the Series KK-2020 Bonds as provided herein, to cancel and destroy the Series KK-2020 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 the Series KK-2020 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 KK-2020 Bonds. 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 KK-2020 Bonds (as well as any successors to any of the foregoing). 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.

(g) The Series KK-2020 Bonds shall be payable, principal and interest, in lawful money of 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 Series KK-2020 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 KK-2020 Bonds, and all such payments shall discharge the obligations of KUB in respect of such Series KK-2020 Bonds to the extent of the payments so made. Payment of principal of the Series KK-2020 Bonds shall be made upon presentation and surrender of such Series KK-2020 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 KK-2020 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 KK-2020 Bonds, payment of interest on such Series KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 Bonds when due.

(i) The Series KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 Bond(s) in such form and with such documentation, if any, the Registration Agent shall issue a new Series KK-2020 Bond or Series KK-2020 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 KK-2020 Bond during the period commencing on a Regular or Special Record Date and ending on the corresponding interest payment date of such Series KK-2020 Bond, nor to transfer or exchange any Series KK-2020 Bond after notice calling such Series KK-2020 Bond for redemption has been made, nor to transfer or exchange any Series KK-2020 Bond during the period following the receipt of instructions from KUB to call such Series KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 Bonds shall be overdue. Series KK-2020 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 KK-2020 Bonds of the same maturity in any authorized denomination or denominations. This subsection shall be applicable only if the Series KK-2020 Bonds are no longer held by a Depository, and as long as the Series KK-2020 Bonds are held by a Depository, transfers of ownership interests in the Bonds shall be governed by the rules of the Depository.

(j) Except as otherwise authorized herein, the Series KK-2020 Bonds shall be registered in the name of Cede & Co., as nominee of DTC, which will act as the Depository for the Series KK-2020 Bonds except as otherwise provided herein. References in this Section 4 to a Series KK-2020 Bond or the Series KK-2020 Bonds shall be construed to mean the Series KK-2020 Bond or the Series KK-2020 Bonds that are held under the Book-Entry System. One Series KK-2020 Bond for each maturity of the Series KK-2020 Bonds shall be issued to DTC and immobilized in its custody or a custodian of DTC. The Bond Registrar is a custodian and agent for DTC, and the Series KK-2020 Bond will be immobilized in its custody. A Book-Entry System shall be employed, evidencing ownership of the Series KK-2020 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 KK-2020 Bonds. Beneficial ownership interests in the Series KK-2020 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 KK-2020 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 KK-2020 Bonds. Transfers of ownership interests in the Series KK-2020 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 KK-2020 BONDS, THE REGISTRATION AGENT SHALL TREAT CEDE & CO., AS THE ONLY HOLDER OF THE SERIES KK-2020 BONDS FOR ALL PURPOSES UNDER THIS RESOLUTION, INCLUDING RECEIPT OF ALL PRINCIPAL OF, PREMIUM, IF ANY, AND INTEREST ON THE SERIES KK-2020 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 KK-2020 Bonds, so long as DTC is the only owner of the Series KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 Bonds in the form of fully registered Series KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 Bond of like tenor, amount, maturity and date, in exchange and substitution for, and upon the cancellation of, the mutilated Series KK-2020 Bond, or in lieu of and in substitution for such lost, stolen or destroyed Series KK-2020 Bond, or if any such Series KK-2020 Bond shall have matured or shall be about to mature, instead of issuing a substituted Series KK-2020 Bond KUB may pay or authorize payment of such Series KK-2020 Bond without surrender thereof. In every case the applicant shall furnish evidence satisfactory to KUB and the Registration Agent of the destruction, theft or loss of such Series KK-2020 Bond, and indemnity satisfactory to KUB and the Registration Agent; and KUB may charge the applicant for the issue of such new Series KK-2020 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 KK-2020 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 KK-2020 Bonds in exchange for Series KK-2020 Bonds of the same principal amount delivered

for transfer upon receipt of the Series KK-2020 Bond(s) to be transferred in proper form with proper documentation as hereinabove described. The Series KK-2020 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 KK-2020 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 KK-2020 Bonds for deposit with DTC, including but not limited to, wire transfers of interest and principal payments with respect to the Series KK-2020 Bonds, utilization of electronic book entry data received from DTC in place of actual delivery of Series KK-2020 Bonds and provision of notices with respect to Series KK-2020 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 KK-2020 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 KK-2020 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 1954 Resolution on a parity and equality of lien with the Outstanding Bonds. The punctual payment of principal of and interest on the Series KK-2020 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 KK-2020 Bonds shall have no recourse to the power of taxation of the City.

Section 6. Form of Series KK-2020 Bonds. The Series KK-2020 Bonds shall be in substantially the following form, the omissions to be appropriately completed when the Series KK-2020 Bonds are prepared and delivered:

(Form of Series KK-2020 Bond)

REGISTERED
Number _____

REGISTERED
$_____

UNITED STATES OF AMERICA
STATE OF TENNESSEE
COUNTY OF KNOX
CITY OF KNOXVILLE
WATER SYSTEM REVENUE BOND, SERIES KK-2020

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 30-

day 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 September 1, 2020, and semi-annually thereafter on the first day of March and September 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 Bond Registrar 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 March 1, 2030 shall mature without option of prior redemption. The Bonds maturing on March 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 March 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 $17,000,000 and issued by the City for the purpose of providing funds to finance the construction of extensions and improvements to the City's water distribution and treatment 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 Sections 9-21-101 et seq., Tennessee Code Annotated, and pursuant to Resolution No. 2075 duly adopted by the City Council of the City on April 20, 1954, as amended and supplemented by Resolution No. 3633, Resolution No. R-26-88, Resolution No. R-8-98, Resolution No. R-151-01, and Resolution No. R-228-2018 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 Water System Revenue Refunding Bonds, Series X-2012, dated April 20, 2012, maturing March 1, 2021 and thereafter, the City's outstanding Water System Revenue Refunding Bonds, Series Y-2013, dated March 15, 2013, maturing March 1, 2021 and thereafter, the City's outstanding Water System Revenue Bonds, Series Z-2013, dated October 1, 2013, maturing March 1, 2021 and thereafter, the City's outstanding Water System Revenue Bonds, Series AA-2014, dated September 18, 2014, maturing March 1, 2021 and thereafter, the City's outstanding Water System Revenue Refunding Bonds, Series BB-2015, dated May 1, 2015, maturing March 1, 2021 and thereafter, the City's outstanding Water System Revenue Bonds, Series CC-2015, dated May 20, 2015, maturing March 1, 2021 and thereafter, the City's outstanding Water System Revenue Bonds, Series DD-2016, dated August 5, 2016, maturing March 1, 2021 and thereafter, the City's outstanding Water System Revenue Refunding Bonds, Series EE-2016, dated August 5, 2016, maturing March 1, 2021 and thereafter, the City's outstanding Water System Revenue Refunding Bonds, Series FF-2017, dated April 7, 2017, maturing March 1, 2021 and thereafter, the City's outstanding Water System Revenue Bonds, Series GG-2017, dated September 15, 2017, maturing March 1, 2021 and thereafter, the City's outstanding Water System Revenue Bonds, Series HH-2018, dated September 14, 2018, maturing March 1, 2021 and thereafter, the City's outstanding Water System Revenue Bonds, Series II-2019, dated August 20, 2019, maturing March 1, 2021 and thereafter, and the City's outstanding Water System Revenue Refunding Bonds, Series JJ-2020, dated May 22, 2020,

maturing March 1, 2021 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 her 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
designated 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: _____

_____
NOTICE: 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.

Section 7. Equality of Lien; Pledge of Net Revenues. The punctual payment of principal of, premium, if any, and interest on the Series KK-2020 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 1954 Resolution. The Series KK-2020 Bonds are issued in compliance with the 1954 Resolution so as to be on a parity with the Outstanding Bonds, and, when duly delivered, the Series KK-2020 Bonds shall constitute a series of bonds issued under the authority of the 1954 Resolution. All recitals, provisions, covenants and agreements contained in the 1954 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 KK-2020 Bonds shall be outstanding and unpaid either as to principal or interest, or until discharge and satisfaction of the Series KK-2020 Bonds as provided in Section 12 hereof, shall be applicable to the Series KK-2020

Bonds, shall inure to the benefit of owners of the Series KK-2020 Bonds as if set out in full herein, and shall be fully enforceable by the owner of any Series KK-2020 Bond.

All references to "holder" or "holders" in the 1954 Resolution shall be deemed to include owners of the Series KK-2020 Bonds, and all references to "Bonds" in the 1954 Resolution shall be deemed to include the Series KK-2020 Bonds.

Section 9. Sale of Series KK-2020 Bonds.

(a) The Series KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 Bonds to a designation other than "Water System Revenue Bonds, Series KK-2020";

(3) change the first interest payment date to a date other than September 1, 2020, provided that such date is not later than twelve months from the dated date of such emission of Series KK-2020 Bonds;

(4) establish and adjust the principal and interest payment dates and determine maturity or mandatory redemption amounts of the Series KK-2020 Bonds or any emission thereof, provided that (A) the total principal amount of all emissions of the Series KK-2020 Bonds does not exceed the total amount of Series KK-2020 Bonds authorized herein, (B) the final maturity date of each emission shall be not later than March 1, 2050 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 KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 Bonds, providing for the purchase and sale of the Series KK-2020 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 KK-2020 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 KK-2020 Bonds to the public, then the Bond Purchase Agreement shall be conformed to reflect such intention. The form of the Series KK-2020 Bond set forth in Section 6 hereof 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 KK-2020 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 Series KK-2020 Bonds.

(e) If the Series KK-2020 Bonds are sold at public sale, the Series KK-2020 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.

Section 10. Disposition of Series KK-2020 Bond Proceeds. The proceeds of the sale of the Series KK-2020 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 1954 Resolution and used to pay interest on the Series KK-2020 Bonds on the first interest payment date following delivery of the Series KK-2020 Bonds; and

(b) The remainder of the proceeds of the sale of the Series KK-2020 Bonds shall be deposited with a financial institution regulated by the Federal Deposit Insurance Corporation or similar federal agency, in the "Water System Construction 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 KK-2020 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 KK-2020 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 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 KK-2020 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 KK-2020 Bonds. If KUB, on behalf of the City, shall pay and discharge the indebtedness evidenced by any of the Series KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 Bonds will not be used in a manner which will cause the Series KK-2020 Bonds to be "arbitrage bonds" within the meaning of Section 148 of the Code, and to this end the said proceeds of the Series KK-2020 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 KK-2020 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 KK-2020 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 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 KK-2020 Bonds. After the Series KK-2020 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 KK-2020 Bonds of a reasonable number of copies of the Official Statement within seven business days after the Series KK-2020 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 KK-2020 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 KK-2020 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 KK-2020 Bonds, an agreement for the benefit of and enforceable by the owners of the Series KK-2020 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.

Section 15. Separability. 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 _____, 2020.

_____
Mayor

ATTEST:

_____
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 Tuesday, _____, 2020; 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 $17,000,000 Water System Revenue Bonds, Series KK-2020.

WITNESS my official signature and seal of the City of Knoxville, Tennessee, this ____ day of _____, 2020.

_____
City Recorder

(seal)

EXHIBIT A

$17,000,000
CITY OF KNOXVILLE, TENNESSEE
ACTING ON BEHALF OF KNOXVILLE UTILITIES BOARD
WATER SYSTEM REVENUE BONDS, SERIES KK-2020

BOND PURCHASE AGREEMENT

_____, 2020

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 _____, 2020.

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 $17,000,000 aggregate principal amount of KUB's Water System Revenue Bonds, Series KK-2020 (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 _____, 2020, 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 water distribution and treatment 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;

(l) 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 shall not preclude the Underwriter from thereafter terminating this Bond Purchase Agreement, and if 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 _____, 2020, 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 Exhibit A 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 Exhibit B 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. Termination.

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,

_____

By:_____
Its:_____

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 _____, 2020 (the "Bond Purchase Agreement"), between _____ (the "Underwriter"), and Knoxville Utilities Board ("KUB"), relating to the sale by KUB of its Water System Revenue Bonds, Series KK-2020, in the aggregate principal amount of $17,000,000 (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 _____, 2020, 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

_____, 2020

_____
_____
_____

Bass Berry & Sims PLC
900 South Gay Street, Suite 1700
Knoxville, Tennessee 37902

Re: City of Knoxville, Tennessee acting on behalf of the Knoxville Utilities Board $17,000,000 Water System Revenue Bonds, Series KK-2020

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 water distribution and treatment 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 and the water 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,

28166123.2

RESOLUTION SUPPLEMENTING RESOLUTION NO. R-129-90 ADOPTED BY THE CITY COUNCIL OF THE CITY OF KNOXVILLE, TENNESSEE ON MAY 15, 1990 PROVIDING FOR THE ISSUANCE OF NOT TO EXCEED THIRTY MILLION AND NO/100 DOLLARS ($30,000,000) OF WASTEWATER SYSTEM REVENUE BONDS, SERIES 2020B.

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 Resolution No. R-129-90 of the City Council adopted May 15, 1990 (which resolution as heretofore amended is hereinafter sometimes referred to as the "1990 Resolution"), authorized the issuance of series of Wastewater System Revenue Bonds; and

WHEREAS, pursuant to the 1990 Resolution, and for the purpose of financing the cost of the extensions and improvements to the City's wastewater collection and treatment system (the "System") and the refinancing of indebtedness issued for that purpose, the City issued Wastewater System Revenue Bonds, the series of which, the amount issued and the amount outstanding as of June 1, 2020, are as follows:

Series	Amount Issued	Amount Outstanding
2010C	$ 70,000,000	$ 58,450,000
2012A	$ 17,070,000	$ 10,850,000
2012B	$ 65,000,000	$ 58,225,000
2013A	$113,340,000	$109,115,000
2014A	$ 30,000,000	$ 27,300,000
2015A	$129,825,000	$116,085,000
2015B	$ 30,000,000	$ 27,475,000
2016	$ 20,000,000	$ 18,275,000
2017A	$ 11,965,000	$ 7,575,000
2017B	$ 25,000,000	$ 23,745,000
2018	$ 12,000,000	$ 11,485,000
2019	$ 16,000,000	$ 15,750,000
2020A	$ 28,320,000	$ 28,230,000

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 authorization contained in the 1990 Resolution and 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 $30,000,000 in aggregate principal amount of wastewater 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 wastewater system of the City 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.

Section 2. Definitions. Capitalized terms used herein and not defined in this Section 2 shall have the meanings ascribed to them in the 1990 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 2020B Bonds, entered into by and between KUB and the Underwriter, in substantially the form of the document attached hereto as Exhibit A, 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) "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;

(h) "DTC Participant(s)" means securities brokers and dealers, banks, trust companies and clearing corporations that have access to the DTC system;

(i) "Governing Body" shall mean the City Council of the City;

(j) "KUB" shall mean the Knoxville Utilities Board;

(k) "1990 Resolution" shall mean Resolution No. R-129-90 of the Governing Body, adopted May 15, 1990, as supplemented and amended by Resolution No. R-5-98, Resolution No. R-148-01 and Resolution No. 11-S and as otherwise supplemented prior to the date hereof;

(l) "Outstanding Bonds" shall mean the City's outstanding Wastewater System Revenue Bonds, Series 2010C (Federally Taxable Build America Bonds), dated December 8, 2010, maturing April 1, 2021 and thereafter, its outstanding Wastewater System Revenue Refunding Bonds, Series 2012A, dated April 20, 2012, maturing April 1, 2021 and thereafter, its outstanding Wastewater System Revenue Bonds, Series 2012B, dated December 18, 2012, maturing April 1, 2021 and thereafter, its outstanding Wastewater System Revenue Refunding Bonds, Series 2013A, dated March 15, 2013, maturing April 1, 2021 and thereafter, its outstanding Wastewater System Revenue Bonds, Series 2014A, dated September 18, 2014, maturing April 1, 2021 and thereafter, its outstanding Wastewater System Revenue Refunding

Bonds, Series 2015A, dated May 1, 2015, maturing April 1, 2021 and thereafter, its outstanding Wastewater System Revenue Bonds, Series 2015B, dated May 20, 2015, maturing April 1, 2021 and thereafter, its outstanding Wastewater System Revenue Bonds, Series 2016, dated August 5, 2016, maturing April 1, 2021 and thereafter, its outstanding Wastewater System Revenue Refunding Bonds, Series 2017A, dated April 7, 2017, maturing April 1, 2021 and thereafter, its outstanding Wastewater System Revenue Bonds, Series 2017B, dated September 15, 2017, maturing April 1, 2021 and thereafter, its outstanding Wastewater System Revenue Bonds, Series 2018, dated September 14, 2018, maturing April 1, 2021 and thereafter, its outstanding Wastewater System Revenue Bonds, Series 2019, dated August 20, 2019, maturing April 1, 2021 and thereafter and its outstanding Wastewater System Revenue Refunding Bonds, Series 2020A, dated May 22, 2020, maturing April 1, 2021 and thereafter;

(m) "Parity Bonds" shall mean any bonds issued pursuant to the 1990 Resolution on a parity with the Series 2020B Bonds and the Outstanding Bonds;

(n) "Project" shall mean extensions and improvements to the System;

(o) "Registration Agent" shall mean the registration and paying agent for the Series 2020B Bonds designated by the President and Chief Executive Officer of KUB, or any successor as designated by the Board;

(p) "Series 2020B Bonds" shall mean the City's Wastewater System Revenue Bonds, Series 2020B, issued pursuant to this resolution, to be 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 1990 Resolution and this resolution in an aggregate principal amount not to exceed $30,000,000;

(q) "State" shall mean the State of Tennessee; and

(r) "Underwriter" shall mean an investment banking firm qualified to underwrite bonds such as the Series 2020B Bonds in the State of Tennessee selected by the President and Chief Executive Officer of KUB.

Section 3. Declarations. It is hereby determined that all requirements of the 1990 Resolution have been or will have been met upon the issuance of the Series 2020B Bonds so that the Series 2020B Bonds will be issued as Parity Bonds.

Section 4. Authorization and Terms of the Series 2020B Bonds. (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 2020B 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 $30,000,000. The Series 2020B Bonds shall be issued in fully registered form, without coupons, shall be known as "Wastewater System Revenue Bonds, Series 2020B" 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 2020B Bonds shall bear interest at a rate or rates not to exceed five percent (5.00%) per annum, payable semi-annually on April 1 and October 1 in each year, commencing October 1, 2020 or such other date as is permitted pursuant to Section 9 hereof. The Series 2020B Bonds shall be initially issued in $5,000 denominations or integral multiples thereof as shall be requested by the purchaser thereof. The Series 2020B Bonds shall mature and be payable either serially or through mandatory redemption on each April 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 April 1, 2050. The final maturity schedule shall be established by the award resolution

or certificate awarding the Series 2020B Bonds to the successful purchaser thereof or in the Bond Purchase Agreement provided for in Section 9 if the Series 2020B Bonds are sold by negotiated sale.

(b) Subject to adjustment pursuant to Section 9 hereof, the Series 2020B Bonds maturing on or before April 1, 2030 shall mature without option of prior redemption, and Series 2020B Bonds maturing on April 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 April 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 of the Series 2020B 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 Series 2020B 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 2020B 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 2020B 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 2020B Bonds are not being held under a Book-Entry System by DTC, or a successor Depository, the Series 2020B 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 each of the Series 2020B 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 of the Series 2020B 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 2020B 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 2020B Bonds, or any successor Depository for the Series 2020B Bonds, shall determine the interest of each Participant in the Series 2020B 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 2020B Bonds, the Series 2020B 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 2020B 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 2020B 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 2020B 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 2020B 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.

(d) Notice of call for redemption, whether optional or mandatory, shall be given by the 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 2020B 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 2020B 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 2020B Bonds, all redemption notices shall be mailed by the Registration Agent to DTC, or such successor Depository, as the registered owner of the of Series 2020B 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 2020B 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 2020B 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 2020B 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 2020B Bonds, and the Registration Agent so appointed is authorized and directed to maintain Bond registration records with respect to the Series 2020B Bonds, to authenticate and deliver the Series 2020B Bonds as provided herein, either at original issuance, upon transfer, or as otherwise directed by the Board, to effect transfers of the Series 2020B Bonds, to give all notices of redemption as required herein, to make all payments of principal and interest with respect to the Series 2020B Bonds as provided herein, to cancel and destroy Series 2020B 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 2020B 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 2020B Bonds. 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 2020B Bonds (as well as any successors to any of the foregoing). 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.

(g) The Series 2020B Bonds shall be payable, principal and interest, in lawful money of 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 Series 2020B 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 Series 2020B Bonds, and all such payments shall discharge the obligations of KUB in respect of such Series 2020B Bonds to the extent of the payments so made. Payment of principal of the Series 2020B Bonds shall be made upon presentation and surrender of such registered Series 2020B 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 2020B 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 2020B Bonds, payment of interest on such Series 2020B 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 2020B 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 2020B 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 2020B 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 any of the Series 2020B 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 any of the Series 2020B Bonds when due.

(i) The Series 2020B 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 2020B 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 2020B 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 2020B Bond(s) in such form and with such documentation, if any, the Registration Agent shall issue a new Series 2020B Bond or Series 2020B 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 2020B Bond during the period commencing on a Regular or Special Record Date and ending on the corresponding interest payment date of such Series 2020B Bond, nor to transfer or exchange any Series 2020B Bond after notice calling such Series 2020B Bond for redemption has been made, nor to transfer or exchange any Series 2020B Bond during the period following the receipt of instructions from KUB to call such Series 2020B 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 2020B 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 2020B 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 2020B Bonds shall be overdue. Series 2020B 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 2020B Bonds of the same maturity in any authorized denomination or denominations. This subsection shall be applicable only if the Series 2020B Bonds are no longer held by a Depository, and as long as the Series 2020B Bonds are held by a Depository, transfers of ownership interests in the Series 2020B Bonds shall be governed by the rules of the Depository.

(j) Except as otherwise authorized herein, the Series 2020B Bonds shall be registered in the name of Cede & Co., as nominee of DTC, which will act as the Depository for the Series 2020B Bonds except as otherwise provided herein. References in this Section 4 to a Series 2020B Bond or the Series 2020B Bonds shall be construed to mean the Series 2020B Bond or the Series 2020B Bonds that are held under the Book-Entry System. One Series 2020B Bond for each maturity of the Series 2020B Bonds shall be issued to DTC and immobilized in its custody or a custodian of DTC. The Bond Registrar is a custodian and agent for DTC, and the Series 2020B Bond will be immobilized in its custody. A Book-Entry System shall be employed, evidencing ownership of the Series 2020B 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 2020B Bonds. Beneficial ownership interests in the Series 2020B 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 2020B 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 2020B Bonds. Transfers of ownership interests in the Series 2020B 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 2020B BONDS, THE REGISTRATION AGENT SHALL TREAT CEDE & CO., AS THE ONLY HOLDER OF THE SERIES 2020B BONDS FOR ALL PURPOSES UNDER THIS RESOLUTION, INCLUDING RECEIPT OF ALL PRINCIPAL OF, PREMIUM, IF ANY, AND INTEREST ON THE SERIES 2020B 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 2020B Bonds, so long as DTC is the only owner of the Series 2020B 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 2020B 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 2020B 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 2020B Bonds in the form of fully registered Series 2020B 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 2020B 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 2020B 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 2020B 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 2020B 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 2020B 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 2020B Bond of like tenor, amount, maturity and date, in exchange and substitution for, and upon the cancellation of, the mutilated Series 2020B Bond, or in lieu of and in substitution for such lost, stolen or destroyed Series 2020B Bond, or if any such Series 2020B Bond shall have matured or shall be about to mature, instead of issuing a substituted Series 2020B Bond KUB may pay or authorize payment of such Series 2020B Bond without surrender thereof. In every case the applicant shall furnish evidence satisfactory to KUB and the Registration Agent of the destruction, theft or loss of such Series 2020B Bond, and indemnity satisfactory to KUB and the Registration Agent; and KUB may charge the applicant for the issue of such new Series 2020B 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 2020B 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 and, subject to the rules of the Depository, to authenticate and deliver Series 2020B Bonds in exchange for Series 2020B Bonds of the same principal amount delivered for transfer upon receipt of the Series 2020B Bond(s) to be transferred in proper form with proper documentation as hereinabove described. The Series 2020B 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 2020B 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 2020B Bonds for deposit with DTC, including but not limited to, wire transfers of interest and principal payments with respect to the Series 2020B Bonds, utilization of electronic book entry data received from DTC in place of actual delivery of Series 2020B Bonds and provision of notices with respect to Series 2020B 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 2020B 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 2020B 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 1990 Resolution on a parity and equality of lien with the Outstanding Bonds. The punctual payment of principal of and interest on the Series 2020B 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 2020B Bonds shall have no recourse to the power of taxation of the City.

Section 6. Form of Series 2020B Bonds. The Series 2020B Bonds shall be in substantially the following form, the omissions to be appropriately completed when the Series 2020B Bonds are prepared and delivered:

(Form of Series 2020B Bond)

REGISTERED
Number _____

REGISTERED
$_____

UNITED STATES OF AMERICA
STATE OF TENNESSEE
COUNTY OF KNOX
CITY OF KNOXVILLE
WASTEWATER SYSTEM REVENUE BOND, SERIES 2020B

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 30-day 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 October 1, 2020, and semi-annually thereafter on the first day of April and October 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 Bond Registrar 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 April 1, 2030 shall mature without option of prior redemption. The Bonds maturing on April 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 April 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 $30,000,000 and issued by the City for the purpose of providing funds to finance the construction of extensions and improvements to the City's wastewater collection and treatment 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. R-129-90 duly adopted by the City Council of the City on May 15, 1990, as supplemented and amended by Resolution No. R-5-98, Resolution No. R-148-01 and Resolution No. 11-S 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 the revenues to be derived from the operation of the System, subject 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 Wastewater System Revenue Bonds, Series 2010C (Federally Taxable Build America Bonds), dated December 8, 2010, maturing April 1, 2021 and thereafter, the City's outstanding Wastewater System Revenue Refunding Bonds, Series 2012A, dated April 20, 2012, maturing April 1, 2021 and thereafter, the City's outstanding Wastewater System Revenue Bonds, Series 2012B, dated December 18, 2012, maturing April 1, 2021 and thereafter, the City's outstanding Wastewater System Revenue Refunding Bonds, Series 2013A, dated March 15, 2013, maturing April 1, 2021 and thereafter, the City's outstanding Wastewater System Revenue Bonds, Series 2014A, dated September 18, 2014, maturing April 1, 2021 and thereafter, the City's outstanding Wastewater System Revenue Refunding Bonds, Series 2015A, dated May 1, 2015, maturing April 1, 2021 and thereafter, the City's outstanding Wastewater System Revenue Bonds, Series 2015B, dated May 20, 2015, maturing April 1, 2021 and thereafter, the City's outstanding Wastewater System Revenue Bonds, Series 2016, dated August 5, 2016, maturing April 1, 2021 and thereafter, the City's outstanding Wastewater System Revenue Refunding Bonds, Series 2017A, dated April 7, 2017, maturing April 1, 2021 and thereafter, the City's outstanding Wastewater System Revenue Bonds, Series 2017B, dated September 15, 2017, maturing April 1, 2021 and thereafter, the City's outstanding Wastewater System Revenue Bonds, Series 2018, dated September 14, 2018, maturing April 1, 2021 and thereafter, the City's outstanding Wastewater System Revenue Bonds, Series 2019, dated August 20, 2019, maturing April 1, 2021 and thereafter and the City's outstanding Wastewater System Revenue Refunding Bonds, Series 2020A, dated May 22, 2020, maturing April 1, 2021 and thereafter (collectively the "Outstanding Bonds") and any bonds or other obligations hereafter issued on a parity therewith. 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 her 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
designated 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 _____, attorney, to transfer the said bond on the records kept for registration thereof with full power of substitution in the premises.

Dated: _____

_____
NOTICE: 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.

Section 7. Equality of Lien; Pledge of Net Revenues. The punctual payment of principal of, premium, if any, and interest on the Outstanding Bonds, the Series 2020B Bonds authorized herein, 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 1990 Resolution. The Series 2020B Bonds are issued in compliance with the 1990 Resolution so as to be on a parity with the Outstanding Bonds, and, when duly delivered, the Series 2020B Bonds shall constitute a series of bonds issued under the authority of the 1990 Resolution. All recitals, provisions, covenants and agreements contained in the 1990 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 2020B Bonds shall be Outstanding and unpaid either as to principal or interest, or until discharge and satisfaction of the Series 2020B Bonds as provided in Section 12 hereof, shall be applicable to the Series 2020B Bonds,

shall inure to the benefit of owners of the Series 2020B Bonds as if set out in full herein, and shall be fully enforceable by the owner of any Series 2020B Bond.

All references to "holder" or "holders" in the 1990 Resolution shall be deemed to include owners of the Series 2020B Bonds, and all references to "Bonds" in the 1990 Resolution shall be deemed to include the Series 2020B Bonds.

Section 9. Sale of Series 2020B Bonds.

(a) The Series 2020B 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 2020B 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 2020B 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 2020B Bonds to:

(1) change the dated date to a date other than the date of issuance;

(2) specify or change the series designation, including any change to reflect whether the Series 2020B Bonds have been previously issued, or change the designation of the Series 2020B Bonds to a designation other than "Wastewater System Revenue Bonds, Series 2020B";

(3) change the first interest payment date to a date other than October 1, 2020, provided that such date is not later than twelve months from the dated date of such emission of Series 2020B Bonds;

(4) establish and adjust the principal and interest payment dates and determine maturity or mandatory redemption amounts of the Series 2020B Bonds or any emission thereof, provided that (A) the total principal amount of all emissions of the Series 2020B Bonds does not exceed the total amount of Series 2020B Bonds authorized herein, (B) the final maturity date of each emission shall be not later than April 1, 2050 and (C) the debt service payable in each fiscal year after the completion of the Project shall be approximately level or decreasing;

(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 2020B 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 2020B 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 2020B 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 2020B Bonds, providing for the purchase and sale of the Series 2020B 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 2020B 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 2020B Bonds to the public, then the Bond Purchase Agreement shall be conformed to reflect such intention. The form of the Series 2020B Bond set forth in Section 6 hereof 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 2020B 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 2020B Bonds are sold at public sale, the Series 2020B 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.

Section 10. Disposition of Series 2020B Bond Proceeds. The proceeds of the sale of the Series 2020B 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 1990 Resolution and used to pay interest on the Series 2020B Bonds on the first interest payment date following delivery of the Series 2020B Bonds; and

(b) The remainder of the proceeds of the sale of the Series 2020B Bonds shall be deposited with a financial institution regulated by the Federal Deposit Insurance Corporation or similar federal agency in a special fund known as the "Wastewater System Construction 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 the Project and issuance of the Series 2020B 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 2020B 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 used to retire Series 2020B Bonds on the earliest possible date. Moneys in the Construction Fund shall be invested as directed by the Chief Financial Officer 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 2020B Bonds. The Series 2020B Bonds may be defeased, discharged and satisfied at any time as provided in Article XII of the 1990 Resolution.

Section 12. Federal Tax Matters. The City and KUB recognize that the purchasers and owners of the Series 2020B 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 2020B 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 2020B 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 2020B Bonds will not be used in a manner which will cause the Series 2020B Bonds to be "arbitrage bonds" within the meaning of Section 148 of the Code, and to this end the said proceeds of the Series 2020B 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 2020B 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 2020B 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 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 2020B Bonds. After the Series 2020B 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 2020B Bonds of a reasonable number of copies of the Official Statement within seven business days after the Series 2020B 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 2020B 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 2020B 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 2020B Bonds, an agreement for the benefit of and enforceable by the owners of the Series 2020B 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.

Section 15. Separability. 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 _____, 2020.

_____
Mayor

ATTEST:

_____
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 _____, 2020; 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 $30,000,000 Wastewater System Revenue Bonds, Series 2020B.

WITNESS my official signature and seal of the City of Knoxville, Tennessee, this ____ day of _____, 2020.

_____
City Recorder
(seal)

EXHIBIT A

$30,000,000
CITY OF KNOXVILLE, TENNESSEE
ACTING ON BEHALF OF KNOXVILLE UTILITIES BOARD
WASTEWATER SYSTEM REVENUE BONDS, SERIES 2020B

BOND PURCHASE AGREEMENT

_____, 2020

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 _____, 2020.

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 $30,000,000 aggregate principal amount of KUB's Wastewater System Revenue Bonds, Series 2020B (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 _____, 2020, 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 wastewater collection and treatment 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;

(l) 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 shall not preclude the Underwriter from thereafter terminating this Bond Purchase Agreement, and if 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 _____, 2020, 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 Exhibit A 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 Exhibit B 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. Termination.

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,

_____

By:_____
Its:_____

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 _____, 2020 (the "Bond Purchase Agreement"), between _____ (the "Underwriter"), and Knoxville Utilities Board ("KUB"), relating to the sale by KUB of its Wastewater System Revenue Bonds, Series 2020B, in the aggregate principal amount of $30,000,000 (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 _____, 2020, 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

_____, 2020

_____
_____
_____

Bass Berry & Sims PLC
900 South Gay Street, Suite 1700
Knoxville, Tennessee 37902

Re: City of Knoxville, Tennessee acting on behalf of the Knoxville Utilities Board $30,000,000 Wastewater System Revenue Bonds, Series 2020B

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 wastewater collection and treatment 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 wastewater 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,

28196449.2

RESOLUTION NO. 1412

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, 2020, Providing for Expenditures Paid for the Period Beginning July 1, 2020, and Ending June 30, 2021

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, Article IX.B.2. of the Knoxville Utilities Board of Commissioners (the "Board") Bylaws provides that: "The Board shall be furnished the proposed budget at least forty-five (45) days prior to the beginning of the forthcoming fiscal year"; "the Board shall require the vice president serving as the chief financial officer to certify the availability of funds adequate to fund the proposed budget"; and "the Board shall approve a budget for the forthcoming fiscal year no later than fifteen (15) days prior to its beginning"; and

Whereas, KUB staff formally presented the proposed budget appropriations for the fiscal year beginning July 1, 2020, to the Board at the Board's budget workshop on April 16, 2020, and the Board has found their adoption to be in the best interest of KUB and its customers; 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 July 1, 2020, and ending June 30, 2021, 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 amount as follows:

> Appropriations of the Electric Division (including appropriations for operation, 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 **$600,651,000.**

Section 2. That budget appropriations for the fiscal year beginning July 1, 2020, and ending June 30, 2021, providing for expenditures paid for said fiscal year, be and the same are hereby made from the funds of the Gas Division, for the purposes and in the amount as follows:

> Appropriations of the Gas Division (including appropriations for operation, 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 gas system revenue bonds or notes, in the amount of **$128,639,000.**

Section 3. That budget appropriations for the fiscal year beginning July 1, 2020, and ending June 30, 2021, providing for expenditures paid for said fiscal year, be and the same are hereby made from the funds of the Water Division, for the purposes and in the amount as follows:

> Appropriations of the Water Division (including appropriations for operation, 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 water system revenue bonds or notes, in the amount of **$94,307,000.**

Section 4. That appropriations for the fiscal year beginning July 1, 2020, and ending June 30, 2021, be and the same are hereby made from the funds of the Wastewater Division, for the purposes and in the amount as follows:

> Appropriations of the Wastewater Division (including appropriations for operation, 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 wastewater system revenue bonds or notes, in the amount of **$138,531,000.**

Section 5. That expenditures for the sole benefit of the electric system shall be charged to the foregoing appropriations and from the funds of the Electric Division. Expenditures for the sole benefit of the natural gas system shall be charged to the foregoing appropriations and from the funds of the Gas Division. Expenditures for the sole benefit of the water system shall be charged to the foregoing appropriations and from the funds of the Water Division. Expenditures for the sole benefit of the wastewater system shall be charged to the foregoing appropriations and from the funds of the Wastewater Division. All expenditures for the joint benefit of the 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 6. That in addition to the foregoing appropriations, whenever any sums are due and payable under customers' deposit agreements, 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 7. That in addition to the foregoing appropriations, whenever any sums are due and payable during the fiscal year beginning July 1, 2020, and ending June 30, 2021, for the entire principal amount of any debt issued during the fiscal year beginning July 1, 2020, and ending June 30, 2021, 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 8. 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 9. 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 10. That the KUB organizational structure, as determined by the President and CEO, which supports the 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 11. That all appropriations made herein shall terminate effective July 1, 2021, and any unexpended balances of such appropriations shall revert to the general funds of the division from which originally appropriated.

Section 12. That funds will be available for each division to fund the expenditures to be paid for the fiscal year beginning July 1, 2020, as noted in Sections 1, 2, 3, and 4 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 13. Be it Further Resolved, that this Resolution shall take effect from and after its passage.

Kathy Hamilton/s
Kathy Hamilton, Chair

Mark Walker/s
Mark Walker, Board Secretary

APPROVED ON 1st
& FINAL READING: 5-21-20
EFFECTIVE DATE: 5-21-20
MINUTE BOOK 42 PAGE 9969-9974

Knoxville Utilities Board

May 15, 2020

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, 2020, as provided for in Resolution 1412, as follows:

Division	Amount
Electric	$ 600,651,000
Gas	$ 128,639,000
Water	$ 94,307,000
Wastewater	$ 138,531,000

The availability of funds for budget appropriations is based on general fund cash and all available cash reserves of the respective divisions as of July 1, 2020, and all monies anticipated to come into the general fund of each division on or before June 30, 2021 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 budget appropriations.

Respectfully submitted,

Mark A. Walker
Senior Vice President and CFO

Enclosure

May 2020: Certification of Available Funds - FY 2021 Budget Appropriations

Electric Division: Certification of Available Funds

	FY 2021
Beginning General Fund Cash (as of July 1, 2020)	$43,542,000
Sales Revenues	$548,687,000
Other Revenues	$21,948,000
Bond Proceeds	$0
Cash Reserves	$38,495,000
Total	$652,672,000
FY 2021 Budget Appropriations (Res. 1412)	**$600,651,000**
Available Funds (as of June 30, 2021)	$52,021,000

If positive, there are available funds to fund appropriations.

Gas Division: Certification of Available Funds

	FY 2021
Beginning General Fund Cash (as of July 1, 2020)	$21,122,000
Sales Revenues	$114,315,000
Other Revenues	$4,059,000
Bond Proceeds	$0
Cash Reserves	$20,306,000
Total	$159,802,000
FY 2021 Budget Appropriations (Res. 1412)	**$128,639,000**
Available Funds (as of June 30, 2021)	$31,163,000

If positive, there are available funds to fund appropriations.

Water Division: Certification of Available Funds

	FY 2021
Beginning General Fund Cash (as of July 1, 2020)	$18,246,000
Sales Revenues	$60,922,000
Other Revenues	$4,048,000
Bond Proceeds	$17,000,000
Cash Reserves	$17,874,000
Total	$118,090,000
FY 2021 Budget Appropriations (Res. 1412)	**$94,307,000**
Available Funds (as of June 30, 2021)	$23,783,000

If positive, there are available funds to fund appropriations.

Wastewater Division: Certification of Available Funds

	FY 2021
Beginning General Fund Cash (as of July 1, 2020)	$16,137,000
Sales Revenues	$99,351,000
Other Revenues	$4,135,000
Bond Proceeds	$30,000,000
Cash Reserves	$34,381,000
Total	$184,004,000
FY 2021 Budget Appropriations (Res. 1412)	**$138,531,000**
Available Funds (as of June 30, 2021)	$45,473,000

If positive, there are available funds to fund appropriations.

RESOLUTION NO. 1413

A Resolution Approving Commitment Appropriations for the Fiscal Year Beginning July 1, 2020, Thereby Authorizing the Commitment of Expenditures to be Paid Subsequent to June 30, 2021, for Contractual Commitments Executed and Other Obligations Incurred on or Before June 30, 2021

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, as of July 1, 2020, the Knoxville Utilities Board ("KUB") will have previously entered into contractual commitments and other obligations for goods and services to be received after June 30, 2021, resulting in the commitment of expenditures to be paid subsequent to June 30, 2021, for which said commitments were charged against a prior appropriation made by the KUB Board of Commissioners (the "Board"); and

Whereas, the amount of the prior appropriation for such commitments shall terminate as of July 1, 2020; and

Whereas, KUB staff anticipates KUB will enter into additional contracts and obligations during the period beginning July 1, 2020, and ending June 30, 2021, for goods and services to be received subsequent to June 30, 2021, resulting in the commitment of expenditures to be paid subsequent to June 30, 2021; and

Whereas, the appropriations provided for in this Resolution shall provide for the commitment of expenditures from KUB subsequent to June 30, 2021, for goods and services to be received by KUB subsequent to June 30, 2021, resulting from contractual commitments executed and other obligations incurred by KUB on or before June 30, 2021; 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 fiscal year beginning July 1, 2020, and ending June 30, 2021, providing for the commitment of expenditures to be paid subsequent to June 30, 2021, for goods and services to be received subsequent to June 30, 2021, resulting from contractual commitments and other obligations incurred on or before June 30, 2021, be and the same are hereby made from the funds of the Electric Division, in the amount of **$25,405,000**.

Section 2. That commitment appropriations for the fiscal year beginning July 1, 2020, and ending June 30, 2021, providing for the commitment of expenditures to be paid subsequent to June 30, 2021, for goods and services to be received subsequent to June 30, 2021, resulting from contractual commitments and other obligations incurred on or before June 30, 2021, be and the same are hereby made from the funds of the Gas Division, in the amount of **$9,025,000**.

Section 3. That commitment appropriations for the fiscal year beginning July 1, 2020, and ending June 30, 2021, providing for the commitment of expenditures to be paid subsequent to June 30, 2021, for goods and services to be received subsequent to June 30, 2021, resulting from contractual commitments and other obligations incurred on or before June 30, 2021, be and the same are hereby made from the funds of the Water Division, in the amount of **$50,656,000**.

Section 4. That commitment appropriations for the fiscal year beginning July 1, 2020, and ending June 30, 2021, providing for the commitment of expenditures to be paid subsequent to June 30, 2021, for goods and services to be received subsequent to June 30, 2021, resulting from contractual commitments and other obligations incurred on or before June 30, 2021, be and the same are hereby made from the funds of the Wastewater Division, in the amount of **$35,646,000**.

Section 5. That funds will be available for each division to fund the expenditures to be paid subsequent to June 30, 2021, for contractual commitments executed and other obligations incurred on or before June 30, 2021, as noted in Sections 1, 2, 3, and 4 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 6. That all appropriations made herein shall terminate effective July 1, 2021.

Section 7. Be it Further Resolved, that this Resolution shall take effect from and after its passage.

Kathy Hamilton/s
Kathy Hamilton, Chair

Mark Walker/s
Mark Walker, Board Secretary

APPROVED ON 1st
& FINAL READING: 5-21-20
EFFECTIVE DATE: 5-21-20
MINUTE BOOK 42 PAGE 9975-9980

Knoxville Utilities Board

May 15, 2020

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.b. of the Board's By-Laws there are sufficient funds adequate to fund the proposed commitment appropriations for the fiscal year beginning July 1, 2020, as provided for in Resolution 1413 as follows:

Division	Amount
Electric	$ 25,405,000
Gas	$ 9,025,000
Water	$ 50,656,000
Wastewater	$ 35,646,000

The availability of funds for commitment appropriations is based on general fund cash and all available cash reserves of the respective divisions as of July 1, 2021, and all monies anticipated to come into the general fund of each 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,

Mark Walker

Mark A. Walker
Senior Vice President and CFO

Enclosure

May 2020: Certification of Available Funds - FY 2021 Commitment Appropriations

Electric Division: Certification of Available Funds

	FY 2022
Available Funds (as of July 1, 2021)	$52,021,000
Sales Revenues	$556,179,000
Other Revenues	$21,898,000
Total	$630,098,000
FY 2021 Commitment Appropriations (Res. 1413)	**$25,405,000**
Available Funds (as of June 30, 2022)	$604,693,000

If positive, there are available funds to fund appropriations.

Gas Division: Certification of Available Funds

	FY 2022
Available Funds (as of July 1, 2021)	$31,163,000
Sales Revenues	$115,133,000
Other Revenues	$4,183,000
Total	$150,479,000
FY 2021 Commitment Appropriations (Res. 1413)	**$9,025,000**
Available Funds (as of June 30, 2022)	$141,454,000

If positive, there are available funds to fund appropriations.

Water Division: Certification of Available Funds

	FY 2022
Available Funds (as of July 1, 2021)	$23,783,000
Sales Revenues	$63,563,000
Other Revenues	$4,111,000
Total	$91,457,000
FY 2021 Commitment Appropriations (Res. 1413)	**$50,656,000**
Available Funds (as of June 30, 2022)	$40,801,000

If positive, there are available funds to fund appropriations.

Wastewater Division: Certification of Available Funds

	FY 2022
Available Funds (as of July 1, 2021)	$45,473,000
Sales Revenues	$101,889,000
Other Revenues	$3,913,000
Total	$151,275,000
FY 2021 Commitment Appropriations (Res. 1413)	**$35,646,000**
Available Funds (as of June 30, 2022)	$115,629,000

If positive, there are available funds to fund appropriations.

May 2020 - Commitments for Future Year Expenditures

Electric Division		FY 2022		FY 2023
New West Knox - 161kV Infeed substation	$	9,000,000		
Circuit trimming - vegetation management	$	7,000,000		
Information systems capital projects	$	3,200,000		
69kV transmission line improvements	$	2,630,000		
Vehicles and equipment	$	2,500,000		
Substation equipment	$	950,000		
Underground cable replacement	$	125,000		
	$	**25,405,000**	**$**	**-**

Natural Gas Division		FY 2022		FY 2023
Steel main replacement projects	$	4,500,000		
South Loop Phase 5	$	2,150,000		
Information systems capital projects	$	1,148,000		
Utility relocations for highway projects	$	1,050,000		
Vehicles and equipment	$	177,000		
	$	**9,025,000**	**$**	**-**

Water Division		FY 2022		FY 2023
Water treatment plant filters	$	19,000,000	$	22,000,000
Galvanized main replacements	$	2,520,000		
Cast iron main replacement projects	$	2,500,000		
Hilton Rd. booster pump station	$	2,040,000		
Information systems capital projects	$	878,000		
Vehicles and equipment	$	700,000		
KUB facility upgrades	$	565,000		
Utility relocations for highway projects	$	300,000		
Pavement resurfacing	$	153,000		
	$	**28,656,000**	**$**	**22,000,000**

Wastewater Division		FY 2022		FY 2023
Collection system main rehabilitation and replacement	$	8,500,000	$	1,000,000
Wastewater pump station improvements	$	12,725,000		
Loves Creek Treatment Plant electrical upgrades	$	3,500,000		
Fourth Creek Treatment Plant disinfection	$	1,600,000		
Pavement resurfacing	$	1,765,000		
Kuwahee Treatment Plant upgrades	$	2,661,000	$	1,300,000
Information systems capital projects	$	1,485,000		
Vehicles and equipment	$	500,000		
KUB facility upgrades	$	610,000		
	$	**33,346,000**	**$**	**2,300,000**

RESOLUTION NO. 1414

A Resolution Replacing or Amending the Existing Rate Schedules of the Electric, Gas, Water and Wastewater Divisions, as Previously Established by Resolution No. 1060, as Heretofore Amended, and Replacing the Existing Purchased Power Adjustment of the Electric Division, as Previously Established by Resolution No. 1065, as Heretofore Amended

This Resolution Replaces the Existing Rate Schedules of the Electric Division, Updating as Needed for Simplification and Agreement with Wholesale Rate Language, Providing for Updated Power Cost Rates for all Rate Schedules Effective November 1, 2020, and Implementing Pilot Time of Use Rate Schedules for Residential and GSA Rate Schedules Effective November 1, 2020

This Resolution Replaces the Existing Purchased Power Adjustment of the Electric Division Effective July 1, 2020 and Replaces Appendix A Effective November 1, 2020

This Resolution Amends the Existing Rate Schedule, G2-Residential, of the Gas Division Effective November 1, 2020

This Resolution Amends the Existing Rate Schedule, Water General Service – Residential, of the Water Division Effective November 1, 2020

This Resolution Amends the Existing Rate Schedule, Wastewater General Service – Residential Rate Schedule, of the Wastewater Division Effective November 1, 2020

Whereas, the Knoxville Utilities Board of Commissioners (the "Board") has rate setting authority pursuant to Article XI of the Charter of the City of Knoxville; and

Whereas, the Board previously adopted Resolution No. 1060, as heretofore amended, providing rate schedules for the Electric Division, Gas Division, Water Division and Wastewater Division of the Knoxville Utilities Board ("KUB"); and

Whereas, the Board previously adopted Resolution No. 1065, as heretofore amended, providing for a Purchased Power Adjustment for the Electric Division; and

Whereas, the KUB Grid Modernization program for advanced metering provides the capability to measure customer use of energy (kWh) and power demanded (kW) in various time periods; and

Whereas, time of use (TOU) rates better align power cost recovery with power cost while giving customers increased control over their bills; and

Whereas, currently customers with greater than 1,000 kW of power demand have TOU rates available; and

Whereas, the Board desires to offer optional TOU pilot rates to residential customers, and non-residential customers under 1,000 kW of demand; and

Whereas, KUB staff has recommended updating the existing Purchased Power Adjustment to account for changes in wholesale power cost, new wholesale power credits, and TOU pilot rate programs; and

Whereas, KUB staff has recommended updating the current language in the residential rate schedules of all divisions to replace the term "Customer Charge" with the term "Basic Service Charge"; and

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

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

Section 1. That the Purchased Power Adjustment previously established in Resolution 1065, as heretofore amended, shall be deleted in its entirety and replaced with Exhibit A to this Resolution, to be effective July 1, 2020

Section 2. That Appendix A to the Purchased Power Adjustment of Resolution 1065, as heretofore amended, shall be deleted in its entirety and replaced with Exhibit B to this Resolution, to be effective November 1, 2020

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 this Resolution, to be effective November 1, 2020

Section 4. That the rate schedules of the Electric Division as set forth in Section 1 of Resolution No. 1060, as heretofore amended, be amended to include rate schedules PILOT PROGRAM RESIDENTIAL – TIME-OF-USE RATE SCHEDULE RS-TOU, and PILOT PROGRAM GENERAL POWER TIME-0F-USE RATE SCHEDULE GSA-TOU, as set forth in Exhibit D to this Resolution, to be effective November 1, 2020

Section 5. That the Gas Division Rate Schedule entitled RATE SCHEDULE G-2 RESIDENTIAL GAS SERVICE as set forth in section 2 of Resolution No. 1060, as heretofore amended, is hereby amended by striking the term "Customer Charge" and replacing it with the term "Basic Service Charge" to be effective beginning November 1, 2020

Section 6. That the Water Division Rate Schedule entitled WATER GENERAL SERVICE – RESIDENTIAL as set forth in Section 3 of Resolution No. 1060, as heretofore amended, is hereby amended by striking the term "Customer Charge" and replacing it with the term "Basic Service Charge" to be effective beginning November 1, 2020

Section 7. That the Wastewater Division Rate Schedule entitled WASTEWATER GENERAL SERVICE – RESIDENTIAL RATE SCHEDULE as set forth in Section 4 of Resolution No. 1060, as heretofore amended, is hereby amended by striking the term "Customer Charge" and replacing it with the term "Basic Service Charge" to be effective beginning November 1, 2020.

Kathy Hamilton/s
Kathy Hamilton, Chair

Mark Walker/s
Mark Walker, Board Secretary

APPROVED ON 1st
READING: 5-21-20
APPROVED ON 2nd
READING: _____
EFFECTIVE DATE: 11-1-20
MINUTE BOOK 42 PAGE 9981-10077

RESOLUTION 1414
EXHIBIT A
PURCHASED POWER ADJUSTMENT
EFFECTIVE JULY 1, 2020

PURCHASED POWER ADJUSTMENT

I. Provision for Adjustment

The electricity rates per kWh, per kW or per customer account billed as set forth in the Rate Schedules of the Electric Division (Division) shall be increased or decreased by amounts hereinafter described, which amounts are called the "Purchased Power Adjustment" or the PPA.

II. Intent and Application to Various Purchases

(a) This Purchased Power Adjustment is intended to assure that KUB recovers on an equitable basis the total cost of electricity purchased for delivery to its electricity sales customers. The PPA is further intended to assure that no excess or deficiency in cost recovery from KUB's electric customers occurs.

(b) The PPA anticipates various costs of purchased power for the general distribution system including, but not limited to:

1. the cost of energy purchased
2. the cost of power demanded
3. the amount of hydro preference adjustment

III. Definitions

The following definitions shall apply to the terms as used in this Section. Any term used in this Section that is not otherwise defined in this Section shall have the meaning customarily ascribed to that term in the electric industry.

(a) Adjustment period – the twelve-month period beginning with the Effective Date of the Purchased Power Adjustment

(b) Base Rates of Purchased Power are:

1. Standard Service Base Rates – as set forth in Appendix A to this resolution

   i. Demand kW Base Rate – the components designed to recover the cost of demand through Demand kW Sales

   ii. Demand kWh Base Rate – the components designed to recover the cost of demand through Demand kWh Sales

iii. Energy kWh Base Rate – the components designed to recover the cost of energy purchased through Energy kWh Sales

iv. Residential Customer Hydro Credit – the component designed to allocate the customer based hydro credit to each eligible residential customer account billed

v. Hydro Energy Credit – the components deigned to allocate the wholesale hydro energy credit to applicable Energy Sales

vi. Hydro Energy Debit – the components designed to allocate the wholesale hydro energy debit to applicable Energy Sales

2. Manufacturing and General Power Service Cost Components – the wholesale base rates as set forth in the current wholesale rate schedules from Supplier plus an historical average for distribution losses

(c) Base Retail Electric Rates – the retail rates per kWh or kW of electricity use or power demanded, or per customer account billed, exclusive of PPA components

(d) Billing Determinants – average Standard Service units billed to KUB by its Supplier during the Computation Period, adjusted for known and measurable changes

1. Demand Billing Determinants – average Standard Service kW

2. Energy Billing Determinants – average Standard Service kWh

3. Residential Customer Hydro Credit – the sum of eligible residential customer accounts billed during KUB's most recently completed fiscal year

4. Hydro Energy Credit – average kWh used to calculate the hydro adjustment *credited* to KUB

5. Hydro Energy Debit – average kWh used to calculate the Hydro adjustment *debited* to KUB

(e) Change in Purchased Power Cost = Projected Purchased Power Cost less Power Cost Recovery (As follows):

1. Change in Demand Cost = Projected Demand Cost less Demand Cost Recovery

i. Change in Demand Cost kW = Change in Demand Cost x (Demand kW Power Cost Recovery/Demand Cost Recovery)

ii. Change in Demand Cost kWh = Change in Demand Cost x (Demand kWh Power Cost Recovery/Demand Cost Recovery)

2. Change in Energy Cost = Projected Energy Cost less Energy Cost Recovery

3. Change in Residential Customer Hydro Credit Cost = Projected Residential Customer Hydro Credit Cost less Residential Customer Hydro Credit Cost Recovery

4. Change in Hydro Energy Credit Cost = Projected Hydro Energy Credit Cost less Hydro Energy Credit Cost Recovery

5. Change in Hydro Energy Debit Cost = Projected Hydro Energy Debit Cost less Hydro Energy Debit Cost Recovery

(f) Computation Period – the thirty-six (36) month period utilized to compute historical volumes purchased from Supplier and billed to customers. Such period shall be the thirty-six (36) month period ending on the last day of the fiscal year which is not more than ninety-three (93) days prior to the proposed Effective Date, as hereinafter defined, which month shall be determined by KUB based upon the availability of the needed information

(g) Computation Period Sales – historic volumes billed to customers adjusted for known and measurable changes

1. Demand kW Sales – the sum of the average power demanded (kW) metered to Standard Service customers

2. Demand kWh Sales – the sum of the average volumes of electricity having a demand component (kWh) metered to Standard Service customers

3. Energy kWh Sales – the sum of the average volumes of electricity (kWh) metered to Standard Service customers

4. Residential Customer Hydro Credit Sales – the sum of eligible residential customer accounts billed in the most recent KUB fiscal year

5. Hydro Energy Credit Sales – the sum of the average volumes to which the wholesale hydro energy credit applies, expressed in kWh, metered to eligible residential customers

6. Hydro Energy Debit Sales – the sum of the average volumes to which the wholesale hydro energy debit applies, expressed in kWh, metered to Standard Service customers

(h) Green Invest Cost – the incremental invoiced cost, including Product price and Third-Party Costs, if any, from TVA associated with purchase of renewable energy from TVA under the Green Invest Agreement, or any similar program offerings by TVA in pursuit of renewable energy for KUB customers, as may be amended from time to time, as approved in Resolution 1410, as may be amended from time to time

(i) Long-term Partnership Credits – all wholesale invoice credits provided by TVA in recognition of signing the TVA Long-Term Agreement, as may be amended from time to time, as approved in Resolution 1410, as may be amended from time to time

(j) Manufacturing and General Power Service – power and energy sold and billed to KUB under any classification other than Standard Service

(k) Power Cost Recovery – the Projected Purchased Power Cost recovery during the Adjustment Period using the Base Rates. The Power Cost Recovery shall be calculated as follows:

1. Demand Cost Recovery – the sum of the Demand kW Power Cost Recovery and the Demand kWh Power Cost Recovery as described below:

    i. Demand kW Power Cost Recovery = Demand kW Base Rates ($) x Demand kW Sales (kW)

    ii. Demand kWh Power Cost Recovery = Demand kWh Base Rates ($) x Demand kWh Sales (kWh)

2. Energy Cost Recovery = Energy kWh Base Rates ($) x the sum of Energy kWh Sales (kWh)

3. Residential Customer Hydro Credit Cost Recovery = Residential Customer Hydro Credit ($) x Residential Customer Hydro Credit Sales (#)

4. Hydro Energy Credit Cost Recovery = Hydro Energy Credit ($) x Hydro Energy Credit Sales (kWh)

5. Hydro Energy Debit Cost Recovery = Hydro Energy Debit ($) x Hydro Energy Debit Sales (kWh)

(l) Projected Purchased Power Cost – the Purchased Power Costs projected to be incurred by the Division during the Adjustment Period. The Purchased Power Costs shall be based on the best information available to KUB and shall have categories as follows:

1. Projected Demand Cost = all projected Purchased Power Demand Costs including, but not limited to, Demand Billing Determinants x the appropriate Supplier Rates

2. Projected Energy Cost = all projected Purchased Power Energy Costs including, but not limited to, Energy Billing Determinants x the appropriate Supplier Rates

3. Projected Residential Customer Hydro Credit Cost = Residential Customer Hydro Credit Billing Determinants x the appropriate Supplier Rates

4. Projected Hydro Energy Credit Cost = Hydro Energy Credit Billing Determinants x the appropriate Supplier Rates

5. Projected Hydro Debit Cost = Hydro Energy Debit Billing Determinants x the appropriate Supplier Rates

(m) Purchased Power Costs – the total cost, excluding Long-term Partnership Credits, issued by TVA, and excluding Green Invest Costs, paid or to be paid to Supplier in connection with the purchase of electricity for the Division. Purchased Power Costs are segregated into categories as follows:

1. Purchased Power Demand Costs – all Purchased Power Costs related to and varying with power demanded (i.e. kW)

2. Purchased Power Energy Costs – Purchased Power Costs, including both fuel and non-fuel components of electricity, and excluding calculation of Hydro Energy Debits and Hydro Energy Credits, related to and varying with energy consumption (i.e. kWh)

3. Purchased Power Residential Customer Hydro Credit Costs – all Purchased Power costs calculated as a credit based on number of eligible residential accounts billed

4. Purchased Power Hydro Energy Credit Costs – all Standard Service Purchased Power costs calculated as a credit based on eligible Hydro Energy Credit volumes (i.e. kWh)

5. Purchased Power Hydro Energy Debit Costs – all Standard Service Purchased Power costs calculated as a debit based on eligible Hydro Energy Debit volumes (i.e. kWh)

Total Purchased Power Costs shall exclude all Long-term Partnership Credits, issued by TVA and exclude all Green Invest Costs.

All other costs not directly attributable to one of the categories described above shall default to Purchased Power Energy Costs.

All costs not attributable to Manufacturing and General Power Service shall default to Standard Service.

(n) Standard Service – power and energy taken by KUB from Supplier for resale to customers and billed to KUB by Supplier at Standard Service wholesale rates

(o) Supplier – any entity that sells electricity to the Division

(p) Supplier Rates – the Supplier's rates which are known or if not known which are reasonably anticipated to be in effect on the first day of the Adjustment Period

IV. Seasonal periods shall be determined as defined in the retail rate schedules of KUB's Electric Division.

V. Computation of the Purchased Power Adjustment Components

All change in costs which can be directly attributed to specific customer classes shall be recovered from those customer classes; where change in costs cannot be directly attributed to specific customer classes those costs shall be divided over all Standard Service demand or energy sales as applicable.

Where change in costs cannot otherwise be directly attributed, the change in costs shall be divided over applicable Energy kWh Sales.

The components of the Purchased Power Adjustment shall be computed and rounded to the nearest hundredth of a cent per kWh, with five thousandths of a cent to be increased to the next higher hundredth of a cent, for adjustments affecting kWh; and computed and rounded to the nearest cent per kW, with five tenths of a cent to be increased to the next higher cent, for adjustments affecting kW, as follows:

(a) Demand kW Component = Change in Demand Cost kW/Demand kW Sales

(b) Demand kWh Component = Change in Demand Cost kWh/Demand kWh Sales

(c) Energy Component = Change in Energy Cost/Energy kWh Sales

(d) Residential Customer Hydro Credit Component = Change in Residential Customer Hydro Credit Cost/Hydro Energy Credit Sales

(e) Hydro Energy Credit Component = Change in Hydro Energy Credit Cost/Hydro Energy Credit Sales

(f) Hydro Energy Debit Component = Change in Hydro Energy Debit Cost/Hydro Energy Debit Sales

(g) Manufacturing and General Power Service Energy Component - Any energy rate per kilowatt hour (kWh) set forth in the current wholesale rate schedules for any rate schedule of the Electric Division duly adopted by the Board for Manufacturing and General Power Service subsequent to this resolution shall be increased or decreased, as applicable, by an amount equivalent to the increase or decrease for the wholesale energy rate for each respective rate schedule, plus an amount to provide for any change in distribution loss charges due to an increase or decrease in the respective wholesale energy rate

(h) Manufacturing and General Power Service Demand Component - Any demand rate per kilowatt (kW) set forth in the current wholesale rate schedules for any rate schedule of the Electric Division duly adopted by the Board for Manufacturing and General Power Service subsequent to this resolution shall be increased or decreased, as applicable, by an amount equivalent to the increase or decrease in the wholesale demand rate for each respective rate schedule, plus an amount to provide for any change in distribution loss charges due to an increase or decrease in the respective demand rate

VI. Application and Effective Date of the Purchased Power Adjustment

(a) The Purchased Power Adjustment shall consist of the following:

1. Standard Service Demand kW Purchased Power Adjustment – the Demand kW Component

2. Standard Service Demand kWh Purchased Power Adjustment – the Demand kWh Component

3. Standard Service Energy Purchased Power Adjustment – the Energy Component

4. Residential Hydro Credit Purchased Power Adjustment – the Residential Customer Hydro Credit Component and the Hydro Energy Credit Component

5. Hydro Energy Debit Purchased Power Adjustment – the Hydro Energy Debit Component

6. Manufacturing and General Power Service Purchased Power Adjustment – the sum of the Manufacturing and General Power Service Demand Component and the Manufacturing and General Power Service Energy Component

(b) Each Purchased Power Adjustment shall apply to billing periods beginning on or after the Effective Date of such adjustment.

1. The Standard Service Demand kW Purchased Power Adjustment shall be added to or deducted from, as appropriate, the Base Retail Electric Rates for Rate Schedule GSA, and for any other rate schedule designated for Standard Service of the Electric Division, duly adopted by the Board subsequent to this resolution.

2. The Standard Service Demand kWh Purchased Power Adjustment shall be added to or deducted from, as appropriate, the Base Retail Electric Rates for Rate Schedules RS, GSA, LS, and for any other rate schedule designated for Standard Service of the Electric Division, duly adopted by the Board subsequent to this resolution.

3. The Standard Service Energy Purchased Power Adjustment shall be added to or deducted from, as appropriate, the Base Retail Electric Rates for Rate Schedules RS, GSA, LS, and for any other rate schedule designated for Standard Service of the Electric Division, duly adopted by the Board subsequent to this resolution.

4. The Residential Hydro Credit Purchased Power Adjustment shall be added to or deducted from, as appropriate, the Base Retail Electric Rates for Rate Schedule RS.

5. The Hydro Energy Debit Purchased Power Adjustment shall be added to or deducted from, as appropriate, the Base Retail Electric Rates for any rate schedule, other than Rate Schedule RS, designated for Standard Service of the Electric Division.

6. The Manufacturing and General Power Service Purchased Power Adjustment shall be added to or deducted from, as appropriate, the Base Retail Electric Rates for rate schedules other than those designated for power and energy sold under Standard Service.

(c) The Purchased Power Adjustment shall be computed as of and shall take effect on the first day of each calendar month (the "Effective Date").

(d) Each computation of the Purchased Power Adjustment shall be promptly filed with the Chief Financial Officer and shall be accompanied with appropriate documentation supporting the calculation of the Purchased Power Adjustment.

VII. Purchased Power Accounting

(a) To appropriately match revenues with the cost of purchased power as contemplated under this PPA, KUB shall originally record Purchased Power Costs as debit entries in the "Unrecovered Purchased Power" account. Monthly KUB shall debit the appropriate subaccount(s) of "Other Power Supply Expenses" with an amount equal to the product obtained by multiplying the appropriate power cost components (the sum of the Base Rates of Purchased Power and the current applicable Purchased Power Adjustment) by the appropriate sales billed to customers. The corresponding monthly credit entry shall be made to the "Unrecovered Purchased Power Cost" account.

(b) The "Unrecovered Purchased Power Cost" account shall be subclassified into appropriate subaccounts, but at a minimum separate subaccounts shall be maintained for demand, energy, residential customer hydro credit, hydro energy credit, and hydro energy debit categories of the Purchased Power Costs.

(c) If it cannot be determined which subaccount should be debited, the energy subaccount will be debited.

VIII. Adjustment for Over or Under Recovery of Standard Service Purchased Power Cost

(a) To permit amortization of the accumulated balance in the "Unrecovered Purchased Power Cost" account, KUB shall include on August 1 of each year the June 30 balance of the "Unrecovered Purchased Power Cost" account for such year in the calculation of the Standard Service Purchased Power Adjustment. This balance shall be included in each monthly calculation of the Standard Service Purchased Power Adjustment commencing on August 1

and thereafter until the following August 1 at which time it shall be superseded by the then current June 30 balance.

(b) The "Unrecovered Purchased Power Cost" balance shall be segregated into demand, energy, hydro energy credit, and hydro energy debit categories, and shall be added to or deducted from, as appropriate, the applicable Demand Costs, Energy Costs, Hydro Energy Credits, and Hydro Energy Debits included in the Standard Service Purchased Power Adjustment.

IX. Annual Reporting

Annually KUB shall retain an independent consultant to audit the transactions in the "Unrecovered Purchased Power Cost" account and the related Standard Service Purchased Power Adjustment calculations to verify that the procedures and intent of this Standard Service Purchased Power Adjustment are being followed. The independent consultant shall report his or her findings to The Board's Audit and Finance Committee.

RESOLUTION
APPENDIX A

BASE RATES OF PURCHASED POWER
STANDARD SERVICE

	Summer	Winter	Transition
Residential Credit Eligible kWh			
demand kWh base	0.01975	0.01935	0.01935
energy kWh base	0.05462	0.05462	0.05462
hydro energy credit	-0.00297	-0.00297	-0.00297
Residential Customer Hydro Credit	As Stated in Current Effective Wholesale Contract		
Residential Debit Eligible kWh			
demand kWh base	0.01975	0.01935	0.01935
energy kWh base	0.04886	0.04886	0.04886
hydro energy debit	0.00279	0.00279	0.00279
GSA1 kWh			
demand kWh base	0.02383	0.02342	0.02342
energy kWh base	0.05533	0.05533	0.05533
hydro energy debit	0.00279	0.00279	0.00279
GSA2			
1st 15,000 kWh			
demand kWh base	0.01990	0.01949	0.01949
energy kWh base	0.05926	0.05926	0.05926
hydro energy debit	0.00279	0.00279	0.00279
additional kWh			
demand kWh base	0	0	0
energy kWh base	0.05033	0.05033	0.05033
hydro energy debit	0.00279	0.00279	0.00279
>50kW			
demand kW base	9.04	8.25	8.25
energy kWh base	0	0	0
GSA3			
kWh			
demand kWh base	0	0	0
energy kWh base	0.05033	0.05033	0.05033
hydro energy debit	0.00279	0.00279	0.00279
0-1000 kW			
demand kW base	9.41	8.65	8.65
energy kWh base	0	0	0
>1000 kW			
demand kW base	11.57	10.81	10.81
energy kWh base	0	0	0
LS kWh			
demand kWh base	0.00375	0.00375	0.00375
energy kWh base	0.04013	0.04013	0.04013
hydro energy debit	0.00279	0.00279	0.00279

EXHIBIT B

APPENDIX A

BASE RATES OF PURCHASED POWER
STANDARD SERVICE

Residential Credit Eligible kWh	**Summer**	**Winter**	**Transition**
demand kWh base	0.02437	0.02396	0.02396
energy kWh base	0.06070	0.06070	0.06070
hydro energy credit	-0.00297	-0.00297	-0.00297
Residential Customer Hydro Credit	As Stated in Current Effective Wholesale Contract		
Residential Credit Eligible kWh - TOU			
Onpeak kWh			
demand kWh base	0.11957	0.11957	0.11957
energy kWh base	0.07229	0.07229	0.07229
hydro energy credit	-0.00297	-0.00297	-0.00297
Offpeak kWh			
energy kWh base	0.06010	0.06010	0.06010
hydro energy credit	-0.00297	-0.00297	-0.00297
Residential Debit Eligible kWh			
demand kWh base	0.02437	0.02396	0.02396
energy kWh base	0.05494	0.05494	0.05494
hydro energy debit	0.00323	0.00323	0.00323
Residential Debit Eligible kWh - TOU			
Onpeak kWh			
demand kWh base	0.11957	0.11957	0.11957
energy kWh base	0.07229	0.07229	0.07229
hydro energy debit	0.00323	0.00323	0.00323
Offpeak kWh			
energy kWh base	0.06010	0.06010	0.06010
hydro energy debit	0.00323	0.00323	0.00323
GSA1			
kWh			
demand kWh base	0.02845	0.02804	0.02804
energy kWh base	0.06141	0.06141	0.06141
hydro energy debit	0.00323	0.00323	0.00323
GSA1 TOU			
Onpeak kWh			
demand kWh base	0.11957	0.11957	0.11957
energy kWh base	0.07229	0.07229	0.07229
hydro energy debit	0.00323	0.00323	0.00323
Offpeak kWh			
energy kWh base	0.06010	0.06010	0.06010
hydro energy debit	0.00323	0.00323	0.00323

GSA2	Summer	Winter	Transition
1st 15,000 kWh			
demand kWh base	0.02452	0.02411	0.02411
energy kWh base	0.06534	0.06534	0.06534
hydro energy debit	0.00323	0.00323	0.00323
additional kWh			
demand kWh base	0	0	0
energy kWh base	0.05641	0.05641	0.05641
hydro energy debit	0.00323	0.00323	0.00323
>50kW			
demand kW base	11.10	10.31	10.31
energy kWh base	0.00	0.00	0.00
GSA2-A TOU			
Onpeak kWh			
demand kWh base	0.11957	0.11957	0.11957
energy kWh base	0.07229	0.07229	0.07229
hydro energy debit	0.00323	0.00323	0.00323
Offpeak kWh			
energy kWh base	0.06010	0.06010	0.06010
hydro energy debit	0.00323	0.00323	0.00323
GSA2-B TOU			
Onpeak kWh			
demand kWh base	0.11957	0.11957	0.11957
energy kWh base	0.07229	0.07229	0.07229
hydro energy debit	0.00323	0.00323	0.00323
Offpeak kWh			
energy kWh base	0.06010	0.06010	0.06010
hydro energy debit	0.00323	0.00323	0.00323
GSA3			
kWh			
demand kWh base	0	0	0
energy kWh base	0.05641	0.05641	0.05641
hydro energy debit	0.00323	0.00323	0.00323
0-1000 kW			
demand kW base	11.47	10.71	10.71
energy kWh base	0.00	0.00	0.00
>1000 kW			
demand kW base	13.63	12.87	12.87
energy kWh base	0.00	0.00	0.00
LS kWh			
demand kWh base	0.00837	0.00837	0.00837
energy kWh base	0.04621	0.04621	0.04621
hydro energy debit	0.00323	0.00323	0.00323

RESOLUTION 1414
EXHIBIT C
RATE SCHEDULES OF THE ELECTRIC DIVISION
EFFECTIVE NOVEMBER 1, 2020

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	$0.09159 per kWh per month
Winter Period	$0.09118 per kWh per month
Transition Period	$0.09118 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

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: $29.00 per delivery point per month

   Energy Charge:

Summer Period	$0.11175 per kWh per month
Winter Period	$0.11134 per kWh per month
Transition Period	$0.11134 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: $95.00 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 $15.18 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 $14.39 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 $14.39 per kW
Energy Charge:	
Summer Period	First 15,000 kWh per month at $0.13863 per kWh
	Additional kWh per month at $0.06123 per kWh
Winter Period	First 15,000 kWh per month at $0.13822 per kWh
	Additional kWh per month at $0.06123 per kWh
Transition Period	First 15,000 kWh per month at $0.13822 per kWh
	Additional kWh per month at $0.06123 per 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:

Customer Charge:	$260.00 per delivery point per month
Demand Charge:	
Summer Period	First 1,000 kW of billing demand per month, at $15.92 per kW
	Excess over 1,000 kW of billing demand per month, at $16.57 per kW, plus an additional
	$16.57 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 $15.16 per kW
	Excess over 1,000 kW of billing demand per month, at $15.81 per kW, plus an additional
	$15.81 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

Transition Period	First 1,000 kW of billing demand per month, at $15.16 per kW Excess over 1,000 kW of billing demand per month, at $15.81 per kW, plus an additional $15.81 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	$0.07110 per kWh per month
Winter Period	$0.07110 per kWh per month
Transition Period	$0.07110 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 30-consecutive-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 30-consecutive-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

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	$0.08305 per kWh per month
Winter Period	$0.08305 per kWh per month
Transition Period	$0.08305 per kWh per month

II. Facility Charge

The annual facility charge shall be 15.89 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 14.74 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 Per Month				
	Lamp Size		Rated	Facility	Total Lamp
(a) Type of Fixture	(Watts)	(Lumens)	kWh	Charge	Charge
Mercury Vapor or	175	7,650	70	$4.97	$10.78
Incandescent*	400	19,100	155	6.94	19.81
	1,000**	47,500	378	11.10	42.49
High Pressure	100	8,550	42	$4.97	$ 8.46
Sodium	250	23,000	105	5.89	14.61
	400	45,000	165	6.94	20.64
	1,000**	126,000	385	11.10	43.07
Decorative	100	8,550	42	$5.66	$9.15

* 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	$0.08305 per kWh per month
Winter Period	$0.08305 per kWh per month
Transition Period	$0.08305 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 $5.00 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	$5.72	$ 7.46
250 WE	58	7.07	11.89
400 WE	79	9.72	16.28

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

Summer Period	$0.08305 per kWh per month
Winter Period	$0.08305 per kWh per month
Transition Period	$0.08305 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 $5.00 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	$6.88 per kW per month of the customer's maximum billing demand plus
Excess Demand	$17.84 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	$6.88 per kW per month of the customer's maximum billing demand plus
Excess Demand	$16.88 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	$6.88 per kW per month of the customer's maximum billing demand plus
Excess Demand	$16.88 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	$0.10876 per kWh per month for all metered onpeak kWh, plus

Offpeak

Block 1	$0.07523 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 $0.03271 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 $0.02968 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 $0.09346 per kWh per month for all metered onpeak kWh, plus

Offpeak

Block 1 $0.07820 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 $0.03271 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 $0.02968 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 $0.07939 per kWh per month for all metered onpeak kWh, plus

Offpeak

Block 1 $0.07939 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 $0.03271 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 $0.02968 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 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 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 $6.15 per kW per month of the customer's maximum

billing demand plus

Excess Demand — $16.91 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

Winter Period:

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

Maximum Demand — $6.15 per kW per month of the customer's maximum billing demand plus

Excess Demand — $15.95 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

Transition Period:

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

Maximum Demand — $6.15 per kW per month of the customer's maximum billing demand plus

Excess Demand — $15.95 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

Energy Charge:

Summer Period:

Onpeak — $0.08648 per kWh per month for all metered onpeak kWh, plus

Offpeak

Block 1 — $0.06180 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 — $0.02756 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 — $0.02418 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 — $0.07523 per kWh per month for all metered onpeak kWh, plus

Offpeak

Block 1 — $0.06400 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 — $0.02756 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 — $0.02418 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 — $0.06149 per kWh per month for all metered onpeak kWh, plus

Offpeak

Block 1 — $0.06149 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 — $0.02756 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 — $0.02418 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 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.

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	$6.03 per kW per month of the customer's maximum billing demand plus

Excess Demand	$16.79 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	$6.03 per kW per month of the customer's maximum billing demand plus
Excess Demand	$15.83 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
Transition Period:	
Onpeak Demand	$9.80 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	$6.03 per kW per month of the customer's maximum billing demand plus
Excess Demand	$15.83 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
Energy Charge:	
Summer Period:	
Onpeak	$0.08639 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	$0.06171 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	$0.02747 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	$0.02409 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	$0.07514 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	$0.06391 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	$0.02747 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	$0.02409 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	$0.06140 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	$0.06140 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	$0.02747 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	$0.02409 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 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	$5.90 per kW per month of the customer's maximum billing demand plus

Excess Demand	$16.66 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	$5.90 per kW per month of the customer's maximum billing demand plus
Excess Demand	$15.70 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	$5.90 per kW per month of the customer's maximum billing demand plus
Excess Demand	$15.70 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	$0.08630 per kWh per month for all metered onpeak kWh, plus

Offpeak

Block 1	$0.06162 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	$0.02624 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 — $0.02400 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 — $0.07505 per kWh per month for all metered onpeak kWh, plus

Offpeak

Block 1 — $0.06382 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 — $0.02624 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 — $0.02400 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 — $0.06131 per kWh per month for all metered onpeak kWh, plus

Offpeak

Block 1 — $0.06131 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 — $0.02624 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 — $0.02400 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 established during the preceding 12 months. The offpeak billing demand shall in no case be less than the sum of (1) 30 percent of the first 5,000 kW, (2) 40 percent of the next 20,000 kW, (3) 50 percent of the next 25,000 kW, (4) 60 percent of the next 50,000 kW, (5) 70 percent of the next 100,000 kW, (6) 80 percent of the next 150,000 kW, and

(7) 85 percent of all kW in excess of 350,000 kW of the higher of the currently effective offpeak contract demand or the highest offpeak billing demand established during the preceding 12 months.

Minimum Bill

The monthly bill under 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	$5.22 per kW per month of the customer's maximum billing demand plus
Excess Demand	$15.47 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	$5.22 per kW per month of the customer's maximum billing demand plus
Excess Demand	$14.50 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	$5.22 per kW per month of the customer's maximum billing demand plus
Excess Demand	$14.50 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 — $0.08377 per kWh per month for all metered onpeak kWh, plus

Offpeak

Block 1 — $0.05874 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 — $0.03129 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 — $0.02874 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 — $0.07234 per kWh per month for all metered onpeak kWh, plus

Offpeak

Block 1 — $0.06097 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 — $0.03129 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 — $0.02874 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 — $0.06186 per kWh per month for all metered onpeak kWh, plus

Offpeak

Block 1 — $0.06186 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 — $0.03129 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 — $0.02874 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 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	$3.22 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 — $0.07921 per kWh per month for all metered onpeak kWh, plus

Offpeak

Block 1 — $0.05445 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 — $0.02504 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 — $0.02252 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 — $0.06791 per kWh per month for all metered onpeak kWh, plus

Offpeak

Block 1 — $0.05666 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 — $0.02504 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 — $0.02252 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 — $0.05752 per kWh per month for all metered onpeak kWh, plus

Offpeak

Block 1 — $0.05752 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 — $0.02504 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 — $0.02252 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 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	$3.10 per kW per month of the customer's maximum billing demand plus
Excess Demand	$13.24 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	$3.10 per kW per month of the customer's maximum billing demand plus
Excess Demand	$12.28 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

Transition Period:

Onpeak Demand	$9.18 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	$3.10 per kW per month of the customer's maximum billing demand plus
Excess Demand	$12.28 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

Energy Charge:

Summer Period:

Onpeak — $0.07801 per kWh per month for all metered onpeak kWh, plus

Offpeak

Block 1 — $0.05324 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 — $0.02634 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 — $0.02634 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 — $0.06670 per kWh per month for all metered onpeak kWh, plus

Offpeak

Block 1 — $0.05544 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 — $0.02634 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 — $0.02634 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 — $0.05631 per kWh per month for all metered onpeak kWh, plus

Offpeak

Block 1 — $0.05631 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 — $0.02634 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 — $0.02634 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 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	$2.67 per kW per month of the customer's maximum billing demand plus
Excess Demand	$12.81 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	$2.67 per kW per month of the customer's maximum billing demand plus
Excess Demand	$11.85 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

Transition Period:

Onpeak Demand	$9.18 per kW per month of the customer's onpeak billing demand, plus
Maximum Demand	$2.67 per kW per month of the customer's maximum billing demand plus
Excess Demand	$11.85 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

Energy Charge:

Summer Period:

Onpeak	$0.07460 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	$0.04984 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	$0.02352 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	$0.02294 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	$0.06330 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	$0.05203 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	$0.02352 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	$0.02294 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	$0.05290 per kWh per month for all metered onpeak kWh, plus
Offpeak	
Block 1	$0.05290 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	$0.02352 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 $0.02294 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 established during the preceding 12 months. The offpeak billing demand shall in no case be less than the sum of (1) 30 percent of the first 5,000 kW, (2) 40 percent of the next 20,000 kW, (3) 50 percent of the next 25,000 kW, (4) 60 percent of the next 50,000 kW, and (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.

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.

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.

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

Service is subject to Rules and Regulations of KUB.

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.

RESOLUTION 1414
EXHIBIT D
PILOT TIME OF USE RATE SCHEDULES OF THE ELECTRIC DIVISION
EFFECTIVE NOVEMBER 1, 2020

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	$0.19838 per kWh per month for all metered onpeak kWh
Offpeak	$0.06662 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

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: $29.00 per delivery point per month

   Demand Charge: $2.00 per kW of maximum billing demand per month

   Energy Charge:

   Onpeak $0.20611 per kWh per month for all metered onpeak kWh

   Offpeak $0.07435 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: $95.00 per delivery point per month

Demand Charge: $4.45 per kW of maximum billing demand per month

Energy Charge:

Onpeak $0.21794 per kWh per month for all metered onpeak kWh

Offpeak $0.08618 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: $110.00 per delivery point per month

Demand Charge: $6.56 per kW of maximum billing demand per month

Energy Charge:

Onpeak $0.19509 per kWh per month for all metered onpeak kWh

Offpeak $0.06333 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:

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

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. 1415

A Resolution Authorizing Participation in the Tennessee Valley Authority's Back to Business Credit Program

Whereas, Knoxville Utilities Board ("KUB") purchases its full electric power requirements from the Tennessee Valley Authority ("TVA"); and

Whereas, the communities in KUB's service territory have been impacted by the worldwide COVID-19 pandemic; and

Whereas, TVA is offering a new program, the Back to Business Credit Program, to assist large commercial and industrial electric customers which reduced operations in response to the COVID-19 pandemic with their transition back to pre-pandemic levels more quickly; and

Whereas, TVA desires to mitigate adverse bill impacts for these customers which may be created if their return to pre-pandemic levels occurs mid-month; and

Whereas, KUB participates in other credit programs offered by TVA for the benefit of customers; and

Whereas, the Back to Business Credit Program will be funded from TVA revenue; and

Whereas, participating distributors will be promptly reimbursed by TVA through the monthly wholesale power invoice; and

Whereas, the Back to Business Credit Program is an optional program for qualified customers of KUB, and KUB will not receive any additional margin from those customers choosing to participate in this program; and

Whereas, the Board has determined, upon recommendation from KUB staff, that it is in the best interest of KUB, its customers, and the community to participate in TVA's Back to Business Credit Program.

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

Section 1. The Board hereby authorizes participation by KUB in the Back to Business Credit Program.

Section 2. The President and CEO is hereby authorized on behalf of KUB to enter any agreements or take any actions reasonably necessary for KUB and its customers to participate in the Back to Business Credit Program.

Section 3. That this Resolution shall take effect from and after its passage.

Kathy Hamilton/s
Kathy Hamilton, Chair

Mark Walker/s
Mark Walker, Board Secretary

APPROVED ON 1st
& FINAL READING: 5-21-20
EFFECTIVE DATE: 5-21-20
MINUTE BOOK 42 PAGE 10078-10079

THIS PAGE LEFT INTENTIONALLY BLANK