

**Knoxville Utilities Board
Board Meeting
Minutes
Thursday, June 18, 2020 Noon**

Call to Order

The Knoxville Utilities Board met in regular session on Thursday, June 18, 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 June 18, 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 June 4, 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 Simpson-Brown, the Board made the determination that the June 18, 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 Pinnell, the May 21, 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".

June 18, 2020

Old Business

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 Gabriel Bolas recognized Mark Walker, Senior Vice President and Chief Financial Officer, to provide an overview of the new pilot time of use electric rates and proposed amendments to the Purchased Power Adjustment mechanism on second and final reading.

President Bolas recommended adoption of Resolution 1414 on second and final reading. His written recommendation is included in Attachment 1.

Upon a motion by Commissioner Small and a second by Commissioner Pinnell, Resolution 1414 (*Attachment 1*) was adopted by a roll call vote on second and final reading. The following Commissioners voted "aye": Askew, Hamilton, Herbert, Pinnell, Simpson-Brown, Small, and Worden. No Commissioner voted "nay".

June 18, 2020

New Business

Resolution 1416, A Resolution Extending the Period of Authorization to December 31, 2020, for the Execution of a Natural Gas Supply Contract with Tennergy Corporation, an Energy Acquisition Corporation, for a Term of up to Thirty-One (31) Years

President Bolas reminded Commissioners the Board previously gave approval for KUB to enter into a long-term gas supply contract that would provide significant savings to our customers. The current authority granted by the Board expires at the end of June. He recognized Mike Bolin, Vice President of Utility Transformation, to discuss extending that authority with Tennergy Corporation to December 31, 2020.

President Bolas recommended adoption of Resolution 1416 on first and final reading. His written recommendation is included in Attachment 2.

Upon a motion by Commissioner Herbert and a second by Commissioner Small, Resolution 1416 (*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".

Resolution 1417, A Resolution Adopting the Second Amendment to the KUB Retirement System

President Bolas recognized Chris Hood, Controller, to present three amendments to existing resolutions regarding the Retirement System. Resolution 1417 is an amendment to the resolution that establishes the governance for the Retirement System. Resolutions 1418 and 1419 are amendments to the Investment Policies for the 401(k) Plan and OPEB Trust.

President Bolas recommended adoption of Resolution 1417 on first and final reading. His written recommendation is included in Attachment 3.

The adoption of this resolution was recommended by the Audit and Finance Committee in accordance with the Board's By-laws. No motion or second were required for this resolution. Resolution 1417 (*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".

June 18, 2020

Resolution 1418, A Resolution Adopting the Amended and Restated Investment Policy of the Knoxville Utilities Board Asset Accumulation 401(k) Plan

President Bolas recommended adoption of Resolution 1418 on first and final reading. His written recommendation is included in Attachment 4.

The adoption of this resolution was recommended by the Audit and Finance Committee in accordance with the Board's By-laws. No motion or second were required for this resolution. Resolution 1418 (Attachment 4) 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 1419, A Resolution Adopting the Amended and Restated Investment Policy of the Knoxville Utilities Board Voluntary Employee Beneficiary Association Other Post Employment Benefit Trust

President Bolas recommended adoption of Resolution 1419 on first and final reading. His written recommendation is included in Attachment 5.

The adoption of this resolution was recommended by the Audit and Finance Committee in accordance with the Board's By-laws. No motion or second were required for this resolution. Resolution 1419 (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".

President's Report

Return to Normal Billing Operations

President Bolas advised Commissioners we're all aware of the tremendous impact the COVID-19 pandemic is having on our community. We are watching closely as the community is reopening and are now beginning to take steps to return to normal customer billing operations. He recognized Tiffany Martin, Director of Customer Experience, to share details of KUB's plan to communicate with and assist customers.

June 18, 2020

Grid Modernization Project Update

President Bolas reminded Commissioners that KUB began a Century II Grid Modernization effort in July 2016 replacing all meters, building a new fiber network for our operations and expanding system automation to improve reliability. He reported that KUB officially finished the meter deployment in April. He recognized Jamie Davis, Director of Grid Modernization, to provide more details about the project's success

Customer Exchange with First Utility District

President Bolas reminded Commissioners that in August 2019 a resolution was adopted by the Board initiating a project between KUB and First Utility District to adjust utility boundaries to better serve 11 customers along the 8000 block of Kingston Pike in West Knoxville. He recognized Shane Bragg, Acting Manager of Water Systems Engineering, to provide an overview of the project, which was completed in April.

Other Business

None

Public Comment

None

Adjournment

There being nothing further to come before the Board, Chair Hamilton declared the Board meeting adjourned at 1:40 p.m.



Kathy Hamilton, Chair



Mark Walker, Board Secretary

Attachments

<p>Attachment 1</p>	<p>Recommendation Letter and 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</p> <p>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</p> <p>This Resolution Replaces the Existing Purchased Power Adjustment of the Electric Division Effective July 1, 2020 and Replaces Appendix A Effective November 1, 2020</p> <p>This Resolution Amends the Existing Rate Schedule, G2-Residential, of the Gas Division Effective November 1, 2020</p> <p>This Resolution Amends the Existing Rate Schedule, Water General Service – Residential, of the Water Division Effective November 1, 2020</p> <p>This Resolution Amends the Existing Rate Schedule, Wastewater General Service – Residential Rate Schedule, of the Wastewater Division Effective November 1, 2020</p>	<p><u>Page(s)</u> 10088 - 10187</p>
<p>Attachment 2</p>	<p>Resolution 1416 – A Resolution Extending the Period of Authorization to December 31, 2020, for the Execution of a Natural Gas Supply Contract with Tennergy Corporation, an Energy Acquisition Corporation, for a Term of up to Thirty-One (31) Years</p>	<p>10188 - 10189</p>

Attachment 3	Resolution 1417 – A Resolution Adopting the Second Amendment to the KUB Retirement System	10190 - 10191
Attachment 4	Resolution 1418 – A Resolution Adopting the Amended and Restated Investment Policy of the Knoxville Utilities Board Asset Accumulation 401(k) Plan	10192 - 10222
Attachment 5	Resolution 1419 – A Resolution Adopting the Amended and Restated Investment Policy of the Knoxville Utilities Board Voluntary Employee Beneficiary Association Other Post Employment Benefit Trust	10223 - 10229



Knoxville Utilities Board

June 12, 2020

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

Commissioners:

The June 18 Board meeting agenda includes multiple official action items, including second reading on several rate matters, the extension of an authorization date for a long-term natural gas supply contract, and several retirement system related items.

An overview of each official action item is provided below:

Resolution 1414 – Second and Final Reading

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. It was approved on first reading at the May 21 Board meeting. It is now being presented on second and final reading.

Resolution 1416

At its November 2019 meeting, the Board adopted Resolution 1405 authorizing the execution of a long-term natural gas supply contract with Tennergy Corporation for a term of up to 31 years. As you may recall, Tennergy is an Energy Acquisition Corporation registered in the state of Tennessee. Energy Acquisition Corporations, as provided for in Tennessee state law, may contract with municipalities to provide natural gas supply on a long-term basis offering significant price discounts, due to the longer contract term.

Tennergy has offered KUB a long-term supply contract of up to 31 years with an initial period price discount to the market price of natural gas of \$0.30 per dekatherm. The price discount would be recalculated every five to seven years, and if the price discount does not meet a certain threshold, then KUB can forego participation in the contract for that period. The contract supply amount is an average of 2,800 dekatherms per day, which represents about 10 percent of KUB's annual gas supply requirements.

The authorization period provided for in Resolution 1405 expires June 30, 2020. Given the recent volatility in the financial markets due to the COVID-19 pandemic, the underlying financial transactions involving Tennergy and other parties have not occurred. As a result, the supply contract between Tennergy and KUB has not been executed.

Resolution 1416 extends the authorization period to execute the contract with Tennergy to December 31, 2020.

Resolution 1417

Resolution 1417 amends Resolution 979, which established KUB's Retirement System, to allow for custodians to administer the retirement system plans on behalf of KUB. Currently only trustees can administer the plans. This provides flexibility in the event KUB should choose to change from its current trustee.

As many companies have closed their pension plans over recent years, the landscape has changed so that fewer financial institutions are willing to act as a trustee for pension plans. While there is essentially no difference in the administrative services provided by a trustee rather than a custodian, a trustee has fiduciary responsibility to ensure plan assets are managed for the best interests of plan participants, while a custodian has a more limited responsibility.

The proposed amendment to KUB's Retirement System resolution was discussed with the Board's Audit and Finance Committee at the Committee's March 31 meeting. The Committee adopted Resolution AF-79, which is enclosed for your information, recommending the Board amend the Retirement System Resolution to reflect the proposed change.

Supporting letters from KUB's Retirement System Counsel and Retirement System Investment Advisor are enclosed for your review.

Resolution 1418

Resolution 1418 amends KUB's 401(k) Investment Policy to provide for a new investment option for plan participants along with several housekeeping changes. In accordance with Resolution 979, which established the KUB Retirement System, the policy may only be amended upon approval of the Board.

In addition to the housekeeping changes, which clarify investment options, guidelines and objectives, the 401(k) Investment Policy is being amended to include a combined small and mid-cap equity fund. The proposed addition allows for better alignment of the 401(k) Plan's active and passive investment tiers, adds exposure to mid-cap equity, and provides for a lower level of volatility without sacrificing investment returns.

The proposed amendments to the 401(k) Investment Policy were discussed with the Board's Audit and Finance Committee at the Committee's March 31 meeting. The Committee adopted Resolution AF-80, which is enclosed, recommending the Board amend the 401(k) Investment Policy to reflect the proposed changes.

A red-lined version of the policy highlighting the proposed changes is also enclosed for your review, as are letters from KUB's Retirement System Counsel, Retirement System Actuary, and Retirement System Investment Advisor supporting the proposed changes to the policy.

Resolution 1419

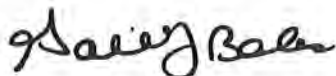
Resolution 1419 amends the investment policy for KUB's Other Post-Employment Benefits (OPEB) Trust for several housekeeping changes, which clarify investment options, guidelines and objectives. In accordance with Resolution 1168, which established the OPEB Trust, the policy may only be amended upon approval of the Board.

The proposed changes to the OPEB Trust Investment Policy were also discussed with the Board's Audit and Finance Committee at the Committee's March 31 meeting. The Committee adopted Resolution AF-81, which is enclosed, recommending the Board amend the OPEB Trust Investment Policy to reflect the proposed changes.

A red-lined version of the policy and letters of support from KUB's Retirement System Counsel, Retirement System Actuary, and Retirement System Investment Advisor are enclosed for your information.

Drafts of Resolutions 1414, 1416, 1417, 1418 and 1419 are enclosed for your review. I recommend the adoption of Resolution 1414 on second and final reading, and Resolutions 1416, 1417, 1418 and 1419 on first and final reading.

Respectfully submitted,



Gabriel J. Bolas II
President and CEO

Enclosures

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-OF-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: 6-18-20
EFFECTIVE DATE: 11-01-20
MINUTE BOOK 42 PAGE 10091-10187

**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 designed 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. $\text{Change in Demand Cost kW} = \text{Change in Demand Cost} \times \frac{\text{Demand kW Power Cost Recovery}}{\text{Demand Cost Recovery}}$
 - ii. $\text{Change in Demand Cost kWh} = \text{Change in Demand Cost} \times \frac{\text{Demand kWh Power Cost Recovery}}{\text{Demand Cost Recovery}}$
 - 2. $\text{Change in Energy Cost} = \text{Projected Energy Cost} \text{ less Energy Cost Recovery}$
 - 3. $\text{Change in Residential Customer Hydro Credit Cost} = \text{Projected Residential Customer Hydro Credit Cost} \text{ less Residential Customer Hydro Credit Cost Recovery}$
 - 4. $\text{Change in Hydro Energy Credit Cost} = \text{Projected Hydro Energy Credit Cost} \text{ less Hydro Energy Credit Cost Recovery}$
 - 5. $\text{Change in Hydro Energy Debit Cost} = \text{Projected Hydro Energy Debit Cost} \text{ less Hydro Energy Debit Cost Recovery}$
- (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 = $\frac{\text{Change in Demand Cost kW}}{\text{Demand kW Sales}}$

- (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

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

	Summer	Winter	Transition
GSA2			
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

(a) <u>Type of Fixture</u>	<u>Charges Per Fixture Per Month</u>			<u>Facility Charge</u>	<u>Total Lamp Charge</u>
	<u>Lamp Size (Watts)</u>	<u>(Lumens)</u>	<u>Rated kWh</u>		
Mercury Vapor or Incandescent*	175	7,650	70	\$4.97	\$10.78
	400	19,100	155	6.94	19.81
	1,000**	47,500	378	11.10	42.49
High Pressure Sodium	100	8,550	42	\$4.97	\$ 8.46
	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. 1416

A Resolution Extending the Period of Authorization to December 31, 2020, for the Execution of a Natural Gas Supply Contract with Tennergy Corporation, an Energy Acquisition Corporation, for a Term of up to Thirty-One (31) Years

Whereas, the Knoxville Utilities Board of Commissioners previously adopted Resolution No. 1405 on November 21, 2019 (the "Original Resolution"), authorizing the participation of the Knoxville Utilities Board ("Purchaser") in a prepaid natural gas project, more particularly described in the Gas Supply Contract with Tennergy Corporation, an Energy Acquisition Corporation ("Tennergy"); and

Whereas, under the Gas Supply Contract, Tennergy will issue bonds to finance the prepayment of long-term gas, and will sell a portion of the gas purchased in a Gas Supply Contract, a form of which was approved in the Original Resolution; and

Whereas, the Original Resolution provided that if the Gas Supply Contract was not fully executed by both parties by June 30, 2020, the authority granted by the Board for the Purchaser to enter into the Gas Supply Contract would expire; and

Whereas, the Purchaser now desires to extend the period of authorization set forth in the Original Resolution to December 31, 2020; and

Whereas, the extension of the period of authorization is 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. The Original Resolution is hereby amended to delete the words "June 30, 2020", as set forth in Section 3 of the Original Resolution and insert the words "December 31, 2020" in their place and stead.

Section 2. Except as amended by this Resolution, the Original Resolution shall remain in full force and effect.

Section 3. All acts and doings of the officers, employees or designated representatives of the Purchaser, which are in conformity with the purposes and intent of the Original Resolution and this Resolution and in furtherance of the execution, delivery and performance of the Gas Supply Contract shall be and the same hereby are in all respects approved and confirmed.

Section 4. This Resolution shall take effect immediately upon its passage.

Kathy Hamilton/s
Kathy Hamilton, Chair

Mark Walker/s
Mark Walker, Board Secretary

APPROVED ON 1st
& FINAL READING: 6-18-20
EFFECTIVE DATE: 6-18-20
MINUTE BOOK 42 PAGE 10188-10189

RESOLUTION NO. 1417

A Resolution Adopting the Second Amendment to the KUB Retirement System

Whereas, Article XI, Section 1107(J) of the City of Knoxville Charter directs and empowers the Board of Commissioners of the Knoxville Utilities Board ("Board") to design, adopt and implement a financially sound retirement system exclusively for the eligible employees and retirees of the Knoxville Utilities Board ("KUB") and their beneficiaries; and

Whereas, the Board previously adopted Resolution No. 979, as amended by Resolution No. 1037, establishing the KUB Retirement System, including the delegations of authority to the President and CEO, and to two committees created therein, to administer KUB's retirement plans and the Retirement System, subject to certain reservations of authority to the Board, including the power to amend the Retirement System from time to time; and

Whereas, the proposed second amendment to the Retirement System has been presented to and reviewed by the Board's Audit and Finance Committee, which found the proposed amendment to be appropriate and in the best interest of the Retirement System and recommended its adoption by the Board through the adoption of Resolution AF-79.

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

Section 1. Effective immediately, the KUB Retirement System established pursuant to Section 1107(J) of the Charter of the City of Knoxville, chapter 540, Private Acts of 1935, as amended, and Board Resolution No. 979, February 18, 1999, as amended by Resolution No. 1037, April 19, 2001, is further amended by adding the following third paragraph to the end of Section 10:

For purposes of this Resolution, as amended, the term, "Trustee" shall include custodians as well as trustees, and the term "Trust Agreement" shall include custody agreements as well as trust agreements, as allowed by applicable provisions of the Internal Revenue Code and IRS Regulations for tax qualified plans; provided, however, prior to accepting the Investment Committee's recommendation for the appointment of a custodian in place of the trustee of the Pension or in place of the trustee of the 401(k) Plan, the President and CEO shall provide notice to the Audit and Finance Committee.

Except as specifically amended herein, the remaining provisions, terms and conditions of the Retirement System are hereby ratified and confirmed and shall remain in full force and effect.

Section 2. 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: 6-18-20
EFFECTIVE DATE: 6-18-20
MINUTE BOOK 42 PAGE 10190-10191

RESOLUTION NO. 1418

A Resolution Adopting the Amended and Restated Investment Policy of the Knoxville Utilities Board Asset Accumulation 401(k) Plan

Whereas, the Knoxville Utilities Board of Commissioners ("Board") previously adopted Resolution No. 979, as amended, establishing the KUB Retirement System, which includes an Asset Accumulation 401(k) Plan ("Plan"); and the Plan has an Investment Policy ("Policy"), previously approved by the Board, relating to the participant-directed investment of Plan accounts; and

Whereas, the Policy is intended to be dynamic in nature and updated and revised as circumstances change; and through Resolution No. 979, as amended, the Board delegated certain responsibilities for the administration of the Policy to the Retirement System Investment Committee, reserving to the Board approval of Policy amendments; and

Whereas, the Retirement System Investment Committee, upon the advisement of the Retirement System's Investment Advisor and Counsel, has recommended certain changes to the Policy, including the recommendation to allow for Small and Mid-Cap Equity as a permitted asset class for participant-directed investment in the active management tier; and

Whereas, the proposed amended and restated Policy has been presented to and reviewed by the Board's Audit and Finance Committee, which found the proposed amended and restated Policy to be appropriate and in the best interest of KUB and the Plan and recommended its adoption by the Board through its adoption of Resolution AF-80.

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

Section 1. The Board hereby adopts the amended and restated Policy, attached hereto as Exhibit A, which shall replace and supersede any Investment Policy previously adopted by the Board for the Plan.

Section 2. That the amended and restated Investment Policy for the KUB Asset Accumulation 401(k) Plan shall become effective July 1, 2020.

Kathy Hamilton/s
Kathy Hamilton, Chair

Mark Walker/s
Mark Walker, Board Secretary

APPROVED ON 1st
& FINAL READING: 6-18-20
EFFECTIVE DATE: 6-18-20
MINUTE BOOK 42 PAGE 10192-10222

KNOXVILLE UTILITIES BOARD
ASSET ACCUMULATION
401(k) PLAN
STATEMENT OF INVESTMENT POLICY

JULY 1, 2020

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I. INTRODUCTION

The Knoxville Utilities Board (“KUB”) Retirement System consists of two plans: the KUB Pension Plan (“Pension Plan”) and the KUB Asset Accumulation 401(k) Plan (“401(k) Plan”). The Pension Plan is closed to new entrants. Employees last hired on or before December 31, 2010, are covered by both Plans; employees last hired after December 31, 2010, are covered by the 401(k) Plan. The Plans provide retirement, death and disability benefits to participants, retirees and beneficiaries (collectively, “Participants”).

The 401(k) Plan is funded by Participants who elect to contribute. KUB also contributes to the 401(k) Plan on behalf of Participants. KUB takes responsibility for providing a broad range of mutual funds and similar investment options, including mutual funds and commingled or collective accounts or trusts (all of which are referred to individually or collectively as, “Fund,” or “Funds”). Participants may direct the investment of their individual 401(k) Plan Accounts among the available choices. This Statement of Investment Policy (“Policy”) sets out the goals and objectives for those investment options and provides for the designation of the default investment, in cases where a Participant does not otherwise direct the investment of any Account balance.

II. PURPOSE

Under the 401(k) Plan, Participants are able to structure a personal investment program from the Funds offered. KUB intends to provide a range of diverse investment choices to accommodate the individual needs and risk tolerances of Participants. KUB has developed this Policy to fulfill its fiduciary obligation, to provide a basis for selecting the Funds to be made available, to establish expectations for the investment performance of those Funds to assure Participants will have access to sound investment alternatives on a continuing basis, and to document the benchmarks against which individual Funds will be measured.

This Policy:

- Provides written documentation of KUB's expectations regarding the Funds offered under the 401(k) Plan.
- Establishes objectives and guidelines for the Funds available.
- Outlines criteria and procedures for the ongoing evaluation of the Funds, and the total investment program.

This Policy is intended to be dynamic in nature and will be updated and revised as circumstances change.

This Policy was last amended effective July 1, 2020, on the approval of the KUB Board of Commissioners ("Board") based on the recommendation of the Board's Audit and Finance Committee, on advice of the Retirement System Investment Committee ("Investment Committee") and its Investment Consultant, Mercer Investment Consulting, LLC.

III. RESPONSIBILITIES

KUB is responsible for assuring that the investment program for the 401(k) Plan and each investment option is managed:

- Prudently and in compliance with applicable laws and regulations; and
- For the exclusive benefit of Participants.

In Resolution No. 979, as amended (“Retirement System Resolution”), the Board established the Retirement System and delegated to the Investment Committee certain responsibilities. The primary responsibilities of the Investment Committee are listed below. For a complete description of the legal responsibilities of the Investment Committee and other various parties, please refer to the Retirement System Resolution, the 401(k) Plan Document and 401(k) Plan Trust Agreement.

- Recommend to the President and CEO, for recommendation to the Board, a Policy for the 401(k) Plan, including investment policies, objectives and benchmarks for each investment option, and amendments to the Policy from time to time;
- Monitor and evaluate investment performance. It is understood that the Funds may, from time-to-time, fail to meet various performance benchmarks. However, the Investment Committee will endeavor to evaluate performance, in the short-term, in the context of the 401(k) Plan’s long-term objectives;
- Recommend modification of the investment options, as appropriate;
- Recommend to the President and CEO the replacement of Funds, if, at the discretion of the Investment Committee based on the advice of the Investment Consultant, such Funds fail to meet performance expectations set forth in this Policy over the long-term;
- Implement procedures for the investment, management, supervision and control of 401(k) Plan Funds;
- Recommend to KUB’s President and CEO appointment and removal of Trustees and Funds; and
- Upon the advice of the Investment Consultant, recommend to the President and CEO for approval, as part of this Policy’s attached Appendix of Indices for Standards of Measurement and Designation of Default Investment (“Appendix”), the default investment for use in cases where a Participant does not otherwise direct the investment of any 401(k) Plan Account balance; provided that the President and CEO is required to report to the Audit and Finance Committee of the Board prior to approving any such default investment.

The Investment Committee shall meet several times a year to review the performance of the Funds and hear from its Investment Consultant. Any changes in the Investment Policy may be initiated

by the Investment Committee upon motion of any member. Recommendations for changes approved by the Investment Committee are transmitted to KUB's President and CEO for presentation to the Board. Changes are effective upon approval by the Board.

This Policy, as recommended by the Investment Committee and approved by the Board on the recommendation of the President and CEO, establishes Standards of Measurement for each investment category within the 401(k) Plan. The particular benchmarks used in the Standards of Measurement are designated in the Appendix. The Board has delegated to the President and CEO responsibility and authority to amend the Appendix and those benchmarks from time-to-time based on the recommendation of the Investment Committee, which shall act upon the advice of the Investment Consultant. The President and CEO is required to report to the Audit and Finance Committee of the Board prior to adopting any such changes in the Appendix or benchmarks for Standards of Measurement. The President and CEO shall cause any such amended Appendix to be attached to this Policy whenever such changes are made.

Delegation of Responsibilities

Under the Charter of the City of Knoxville, Section 1107(j), the Retirement System is authorized to delegate certain responsibilities to qualified agents to assist it in properly meeting the overall Retirement System responsibilities as outlined above. Specifically, in the Retirement System Resolution, the Board has delegated responsibility: to the President and CEO to appoint a Trustee and select Funds; to the Administrative Committee of the Retirement System to select Legal Counsel and an Actuary; and to the Investment Committee to appoint an Investment Consultant.

- ◆ **Trustee** - The designated non-discretionary Trustee is delegated the following responsibilities:
 - Except to the extent the Funds are responsible for such action, perform, participate in and exercise such rights, privileges, duties and responsibilities possessed by any other owner or holder of bonds or other evidence of indebtedness and common and preferred stock;
 - Safekeep all assets including securities, cash and cash equivalents;
 - Provide monthly transaction accounting on security holdings with reports provided to the Retirement System in a timely manner;
 - Unless and until assumed by the Retirement System or the third-party administrator, process annual tax reporting to the Internal Revenue Service and to retirees and beneficiaries in a timely manner; and
 - Provide oversight responsibility relating to the security and safekeeping of 401(k) Plan Trust assets normally expected of a Trustee acting in this capacity.

As provided in the Retirement System Resolution, for purposes of this Policy, the term, "Trustee" shall include custodians as well as trustees, and the term "Trust Agreement" shall

include custody agreements as well as trust agreements, as allowed by applicable provisions of the Internal Revenue Code and IRS Regulations for tax qualified plans; provided, however, prior to accepting the Investment Committee's recommendation for the appointment of a custodian in place of the trustee of the 401(k) Plan, the President and CEO shall provide notice to the Audit and Finance Committee.

- ◆ **Funds** – The designated Fund Managers shall undertake the following responsibilities in accordance with applicable law and the Fund prospectus:
 - Exercise complete investment discretion for investments in their Funds;
 - Strictly comply with all of the provisions of applicable law as they pertain to dealings, functions and responsibilities as Funds;
 - Diversify the Fund so as to minimize the risk of large losses unless, under the circumstances, it is clearly prudent to not so diversify; and
 - Invest the assets of the Fund with care, skill, prudence and diligence under circumstances then prevailing that a prudent person, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with such aims.

- ◆ **Investment Consultant** – It shall be the responsibility of the designated Investment Consultant to assist the Retirement System with the following functions:
 - Provide comprehensive, periodic evaluations of the investment results achieved by the designated Funds in light of the investment guidelines and performance standards contained in this Policy;
 - Make recommendations to the Retirement System of appropriate actions to be considered which, in the Investment Consultant's opinion, will enhance the probability of achieving overall Fund objectives. Such recommendations may include, but are not limited to:
 - Use of traditional or alternate assets strategies or asset classes;
 - Changes in overall investment policy; and
 - Changes in designated Funds.
 - Assist the Retirement System in monitoring, screening and selecting Funds as appropriate.

- ◆ **Legal Counsel** – The Retirement System's designated Legal Counsel will advise and represent KUB, the Board and the Retirement System in all matters requiring legal insight and advice pertaining to the Retirement System.

◆ **Actuary** – The Retirement System’s designated Actuary shall have the following responsibilities:

- Conduct special experience and actuarial studies as required by the Retirement System.

IV. INVESTMENT OPTION STRUCTURE

Investment Options

Investment options offered to Participants through the 401(k) Plan consist of the following four tiers that may be used in Participant-directed combinations to diversify their investments: (i) a selection of target date or lifecycle Funds covering the spectrum of expected retirement ages, (ii) a choice of passively managed index Funds across a range of major asset classes, (iii) an appropriate variety of selected actively managed Funds across a number of asset classes, and (iv) a self-directed brokerage option. Using a single tier or two or more tiers allows each Participant to select the level of involvement he or she wishes to have in the investment management process, and to have some control over the cost he or she is willing to bear.

To achieve diversity in the investment options offered, technical criteria are defined to establish material differences between and among potential investment options within the various tiers (see descriptions of allowable Funds in Policy Sections V, VI and VII). The Investment Committee also analyzed prospective investment options in terms of their potential attractiveness to Participants, given their demographic characteristics. Consideration was given to the number of options within each tier, and the need to offer clear choices, but also to provide a broad spectrum of risk and reward investment profiles, asset classes and management styles, as well as an appropriate range of investment options of varying levels of cost.

On the basis of those considerations, the following asset classes within the designated tiers are currently considered to provide appropriate ranges within which the Investment Committee may choose to offer particular Funds:

- **Target Date Tier**
 - A selection of Funds with target dates commensurate with the spectrum of expected retirement ages of KUB employees, which may be adjusted to remove or add additional target dates from time to time.

- **Index Tier**
 - Core Fixed Income Index Fund
 - Large Cap Equity Index Fund
 - Small & Mid Cap Equity Index Fund
 - International Equity Index Fund

- **Active Management Tier**
 - Stable Value Fund
 - Core Fixed Income Fund
 - Balanced Fund
 - Large Cap Equity Fund
 - Mid Cap Equity Fund
 - Small Cap Equity Fund
 - International Equity Fund

Within the Active Management Tier, Equity Funds at the indicated capitalizations may be offered that focus on various styles (core, value or growth) and, in the case of International Equity Funds, on companies of various capitalizations; in addition, Equity Funds covering both Mid Cap and Small Cap (SMID Cap) may be offered

- **Specialty Tier**
 - Self-Directed Brokerage

The Investment Committee shall recommend to the President and CEO from time to time specific Funds to be included in each Tier, within the asset classes identified above. Policy Sections V, VI and VII below describe some of the Funds that may be offered within asset classes for Target Date, Index and Active Management Tiers. Other Funds may be offered as authorized by this Policy Section IV.

Additional Passive Investment Options

The Investment Committee is also authorized from time-to-time as it determines appropriate to expand the list of available passively managed Funds in the Index Tier to include other broad domestic or international fixed income or equity market categories as the Investment Committee may determine desirable. In that event, appropriate Standards of Measurement for any such passively managed Funds shall be recommended by the Investment Committee to the President and CEO and reported to the Audit and Finance Committee of the Board for addition to the Appendix, pursuant to the procedures described in Section III above.

Self-Directed Brokerage Option

In an effort to provide Participants with maximum investment flexibility, under rules, evaluation criteria, and procedures to be developed and modified from time-to-time by the Investment Committee, a self-directed brokerage option may be offered in the 401(k) Plan, allowing Participants to invest in a broad range of publicly traded Funds, but excluding single security investments, short sales, options, futures, limited partnerships, currency trading, and trading on margin. The Investment Committee may: set limits on the portion of a Participant's account balance that may be invested through the Self-Directed Brokerage Option; fix conditions for participation in this Option; and determine the availability of the Self-Directed Brokerage Option. Participants who elect to use the self-directed brokerage option are allocated all costs associated with this option.

Review Procedures

The Investment Committee evaluates investment fees at the time of manager selection, and periodically, both as to the Fund's absolute fees as well as compared to other managers in the appropriate universe, and in relation to the investment services provided.

Performance will be reviewed at least annually based on the Standards of Measurement defined below.

Standards of Measurement

To serve as the basis for evaluation, each Fund's performance, investment management fees and transaction costs, will be evaluated against the applicable Standards of Measurement set out in the Appendix, as amended from time-to-time. From time-to-time, the Fund may not achieve one or more of these Standards of Measurement but will be expected to achieve them over the long-term.

Additionally, the Investment Committee will consider the quality and consistency of each Fund's investment team and other appropriate qualitative characteristics, including, but not limited to, material changes to a Fund's investment process, material litigation or regulatory action that may impact future performance or the reputation or stability of the provider, application of generally accepted investment theories and prevailing practices, and utilization of the Fund by Participants.

V. TARGET DATE TIER

Purpose

This Tier is comprised of Target Date Funds which are primarily offered for Participants who wish to have their asset allocation decisions set by a Fund that uses passive “through retirement” glide paths for varying retirement dates. Multiple Target Date Funds from one family of such Funds are offered, each with a different target maturity date to accommodate Participants of varying ages and anticipated retirement dates. Participants typically choose the Target Date Fund that is closest to their target retirement date. Each Fund’s asset allocation is determined by the Fund Manager’s proprietary model. The mixes of the Funds are dynamic and change over time. The risk level for each Fund will vary from moderate to very high and is a function of the number of years remaining until expected retirement.

Objective

The objective of the Target Date Tier is to provide a professionally managed, diversified series of options, or a series made up of passively managed funds, to help Participants achieve capital appreciation while the time horizon of the investment is relatively long, and gradually shift to an objective of income and capital preservation as Participants near their target retirement dates.

The Lifecycle Funds will attempt to meet the following Participant expectations:

- Growth in principal value with returns comparable to those achieved by a portfolio similarly weighted to an appropriate composite benchmark;
- Risk levels appropriate to the investment class and style of investment; and
- Liquidity in accordance with 401(k) Plan provisions.

Guidelines for Evaluation

These general operating guidelines have been adopted for the Target Date Funds:

- Investment in a diversified portfolio of securities including, but not limited to, domestic and international equities and fixed income securities and/or funds.
- Target Date Funds may contain a combination of equity or equity alternative securities (American Depositary Receipts (“ADRs”), issues convertible into common stock, etc.), fixed income securities and cash equivalents.
- No specific constraints as to market capitalization, earnings cash flow record or credit quality is expected, but the overall portfolio structure should be consistent with the return and risk parameters as outlined in the Fund objective.
- A Target Date Fund may be made up of underlying funds of appropriate investment or asset categories.

VI. INDEX TIER

A. CORE FIXED INCOME INDEX FUND

Purpose

The primary purpose of the Core Fixed Income Index Fund is to afford Participants the opportunity to accumulate capital over the long-term in a Fund whose investment strategy is expected to provide current income and capital preservation. This Fund, over the long-term, is expected to offer Participants positive inflation-adjusted returns in most economic environments.

Objective

The objective is expected to be accomplished by investing in the fixed income securities contained in an appropriate, widely recognized and reported index of fixed income aggregate domestically traded securities.

The Core Fixed Income Index Fund will attempt to meet the following Participant expectations:

- A level of current income with returns comparable to those achieved by an appropriate aggregate bond benchmark;
- Risk levels appropriate to the investment class and style of investment; and
- Liquidity in accordance with 401(k) Plan provisions.

Guidelines for Evaluation

These general operating guidelines have been adopted for the Core Fixed Income Index Fund

- Investment in a diversified portfolio comprised primarily of securities contained within the designated fixed income aggregate index.

B. LARGE CAP EQUITY INDEX FUND

Purpose

The primary purpose of the Large Cap Equity Index Fund is to afford Participants the opportunity to accumulate capital over the long-term in a Fund whose investment strategy is expected to provide capital appreciation. This Fund, over the long-term, is expected to offer Participants higher inflation-adjusted returns, with increased potential for volatility in the short-term.

Objective

The objective is expected to be accomplished by investing in the large capitalization stocks contained in an appropriate, widely recognized and reported index of large capitalization equity domestically traded securities. Some other securities may be utilized in small amounts, for example to facilitate cash flow management within the Fund.

The Large Cap Equity Index Fund will attempt to meet the following Participant expectations:

- Growth in principal value with returns comparable to those achieved by the designated large cap equity index;
- Risk levels appropriate to the investment class; and
- Liquidity in accordance with 401(k) Plan provisions.

Guidelines for Evaluation

These general operating guidelines have been adopted for the Large Cap Equity Index Fund

- Investment in a diversified equity portfolio comprised primarily of stocks contained within the designated large cap equity index.

C. SMALL & MID CAP EQUITY INDEX FUND

Purpose

The primary purpose of the Small & Mid Cap Equity Index Fund is to afford Participants the opportunity to accumulate capital over the long-term in a Fund whose investment strategy is expected to provide capital appreciation. This Fund, over the long-term, is expected to offer Participants higher inflation-adjusted returns, with increased potential for volatility in the short-term.

Objective

The objective is expected to be accomplished by investing in the small- and mid-capitalization securities contained in an appropriate, widely recognized and reported index of small- and mid-capitalization equity domestically traded securities. Some other securities may be utilized in small amounts, for example to facilitate cash flow management within the Fund.

The Small & Mid Cap Equity Index Fund will attempt to meet the following Participant expectations:

- Growth in principal value with returns comparable to those achieved by the designated small- and mid-cap equity index;
- Risk levels appropriate to the investment class; and
- Liquidity in accordance with 401(k) Plan provisions.

Guidelines for Evaluation

These general operating guidelines have been adopted for the Small & Mid Cap Equity Index Fund:

- Investment in a diversified equity portfolio comprised primarily of stocks contained within the designated small- and mid-cap equity index.

D. INTERNATIONAL EQUITY INDEX FUND

Purpose

The primary purpose of the International Equity Index Fund is to afford Participants the opportunity to accumulate capital over the long-term in a Fund whose investment strategy is expected to provide capital appreciation. This Fund, over the long-term, is expected to offer Participants higher inflation-adjusted returns, with increased potential for volatility in the short-term.

Objective

The objective is expected to be accomplished by investing in the stocks contained in the appropriate, widely recognized and reported index of international equity securities. Some other securities may be utilized in small amounts, for example to facilitate cash flow management within the Fund.

The International Equity Index Fund will attempt to meet the following Participant expectations:

- Growth in principal value with returns comparable to those achieved by the designated international equity index;
- Risk levels appropriate to the investment class; and
- Liquidity in accordance with 401(k) Plan provisions.

Guidelines for Evaluation

These general operating guidelines have been adopted for the International Equity Index Fund:

- Investment in a diversified equity portfolio comprised primarily of stocks contained within the designated international equity index.

VII. ACTIVE MANAGEMENT TIER

A. STABLE VALUE FUND

Purpose

The primary purpose of the Stable Value Fund is to afford Participants the opportunity to preserve capital in the short- and long-term while maintaining consistency of returns. This Fund, over the long-term, is expected to meet or exceed inflation in most economic environments

Objectives

The objective of the Stable Value Fund is to achieve a maximum yield with limited or no volatility in the value of the underlying assets, as well as to provide maximum flexibility given the contractual nature of certain fixed-income investments held in the Fund.

The Stable Value Fund will attempt to meet the following Participant expectations:

- Safety of principal;
- A rate of return providing a premium above short-term interest rates; and

Liquidity in accordance with 401(k) Plan provisions.

Guidelines for Evaluation

These general operating guidelines have been adopted for the Stable Value Fund

Appropriate Investments within the Fund:

- Investment contracts (guaranteed investment contracts (“GICs”) and bank investment contracts (“BICs”)) issued by insurance companies and banks as unsecured general obligations.
- GIC separate account and synthetic GIC contracts issued by banks, insurance companies, and other financial institutions that provide for direct ownership of, or an enhanced claim on, the underlying securities supporting the contracts’ liabilities.
- Money market/short-term instruments.

B. CORE FIXED INCOME FUND

Purpose

The primary purpose of the Core Fixed Income Fund is to afford Participants the opportunity to accumulate capital over the long-term in a Fund whose investment strategy is expected to provide current income and capital preservation. This Fund, over the long-term, is expected to offer Participants positive inflation-adjusted returns in most economic environments

Objective

The objective is expected to be accomplished by investing in fixed income securities similar to those contained in an appropriate, widely recognized and reported index of fixed income aggregate domestically traded securities.

The Core Fixed Income Fund will attempt to meet the following Participant expectations:

- A level of current income with returns comparable to those achieved by an appropriate aggregate bond benchmark;
- Risk levels appropriate to the investment class and style of investment; and
- Liquidity in accordance with 401(k) Plan provisions.

Guidelines for Evaluation

These general operating guidelines have been adopted for the Core Fixed Income Fund

- Investment in a diversified, high-quality fixed income portfolio.
- High-quality fixed-income shall mean U.S. Government and agency securities as well as corporate bonds, mortgage-backed securities, asset-backed securities and collateralized mortgage obligations (“CMOs”). The fund manager may make use of other sectors including High Yield and Emerging Market debt to increase diversification and enhance returns opportunistically.
- The overall Fund structure should be consistent with the return and risk parameters as outlined in the Fund objective.

C. BALANCED FUND

Purpose

The primary purpose of the Balanced Fund is to afford Participants the opportunity to accumulate capital over the long-term in a Fund whose investment strategy is expected to provide a balance between capital appreciation and current income. This alternative is expected to provide Participants with a professionally managed blend of equity and fixed income securities.

Objective

The objective of the Balanced Fund is to achieve capital appreciation over the long-term while maintaining a level of income that will limit volatility in the short-term.

The Balanced Fund will attempt to meet the following Participant expectations:

- Growth in principal value with returns comparable to those achieved by a portfolio weighted 60% to an appropriate large cap equity benchmark and 40% to an appropriate aggregate bond benchmark;
- Risk levels appropriate to the investment class and style of investment; and
- Liquidity in accordance with 401(k) Plan provisions.

Guidelines for Evaluation

These general operating guidelines have been adopted for the Balanced Fund

- Investment in a high-quality, diversified portfolio of securities appropriately balanced as to equities and fixed income securities.
- Balanced portfolios shall mean portfolios containing a combination of equity (domestic and international) or equity alternative securities (American Depositary Receipts (“ADRs”), issues convertible into common stock, etc.), fixed income securities and cash equivalents.
- The overall portfolio structure is expected to be consistent with the return and risk parameters as outlined in the Fund objective.

D. LARGE CAP VALUE EQUITY FUND

Purpose

The primary purpose of the Large Cap Value Equity Fund is to afford Participants the opportunity to accumulate capital over the long-term in an actively managed Fund whose investment strategy is expected to provide capital appreciation. This Fund, over the long-term, is expected to offer Participants higher inflation-adjusted returns, with increased potential for volatility in the short-term.

Objective

The objective is expected to be accomplished by investing in stocks of domestically traded companies with relatively high market capitalizations that are expected to experience price appreciation through improving valuations.

The Large Cap Value Equity Fund will attempt to meet the following Participant expectations:

- Growth in principal value with returns comparable to those achieved by an appropriate large cap value benchmark;
- Risk levels appropriate to the investment class and style of investment; and
- Liquidity in accordance with 401(k) Plan provisions.

Guidelines for Evaluation

These general operating guidelines have been adopted for the Large Cap Value Equity Fund

- Investment in a diversified equity-oriented portfolio.
- Equity-oriented portfolios shall mean portfolios containing primarily common stocks or stock equivalents (American Depositary Receipts (“ADRs”), issues convertible into common stock, etc.), but shall not exclude the use of fixed income securities and cash equivalents.
- The overall Fund structure should be consistent with the return and risk parameters as outlined in the Fund objective. The average market capitalization should be within the range of the largest 1,000 stocks in the U.S. Markets.

E. LARGE CAP GROWTH EQUITY FUND

Purpose

The primary purpose of the Large Cap Growth Equity Fund is to afford Participants the opportunity to accumulate capital over the long-term in an actively managed Fund whose investment strategy is expected to provide capital appreciation. This Fund, over the long-term, is expected to offer Participants higher inflation-adjusted returns, with increased potential for volatility in the short-term.

Objective

The objective is expected to be accomplished by investing in domestically traded companies with relatively high market capitalizations that are expected to experience price appreciation through earnings growth.

The Large Cap Growth Equity Fund will attempt to meet the following Participant expectations:

- Growth in principal value with returns comparable to those achieved by an appropriate large cap growth benchmark;
- Risk levels appropriate to the investment class and style of investment; and
- Liquidity in accordance with 401(k) Plan provisions.

Guidelines for Evaluation

These general operating guidelines have been adopted for the Large Cap Growth Equity Fund:

- Investment in a diversified equity-oriented portfolio.
- Equity-oriented portfolios shall mean portfolios containing primarily common stocks or stock equivalents (American Depositary Receipts (“ADRs”), issues convertible into common stock, etc.), but shall not exclude the use of fixed income securities and cash equivalents.
- The overall Fund structure should be consistent with the return and risk parameters as outlined in the Fund objective. The average market capitalization should be within the range of the largest 1,000 stocks in the U.S. markets.

F. SMALL & MID CAP EQUITY FUND

Purpose

The primary purpose of the Small & Mid Cap Equity Fund is to afford Participants the opportunity to accumulate capital over the long-term in an actively managed Fund whose investment strategy is expected to provide capital appreciation. This Fund, over the long-term, is expected to offer Participants higher inflation-adjusted returns, with increased potential for high levels of volatility in the short-term.

Objective

The objective is expected to be accomplished by investing primarily in domestically traded stocks comparable to those contained in the appropriate, widely recognized and reported index.

The Small & Mid Cap Equity Fund will attempt to meet the following Participant expectations:

- Growth in principal value with returns comparable to those achieved by an appropriate small- and mid-cap equity benchmark;
- Risk levels appropriate to the investment class and style of investment; and
- Liquidity in accordance with 401(k) Plan provisions.

Guidelines for Evaluation

These general operating guidelines have been adopted for the Small & Mid Cap Equity Fund:

- Investment in a diversified equity-oriented portfolio.
- Equity-oriented portfolios shall mean portfolios containing primarily common stocks or stock equivalents (American Depositary Receipts (“ADRs”), issues convertible into common stock, etc.), but shall not exclude the use of fixed income securities and cash equivalents.
- The overall portfolio structure should be consistent with the return and risk parameters as outlined in the Fund objective. The average market capitalization should be within the range of the lower 2,500 of the 3,000 largest capitalization stocks in the U.S. markets.

G. SMALL CAP VALUE EQUITY FUND

Purpose

The primary purpose of the Small Cap Value Equity Fund is to afford Participants the opportunity to accumulate capital over the long-term in an actively managed Fund whose investment strategy is expected to provide capital appreciation. This Fund, over the long-term, is expected to offer Participants higher inflation-adjusted returns, with increased potential for high levels of volatility in the short-term.

Objective

The objective is expected to be accomplished by investing in domestically traded companies with small- to mid-sized market capitalization that are expected to experience price appreciation through improving valuations.

The Small Cap Value Equity Fund will attempt to meet the following Participant expectations:

- Growth in principal value with returns comparable to those achieved by an appropriate mid- and small-cap value benchmark;
- Risk levels appropriate to the investment class and style of investment; and
- Liquidity in accordance with 401(k) Plan provisions.

Guidelines for Evaluation

These general operating guidelines have been adopted for the Small Cap Value Equity Fund:

- Investment in a diversified equity-oriented portfolio.
- Equity-oriented portfolios shall mean portfolios containing primarily common stocks or stock equivalents (American Depositary Receipts (“ADRs”), issues convertible into common stock, etc.), but shall not exclude the use of fixed income securities and cash equivalents.
- The overall portfolio structure should be consistent with the return and risk parameters as outlined in the Fund objective. The average market capitalization should be within the range of the lower 2,000 of the 3,000 largest capitalization stocks in the U.S. markets.

H. SMALL CAP GROWTH EQUITY FUND

Purpose

The primary purpose of the Small Cap Growth Equity Fund is to afford Participants the opportunity to accumulate capital over the long-term in an actively managed Fund whose investment strategy is expected to provide capital appreciation. This Fund, over the long-term, is expected to offer Participants higher inflation-adjusted returns, with increased potential for high levels of volatility in the short-term.

Objective for Evaluation

The objective is expected to be accomplished by investing in domestically traded companies with small- to mid-sized market capitalizations that are expected to experience price appreciation through improving earnings.

The Small Cap Growth Equity Fund will attempt to meet the following Participant expectations:

- Growth in principal value with returns comparable to those achieved by an appropriate mid- and small-cap growth benchmark;
- Risk levels appropriate to the investment class and style of investment; and
- Liquidity in accordance with 401(k) Plan provisions.

Guidelines

These general operating guidelines have been adopted for the Small Cap Growth Equity Fund:

- Investment in a diversified equity-oriented portfolio.
- Equity-oriented portfolios shall mean portfolios containing primarily common stocks or stock equivalents (American Depositary Receipts (“ADRs”), issues convertible into common stock, etc.), but shall not exclude the use of fixed income securities and cash equivalents.
- The overall portfolio structure should be consistent with the return and risk parameters as outlined in the Fund objective. The average market capitalization should be within the range of the lower 2,000 of the 3,000 largest capitalization stocks in the U.S. markets.

I. INTERNATIONAL EQUITY FUND

Purpose

The primary purpose of the International Equity Fund is to afford Participants the opportunity to accumulate capital over the long-term in a Fund whose investment strategy is expected to provide capital appreciation. This Fund, over the long-term, is expected to offer Participants higher inflation-adjusted returns, with increased potential for volatility in the short-term.

Objective

The objective is expected to be accomplished by investing in stocks comparable to those contained in the appropriate, widely recognized and reported index of international equity securities. Some other securities may be utilized in small amounts, for example, to facilitate cash flow management within the Fund.

The International Equity Fund will attempt to meet the following Participant expectations:

- Growth in principal value with returns comparable to those achieved by an appropriate international equity benchmark;
- Risk levels appropriate to the investment class and style of investment; and
- Liquidity in accordance with 401(k) Plan provisions.

Guidelines for Evaluation

These general operating guidelines have been adopted for the International Equity Fund:

- Investment in a diversified equity-oriented portfolio of stocks domiciled outside of the United States.
- Equity-oriented portfolios shall mean portfolios containing primarily common stocks or stock equivalents (American Depositary Receipts (“ADRs”), issues convertible into common stock, etc.), but shall not exclude the use of fixed income securities and cash equivalents.
- The overall portfolio structure should be consistent with the return and risk parameters as outlined in the Fund objective.

VIII. APPENDIX OF INDICES FOR STANDARDS OF MEASUREMENT AND DESIGNATION OF DEFAULT INVESTMENT
 KUB 401(k) PLAN – INVESTMENT POLICY – SUMMARY OF PERFORMANCE MEASURES – JULY 1, 2020

TARGET DATE TIER

Asset Class/Current Fund Name	Purpose	Investments	Measurement 1 – Fund's Return on a Rolling 3 Year basis: ¹	Measurement 2 – Fund's Return on a Rolling 5 Year basis: ²	Measurement 3 – Fund's Volatility on a Rolling 5 Year basis: ³
Target Date Funds/SSgA Target Retirement	Current Income & Capital Appreciation	Combined Equity, Fixed Income & Cash Equivalent	On quarterly and annual bases, Target Date Funds should equal or exceed target-year appropriate customized extended asset class indices developed and maintained by SSgA and monitored by Mercer Investment Consulting	On quarterly and annual bases, Target Date Funds should equal or exceed target-year appropriate customized extended asset class indices developed and maintained by SSgA and monitored by Mercer Investment Consulting	Should not exceed target-year appropriate customized extended asset class indices developed and maintained by SSgA and monitored by Mercer Investment Consulting 125%

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DESIGNATION OF DEFAULT INVESTMENT

The Target Date Funds are hereby designated as the default investment in those cases where a Participant does not otherwise effectively direct the investment of any 401(k) Plan Account balance. The particular Target Date Fund, from among those offered under the 401(k) Plan, that has a target date closest to any individual Participant's 65th birthday shall be treated as the default investment for that Participant.

¹ On rolling three-year periods, the performance of the Fund should exceed the performance of the stated index.

² On rolling five-year periods, the performance of the Fund should exceed the performance of the stated index.

³ On rolling five-year periods, the annualized standard deviation of the Fund's quarterly rate of return should not exceed that of the stated index times the stated percentage.

INDEX FUND TIER

Asset Class/Current Fund Name	Purpose	Investments	Measurement
Core Fixed Income Index Fund/Fidelity U.S. Bond Index Fund	Current Income & Capital Preservation	U.S. Govt. & Corp. Bonds Average A Grade	On quarterly and annual bases, Fund should closely track performance and volatility of Bloomberg Barclays U.S. Aggregate Bond Index
Large Cap Equity Index Fund/Fidelity 500 Index Fund	Capital Appreciation	S&P 500 Stocks	On quarterly and annual bases, Fund should closely track performance and volatility of S&P 500 Index
Small & Mid Cap Equity Index Fund/Fidelity Extended Market Index Fund	Capital Appreciation	Small to Mid Cap Equity	On quarterly and annual bases, Fund should closely track performance and volatility of Dow Jones US Completion TSM Index
International Equity Index Fund/Fidelity Total International Index Fund	Capital Appreciation	Non-US Equity	On quarterly and annual bases, Fund should closely track performance and volatility of MSCI ACWI Ex-US IMI Index

ACTIVE MANAGEMENT TIER

Asset Class/Current Fund Name	Purpose	Investments	Measurement 1 – Fund's Return on a Rolling 3 Year basis: ⁴	Measurement 2 – Fund's Return on a Rolling 5 Year basis: ⁵	Measurement 3 – Fund's Volatility on a Rolling 5 Year basis: ⁶
Stable Value Fund/Fidelity Managed Income Portfolio	Stable Investment	GICs & BICs	Citigroup T-Bill + 100 bps	Citigroup T-Bill + 100 bps	None
Core Fixed Income Fund/Prudential Core Plus Bond CIT	Current Income & Capital Preservation	U.S. Govt. & Corp. Bonds Average A Grade	Mercer MF US Fixed Combined	+Median	Barclays Capital Aggregate Bond Index
Balanced Fund/Dodge & Cox Balanced	Balance Current Income & Capital Appreciation	Blend of Equity, Fixed Income & Cash Equivalents	Mercer MF US Balanced	+Median	60% S&P 500 & 40% Barclays Capital Aggregate Index
Large Cap Value Equity Fund/T. Rowe Price Institutional Large Cap Value	Capital Appreciation	Large Cap – Appreciation by Improving Valuations	Mercer MF US Large Cap Value	+ Median	Russell 1000 Value Index

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⁴ On rolling three-year periods, the performance of the Fund should exceed the median of the stated universe (and in the case of the Stable Value Fund, by at least the amount stated).

⁵ On rolling five-year periods, the performance of the Fund should exceed the return of the stated index (and in the case of the Stable Value Fund, by at least the amount stated).

⁶ On rolling five-year periods, the annualized standard deviation of the Fund's quarterly rate of return should not exceed that of the stated index times the stated percentage.

Asset Class/Current Fund Name	Purpose	Investments	Measurement 1 – Fund's Return on a Rolling 3 Year basis: ⁷	Measurement 2 – Fund's Return on a Rolling 5 Year basis: ⁸	Measurement 3 – Fund's Volatility on a Rolling 5 Year basis: ⁹
Large Cap Growth Equity Fund/T. Rowe Price Institutional Large Cap Core Growth	Capital Appreciation	Large Cap – Appreciation by Earnings Growth	Mercer MF US Large Cap Growth + Median	Russell 1000 Growth Index	Russell 1000 Growth Index 125%
Small Cap Value Equity Fund/Victory Integrity Small-Cap Value	Capital Appreciation	Small to Mid Cap Equity – Improved Valuations	Mercer MF US Small Cap Value + Median	Russell 2000 Value Index	Russell 2000 Value Index 150%
Small Cap Growth Equity Fund/Voya Small-Cap Opportunities	Capital Appreciation	Small to Mid Cap Equity – Improved Earnings	Mercer MF US Small Cap Growth + Median	Russell 2000 Growth Index	Russell 2000 Growth Index 150%
International Equity Fund/Fidelity International Discovery	Capital Appreciation	Non-US Equity	Mercer MF International Equity + Median	MSCI EAFE Index	MSCI EAFE Index 125%

MF = Mutual Fund

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New asset classes, new standards of measurement, changes in benchmarks, and other similar substantive changes to this Appendix shall be reported to the Board's Audit and Finance Committee prior to adoption by the President and CEO.

All other changes, including a change in manager within an existing asset class with no change in standard of measurement and other similar changes, shall be updated in this Appendix by retirement system staff with notice to the Investment Committee upon adoption by the President and CEO.

⁷ On rolling three-year periods, the performance of the Fund should exceed the median of the stated universe (and in the case of the Stable Value Fund, by at least the amount stated).

⁸ On rolling five-year periods, the performance of the Fund should exceed the return of the stated index (and in the case of the Stable Value Fund, by at least the amount stated).

⁹ On rolling five-year periods, the annualized standard deviation of the Fund's quarterly rate of return should not exceed that of the stated index times the stated percentage.

RESOLUTION NO. 1419

A Resolution Adopting the Amended and Restated Investment Policy of the Knoxville Utilities Board Voluntary Employee Beneficiary Association Other Post Employment Benefit Trust

Whereas, the Knoxville Utilities Board of Commissioners ("Board") previously adopted Resolution No. 1168, as amended, establishing a Voluntary Employee Beneficiary Association Other Post Employment Benefit Trust ("OPEB Trust") for the purpose of pre-funding KUB's liability for other post-employment benefits, and an Investment Policy ("Policy") for the investment of assets of the OPEB Trust; and

Whereas, through Resolution No. 1168, as amended, the Board delegated certain responsibilities for the administration of the OPEB Trust and Policy to the OPEB Board; and

Whereas, the OPEB Board, upon the advisement of the OPEB Trust's Investment Advisor and Counsel, has recommended certain clarifying and conforming amendments to the Policy to the President and CEO; and

Whereas, the proposed amended and restated Policy has been presented to and reviewed by the Board's Audit and Finance Committee, which found the proposed amended and restated Policy to be appropriate and in the best interest of the OPEB Trust and recommended its adoption by the Board through its adoption of Resolution AF-81.

Whereas, the Policy may only be amended upon approval of the Board.

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

Section 1. The Investment Policy of the OPEB Trust, attached hereto and incorporated herein as Exhibit A to this Resolution, reflecting the aforementioned amendments, is hereby adopted in its entirety and as of and after the effective date of this Resolution shall be applicable in place of the existing Investment Policy of the OPEB Trust.

Section 2. That the revised Investment Policy for the KUB OPEB Trust shall become effective July 1, 2020.

Kathy Hamilton/s
Kathy Hamilton, Chair

Mark Walker/s
Mark Walker, Board Secretary

APPROVED ON 1st
& FINAL READING: 6-18-20
EFFECTIVE DATE: 6-18-20
MINUTE BOOK 42 PAGE 10223-10229

**KNOXVILLE UTILITIES BOARD (KUB)
OTHER POST EMPLOYMENT BENEFITS (OPEB)
TRUST INVESTMENT POLICY
July 1, 2020**

1. Policy

It is the policy of KUB to invest OPEB Trust funds for the exclusive benefit of Plan beneficiaries in a manner that will provide sufficient investment return to meet current and future OPEB benefit cash flow demands for retiree health benefits under the KUB Health Plan (Plan) while conforming to all State statutes governing the investment of such OPEB dedicated Trust funds.

2. Scope

This Policy covers all OPEB funds held in Trust and invested for the purpose of meeting the OPEB obligations under the Plan.

3. Prudence

Investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital, as well as the probable income to be derived.

The standard of prudence to be used by the OPEB Board shall be the "prudent person" standard and shall be applied in the context of managing an overall Portfolio.

4. Objectives

The primary objectives, in order of priority, shall be:

- Legality - conformance with federal, state and other legal requirements
- Liquidity - ability to meet OPEB obligations without forced sale of assets
- Safety - preservation of capital and protection of investment principal
- Yield - attainment of market rates of return

The Portfolio should be reviewed periodically as to its effectiveness in meeting KUB's needs for legality, safety, liquidity, rate of return, and its general performance.

5. Delegation of Authority

Management and administrative responsibility for the investment program and implementation of this Policy is delegated to the OPEB Board created by the OPEB Trust pursuant to KUB Board of Commissioners Resolution No. 1168.

The OPEB Board may contract with or employ technical and professional advice from one or more qualified firms or individuals as may be needed to provide investment advice or execution of this Policy provided such services are rendered to the Trust on a fixed fee and non-commissioned basis and do not involve any direct investment with or through the firm providing such financial advice.

The investment asset allocation is appended to this Policy. The OPEB Board shall recommend from time to time modifications to the investment asset allocation through KUB's President and CEO to the KUB Board of Commissioners for approval. The asset allocation in effect from time to time shall be appended to this Policy.

6. Ethics and Conflicts of Interest

The OPEB Board and employees involved in the investment process shall refrain from personal business activity that could conflict with the proper execution and management of the OPEB Trust, or that could impair their ability to make impartial decisions. Employees and the OPEB Board shall disclose any material interests in financial institutions with which they conduct business. They shall further disclose any personal financial/investment positions that could be related to the performance of the Portfolio. Employees and the OPEB Board shall refrain from undertaking personal investment transactions with the same individual with whom business is conducted on behalf of the Trust.

7. Authorized and Suitable Investments

Investments, including both actively and passively managed accounts, may be made in any type of security instrument allowed for in T.C.A. 8-50-1203, as amended. The following asset types are among those approved for investment (definitions included for less commonly known terms):

Fixed Income Investments

- Certificates of Deposit — Certificates of deposit and other evidence of deposit at financial institutions, bankers' acceptances, and commercial paper, rated in the highest tier (e.g., A-i, P-i, F-i, or D-i or higher) by a nationally recognized rating agency.
- Money Market Mutual Funds — Money market mutual funds regulated by the Securities and Exchange Commission and whose portfolios consist only of dollar denominated securities.
- Stable Value Funds — Stable value funds maintain the value of the principal and all accumulated interest regardless of interest rate moves because of the investments held by the fund. A stable value fund generally holds a mix of high-quality, intermediate-term bonds and guaranteed-interest contracts (GICs) from insurance companies.

Government Securities Investments

- U.S. Government Notes and Bonds - U.S. government obligations, U.S. government agency obligations, and U.S. government instrumentality obligations, which have a liquid market with a readily determinable market value.

Variable Investments

- Bond Funds - A mutual fund that invests in bonds, typically with the objective of providing stable income with minimal capital risk.
- Balanced Funds - A mutual fund that buys instruments of or a combination of common stock, preferred stock, bonds, and short-term bonds, to provide both income and capital appreciation while avoiding excessive risk.
- Domestic Equity Funds - A broad category of mutual funds that invest primarily in instruments of or shares of stock of U.S. companies.
- International Equity Funds - A broad category of mutual funds that invest primarily in instruments of or shares of stock of companies from outside the U.S.
- Equities - Shares of domestic or international stock to include common and preferred.

All investment and allocation decisions shall reflect the current and future projected cash flow needs of the Plan. The projected cash flow needs shall be determined in part from the data compiled for the OPEB actuarial valuation, conducted annually, and KUB's workforce analysis and retirement projections.

8. Diversification

The investments shall be diversified by:

- limiting investments to avoid over-concentration in securities from a specific issuer or business sector (excluding U. S. Treasury securities),
- limiting investment in securities that have higher credit risks,
- investing in securities with varying maturities, and
- continuously investing a portion of the Portfolio in readily available funds such as local government investment pools (LGIPs), money market funds or overnight repurchase agreements to ensure that appropriate liquidity is maintained in order to meet ongoing obligations.

9. Internal Control

The OPEB Board, the custodial trustee and each Investment Manager shall ensure that the assets of the Trust are protected from loss, theft or misuse through the implementation of appropriate internal controls.

The OPEB Board shall arrange for an annual independent review by an external auditor to assure compliance with policies and procedures. The internal controls shall address the following points:

- Control of collusion
- Separation of transaction authority from accounting and record-keeping
- Custodial safekeeping
- Avoidance of physical delivery securities
- Clear delegation of authority to subordinate staff members
- Written confirmation of transactions for investments and wire transfers
- Development of a wire transfer agreement with the lead bank and third-party custodian as evidenced by safekeeping receipts.

10. Performance Standards

This investment Portfolio will be managed in accordance with the parameters specified within this Policy. The Portfolio should obtain a comparable rate of return during a market/economic environment of stable interest rates. Portfolio performance should be compared to benchmarks with similar investment options as the Portfolio on a regular basis.

11. Reporting

The Investment Manager shall provide an investment report at least quarterly. The report should be provided to the OPEB Board quarterly and it should be available at any other time by request. The report shall be in a format suitable for review by the general public. An annual report shall be provided to the KUB Board of Commissioners.

12. Marking to Fair Value

A statement of the fair value of the portfolio shall be issued to the OPEB Board quarterly and reported to the KUB Board of Commissioners annually as part of the Retirement System annual report. Such statement shall be prepared consistent with the Government Finance Officer Association (GFOA) recommended practices. In defining fair value, consideration should be given to the GASB Statement 72 pronouncement.

13. Investment Policy Adoption

Following adoption of the Investment Policy by the KUB Board of Commissioners, the Policy shall be reviewed on an annual basis by the OPEB Board and any modifications made thereto must be approved by the KUB Board of Commissioners.

Addendum:
 OPEB Trust Investment Policy
 Asset Allocation
 Effective December 17, 2015

The target asset mix for the OPEB Trust Fund is as follows:

<u>Asset Class</u>	<u>Portion of OPEB Trust Fund</u>	<u>Tactical Ranges</u>
Domestic Equity		
Large Cap	30%	20%-40%
Small Cap	8%	0%-16%
International Equity		
Developed	16%	10%-30%
Emerging	8%	0%-16%
REITs	8%	0%-16%
Fixed Income	30%	10%-50%
Cash Equivalents	<u>0%</u>	0%-5%
Total Fund	100%	

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