

**Board Meeting Agenda
Thursday, June 16, 2016
Noon**

Call to Order

Roll Call

Approval of Minutes

Official Action

Resolution 1346 – A Resolution Adopting Investment Policies of the Knoxville Utilities Board’s Pension Plan and Asset Accumulation 401(k) Plan, Thereby Replacing the Existing Investment Policies of the Pension Plan and Asset Accumulation 401(k) Plan

Resolution 1347 – A Resolution Adopting Rules and Regulations for the Electric, Water and Wastewater Divisions of the Knoxville Utilities Board Providing for the Efficient Use, Operation, and Management of the Electric, Water and Wastewater Systems, Thereby Replacing the Existing Rules and Regulations of the Electric, Water and Wastewater Divisions

Resolution 1348 – Authorizing the Condemnation and the Taking of Electric Utility Easements as May Be Necessary in Support of KUB’s Strawberry Plains 69kV Transmission Line Project

President’s Report

Other Business

Public Comments

Adjournment



June 10, 2016

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

Commissioners:

As you know, KUB's Retirement System includes both a defined benefit Pension Plan, which is closed to new entrants, and defined contribution 401(k) Plan. Each plan has its own Board approved investment policy, which governs the investment activities of the plan.

The investment policies are intended to be dynamic in nature and are updated and revised as circumstances change. In accordance with Resolution 979, as amended, which established the KUB Retirement System, the investment policies may be revised only upon approval of the Board. Both investment policies were last revised in 2013.

The Retirement System Investment Committee, in consultation with the Retirement System's investment consultant, actuary, and benefits counsel, has recommended certain changes to the investment policies to the President and CEO. The proposed changes, which do not change benefits or increase the cost of the plans, reflect the recent transfer of the 401(k) match funds from the Pension Trust to the 401(k) Trust, and clarify investment options, objectives, and guidelines. Letters from the Retirement System investment consultant, actuary, and benefits counsel regarding the proposed changes are attached for your information.

Staff reviewed the proposed changes to the investment policies with the Board's Audit and Finance Committee at the Committee's meeting on March 23. The Committee adopted Resolution AF-63, which is enclosed for your information, recommending the Board adopt revised investment policies reflecting the proposed changes.

A summary of the proposed changes to each investment policy is also enclosed for your review.

Resolution 1346 has been prepared adopting revised investment policies for the Pension and 401(k) Plans. I recommend approval of Resolution 1346 on first and final reading.

Respectfully submitted,

Mintha Roach

Mintha E. Roach
President and CEO

Enclosures

Resolution 1346

Summary of Proposed Changes to Pension and 401(k) Investment Policies

The notable changes proposed for the Pension Investment Policy are as follows:

- Remove all references to the 401(k) match, to reflect the December 2015 CEO-approved transfer of the accumulated match account from the Pension Trust to the 401(k) Trust, to be administered thereafter as part of the 401(k) Plan.
- Clarify that Investment Managers may be managers of separate accounts or pooled investments such as commingled or mutual funds.
- Clarify that pooled investments are invested by their own investment policy, which is reviewed by the Investment Committee upon selection.
- Modify language to reflect that the Board has delegated responsibility to appoint a Trustee, Actuary, Investment Managers, Legal Counsel, and Investment Consultant to specified Committees.
- Add language that fund performance is evaluated net of fees and that fees are periodically evaluated with the assistance of the Plan Investment Consultant.
- Modify the responsibilities of the Plan Investment Consultant to include the provision of advice on asset allocation.
- Modify the types of securities in the Convertible Security holding to include preferred stock.
- Add language that the Convertible Security fund manager may maintain a rating system of its own for securities that are not rated.
- Remove the Investment Committee's responsibility to designate well-recognized and reputable securities rating agencies.
- Remove Securities Lending from investment guidelines, as this practice has been discontinued by the Fund.
- Modify the Standards of Measurement to remove the specific amount by which each benchmark should be exceeded.
- Modify the Standards of Measurement for annualized standard deviation to be 150% across all asset classes.
- Update the summary of performance measures, as set forth in the Appendix, to reflect current Investment Managers and benchmarks, and the changes to Standards of Measurement.

The notable changes proposed for the 401(k) Investment Policy are as follows:

- Modify language throughout to reflect the transfer of the 401(k) match from the Pension Trust to the 401(k) Trust.
- Add language to clarify that the Investment Policy must be recommended to the Board of Commissioners.
- Modify language to reflect that Board has delegated responsibility to appoint a Trustee, Actuary, Investment Managers, Legal Counsel, and Investment Consultant to the specified Committees.
- Remove Emerging Markets Equity fund from asset structure.
- Modify the Lifecycle Tier to reflect the passive, "through retirement" nature of the holding.
- Modify the Stable Value, Core Fixed Income, and International Equity fund purpose/objectives to more appropriately describe the current holdings.
- Add language to Core Fixed Income guidelines for evaluation to allow the use of other sectors to increase diversification and enhance returns opportunistically.
- Update the Summary of Performance Measures, as set forth in the Appendix, to reflect current Investment Managers and benchmarks.

RESOLUTION NO. AF-63

A Resolution Recommending the Knoxville Utilities Board of Commissioners (“Board”) Amend the Investment Policies (“Policies”) of the Knoxville Utilities Board Pension and 401(k) Plans (“Plans”)

Whereas, Board Resolution No. 979, as amended, delegated certain responsibilities for the administration of the Plans to the Retirement System Investment Committee, including the responsibility to recommend amendments to the Policies of the Plans to the President and CEO from time to time; and

Whereas, the Retirement System Investment Committee, upon the advisement of the Retirement System's Investment Consultant and Counsel, has recommended certain amendments to the Policies to the President and CEO; and

Whereas, the proposed amendments to the Policies have been presented to and reviewed by the Board's Audit and Finance Committee (“Committee”); and

Whereas, the Committee finds the proposed amendments to the Policies to be appropriate and in the best interest of KUB and participants in the Plans; and

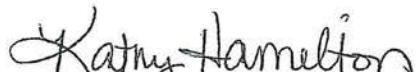
Whereas, the Policies may only be amended upon approval of the Board; and

Whereas, the Committee recommends the Board adopt the proposed amendments to the Policies.

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

Section 1. The Committee recommends the Board adopt amended Policies, as set forth in Exhibit 1 and Exhibit 2 to this Resolution, reflecting the proposed changes presented to the Committee.

Section 2. Be It Further Resolved that this Resolution shall take effect in accordance with its terms from and after its passage.



Kathy Hamilton, Committee Chair

Approved on 1st

& Final Reading:

3/23/16

Effective Date:

3/23/16

Via Electronic Mail

February 19, 2016

Mr. Mark Walker
Chief Financial Officer
Knoxville Utilities Board
445 Gay Street
Knoxville, Tennessee 37902

Re: Asset Accumulation 401(k) Plan Actuarial Evaluation of Investment Policy

Dear Mark:

You have requested an estimate of the actuarial impact of the proposed Investment Policy for the Knoxville Utilities Board (“KUB”) Asset Accumulation 401(k) Plan.

Summary of Amendments

It is our understanding that this proposed policy clarifies language and formatting issues but does not change the plan.

Actuarial Impact

It is our opinion that this updated policy will have no actuarial impact on the Asset Accumulation 401(k) Plan.

This analysis was determined based on current provisions of the Knoxville Utilities Board Asset Accumulation 401(k) Plan.

Certification

I hereby certify that, to the best of my knowledge, this letter and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as a credentialed actuary, I meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this letter. This letter does not address any contractual or legal issues. I am not an attorney and our firm does not provide any legal services or advice.

Cheiron's letter was prepared exclusively for Knoxville Utilities Board for a specific and limited purpose. This letter is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

Mr. Mark Walker
February 19, 2016
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I am available to answer any questions on the material in this letter or to provide explanations or further details as appropriate. Please let me know if you have any questions or need any further information. I can be reached at (703) 893-1456 extension 1030 or via electronic mail at smcelhaney@cheiron.us.

Sincerely,
Cheiron


Stephen T. McElhaney, FCA, FSA
Principal Consulting Actuary

Via Electronic Mail

February 19, 2016

Mr. Mark Walker
Chief Financial Officer
Knoxville Utilities Board
445 Gay Street
Knoxville, Tennessee 37902

Re: Pension Plan Actuarial Evaluation of Investment Policy

Dear Mark:

You have requested an estimate of the actuarial impact of the proposed Investment Policy for the Knoxville Utilities Board (“KUB”) Pension Plan.

Summary of Amendments

It is our understanding that this proposed policy is an update from the current policy but does not actually change the invested asset mix at this point.

Actuarial Impact

It is our opinion that this updated policy will have no actuarial impact on the Pension Plan.

This analysis was determined based on current provisions of the Knoxville Utilities Board Pension Plan.

Data, Methods and Assumptions

In performing this analysis we referred to the data, actuarial methods and assumptions as were used in the actuarial valuation of the Plan as of January 1, 2015. In preparing our letter, we relied without audit on information (some oral and some written) supplied by KUB. This information includes, but is not limited to plan provisions, membership data and financial information.

The actuarial assumptions have been selected to reflect the likely future experience of the Plan. The results of this letter are dependent upon future experience conforming to these assumptions. To the extent that future experience deviates from the actuarial assumptions, the true cost of the proposed legislation could vary from our results.

Mr. Mark Walker
February 19, 2016
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Certification

I hereby certify that, to the best of my knowledge, this letter and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as a credentialed actuary, I meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this letter. This letter does not address any contractual or legal issues. I am not an attorney and our firm does not provide any legal services or advice.

Cheiron's letter was prepared exclusively for Knoxville Utilities Board for a specific and limited purpose. This letter is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

I am available to answer any questions on the material in this letter or to provide explanations or further details as appropriate. Please let me know if you have any questions or need any further information. I can be reached at (703) 893-1456 extension 1030 or via electronic mail at smcelhaney@cheiron.us.

Sincerely,
Cheiron


Stephen T. McElhaney, FCA, FSA
Principal Consulting Actuary



February 22, 2016

Mintha Roach
President & CEO
Knoxville Utilities Board
445 Gay Street
Knoxville, TN 37902

Re: KUB Pension and 401(k) Plan Investment Policies

Dear Mintha:

As requested, we drafted the revised Investment Policies for the KUB Pension and 401(k) Plans, effective July 1, 2016, with input from KUB staff and KUB's Investment Consultant, Mercer Investment Consulting, Inc.

In our opinion, the proposed Investment Policies are in legally satisfactory form and have been reviewed formally and recommended by the Retirement System Investment Committee. When duly adopted by the KUB Board of Commissioners, it is our opinion that the Investment Policies will comply with Federal and State law and will not adversely affect the tax qualified status of the Plans.

If there are questions, please let me know.

Sincerely,

A handwritten signature in blue ink that reads "William E. Mason".

William E. Mason
For the Firm

cc: Amanda Branch

Memo

To: Chris Hood, Chair, Retirement System Investment Committee
Date: February 22, 2016
From: David Axelson
Subject: Investment Committee Recommendations – Investment Policy Statement
Copy: Amanda Branch, William E. Mason, Esq.

Dear Chris,

Mercer concurs with the Investment Committee's recommendation to update the Investment Policy Statement for the KUB Pension Plan and 401(k) Plan as of February 11, 2016.

Please feel free to contact me if you have any questions or comments.

Sincerely,



David Axelson
Investment Consultant

RESOLUTION NO. 1346

A Resolution Adopting Investment Policies of the Knoxville Utilities Board's Pension Plan and Asset Accumulation 401(k) Plan, Thereby Replacing the Existing Investment Policies of the Pension Plan and Asset Accumulation 401(k) Plan

Whereas, the Knoxville Utilities Board of Commissioners (the "Board") previously adopted Resolution 979, as amended, establishing the KUB Retirement System, which includes a Pension Plan and an Asset Accumulation 401(k) Plan; and

Whereas, the Pension Plan and the Asset Accumulation 401(k) Plan each have an investment policy, approved by the Board, which governs the investment activities of each plan's assets; and

Whereas, these investment policies are intended to be dynamic in nature and updated and revised as circumstances change; and

Whereas, through Resolution No. 979, as amended, the Board delegated certain responsibilities for the administration of the investment policies to the KUB Retirement System Investment Committee; and

Whereas, the KUB Retirement System Investment Committee, upon the advisement of the KUB Retirement System's Investment Advisor and Counsel, has recommended certain changes to the respective investment policies to the President and CEO; and

Whereas, KUB's Retirement System Actuary and Counsel have each reviewed the revised investment policies and determined the proposed changes to the investment policies will not have any impact on the respective Plan's costs or liabilities; and

Whereas, the proposed changes to the investment policies have been presented to and reviewed by the Board's Audit and Finance Committee ("Committee"); and

Whereas, the Committee finds the proposed changes to the investment policies to be appropriate and in the best interest of KUB and the Pension Plan and Asset Accumulation 401(k) Plan; and

Whereas, the adoption of revised investment policies by the Board reflecting the proposed changes has been recommended by the Committee through its adoption of Resolution AF-63; and

Whereas, the investment policies may only be revised upon approval of the Board.

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

Section 1. That the KUB Board hereby adopts the KUB Pension Plan Investment Policy, attached hereto as Exhibit A, which shall replace and supersede any investment policy previously adopted by the Board for the KUB Pension Plan.

Section 2. That the KUB Board hereby adopts the KUB Asset Accumulation 401(k) Plan Investment Policy, attached hereto as Exhibit B, which shall replace and supersede any investment policy previously adopted by the Board for the Asset Accumulation 401(k) Plan.

Section 3. That the revised investment policies for the KUB Pension Plan and Asset Accumulation 401(k) Plan shall become effective July 1, 2016.

Nikitia Thompson, Chair

Mark Walker, Board Secretary

APPROVED ON 1st
& FINAL READING: _____
EFFECTIVE DATE: _____
MINUTE BOOK 36 PAGE _____

KNOXVILLE UTILITIES BOARD

PENSION PLAN

STATEMENT OF INVESTMENT POLICY

JULY 1, 2016

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I. INTRODUCTION

The Knoxville Utilities Board (“KUB”) Retirement System (“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”).

Funding for the Pension Plan is primarily the responsibility of KUB, although a small number of Participants in a prior closed plan make employee contributions.

KUB is responsible for investment of Pension Plan Trust assets and this Statement of Investment Policy (“Policy”) sets out its goals and objectives in that regard.

Depending on the circumstances, the Pension Plan Trust fund (“Fund”) employs various forms of investment managers, including managers of separate accounts (“Separate Account Investment Managers”), managers of commingled or collective accounts or trusts, and mutual funds to manage designated portfolios consisting of investments in particular asset classes. As used in this Policy, "Investment Manager" is intended to refer to all such managers unless otherwise specified.

II. PURPOSE

The purpose of this Policy is to define the investment objectives, guidelines and performance standards for the assets of the Fund. The objectives are formulated in response to the following:

- The anticipated financial needs of KUB;
- Consideration of risk tolerance; and
- The need to document and communicate objectives, guidelines and standards to the Investment Managers.

This Policy represents the formal document for the investment of the Fund's assets and is to be communicated to the Separate Account Investment Managers for their use in developing an appropriate investment program and to the Trustee for its use in exercising its fiduciary responsibility. This Policy is also used as the basis for measurement and evaluation of investment performance of Investment Managers by the Investment Committee of the Retirement System ("Investment Committee") and its Investment Consultant.

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, 2016, on the approval of the KUB Board of Commissioners ("Board") based on the Investment Committee's recommendation, with the advice of the Investment Committee's Investment Consultant, Mercer Investment Consulting, LLC.

III. RESPONSIBILITIES

KUB is responsible for assuring that the investment program for the Fund 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 Pension Plan Document and Pension Plan Trust Agreement.

- Recommend to the President & CEO, for recommendation to the Board, a Policy for the Pension Plan, including investment policies, objectives, and benchmarks for the overall Fund and for each investment portfolio, and amendments to such Investment Policies from time to time;
- Implement procedures for the investment, management, supervision and control of the Fund;
- Recommend to KUB's President & CEO appointment and removal of Trustees and Investment Managers;
- Communicate the Policy to Separate Account Investment Managers;
- Monitor and evaluate investment performance. It is understood that the Investment Managers 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 Pension Plan's long-term objectives;
- Recommend modification of the investment types as appropriate; and
- Recommend to the President & CEO the replacement of Investment Managers, if, at the discretion of the Investment Committee based on the advice of the Investment Consultant, the Investment Managers fail to meet performance expectations set forth in this Policy over the long-term.

The Investment Committee shall meet several times a year to review the performance of the Investment Managers and hear from its Investment Consultant and any Investment Managers invited to appear. Any changes in the 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 & CEO for presentation to the Board. Changes are effective upon approval by the Board.

The Policy is communicated to Separate Account Investment Managers in writing, and each such Separate Account Investment Manager is required to sign the statement at the end of this Policy confirming acceptance by the Separate Account Investment Manager.

To the extent a portion of the Fund is invested in a mutual fund or other commingled vehicle, such mutual fund or commingled vehicle shall be evaluated based on this Policy, although KUB recognizes that fund or vehicle is actually invested exclusively pursuant to its own investment policy and guidelines, which are reviewed by the Investment Committee upon selection.

This Policy, as recommended by the Investment Committee and approved by the Board on the recommendation of the President & CEO, establishes Standards of Measurement for each investment category within the Pension Plan. The particular benchmarks used in the Standards of Measurement are designated in the Appendix to this Policy. The Board has delegated to the President & CEO responsibility and authority to amend the Appendix of Indices or Standards of Measurement 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 & CEO is required to report to the Audit & Finance Committee of the Board prior to adopting changes in such Appendix or benchmarks for Standards of Measurement. The President & 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 & CEO to appoint a Trustee and Investment Managers; 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 Trustee is delegated the following responsibilities:
 - Except to the extent delegated to the Investment Managers, 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;

- Receive instructions from Investment Managers to purchase and sell various securities and ensure that transactions are settled according to established settlement procedures;
- Provide monthly transaction accounting on security holdings with reports provided to the Retirement System in a timely manner;
- To the extent requested by the Retirement System, disburse Pension Plan benefits and Retirement System expense payments and process annual tax reporting to the Internal Revenue Service, vendors, and Participants in a timely manner; and
- Provide oversight responsibility relating to the security and safekeeping of Pension Plan Trust assets normally expected of a Trustee acting in this capacity.
- **Investment Managers** – The designated Investment Managers are charged with the following responsibilities:
 - Adhere to the Investment Guidelines contained in this Policy or the investment policy for the mutual fund or commingled vehicle;
 - Exercise complete investment discretion within the boundaries of the restrictions outlined in this Policy or the investment policy for the mutual fund or commingled vehicle;
 - Strictly comply with all of the provisions of applicable law as they pertain to the Investment Manager's dealings, functions and responsibilities as fiduciaries;
 - Diversify the portfolio so as to minimize the risk of large losses unless, under the circumstances, it is clearly prudent to not so diversify;
 - 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;
 - As to Separate Account Investment Managers, acknowledge in writing the recognition and acceptance of full responsibility as a fiduciary under applicable federal and state legislation, and the Investment Manager's intention to comply with this Policy as it currently exists or as it is modified in the future.

- **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 Investment Managers 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 alternate asset strategies, asset allocation or asset classes;
 - Changes in overall investment policy;
 - Changes in designated Investment Managers;
 - Assist the Retirement System in monitoring, screening and selecting Investment Managers, 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:
 - Prepare, on a frequency determined by the Retirement System, a comprehensive valuation of the Pension Plan’s funded status and required contribution levels, and attest to the appropriateness of the Pension Plan’s assumptions and funding policy; and
 - Conduct special experience and actuarial studies as required by the Retirement System.

IV. INVESTMENT OBJECTIVE

The investment objective of the Fund is to ensure, over the remaining life of the Fund for this closed Pension Plan, an adequate level of assets to fund the benefits for Participants at the time they are payable. In meeting this objective, the Retirement System seeks to achieve an investment return consistent with a prudent level of risk.

The Fund's goal will be to provide an annualized rate of return that is consistent with the Pension Plan's actuarial rate of return assumptions as those assumptions may be adjusted from time to time for this closed Pension Plan. The Investment Committee shall periodically review current expected annual returns for the various asset classes and the Fund as a whole to determine, in consultation with the Actuary and Investment Consultant, whether overall return expectations are consistent with KUB risk and return targets and the actuarial long-term rate of return assumption for the Pension Plan, and whether the investment objectives continue to be appropriate for the Pension Plan. The asset classes utilized and their respective weights are determined with careful consideration of the Fund's assets and liabilities. Periodic asset liability studies may be performed by the Investment Consultant, Actuary or any other qualified party and the results of such studies may be used to determine the asset classes included within the Fund and their respective weights contained herein. The current target asset structure is set out in Section V below.

Fund and portfolio performance is measured net of investment fees. As part of its performance evaluation, the Investment Committee reviews, with the assistance of the Investment Consultant, the absolute fees charged by Investment Managers as well as the relative fees of comparable managers and for the Fund as a whole.

V. ASSET STRUCTURE

The asset structure should reflect a proper balance of the Fund's needs for liquidity, growth of assets and KUB's risk tolerance, while taking account of the Pension Plan's long, but limited life.

The target asset mix is as follows:

<u>Asset Class</u>	Target Allocation	Tactical Ranges
Domestic Equity		
Large Cap	24.0%	20% - 50%
Mid Cap	8.0%	0% - 15%
Small Cap	8.0%	0% - 15%
Convertible Securities	7.5%	0% - 10%
Non-US Equity ¹	15.0%	0% - 20%
Real Estate Equity	7.5%	0% - 10%
Fixed Income		
Aggregate Bonds	10.0%	5% - 25%
Long-term Bonds	20.0%	10% - 25%
Cash Equivalents	<u>0.0%</u>	0% - 5%
Total Fund	100.0%	

The strategic allocation is intended to provide reasonable assurance that the Fund's investment objective can be achieved based on historic relationships of asset class performance, using active and passive portfolio management. The Fund may include a benefit funding account to provide for monthly benefit and expense obligations. Liquidity is required from Separate Account Investment Managers only to meet defined payout needs, unless the Investment Managers are otherwise advised by the Retirement System.

The Investment Committee is charged with the responsibility of monitoring the overall allocation within the parameters described above.

It is understood that the target allocations are targets and that deviations may occur from time to time as a result of market impact or from short-term timing decisions implemented by either the Retirement System or, with prior approval, by the Investment Managers. The Investment Committee, with the advice of its Investment Consultant, shall be responsible for identifying deviations from the Policy and determining and implementing appropriate corrections when necessary. Any permanent changes to this

¹ Non-US Equity Investment Managers each have allowable tactical ranges for which they may invest a certain percentage in emerging markets. Their investments in emerging markets are purely opportunistic and therefore not included in the Total Fund's target asset allocation.

Policy, with the exception of the Appendix of Indices, must be recommended by the Investment Committee to KUB's President & CEO and approved by the Board.

Should a Separate Account Investment Manager deem an asset structure outside the tactical range to be appropriate, the Investment Manager may deviate from this Policy only with the written approval of the Investment Committee.

This Policy recognizes that KUB may decide to provide certain benefits (e.g., retirement annuities, death benefits or disability benefits) through insurance policies, annuity contracts, or similar financial arrangements owned by the Pension Plan or by KUB.

Passive Investment Portfolios

The Investment Committee is also authorized from time-to-time as it determines appropriate to direct the investment of portions of the Fund in passively-managed portfolios within the asset classes specifically allowed by this Policy. In that event, appropriate Standards of Measurement for any such passively-managed funds shall be recommended by the Investment Committee to the President & CEO for addition to the Standards of Measurement Appendix, pursuant to the procedures described in Section III above, including reporting to the Audit & Finance Committee of the Board.

VI. INVESTMENT GUIDELINES

DOMESTIC LARGE CAP EQUITY HOLDINGS

<u>Types of Securities</u>	This is a passive large capitalization equity strategy, which is designed to include domestic equity securities to closely track the returns and volatility of a core U.S. large cap index.
<u>Diversification</u>	The exposure to the securities of any one issuer should approximate the benchmark weight of the security. The account should be diversified by sector; however, the sector allocations should approximate the benchmark index. All issues must be denominated in U.S. Dollars.
<u>Quality</u>	The quality of securities is expected to be similar to the securities contained within the domestic large cap equity index for which the strategy is attempting to closely track. As an exception to that quality standard, the Investment Manager may hold a small amount of cash or cash equivalent instruments with maturities of less than one year and carrying a credit rating of at least A1/P1 or equivalent by a designated rating agency.
<u>Exclusions</u>	Without the expressed written consent of the Investment Committee, commodities and leveraged investments, including the following, are prohibited: naked call options; puts, straddles; margin buying, short selling

DOMESTIC MID CAP EQUITY HOLDINGS

Types of Securities

Domestic mid cap equity securities shall mean common and preferred stocks of domestic corporations and American Depository Receipts (ADRs). Such securities will be similar, but not limited to those found within a core mid cap domestic equity index.

Diversification

The securities of any one issuer are limited to 5% at cost and 8% at market of each equity portfolio. Broad industry diversification is desirable.

Quality

Only equity securities that are broadly classified as institutional quality issues are eligible for inclusion in the portfolio. The universe of stocks for selection should reflect the capitalization and style profile of the Investment Manager's benchmark.

Exclusions

Without the expressed written consent of the Investment Committee, commodities and leveraged investments, including the following, are prohibited:

naked call options;
puts, straddles;
margin buying, short selling

DOMESTIC SMALL CAP EQUITY HOLDINGS

Types of Securities

Domestic small cap equity securities shall mean common and preferred stocks of domestic corporations and American Depository Receipts (ADRs). Such securities will be similar, but not limited to those found within a core small cap domestic equity index.

Diversification

The securities of any one issuer are limited to 5% at cost and 8% at market of each equity portfolio. Broad industry diversification is desirable.

Quality

Only equity securities that are broadly classified as institutional quality issues are eligible for inclusion in the portfolio. The universe of stocks for selection should reflect the capitalization and style profile of the Investment Manager's benchmark.

Exclusions

Without the expressed written consent of the Investment Committee, commodities and leveraged investments, including the following, are prohibited:

naked call options;
puts, straddles;
margin buying, short selling

INTERNATIONAL EQUITY HOLDINGS

Types of Securities

International equity securities shall mean a broad range of international equity securities similar to those contained in a core all-cap non-US equity index. Investment in emerging markets is permissible, but should be limited to no more than 35% of each non-US equity Investment Manager's portfolio.

Diversification

The securities of any one issuer are limited to 5% at cost and 8% at market of each equity portfolio. Both broad industry and country diversification are desirable.

Quality

Only equity securities that are broadly classified as institutional quality issues are eligible for inclusion in the portfolio. The universe of stocks for selection should reflect the capitalization and style profile of the Investment Manager's benchmark.

Exclusions

Without the expressed written consent of the Investment Committee, commodities and leveraged investments, including the following, are prohibited:

naked call options;
puts, straddles;
margin buying, short selling

CONVERTIBLE SECURITY HOLDINGS

Types of Securities

Convertible securities shall mean: debt instruments convertible into common and preferred stocks; and preferred stocks. Such securities will be similar, but not limited to those found within a core convertible security index.

Diversification

The securities of any one issuer are limited to 5% at cost and 8% at market of each equity portfolio. Broad industry diversification is desirable.

Quality

Only convertible securities that are broadly classified as institutional quality issues are eligible for inclusion in the portfolio. Due to the nature of this asset class, a certain portion of this portfolio is invested in below investment grade issues. Therefore, no more than 50% of the portfolio should be invested in securities rated below investment grade by a designated rating agency; for securities that are not rated, the Investment Manager shall maintain a rating system consistently applied to provide equivalent quality controls.

Exclusions

Without the expressed written consent of the Investment Committee, commodities and leveraged investments, including the following, are prohibited:

naked call options;
puts, straddles;
margin buying, short selling

REAL ESTATE EQUITY

Types of Securities

This is a passive REIT equity strategy, which is designed to include REIT securities to closely track the returns and volatility of a designated Real Estate Investment Trust (REIT) index. Such securities will be similar, but not limited to those found within a core REIT index. Both domestic and global REIT markets may be covered by the core REIT index.

Diversification

The exposure to the securities of any one issuer should approximate the benchmark weight of the security. The account should be diversified by sector; however, the sector allocations should approximate the benchmark index.

Quality

The quality of securities is expected to be similar to the securities contained within the designated REIT index for which the strategy is attempting to closely track. As an exception to that quality standard, the Investment Manager may hold a small amount of cash or cash equivalent instruments with maturities of less than one year and carrying a credit rating of at least A1/P1 or equivalent by a designated rating agency.

Exclusions

Without the expressed written consent of the Investment Committee, commodities and leveraged investments, including the following, are prohibited:

naked call options;
puts, straddles;
margin buying, short selling

FIXED INCOME HOLDINGS

Types of Securities

Debt instruments of any entity denominated in U.S. dollars, and not otherwise prohibited, including U.S. dollar denominated sovereign and supranational bonds (Yankee bonds). Treasury Inflation Protection Securities (TIPS) may also be held as a portion of the bond allocation.

Diversification

The securities of any one issuer, with the exception of the U.S. Government and its agencies, are limited to 10% at cost and 15% at market of each fixed income portfolio.

Quality

The portfolio should be, on average, comprised of high-quality issues. Securities should have a quality rating of investment grade by two or more designated rating agencies or, in the purchase of private placements not subject to such ratings, a rating by a qualified banking institution on an equal basis with a designated rating agency's investment grade ratings or higher. Securities downgraded below investment grade by at least one rating agency should be liquidated by the Investment Manager within a reasonable amount of time, with notice to the Investment Committee through the Investment Consultant.

Other

While there are no maturity limits placed on the portfolio, it is expected that the duration of the fixed income portfolio will be maintained within +/- 10% of the duration of the target index.

Exclusions

Without the express written consent of the Investment Committee, commodities and leveraged investments, including the following, are prohibited:

margin buying, short selling;
options

CASH EQUIVALENTS

<u>Types of Securities</u>	Debt securities of any U.S. entity not otherwise prohibited, with maturities of not more than 13 months, through a short-term investment fund.
<u>Diversification</u>	No more than 10% of the cash portfolio shall be invested in Certificates of Deposit or Banker's Acceptances issued by any single bank. No more than 35% of the cash portfolio shall be invested in commercial paper, with no more than 5% of the portfolio invested with any single issuer of commercial paper.
<u>Quality</u>	Only cash equivalents with the following minimum quality ratings from designated rating agencies are eligible for inclusion in the portfolio: Commercial Paper: A1/P1 or equivalent Certificates of Deposit and Banker's Acceptances: AA- to Aa3. Repurchase Agreements: U.S. Government or agency secured.
<u>Pooled or Commingled Funds</u>	The Investment Managers are encouraged to use commingled investment vehicles when it is advantageous to do so. It shall be the responsibility of the Trustee to make available for use by the Investment Managers pooled or commingled funds, which comply with these guidelines. With the exception of direct obligations of the U.S. Government or its agencies, no individual security position in any commingled fund shall constitute greater than 5% of the commingled fund's assets.

VII. STANDARDS OF MEASUREMENT

Standards used to measure investment performance will be set forth in context with the established objectives. Each standard shall apply independently to the portfolio of each Investment Manager and, except in the case of passive management, is expected to be achieved net of investment management fees and expenses.

PASSIVE MANAGER STANDARDS

Measurement #1

On quarterly and annual bases, the index fund should closely track performance and volatility of the designated index.

DOMESTIC MID AND SMALL CAP EQUITY MANAGER STANDARDS

Measurement #1

Over rolling three-year periods, the performance of the mid and small cap equity portfolios should exceed the median of a universe of comparable equity funds.

Measurement #2

Over rolling five-year periods, the annualized performance of the mid and small cap equity portfolios, net of fees, should exceed the return of the appropriate benchmark.

Measurement #3

Over rolling five-year periods, the annualized standard deviation of the mid and small cap equity portfolios' quarterly rate of return shall be no greater than 150% of the appropriate index.

INTERNATIONAL EQUITY MANAGER STANDARDS

Measurement #1

Over rolling three-year periods, the performance of the international equity portfolios should exceed the median of a universe of comparable international equity funds.

Measurement #2

Over rolling five-year periods, the annualized performance of the international equity portfolios, net of fees, should exceed the return of the appropriate benchmark.

Measurement #3

Over rolling five-year periods, the annualized standard deviation of the international equity portfolios' quarterly rate of return shall be no greater than 150% of the appropriate index.

FIXED INCOME MANAGER STANDARDS

Measurement #1

Over rolling three-year periods, the performance of the fixed-income portfolios should exceed the median of the universe of comparable fixed income funds.

Measurement #2

Over rolling five-year periods, the annualized performance of the fixed income portfolios, net of fees, should exceed the return of the appropriate benchmark.

Measurement #3

Over rolling five-year periods, the annualized standard deviation of the fixed income portfolios' quarterly rate of return shall be no greater than 150% of the appropriate index.

CONVERTIBLE SECURITIES MANAGER STANDARDS

Measurement #1

Over rolling three-year periods, the performance of the convertible security portfolio should exceed the median of a universe of comparable convertible security funds.

Measurement #2

Over rolling five-year periods, the annualized performance of the convertible security portfolio, net of fees, should exceed the return of the appropriate benchmark.

Measurement #3

Over rolling five-year periods, the annualized standard deviation of the convertible security portfolio's quarterly rate of return shall be no greater than 150% of the appropriate index.

VIII. INVESTMENT ADMINISTRATION

Documentation

The Separate Account Investment Managers are required to submit a written statement to the Investment Committee describing their proposed investment strategy and tactics for achieving the investment goals and objectives of this Policy. They should also submit suggested revisions to this Policy whenever their strategy or tactics change significantly as a result of changing market conditions or other factors.

Detailed financial statements are to be supplied monthly by the Investment Managers.

Annual Review Meeting

Each Investment Manager will be expected to meet at least annually with the staff and Investment Consultant and/or members of the Investment Committee. The agenda for these meetings shall include, but not be limited to:

1. A presentation of investment results in light of the objectives of this Policy.
2. A discussion of investment strategies currently being executed by the Investment Manager.
3. Communication of material changes in the policy, objectives, staffing or business condition of the Investment Manager.

Acceptance Agreement

The undersigned Separate Account Investment Manager hereby acknowledges its appointment as a named fiduciary in accordance with the Advisory Agreement between the Investment Manager and KUB and agrees that this Statement of Investment Policy (revised effective July 1, 2016) shall be incorporated as a part of the Investment Manager's Advisory Agreement with KUB and shall be substituted for any previous Statement of Investment Policy agreed to by KUB and the Investment Manager.

If at any time the Investment Manager believes that the objectives and guidelines contained in this Statement of Investment Policy cannot be met or performed in strict compliance with the Statement, the Investment Manager agrees to promptly notify the Chair of the Investment Committee in writing. In consideration of the Investment Manager's initial engagement by KUB and the Investment Manager's ongoing relationship as an Investment Manager for KUB Retirement System, the Investment Manager hereby acknowledges a complete understanding of these objectives and guidelines and agrees to abide by each of said requirements during the course of the Investment Manager's engagement.

SEPARATE ACCOUNT INVESTMENT MANAGER:

Dated: _____

Name _____

By: _____
Its: _____

IX. APPENDIX OF INDICES FOR STANDARDS OF MEASUREMENT – JULY 1, 2016
KUB PENSION PLAN – INVESTMENT POLICY – SUMMARY OF PERFORMANCE MEASURES

Portfolio Name / Current Investment Manager	Purpose	Investments	Measurement 1 – Rolling Return		Measurement 2 – Rolling Return		Measurement 3 - Volatility							
Fixed Income			Rolling 3 Year ¹	+ Median	Rolling 5 Year ²	> index	Rolling 5 Year ³	150%						
Agincourt	Current income	US government & corporate bonds, mortgages	Mercer US Fixed Core Manager Universe		Barclays Capital Aggregate Index		Barclays Capital Aggregate Index							
Schroder	Current income & capital appreciation	Long term government & corporate bonds	Mercer US Fixed Long Duration Manager Universe		Barclays Capital Long Government Credit Index		Barclays Capital Long Government Credit Index							
Convertibles			Rolling 3 Year	+ Median	Rolling 5 Year	> index	Rolling 5 Year	150%						
Shenkman	Current income & capital appreciation	Convertible corporate securities	Mercer US Convertible Manager Universe		BAML All US Convertible Ex Mandatory Index (V0A0)		BAML All US Convertible Ex Mandatory Index (V0A0)							
Large Cap Equity														
Russell 1000 Index	On quarterly and annual bases, index should closely track performance and volatility of designated index													
Mid and Small Cap Equity			Rolling 3 Year	+ Median	Rolling 5 Year	> index	Rolling 5 Year	150%						
Wellington Management	Capital Appreciation	Mid Cap stocks	Mercer US Mid Cap Core Equity Universe		S&P 400 Mid Cap Index		S&P 400 Mid Cap Index							
Jennison Associates	Capital Appreciation	Small Cap stocks	Mercer US Small Cap Core Equity Universe		Russell 2000 Index		Russell 2000 Index							
Real Estate														

¹ On rolling three-year periods, the performance of the portfolio should exceed the median of the stated universe.

² On rolling five-year periods, the annualized performance of the portfolio, net of fees, should exceed the return of the stated index.

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

Portfolio Name / Current Investment Manager	Purpose	Investments	Measurement 1 – Rolling Return		Measurement 2 – Rolling Return		Measurement 3 - Volatility	
REIT Index	On quarterly and annual bases, index should closely track performance and volatility of designated index							
International Equities			Rolling 3 Year	+ Median	Rolling 5 Year	> index	Rolling 5 Year	150%
MFS	Capital Appreciation	Non - US developed stocks	Mercer World ex US/EAFE Equity Universe		MSCI EAFE Value Index		MSCI EAFE Value Index	
Artisan	Capital Appreciation	Non - US developed stocks	Mercer World ex US/EAFE Equity Universe		MSCI EAFE Growth Index		MSCI EAFE Growth Index	

KNOXVILLE UTILITIES BOARD

**ASSET ACCUMULATION
401(k) PLAN**

STATEMENT OF INVESTMENT POLICY

JULY 1, 2016

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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, and 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, 2016, on the approval of the KUB Board of Commissioners (“Board”) based on the recommendation of the Investment Committee of the Retirement System (“Investment Committee”), with the advice of 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 & 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 & 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 & CEO appointment and removal of Trustees and Funds; and
- Upon the advice of the Investment Consultant, recommend to the President & 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 & CEO is required to report to the Audit & 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 & 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 & 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 & 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 & CEO is required to report to the Audit & Finance Committee of the Board prior to adopting any such changes in the Appendix or benchmarks for Standards of Measurement. The President & 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 & 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.

- “ **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 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 lifecycle Funds covering the spectrum of expected retirement ages, (ii) a choice of index Funds across a range of major asset classes, (iii) a wide variety of selected actively managed Funds in 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 have been defined to establish material differences between and among potential investment options within the various tiers (see Performance Standards, under description of each Fund). 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 investment options of varying levels of cost.

On the basis of those considerations, the following investment structure is currently considered appropriate:

- **Lifecycle Tier**
 - A selection of Funds with target dates commensurate with the spectrum of expected retirement ages of KUB employees, which may be extended to 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 Value Equity Fund
 - Large Cap Growth Equity Fund
 - Small Cap Value Equity Fund
 - Small Cap Growth Equity Fund
 - International Equity Fund

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

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 & CEO and reported to the Audit & 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

Fund performance is measured net of investment fees. 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, net of 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.

V. LIFECYCLE TIER

Purpose

These Funds 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. Participants typically choose the Fund within the Lifecycle program that is closest to their targeted 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 Lifecycle Funds is to 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 the Participant nears expected retirement.

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 Lifecycle Funds:

- Investment in a diversified portfolio of securities including, but not limited to, domestic and international equities and fixed income securities and/or funds.
- Lifecycle Funds may contain a combination of equity or equity alternative securities (American Depository 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 Lifecycle 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 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 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 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 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 index;
- 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 Index Fund:

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

- Investment in a diversified equity portfolio comprised primarily of stocks contained within the designated international 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;
- Liquidity in accordance with 401(k) Plan provisions; and
- Responsiveness to changing interest rate environments.

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 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 generally 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 Depository 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 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 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 Depository 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 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 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 Depository 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 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 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 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 Depository 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.

G. 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 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 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 Depository 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. 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 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 Depository 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, 2016

LIFECYCLE 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
Lifecycle Funds/SSgA Target Retirement	Current Income & Capital Appreciation	Combined Equity, Fixed Income & Cash Equivalent	On quarterly and annual bases, Lifecycle 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, Lifecycle 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

DESIGNATION OF DEFAULT INVESTMENT

The Lifecycle 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 Lifecycle 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.

INDEX FUND TIER

Asset Class/Current Fund Name	Purpose	Investments	Measurement
Core Fixed Income Index Fund/ Vanguard Total Bond Market Index	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 Barclays Capital Aggregate Index
Large Cap Equity Index Fund/Fidelity	Capital Appreciation	S&P 500 Stocks	On quarterly and annual bases, Fund should closely track performance and volatility of S&P 500 Index

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.

Asset Class/Current Fund Name	Purpose	Investments	Measurement
Spartan 500 Index			
Small & Mid Cap Equity Index Fund/Fidelity Spartan Extended Market Index	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/ Vanguard Total International Stock Index	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 bp	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	Barclays Capital Aggregate Bond Index 110%

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	
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	60% S&P 500 & 40% Barclays Capital Aggregate Index	120%
Large Cap Value Equity Fund/John Hancock Classic Value	Capital Appreciation	Large Cap – Appreciation by Improving Valuations	Mercer MF US Large Cap Value	+ Median	Russell 1000 Value Index	Russell 1000 Value Index	125%
Large Cap Growth Equity Fund/Mainstay Large Cap 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

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.



June 10, 2016

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

Commissioners:

As you may recall, each KUB utility division operates under a set of rules and regulations adopted by the Board of Commissioners. These documents dictate the general policies and procedures under which each utility system is to be operated.

KUB staff, in conjunction with legal counsel, periodically reviews the rules and regulations to ensure the governing documents consistently and accurately reflect KUB's current business structure and practices.

The Rules and Regulations for the Electric, Water and Wastewater Divisions have recently been reviewed and proposed changes have been identified, including housekeeping items to improve the overall clarity of the documents, and changes to reflect current business practices. As you may recall, the Gas Division Rules and Regulations were recently modified by Board action in November 2015.

Resolution 1347 adopts revised Electric, Water and Wastewater Division Rules and Regulations reflecting the aforementioned changes. Drafts of the proposed Electric, Water and Wastewater Division Rules and Regulations are enclosed for your review, along with a summary of the proposed changes.

I recommend the adoption of Resolution 1347 on first and final reading.

Respectfully submitted,

A

Mintha E. Roach
President and CEO

Enclosures

RESOLUTION NO. 1347

A Resolution Adopting Rules and Regulations for the Electric, Water and Wastewater Divisions of the Knoxville Utilities Board Providing for the Efficient Use, Operation, and Management of the Electric, Water and Wastewater Systems, Thereby Replacing the Existing Rules and Regulations of the Electric, Water and Wastewater Divisions

Whereas, Section 1106(G) of the Charter of the City of Knoxville provides that the Knoxville Utilities Board (“KUB”) has the authority to make and enforce all necessary and desirable rules and regulations for the efficient use, operation, and management of the KUB system; and

Whereas, the KUB Board of Commissioners (“Board”), by Resolution No. 1191, previously adopted Electric Division Rules and Regulations; and

Whereas, the Board, by Resolution No. 1190, previously adopted Water Division Rules and Regulations; and

Whereas, the Board, by Resolution No. 1241, as amended, previously adopted Wastewater Division Rules and Regulations; and

Whereas, KUB staff periodically reviews KUB’s utility division rules and regulations for clarity and to ensure consistency with applicable laws, other KUB governance documents, and KUB’s current business structure and practices; and

Whereas, KUB staff, in conjunction with legal counsel, have identified certain modifications to the Electric, Water and Wastewater Rules and Regulations, which will provide greater clarity and more accurately reflect KUB’s current business practices; and

Whereas, the Board finds that it is in the best interest of KUB and its customers to adopt revised Electric Division Rules and Regulations, Water Division Rules and Regulations, and Wastewater Division Rules and Regulations.

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

Section 1. The Electric Division Rules and Regulations, attached hereto and incorporated herein as Exhibit A to this resolution, are hereby adopted in their entirety and as of and after the effective date of this resolution shall be applicable in place of the existing Electric Division Rules and Regulations.

Section 2. The Water Division Rules and Regulations, attached hereto and incorporated herein as Exhibit B to this resolution, are hereby adopted in their entirety and as of and after the effective date of this resolution shall be applicable in place of the existing Water Division Rules and Regulations.

Section 3. The Wastewater Division Rules and Regulations, attached hereto and incorporated herein as Exhibit C to this resolution, are hereby adopted in their entirety and as of and after the effective date of this resolution shall be applicable in place of the existing Wastewater Division Rules and Regulations, however the appendices to the existing Wastewater Division Rules and Regulations providing operating guidelines and enforcement response guides for certain wastewater programs shall remain intact and in full force and effect.

Section 4. The President and CEO is authorized to take such actions and to authorize other persons to take such actions as may be necessary, proper, and convenient to carry into effect the Electric Division Rules and Regulations, the Water Division Rules and Regulations, and the Wastewater Division Rules and Regulations.

Section 5. This resolution shall take effect from and after its passage.

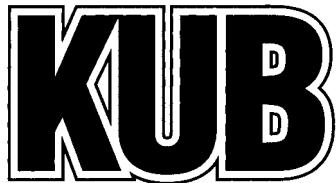
Nikitia Thompson, Chair

Mark Walker, Board Secretary

APPROVED ON 1st
& FINAL READING: _____
EFFECTIVE DATE: _____
MINUTE BOOK 36 PAGE _____



KUB
Electric Division
Rules and Regulations



Knoxville Utilities Board

Rules and Regulations for the Electric Division

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Section I. Purpose

It is the intent of the *Knoxville Utilities Board* ("KUB") that these *Rules and Regulations* promote the following principles:

1. Assure the safe and efficient use, administration, operation, expansion, extension, and preservation of *KUB's electric system*.
2. Assure its *customers' compliance* with these *Rules and Regulations, Rate Schedules for electric service* adopted by the *Board and Service Procedures* established by *KUB* to implement these *Rules and Regulations*.
3. Promote fair, reasonable, and uniform treatment of *customers* in each of the *rate classes* of *KUB's Electric Division*.
4. Protect our environment through the professional management of our *system* and maintain public confidence in *KUB's electric system*.
5. Encourage economic development by promoting extensions of the *KUB electric system*.
6. Simplify, clarify, and modernize the policies governing the operation of *KUB's Electric Division*.
7. Assure that the *KUB electric system* operating practices are as uniform as appropriate.
8. Promote the continued evolution and development of *KUB's electric system* operating guidelines and practices.

Section II. Scope

These *Rules and Regulations* apply to the application, implementation, and operation of *KUB's electric system* and the provision of *electric service* and have been adopted pursuant to authority granted the *Board* by Section 1106(G) of the *City Charter*.

1. Conflict. In addition to these *Rules and Regulations*, the following documents, listed in order of precedence, are hereby made a part of all contracts and enforceable through all contracts, actual and implied, for *customers* and *users* receiving *electric service* from *KUB* and apply to all *electric services* received by *customers*, whether the service is based upon contract, agreement, signed application or otherwise:

- i) the *Electric Division Rate Schedules*;
- ii) these *Rules and Regulations* as may be amended from time to time; and
- iii) the *Service Procedures*.

In the event of a conflict between the documents listed above, the order of precedence shall govern.

2. Severability. If any clause, sentence, paragraph, section or part of these *Rules and Regulations*, any applicable *Electric Division Rate Schedule*, or any provision of the *Service Procedures* shall be declared invalid or unconstitutional, it shall not affect the validity of the remaining parts of these *Rules and Regulations*, the applicable *Electric Division Rate Schedule*, or the *Service Procedures*.

3. Authority. Subject to the limitations set forth in the Charter, these *Rules and Regulations*, applicable *Rate Schedules* and any other official *Board* action or resolution, the *President and CEO*, and his/her designees, has all rights, powers, duties and authorities to implement, and enforce these *Rules and Regulations*. The *President and CEO*, and his/her designees has all rights, powers, duties, and authorities to establish and enforce *Service Procedures* and other such policies and programs necessary to implement these *Rules and Regulations*.

4. Rules and Regulations Oversight Committee. The *Rules and Regulations* Oversight Committee shall consist of the *Chief Operating Officer* (COO), and other members of *KUB* management, as so designated by the *President and CEO*. The COO shall chair the Committee. The *Rules and Regulations* Oversight Committee will provide oversight of the implementation, enforcement and administration of the *Rules and Regulations*. The *Rules and Regulations* Oversight Committee is responsible for recommending changes to the *Rules and Regulations* to the *President and CEO*. Any substantive amendments or changes to these *Rules and Regulations* are subject to the approval of the *President and CEO* and adoption by the *Board* in accordance with the *Board's* procedures.

5. Access to Premises. The *customer, user, and if a different person, owner of premises* to which *electric service* is provided shall, by its receipt and acceptance of *electric service*, grant to *KUB* permission to access the *premises* at all times, including immediate access if determined to be necessary by *KUB* in the event of an emergency, for the purpose of:

- i. Reading meters;
- ii. Installing, testing, inspecting, repairing, operating, maintaining, removing, and replacing any *KUB electric system* component;
- iii. Vegetation management including but not limited to tree-trimming;
- iv. Clearing hazards away from *KUB's electric system*;
- v. Inspecting and operating the *customer's, user's, and if a different person, owner's* electric facilities;
- vi. Inspecting the *premises*; and
- vii. Providing notifications

in order to determine that *KUB's Rules and Regulations* and/or *Service Procedures* implementing the *Rules and Regulations*, the National Electric Code, and the National Electric Safety Code are being complied with and to ensure compliance with applicable federal, state, and local law(s) and regulation(s).

6. Responsibility for KUB's Property. The *customer, user, and if a different person, owner* shall provide a space for and exercise proper care to protect any *KUB* property on the *premises*; and in the event of loss or damage to *KUB*'s property, arising from the negligence to care for said property, the cost of necessary repairs or replacements shall be paid by the negligent party.

The customer is solely responsible for trimming and/or removing any vegetation impeding (including but not limited to any tree) the installation, operation, repair, maintenance, removal or replacement of the electric service lines and related electric facilities.

No *person* shall cause or allow to exist on the *premises* any building, trees or anything else that interferes with the installation, operation, maintenance, removal or replacement of *KUB*'s service and related electric facilities.

No *person* shall perform excavation without a valid TN811 locate request ticket. The Tennessee Underground Utility Damage Prevention Act specifies the requirements for safe digging or other work near utilities.

7. Responsibility for Compliance with Rules and Regulations. Every *customer, user, and if a different person, owner* shall comply with these *Rules and Regulations, Rate Schedules* for the *Electric Division* adopted by the *Board*, and *Service Procedures* established by *KUB* to implement these *Rules and Regulations*.

8. Promotion of Technology. *KUB* may establish and maintain processes consistent with these *Rules and Regulations* that promote and utilize new technologies for the operation of its *electric system* which improve system reliability, increase operational flexibility and/or lower costs of operation. Examples include, but are not limited to, automated remote metering, estimated metering, etc.

9. Health and Safety. All *Rules and Regulations* and *Service Procedures* affecting health and safety, including (without limitation) all provisions relating to inspection, general safety precautions for utilization, operation and maintenance of *KUB*'s *electric system*, and rules governing installations, are for the guidance and benefit of *customers, users, and if a different person, owners*, and *KUB* shall not be responsible for the health

and safety thereof, or for any loss, damage, or injury resulting from any violation thereof, but *KUB* reserves the right, in its discretion, to refuse to furnish *electric service*, or to discontinue furnishing *electric service*, where the *customer, user*, and if a different *person, owner* fails to comply therewith.

10. Interpretation. It is the intent of *KUB* that these *Rules and Regulations* be liberally interpreted.

Section III. Definitions

For the purpose of these *Rules and Regulations*, and unless the context specifically indicates otherwise, the following terms shall have the meaning ascribed:

Wherever the context shall require, words used herein in the singular shall include the plural, words used in the plural shall include the singular, words used in the masculine shall include the feminine, and words used in the feminine shall include the masculine.

Board shall mean the *KUB Board* of Commissioners, as appointed from time to time by the Mayor and City Council of the City of Knoxville, Tennessee.

Chief Executive Officer or President and CEO shall mean the *President and Chief Executive Officer* of the *Knoxville Utilities Board*.

Chief Operating Officer or COO shall mean the *Chief Operating Officer* of the *Knoxville Utilities Board*. The *COO*, subject to the supervision of the *CEO*, shall administer, implement, and enforce the provisions of these *Rules and Regulations*.

City shall mean the City of Knoxville, Tennessee.

Commercial and industrial use shall mean all uses with the exception of *domestic use* as defined in these *Rules and Regulations*.

Connection shall mean any physical tie or hookup made to the *KUB electric system*.

Contribution in Aid of Construction (CIAC) shall mean a payment required of the *customer* for the extension of *KUB's electric system*.

Customer shall mean any *person* who receives *electric service* from *KUB* under either an express or implied contract requiring such *person* to pay

KUB for such service. The term shall also include illicit users of *electric service* from *KUB*.

Domestic use of the *electric system* shall be defined and limited to single-family, multifamily, apartment or other *dwelling unit* or *dwelling unit equivalent* connecting to *KUB's electric system* and used for residential purposes only.

Dwelling unit shall mean any structure occupied by one or more *persons* of a single family for residential purposes. Apartment buildings and other structures occupied by more than one family shall be considered multiple *dwelling units*.

Electric Division or *division* shall mean the part of the *KUB* system having charge of the physical operation and financial oversight of *KUB's electric system*.

Electric system shall mean all facilities for transmitting, distributing, and receiving *electricity*.

Electricity and/or electric service means energy made available for consumption by *KUB* for its *customers*, *users*, and if a different *person*, *owners* for *domestic*, *commercial* and/or *industrial use* by transmitting or distributing energy via the flow of an electric charge through a conductor.

Fee is any amount levied that is: (1) infrequent in nature, and/or (2) generally not consumption based, and/or (3) set at the discretion of management of *KUB* as authorized by the *Board*, but does not include a *rate*.

Knoxville Utilities Board, or *KUB*, shall mean the *Knoxville Utilities Board* of the City of Knoxville, Tennessee, or, as the context requires, the management of *KUB*, its contractors or agents.

Overhead electric service line (service drop) shall mean an overhead extension of *KUB's electric system* required to connect the *customer's*, *user's*, or if a different *person*, *owner's premises* and/or *dwelling* to the *electric system*. The *overhead electric service line (service drop)* shall be owned by *KUB* and thus be considered a part of *KUB's electric system*.

Person shall mean any individual, partnership, firm, company, association, society, corporation, limited liability company, trust, estate, governmental entity, or any other legal entity, or its legal representatives, agents, or assigns. This definition includes all federal, state and local governmental entities and shall also include illicit users of *electric service* from *KUB*.

Point of Delivery, for overhead electric service, shall mean the point at which the *overhead electric service line (service drop)* connects to the *customer's, user's, or if a different person, owner's premises*, as determined by *KUB*; for underground electric service, it shall mean the point at which the *underground electric service conductors (service lateral)* connects to *KUB's electric system*, as determined by *KUB*.

Premises shall mean any structure, group of structures, or property, whether occupied or unoccupied, operated as a single business, enterprise, or *dwelling unit*, but shall not include more than one *dwelling unit*.

Rate is any quantitative value used to determine an amount levied on a *customer* directly related to the provision and/or consumption of *electricity* typically associated with utility usage, as set forth in an *Electric Division Rate Schedule* adopted by the *Board*.

Rules and Regulations means the rules and regulations adopted by the *Board* governing the operation and use of *KUB's electric system*.

Service Procedures means those governing procedures set forth in a document or document(s) adopted by the *President and CEO* implementing the *Rules and Regulations* for the *KUB electric system* and outlining the guidelines necessary to oversee daily operation of *KUB's electric system*.

Stand-by Service is support *electric service* that is not regularly used by the *customer* that is made available as needed to supplement a *customer's electric service requirements* as authorized by the *KUB Rate Schedule(s)* for the *Electric Division* and/or a *customer contract*.

Standards and specifications shall mean a set of processes or procedures regarding certain aspects of the *KUB electric system*, which may be in effect from time to time, but may not be included in the *Service Procedures*.

Sub-metering shall mean metering equipment not owned by *KUB* that is used to measure and bill *electric consumption* at a *premises* and/or *dwelling unit* for payment of *electric consumption* to an entity other than *KUB*.

Underground electric service conductor (service lateral) shall mean an underground extension of electric facilities and related appurtenances required to connect the customer's, user's, or if a different person, owner's premises and/or dwelling to KUB's electric system. *Underground electric service conductors (service lateral)* shall be owned by the individual property owner.

User shall mean any premise having a connection to the KUB electric system or having access thereto. The term shall include illicit users of electric service from KUB.

Section IV. Initiation of *Electric Service*

1. Residential use. A formal request for either original or additional electric service must be made to KUB by the customer and be duly approved by KUB before connection to the KUB electric system is made. The request shall be in the prescribed form according to the Service Procedures. The receipt by KUB of a prospective customer's request for electric service shall not obligate KUB to render the electric service. KUB may, at its sole discretion, require the customer to provide security, assurance, or guaranty prior to KUB rendering electric service.

2. Commercial and industrial use. A formal request for either original or additional electric service must be made to KUB and be duly approved before connection is made. The request shall be in the prescribed form according to the Service Procedures. The receipt by KUB of a prospective customer's request for electric service shall not obligate KUB to render the electric service. KUB may, at its sole discretion, require the customer to provide security, assurance, or guaranty prior to KUB rendering electric service.

3. Intergovernmental agreements. At KUB's sole discretion, KUB may enter into agreements with municipalities and unincorporated areas for the distribution and/or transmission of electric service. Any such agreement must comply with all applicable federal, state and local laws, ordinances, regulations and KUB's Rules and Regulations. There shall be no liability on the part of KUB to the requestor for refusal of such service.

4. Private electric systems. At KUB's sole discretion, KUB may allow the connection of private electric systems to the KUB electric system. Any person owning or controlling premises either within or without the current KUB electric system area of service desiring to install a private electric system and to connect to the KUB electric system must comply with all applicable federal, state and local laws, ordinances, regulations and KUB's Rules and Regulations and Service Procedures. KUB may enter into an agreement with said persons at KUB's sole discretion. There shall

be no liability on the part of *KUB* to the requestor for refusal of such service.

Section V. Connections to *KUB Electric System*

1. *Electric System extension or relocations.* *Customer* extensions or relocations, both overhead and underground, will be located in a right-of-way or dedicated easement acceptable to *KUB*. Unless approved by *KUB*, the right-of-way must be adjacent to a road that is suitably maintained so as to permit *KUB* to have direct access to the *KUB electric system*. Should the right-of-way be adjacent to a private road, rights of ingress and egress shall be granted to *KUB*, and a dedicated easement shall be provided to *KUB* without cost before any *overhead electric service line* extension and/or *underground electric service conductors* are constructed. If additional easements are required, the *customer* shall bear *KUB*'s costs of obtaining said easements.

KUB may offer temporary *electric service* in accordance with its *Rate Schedules* and/or *Service Procedures*.

2. *Point of delivery*

- A. The *point of delivery*, for overhead electric service, shall mean the point at which the *overhead electric service line (service drop)* connects to the *customer's, user's, or if a different person, owner's premises*, as determined by *KUB*; for underground electric service, the *point of delivery* shall mean the point at which the *underground electric service conductors (service lateral)* connects to *KUB's electric system*, as determined by *KUB*.
- B. All connections to the *KUB electric system* are to be made in accordance with all applicable *KUB standards and specifications*. In the event of a discrepancy between *KUB standards and specifications* and the National Electric Code, the National Electric Code shall prevail.
- C. The Codes Inspector for the *City* for *connections* within the *City* and the appropriate regulatory authority for the area for *connections* outside the *City*, including but not limited to the State Inspector, must inspect and approve the *electric service connection* before any meter is set by *KUB*. For *connections* for government entities within *KUB's service area*, the appropriate regulatory authority, if any, shall make electrical inspections, before any meter is set by *KUB*.
- D. Costs and expenses incident to the installation, connection and inspection of the wiring and equipment beyond the *point of delivery*

shall be borne by the *customer, user*, and if a different person, owner. All wiring or equipment (except *KUB's metering*) beyond the *point of delivery* shall be owned and maintained by the *customer, user*, and if a different person, owner unless otherwise agreed to in writing by *KUB*.

- E. Each *customer, user*, or if a different person, owner shall be entirely responsible for the maintenance, including repair and rehabilitation, of the *underground electric service conductors (service lateral)* in accordance with *KUB's standards and specifications*, these *Rules and Regulations*, the most recent Electrical Code, as modified and adopted by the *City*, or the appropriate regulatory authority for the area of connection outside of the *City*, and all applicable codes and ordinances.

The *customer, owner*, and if a different person, owner shall also be entirely responsible for the trimming and/or removal of vegetation in order to maintain a reasonable clearance between said vegetation and the *underground electric service conductors (service lateral)* and/or the *overhead electric service line (service drop)*.

- F. *KUB* operates, maintains, repairs, and replaces all portions of the *KUB electric system*. *KUB* shall perform all work in accordance with National Electric Code regulations, *KUB's standards and specifications*, these *Rules and Regulations*, and any other applicable codes and ordinances.
- G. The location of *KUB's metering equipment* shall not change the location of the *point of delivery*.
- H. *KUB* shall not be liable for any injury to persons or property on account of any defect or negligence in the installation, maintenance, or use of the *customer's, user's*, and if a different person, owner's equipment beyond the *point of delivery*.

3. Voltage Fluctuations. *Electric service* must be used by the *customer, user*, and if a different person, owner in such a manner as to not cause unusual fluctuations or disturbances to *KUB's electric system*. *KUB* may require any such party, at their expense, to install a suitable apparatus that will reasonably limit such fluctuations. *KUB* shall inspect and approve any such apparatus and will require installation to meet all applicable codes and *KUB standards and specifications*.

4. Additional Load. The service *connection*, transformers, meters and equipment supplied by *KUB* for each *customer, user*, and if a different person, owner have definite capacity and no major addition to the equipment or load connected thereto, as determined by *KUB* in its sole

discretion, will be allowed except by consent of *KUB*. Failure to give written notice of major additions or changes in load, as determined by *KUB* in its sole discretion, and to obtain *KUB*'s written consent for same shall render said party liable for any damage to *KUB's electric system* caused by the additional or changed installation.

5. *Stand-by Service.* A qualified *customer* may request *stand-by service* provided the stand-by capacity can be provided and made available. The determination of the economic contribution made by *KUB*, if any, toward providing *stand-by service* for a *customer* shall be determined by *KUB* on the basis of economic and/or technical feasibility. In making such determination, *KUB* shall consider the total capital cost, the anticipated revenues, the estimated expenses associated with the extension, such other economic factors as the *KUB* may deem appropriate under the circumstances, and the availability of stand-by capacity. Costs in excess of *KUB*'s investment, if any, shall be borne by the *customer* and shall constitute a *C/IAC*. All expenses incident thereto, including testing, repair, maintenance, billing and reading the meter for the *stand-by service*, shall be borne by the *customer*. A *customer* must receive approval from *KUB* prior to the installation of a *stand-by service*.

6. *Interconnection.* No interconnection of any kind shall be permitted between *KUB's electric system* and any *electric supply* from any other source, nor shall any *electric supply* from any other source be permitted to migrate into *KUB's electric system*, unless approved in writing by the COO or the *President and CEO*. Additionally, *KUB* will require technical information, including but not limited to manufacturer drawings, equipment layout, and details concerning the transfer switch apparatus, in regard to the interconnection or *electric backup system*. *KUB* reserves the right to alter or modify the requesting party's plans to address safety concerns or *KUB's electric system* integrity.

Section VI. Interruption of *Electric Service*

KUB shall not be liable for any damage resulting from failure of any *KUB electric system* component, or by discontinuing the operation of any segment of its *electric system* for repair, extensions or connections, or from the accidental failure of its *electric system* from any cause whatsoever, or the termination of *electric service* as the result of violations by any *customer, user*, and if a different person, owner of any applicable federal, state and local laws and/or these *Rules and Regulations* or *KUB's Service Procedures*, or damage resulting from *KUB*'s failure to terminate *electric service* after notice of termination of *electric service* by the *customer*. In cases of emergency, *KUB* shall have the right to restrict the use of its *electric system* in any reasonable manner for the protection of *KUB's electric system, customers, the public, and the environment*.

Section VII. Shortage of *Electricity*

In the event of an emergency or other condition causing a shortage in the amount of *electricity* for *KUB* to meet the demands on its *electric system*, *KUB* may, by a method deemed equitable by *KUB*, fix the amount of *electricity* to be made available for use by *customers* and/or may otherwise restrict the time and purpose of *electric* use by *customers*. A method for the distribution of *electricity* under such circumstances may be set forth in the *Service Procedures*.

If such conditions become necessary, a *customer* may request a variance because of unusual circumstances including matters adversely affecting public health, safety, and welfare. If the *customer* fails to comply with such restriction, *KUB* may take such remedial action, as it deems appropriate under the circumstances including but not limited to temporarily terminating *electric service* or charging additional amounts because of the excess use of *electricity*.

KUB also reserves the right to grant no further applications for *electric service* until such time that the shortage of *electricity* for *KUB* to meet the demands on its *electric system* has been alleviated.

Section VIII. Termination of *Electric Service*; Refusal to Connect *Electric Service*

KUB has the right to terminate or refuse *electric service* based on outstanding debts owed to *KUB* related to the non-payment of utility bills, a dispute as to the ownership or right of occupancy of the *premises* requesting *electric service*, a violation of these *Rules and Regulations*, a violation of *Service Procedures*, a violation of a *customer* contract, non-payment of a utility bill by the *customer*, non-usage of *electric service* for a reasonable period of time, a violation of the National Electric Safety Code or any other applicable rule, law, or ordinance, or any other legitimate reason deemed in *KUB*'s best interests and the best interests of *KUB*'s *electric system*.

Section IX. Rates for *Electric Service*

Electric service rates shall be set forth in the *Electric Division Rate Schedules* as adopted by the *KUB Board*.

Section X. Billing for *Electric Service*

The billing for *electric service* shall be in accordance with the *Rate Schedules* of the *Electric Division* as approved by the *Board* and this section of the *Rules and Regulations*.

1. **Minimum charges.** The minimum charge, if any, will be as stated in the *Rate Schedules* of the *Electric Division*.

2. **Estimated billing.** *KUB* may periodically estimate a *customer's electric* consumption and submit to *customer* for payment such estimated service bill.
3. **Billing adjustments.** *KUB* may adjust *customer* billing for reasons including but not limited to the following: billing for over or under registration of meters, for the determination of *electric* consumption by *customers* when meters have been inoperative, for an obviously incorrect meter reading, or for other recognized and proper adjustments as are determined by *KUB*.

Section XI. Authority to Levy Charges and Fees

Under the provisions of the City Charter and of the general laws of the State of Tennessee, *KUB* is authorized and empowered to fix, levy and collect fees, rents, tolls or other charges for the use of or in connection with the *KUB electric system*. This authorization includes but is not limited to the establishment, levy and collection of a service charge, improvement charge or other charges deemed necessary. The CEO and/or his/her designee may establish *Service Procedures* addressing the establishment of charges and fees associated with *electric service*.

Section XII. KUB Electric System Extensions

1. General Extension Policy

- A. The investment that *KUB* will make, if any, toward an extension of the *KUB electric system* will be equitably determined by *KUB* on the basis of economic and/or technical feasibility. In making such determination, *KUB* shall consider the total capital cost, the anticipated revenues, the estimated expenses associated with the extension, such other economic factors as *KUB* may deem appropriate under the circumstances and the availability of adequate capacity in the *KUB electric system*. *KUB* may require the person to pay a CIAC.
- B. *KUB* may require the person to execute an extension agreement which requires and/or provides for assurances or other security or credit arrangements as may be required by *KUB* in its sole discretion, with respect to the extension, including, but not limited to, refundable construction advances, minimum demand or bill requirements, and such other forms of security, assurance, and/or guaranty, as *KUB* determines to be necessary or appropriate to protect the interest of *KUB* and its *customers*. *KUB* shall not be obligated to provide refunds unless specified in a contract. In no

event shall a refund be in excess of the amount of the advance for or actual cost of construction.

- C. *KUB* shall have the authority to extend its *electric system* in a manner different from that set forth in the *Rules and Regulations* and charge a *C/IAC* when any such extension is determined to be in the best interest of *KUB*, economic interest of the community, or to the benefit of the public health of the community.
- D. The authority to make *electric* extensions is in *KUB*'s sole discretion even though all requirements have been met. Nothing contained herein shall be construed as requiring *KUB* to extend *electric* service to any property. *KUB electric system* extensions shall not be denied on the basis of race, sex, religion, color, age, or national origin.
- E. All costs associated with designing and installing an *electric system* and all appurtenances in new developments are the sole responsibility of the *persons* developing the subdivision or land development project.

2. Construction of *KUB Electric System*

- A. *KUB's electric system* shall be constructed by *KUB* personnel or by a licensed contractor acceptable to *KUB*.
- B. The size, type, and installation of *KUB's electric system* components shall comply with *KUB's standards and specifications* and must be approved by *KUB*. *KUB* may at its sole discretion install its facilities overhead or underground.
- C. Construction work on *KUB's electric system* shall at all times be subject to inspection by *KUB* to assure that the work conforms to *KUB's standards and specifications*.
- D. No approval or inspection by *KUB* hereunder shall relieve a contractor or a *person* who contracted with a contractor of any liability for work performed on the *KUB electric system*.
- E. Upon the completion of construction and subsequent inspection and approval by *KUB*, such construction shall become the property of *KUB* and thereafter become a part of *KUB's electric system*. The *persons* paying the cost of construction shall execute any written instrument requested by *KUB* to provide evidence of *KUB's* title. In consideration of such being transferred to *KUB*, *KUB* shall incorporate such as an integral part of *KUB's electric system* in accordance with these *Rules and Regulations*.

- F. *KUB* may, at the request of a *person*, relocate or change existing *KUBelectric system* components. The *person* may be required to reimburse *KUB* for costs of such relocation or change including but not limited to appropriate overheads and associated costs for easement acquisitions. When a public right-of-way is changed for the benefit of private interests and *KUB's electric system* must be adjusted to accommodate said change, the cost of such adjustments shall be paid in advance on a non-refundable basis by the requesting parties.
 - G. The property owner shall be entirely responsible for the trimming and/or removal of vegetation in order to maintain a reasonable clearance between said vegetation and the *underground electric service conductors (service lateral)* and/or the *overhead electric service line (service drop)*.
3. **Construction and Responsibility for Private *Electric Systems*.** *KUB* reserves the authority to allow and/or deny private *electric systems* that either directly or indirectly draw and/or transmit electrical current to and/or from, as appropriate, the *KUB electric system*. Any such private *electric system* shall be approved by the applicable governing entities. The owner of the private *electric system*, such as the developer, the developer's legally authorized successor, property owner, etc., shall retain ownership of and be responsible for all operation and maintenance of the private *electric system*. *KUB* shall retain ownership of and be responsible for the operation and maintenance of the master *metering equipment*, which registers *electric usage* by the private *electric system*. If determined by *KUB* that the private *electric systems* violate any applicable federal, state or local laws, or regulations or these *Rules and Regulations or Service Procedures*, then *KUB* has the authority to require the *customer* to rectify the violation at the *customer's expense*. *KUB* has the authority and reserves the right to enter on the *customer's property* and to rectify the violation and seek reimbursement for costs borne by *KUB* to rectify the violation.

Section XIII. Prohibition of *Electricity Resale*.

No *person* shall resell *electricity* from *KUB's electric system* without *KUB's express written permission*.

Section XIV. *Sub-metering*.

Sub-metering of *KUB's electric service* shall not be allowed except as expressly permitted in writing by *KUB* in circumstances where the COO has determined it is in *KUB's best interests* or it is expressly permitted in a *Rate Schedule*.

A

Water Division
Rules and Regulations

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Rules and Regulations for the Water Division

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Section I. Purpose

It is the intent of the *Knoxville Utilities Board* ("KUB") that these *Rules and Regulations* promote the following principles:

1. Assure the safe and efficient use, administration, operation, expansion, extension, and preservation of *KUB's water system*.
2. Assure its *customers' compliance* with these *Rules and Regulations, Rate Schedules for water service* adopted by the *Board and Service Procedures* established by KUB to implement these *Rules and Regulations*.
3. Promote fair, reasonable, and uniform treatment of *customers* in each of the *rate classes* of *KUB's Water Division*.
4. Protect our environment through the professional management of our *system* and maintain public confidence in *KUB's water system*.
5. Encourage economic development by promoting extensions of the *KUB water system*.
6. Simplify, clarify, and modernize the policies governing the operation of *KUB's Water Division*.
7. Assure that the *KUB water system* operating practices are as uniform as appropriate.
8. Promote the continued evolution and development of *KUB's water system* operating guidelines and practices.

Section II. Scope

These *Rules and Regulations* apply to the application, implementation, and operation of *KUB's water system* and the provision of *water service*, and have been adopted pursuant to authority granted the *Board* by Section 1106(G) of the *City Charter*.

1. Conflict. In addition to these *Rules and Regulations*, the following documents, listed in order of precedence, are hereby made a part of all contracts and are enforceable through all contracts, actual and implied, for *customers* and *users* receiving *water service* from *KUB* and apply to all *water services* received by *customers*, whether the service is based upon contract, agreement, signed application or otherwise:

- i) the *Water Division Rate Schedules*;
- ii) these *Rules and Regulations* as may be amended from time to time; and
- iii) the *Service Procedures*.

In the event of a conflict between the documents listed above, the order of precedence shall govern.

2. Severability. If any clause, sentence, paragraph, section or part of these *Rules and Regulations*, any applicable *Water Division Rate Schedule*, or any provision of the *Service Procedures* shall be declared invalid or unconstitutional, it shall not affect the validity of the remaining parts of these *Rules and Regulations* or the applicable *Water Division Rate Schedule*, or the *Service Procedures*.

3. Authority. Subject to the limitations set forth in the Charter, these *Rules and Regulations*, applicable *Rate Schedules* and any other official *Board* action or resolution, the *President and CEO*, and his/her designees, has all rights, powers, duties and authorities to implement, and enforce these *Rules and Regulations*. The *President and CEO*, and his/her designees, has all rights, powers, duties, and authorities to establish and enforce *Service Procedures* and other such policies and programs necessary to implement these *Rules and Regulations*.

4. Rules and Regulations Oversight Committee. The *Rules and Regulations* Oversight Committee shall consist of the *Chief Operating Officer* (COO), and other members of *KUB* management, as so designated by the *President and CEO*. The COO shall chair the Committee. The *Rules and Regulations* Oversight Committee will provide oversight of the implementation, enforcement and administration of the *Rules and Regulations*. The *Rules and Regulations* Oversight Committee is responsible for recommending changes to the *Rules and Regulations* to the *President and CEO*. Any substantive amendments or changes to these *Rules and Regulations* are subject to the approval of the *President and CEO* and adoption by the *Board* in accordance with the *Board's* procedures.

5. Access to Premises. The *customer, user, and if a different person, owner of premises* to which *water service* is provided shall, by its receipt and acceptance of *water service*, grant to *KUB* permission to access the *premises* at all times, including immediate access, if determined to be necessary by *KUB* in the event of an emergency, for the purpose of:

- i. Reading meters;
- ii. Installing, testing, inspecting, repairing, operating, maintaining, removing, and replacing any *KUB water system* component;
- iii. Clearing hazards away from *KUB's water system*;
- iv. Inspecting and operating the *customer's, user's, and if a different person, owner's* water facilities;
- v. Inspecting the *premises*; and
- vi. Providing notifications

in order to determine that *KUB's Rules and Regulations* and/or *Service Procedures* implementing the *Rules and Regulations*, and the regulations and requirements of the applicable Tennessee state regulatory authority, are being complied with and to ensure compliance with applicable federal, state, and local law(s) and regulation(s).

6. Responsibility for KUB's Property. The *customer, user, and if a different person*, owner shall provide a space for and exercise proper care to protect any *KUB* property located on the *premises*; and in the event of loss or damage to *KUB's* property, arising from the negligence to care for said property, the cost of necessary repairs or replacements shall be paid by the negligent party.

No person shall perform excavation without a valid TN811 locate request ticket. The Tennessee Underground Utility Damage Prevention Act specifies the requirements for safe digging or other work near utilities.

7. Responsibility for Compliance with Rules and Regulations. Every *customer, user, and if a different person*, owner shall comply with these *Rules and Regulations, Rate Schedules of the Water Division* adopted by the *Board*, and *Service Procedures* established by *KUB* to implement these *Rules and Regulations*.

8. Promotion of Technology. *KUB* may establish and maintain processes consistent with these *Rules and Regulations* that promote and utilize new technologies for the operation of its *water system* which improve system reliability, increase operational flexibility and/or lower costs of operation. Examples include, but are not limited to, automated remote metering, estimated metering, etc.

9. Health and Safety. All *Rules and Regulations* and *Service Procedures* affecting health and safety, including (without limitation) all provisions relating to inspection, general safety precautions for utilization, operation and maintenance of *KUB's water system*, and rules governing installations, are for the guidance and benefit of *customers, users, and if a different person*, owners, and *KUB* shall not be responsible for the health and safety thereof, or for any loss, damage, or injury resulting from any violation thereof, but *KUB* reserves the right, in its discretion, to refuse to furnish *water service*, or to discontinue furnishing *water service*, where the *customer, user, and if a different person*, owner fails to comply therewith.

10. Interpretation. It is the intent of *KUB* that these *Rules and Regulations* be liberally interpreted.

Section III. Definitions

For the purpose of these *Rules and Regulations*, and unless the context specifically indicates otherwise, the following terms shall have the meaning ascribed:

Wherever the context shall require, words used herein in the singular shall include the plural, words used in the plural shall include the singular, words used in the masculine shall include the feminine, and words used in the feminine shall include the masculine.

Board shall mean the *KUB Board of Commissioners*, as appointed from time to time by the Mayor and City Council of the City of Knoxville, Tennessee.

Chief Executive Officer or President and CEO shall mean the *President* and *Chief Executive Officer* of the *Knoxville Utilities Board*.

Chief Operating Officer or COO shall mean the *Chief Operating Officer* of the *Knoxville Utilities Board*. The *COO*, subject to the supervision of the *CEO*, shall administer, implement, and enforce the provisions of these *Rules and Regulations*.

City shall mean the City of Knoxville, Tennessee.

Commercial and industrial use shall mean all uses with the exception of *domestic use* as defined in these *Rules and Regulations*.

Connection shall mean the point at which the *water service line* connects with the *KUB water system*. For metered *water service*, the point of *connection* shall be where the outlet pipe leaves the outlet side of the meter box. For unmetered *water service*, the point of *connection* shall be at the control valve of the *water service main*.

Contribution in Aid of Construction (CIAC) shall mean a payment required of the *customer* for the extension of *KUB's water system*.

Cross connection shall mean any actual or potential physical connection between *KUB's water system* and an unapproved water supply or other potential source of contamination.

Customer shall mean any *person* who receives *water service* from *KUB* under either an express or implied contract requiring such *person* to pay *KUB* for such service. The term shall also include *illicit users* of *water service* from *KUB*.

Domestic use of the *water system* shall be defined and limited to single-family, multifamily, apartment or other *dwelling unit* or *dwelling unit equivalent* connecting to *KUB's water system* and used for residential purposes only.

Dwelling unit shall mean any structure occupied by one or more *persons* of a single family for residential purposes. Apartment buildings and other structures occupied by more than one family shall be considered multiple *dwelling units*.

Fee is any amount levied that is: (1) infrequent in nature, and/or (2) generally not consumption based, and/or (3) set at the discretion of management of *KUB* as authorized by the *Board*, but does not include a *rate*.

Knoxville Utilities Board, or *KUB*, shall mean the *Knoxville Utilities Board* of the City of Knoxville, Tennessee, or, as the context requires, the management of *KUB*, its contractors or agents.

Person shall mean any individual, partnership, firm, company, association, society, corporation, limited liability company, trust, estate, governmental entity, or any other legal entity, or its legal representatives, agents, or assigns. This definition includes all federal, state and local governmental entities and shall also include illicit users of water service from *KUB*.

Point of Delivery, unless otherwise designated by *KUB*, shall be where the outlet pipe leaves the outlet side of the meter box. For unmetered water service, the *point of delivery*, unless otherwise designated by *KUB*, shall be at the control valve of the water service main.

Premises shall mean any structure, group of structures, or property, whether occupied or unoccupied, operated as a single business, enterprise, or dwelling unit, but shall not include more than one dwelling unit.

Private fire line shall mean a water service line to be used exclusively to access water flow for private fire protection purposes.

Private water system is any water system owned and maintained by the customer, whose operation is regulated by entities other than *KUB* including but not limited to the applicable Tennessee state regulatory authority. The water use of a *private water system* shall be master metered by *KUB* at a central location.

Rate is any quantitative value used to determine an amount levied on a customer directly related to the provision and/or consumption of water typically associated with utility usage, as set forth in a *Water Division Rate Schedule* adopted by the Board.

Rules and Regulations means the rules and regulations adopted by the Board governing the operation and use of *KUB's water system*.

Service Procedures means those governing procedures set forth in a document or document(s) adopted by the President and CEO implementing the *Rules and Regulations* for the *KUB water system* and outlining the guidelines necessary to oversee the daily operation of *KUB's water system*.

Standards and specifications shall mean a set of processes or procedures regarding certain aspects of the *KUB water system*, which may be in effect from time to time, but may not be included in the *Service Procedures*.

User shall mean any premise having a connection to the *KUB water system* or having access thereto. The term shall include illicit users of water service from *KUB*.

Water and/or water service means water made available for consumption by *KUB* for its *customers, users*, and if a different person, owner for *domestic, commercial and/or industrial use* by delivering or distributing water via the *KUB water system*.

Water Division or division shall mean the part of the *KUB* system having charge of the physical operation and financial oversight of *KUB's water system*.

Water main shall mean the principal or major pipes in the *water system* conveying water to *water service lines* for distribution. A *water main* consists of a *water distribution main* and a *water service main*.

Water distribution main shall mean the *water main* that is ordinarily located in and extends longitudinally along a public street, road, similar public right of way or easement. The *water distribution main* shall be owned and maintained by *KUB*.

Water service main shall mean the portion of the *water main*, which leads from the *water distribution main* to the *point of delivery*. The *water service main* shall exclude the meter, meter box, control valve, and meter connections. The *water service main* shall be owned and maintained by *KUB*.

Water service line shall mean the pipe, which extends from the *point of delivery* to the *customer's, user's*, or if a different person, owner's *premises*. The *water service line* shall exclude the meter, meter box, control valve, and meter connections. The *water service line* shall be owned and maintained by the individual property owner.

Water system shall mean all facilities for distributing and receiving water, including but not limited to *water distribution mains, water service mains, meters, meter boxes, meter connections, and control valves*.

Section IV. Initiation of Water Service

1. Residential use. A formal request for either original or additional water service must be made to *KUB* by the *customer* and be duly approved by *KUB* before connection to the *KUB water system* is made. The request shall be in the prescribed form according to the *Service Procedures*. The receipt by *KUB* of a prospective *customer's* request for water service shall not obligate *KUB* to render water service. *KUB* may, at its sole discretion, require the *customer* to provide security, assurance, or guaranty prior to *KUB* rendering water service.

2. Commercial and industrial use. A formal request for either original or additional water service must be made to *KUB* and be duly approved before *connection* is made. The request shall be in the prescribed form according to the *Service Procedures*. The receipt by *KUB* of a prospective *customer's* request for water service shall not obligate *KUB* to render the *water service*. *KUB* may, at its sole discretion, require the *customer* to provide security, assurance, or guaranty prior to *KUB* rendering *water service*.

3. Intergovernmental agreements. At *KUB*'s sole discretion, *KUB* may enter into agreements with municipalities, utility districts, and unincorporated areas for the distribution of *water service*. Any such agreement must comply with all applicable federal, state and local laws, ordinances, regulations and *KUB's Rules and Regulations*. There shall be no liability on the part of *KUB* to the requestor for refusal of such service.

4. Private water systems. At *KUB*'s sole discretion, *KUB* may allow the connection of *private water systems* to the *KUB water system*. Any person owning or controlling *premises* either within or without the current *KUB water system* area of service desiring to install a *private water system* and to *connect* to the *KUB water system* must comply with all applicable federal, state and local laws, ordinances, regulations and *KUB's Rules and Regulations* and *Service Procedures*. *KUB* may enter into an agreement with said persons at *KUB*'s sole discretion. There shall be no liability on the part of *KUB* to the requestor for refusal of such service.

Section V. Connections to KUB Water System

1. Water system extensions or relocations. *Water system* extensions or relocations will be located in a right-of-way or dedicated easement acceptable to *KUB*. Unless approved by *KUB*, the right-of-way must be adjacent to a road that is suitably maintained so as to permit *KUB* to have direct access to the *KUB water system*. Should the right-of-way be adjacent to a private road, rights of ingress and egress shall be granted to *KUB*, and a dedicated easement shall be provided to *KUB* without cost before any *water main* is installed. If additional easements are required, the *customer* shall bear *KUB*'s costs of obtaining said easements.

KUB may offer temporary *water service* in accordance with its *Rate Schedules* and/or *Service Procedures*.

2. Point of delivery

- A. The *point of delivery* for metered *water service*, unless otherwise designated by *KUB*, shall be the point where the outlet pipe leaves the outlet side of the meter box. In the event the meter and meter box are located inside the *customer's*, *user's*, and if a different person, owner's property line, *KUB* shall be granted access, without cost to *KUB*, to that

portion of the *water service main* inside the property line, in accordance with Section II.5. The *point of delivery* for unmetered water service, unless otherwise designated by *KUB*, shall be at the control valve of the *water service main*, which provides water service to the *customer, user, and if a different person, owner*.

- B. All *connections* to the *KUB water system* are to be made in accordance with all applicable *KUB standards and specifications*. All *water service line* installations shall be made by the *persons* desiring a *connection* to the *KUB water system*, and in accordance with all applicable codes and ordinances.
- C. The Plumbing Inspector for the *City* for connections within the *City* must inspect and approve the *water service line* and the connection before any meter is set by *KUB*. For connections outside the *City* within *KUB's* service territory, the appropriate regulatory authority, if any, shall inspect the *water service line* and the connection before any meter is set by *KUB*.
- D. The *water service line* and any other *water piping or equipment* beyond the *point of delivery* shall be owned and maintained by the individual property owner. Costs and expenses incidental to the installation, connection and inspection of *water piping and equipment* beyond the *point of delivery* shall be borne by the *customer*, excluding any costs incident to the meter, meter box, and meter connections.
- E. The maintenance of the *water service line*, including repair and rehabilitation, shall be performed by a licensed contractor and be in accordance with all applicable codes and ordinances.
- F. The *water distribution main*, *water service main*, meter, meter box, meter connections, and control valve shall be owned and maintained by *KUB*.
- G. The location of *KUB's* meter, meter box, *water service main*, or other equipment on the *customer's, user's, and if a different person, owner's* property shall not change the location of the *point of delivery*.
- H. As described elsewhere in this Section V(2), *KUB* shall own and maintain all *water facilities* up to the *point of delivery*, and the individual property owner shall own and maintain all *water facilities* and other piping and equipment beyond the *point of delivery*. However, under certain circumstances, as determined by *KUB* in its sole discretion (i.e. *KUB* designates control valve at the *water service main* as *point of delivery* for a metered *water service*), *KUB* may also own and maintain certain *water facilities* beyond the *point of delivery*, including but not limited to the meter, meter box, and meter connections.

- I. *KUB shall not be liable for any injury to persons or property on account of any defect or negligence in the installation, maintenance, or use of the customer's, user's, and if a different person, owner's equipment beyond the point of delivery.*
3. **Cross Connections.** No cross connections shall be permitted without the written authorization of *KUB*.
4. **Mains on Private Property.** *KUB reserves the right to install water main in dedicated easements on private property for residential and business developments, including but not limited to condominium developments and commercial strip malls. In such instances, the point of delivery shall be the point where the water main crosses the dedicated easement, or where the outlet pipe extends from the meter within the easement.*
5. **Restriction on Continuous Flow of Unmetered Service.** Except for fire-fighting use or testing, no customer, user, and if a different person, owner shall take any water through an unmetered service without the written authorization of *KUB*.
6. **Additional Volume or Pressure.** The water service line, water service main, and meter for each customer, user, and if a different person, owner have definite capacity and no major addition to water volume or pressure, as determined by *KUB* in its sole discretion, will be allowed except by consent of *KUB*. Failure to give written notice of major additions or changes in water volume or pressure, as determined by *KUB* in its sole discretion, and to obtain *KUB*'s written consent for same shall render said party liable for any damage to *KUB*'s water system caused by the additional or changed installation. In addition, in such instances, *KUB* shall not be liable for any damage to any premises caused by the additional or changed installation.
7. **Interconnection.** No interconnection of any kind shall be permitted between *KUB*'s water system and any other water supply from any other source, nor shall any other water supply from any other source be permitted to migrate into *KUB*'s water system, unless approved in writing by the COO or the President and CEO. Additionally, *KUB* will require technical information, including but not limited to manufacturer drawings and equipment layout, in regard to the interconnection. *KUB* reserves the right to alter or modify the requesting party's plans to address safety concerns or *KUB*'s water system integrity.
8. **Unauthorized Use or Interference with Water Supply.** No person(s) shall turn on or turn off any of *KUB*'s valves, spigots, or fire hydrants, except when expressly authorized by *KUB*.

9. Limited Use of Private Fire Line. In the case of a *private fire line*, no water shall be used from such *fire line* or from any hydrant thereon, except for fire protection or when the line is being tested or inspected.

Section VI. Interruption of Water Service

KUB shall not be liable for any damage resulting from failure of any *KUB water system* component, or by fluctuations in *water pressure*, or by discontinuing the operation of any segment of its *water system* for repair, extensions or connections, or from the accidental failure of its *water system* from any cause whatsoever, or the termination of *water service* as the result of violations by any *customer, user*, and if a different person, owner, of any applicable federal, state and local laws and/or these *Rules and Regulations* or *KUB's Service Procedures*, or damage resulting from *KUB's* failure to terminate *water service* after notice of termination of *water service* by the *customer*. In cases of emergency, *KUB* shall have the right to restrict the use of its *water system* in any reasonable manner for the protection of *KUB's water system, customers, the public, and the environment*.

Section VII. Restricted Use of Water

In the event of an emergency or other condition causing a shortage in the amount of *water* for *KUB* to meet the demands on its *water system*, *KUB* may, by a method deemed equitable by *KUB*, fix the amount of *water* to be made available for use by *customers* and/or may otherwise restrict the time and purpose of *water use* by *customers*. A method for the distribution of *water* under such circumstances may be set forth in the *Service Procedures*.

If such conditions become necessary, a *customer* may request a variance because of unusual circumstances including matters adversely affecting public health, safety, and welfare. If the *customer* fails to comply with such restriction, *KUB* may take such remedial action, as it deems appropriate under the circumstances including but not limited to temporarily disconnecting *water service* or charging additional amounts because of the excess use of *water*.

KUB also reserves the right to grant no further applications for *water service* until such time that the shortage of *water* for *KUB* to meet the demands on its *water system* has been alleviated.

Section VIII. Termination of Water Service; Refusal to Connect Water Service

KUB has the right to terminate or refuse *water service* based on outstanding debts owed to *KUB* related to the non-payment of utility bills, a dispute as to the ownership or right to occupancy of the *premises* requesting *water service*, a violation of these *Rules and Regulations*, a violation of *Service Procedures*, a violation of a *customer contract*, non-payment of a utility bill by the *customer*, non-usage of *water service* for a reasonable period of time, a violation of any other applicable rule, law, or ordinance, or

any other legitimate reason deemed in *KUB*'s best interests and the best interests of *KUB*'s water system.

Section IX. Rates for Water Service

Water service rates shall be set forth in the *Water Division Rate Schedules* as adopted by the *KUB Board*.

Section X. Billing for Water Service

The billing for water service shall be in accordance with the *Rate Schedules* of the *Water Division* as approved by the *Board* and this section of the *Rules and Regulations*.

1. **Minimum charges.** The minimum charge, if any, will be as stated in the *Rate Schedules* of the *Water Division*.
2. **Estimated billing.** *KUB* may periodically estimate a *customer's water* consumption and submit to *customer* for payment such estimated service bill.
3. **Billing adjustments.** *KUB* may adjust *customer* billing for reasons including but not limited to the following: billing for over or under registration of meters, for the determination of *water* consumption by *customers* when meters have been inoperative, for an obviously incorrect meter reading, or for other recognized and proper adjustments as are determined by *KUB*.

Section XI. Authority to Levy Charges and Fees

Under the provisions of the City Charter and of the general laws of the State of Tennessee, *KUB* is authorized and empowered to fix, levy and collect fees, rents, tolls or other charges for the use of or in connection with the *KUB water system*. This authorization includes but is not limited to the establishment, levy and collection of a service charge, improvement charge or other charges deemed necessary. The CEO and/or his/her designee may establish *Service Procedures* addressing the establishment of charges and fees associated with *water service*.

Section XII. KUB Water System Extensions

1. General Extension Policy

- A. The investment that *KUB* will make, if any, toward an extension of the *KUB water system* will be equitably determined by *KUB* on the basis of economic and/or technical feasibility. In making such determination, *KUB* shall consider the total capital cost, the anticipated revenues, the estimated expenses associated with the extension, such other economic factors as *KUB* may deem appropriate under the circumstances and the

availability of adequate capacity in the *KUB water system*. *KUB* may require the *person* to pay a *CIAC*.

- B. *Persons* desiring *water system* extensions to and within new developments, including but not limited to land development projects and new subdivisions, shall be required to design and install all *water mains* and related facilities to support the new development. In addition, such *persons* shall be required to pay a tap fee toward the cost of connecting the *water mains* in the new development to the *water system*.
- C. *KUB* may require the *person* to execute an extension agreement which requires and/or provides for assurances or other security or credit arrangements as may be required by *KUB* in its sole discretion, with respect to the extension, including, but not limited to, refundable construction advances, minimum demand or bill requirements, and such other forms of security, assurance, and/or guaranty, as *KUB* determines to be necessary or appropriate to protect the interest of *KUB* and its *customers*. *KUB* shall not be obligated to provide refunds unless specified in a contract. In no event shall a refund be in excess of the amount of the advance for or actual cost of construction.
- D. *KUB* shall have the authority to extend its *water system* in a manner different from that set forth in the *Rules and Regulations* and charge a *CIAC* when any such extension is determined to be in the best interest of *KUB*, economic interest of the community, or to the benefit of the public health of the community.
- E. The authority to make *water system* extensions is in *KUB*'s sole discretion even though all requirements have been met. Nothing contained herein shall be construed as requiring *KUB* to extend *water service* to any property. *KUB water system* extensions shall not be denied on the basis of race, sex, religion, color, age or national origin.

2. Construction of *KUB Water System*

- A. *KUB's water system* shall be constructed by *KUB* personnel or by a contractor acceptable to *KUB*.
- B. The size, type and installation of *water system* components shall comply with *KUB's standards and specifications* and must be approved by *KUB*.
- C. Construction work on *KUB's water system* shall at all times be subject to inspection by *KUB* to assure that the work conforms to *KUB's standards and specifications*.

- D. No approval or inspection by *KUB* hereunder shall relieve the *customer*, *person* or the contractor of the *customer* or *person* of any liability for work performed on the *KUB water system*.
- E. Upon the completion of construction and subsequent inspection and approval by *KUB*, such construction shall become the property of *KUB* and thereafter become a part of *KUB's water system*. The *persons* paying the cost of construction shall execute any written instrument requested by *KUB* to provide evidence of *KUB's title*. In consideration of such being transferred to *KUB*, *KUB* shall incorporate such as an integral part of *KUB's water system* in accordance with these *Rules and Regulations*.
- F. *KUB* may, at the request of a *person*, relocate or change existing *KUB water system* components. The *person* may be required to reimburse *KUB* for costs of such relocation or change including but not limited to appropriate overheads and associated costs for easement acquisitions. When a public right-of-way is changed for the benefit of private interests and *KUB's water system* must be adjusted to accommodate said change, the cost of such adjustments shall be paid in advance on a non-refundable basis by the requesting parties.

3. **Construction and Responsibility for Private Water Systems.** *KUB* reserves the authority to allow and/or deny *private water systems* that either directly or indirectly draw *water* flow from the *KUB water system*. Any such *private water system* shall be approved by the applicable governing entities, including but not limited to the applicable Tennessee state regulatory authority. The owner of the *private water system*, such as the developer, the developer's legally authorized successor, property owner, etc., shall retain ownership of and be responsible for all operation and maintenance of the *private water system*. *KUB* shall retain ownership of and be responsible for the operation and maintenance of the master meter(s), which registers *water* usage by the *private water system*, and all applicable *water* facilities related to the operation of the master meter.

Section XIII. Prohibition of Water Resale

No person shall resell water from *KUB's water system* without *KUB's express written permission or written authorization from the applicable Tennessee state regulatory authority.*



Wastewater Division Rules and Regulations

A

Knoxville Utilities Board Rules and Regulations for the Wastewater Division

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Section I. Purpose

It is the intent of the *Knoxville Utilities Board* ("KUB") that these *Rules and Regulations* promote the following principles:

1. Assure the safe and efficient use, administration, operation, expansion, extension, and preservation of *KUB's wastewater system*.
2. Assure *KUB's* compliance with all applicable federal, state, and local statutes, regulations, ordinances and with any other requirements of orders, consent decrees, and/or mandates established by the *Environmental Protection Agency (EPA)* or the Tennessee Department of Environment and Conservation (TDEC), including permits for authorization to discharge under the *National Pollutant Discharge Elimination System (NPDES)*; and its *customers' compliance* with these *Rules and Regulations*, Rate Schedules for wastewater service adopted by the *Board* and any rules of procedure established by *KUB* to implement these *Rules and Regulations*.
3. Promote fair, reasonable, and uniform treatment of *customers* in each of the rate classes of *KUB's Wastewater Division*.
4. Protect our environment through the professional management of our *system* and maintain public confidence in *KUB's wastewater system*.
5. Encourage economic development by promoting extensions of the *KUB wastewater system*.
6. Simplify, clarify, and modernize the policies governing the operation of *KUB's Wastewater Division*.
7. Assure that the *KUB wastewater system* operating practices are as uniform as appropriate.
8. Promote the continued evolution and development of *KUB's wastewater system* operating guidelines and practices.

Section II. Scope

These *Rules and Regulations* apply to the application, implementation, and operation of *KUB's wastewater system* and the provision of *wastewater service* and have been adopted pursuant to authority granted the *Board* by Section 1106(G) of the *City Charter*.

1. **Conflict.** In addition to these *Rules and Regulations*, the following documents, listed in order of precedence, are hereby made a part of all contracts and are enforceable through all contracts, actual and implied, for *customers* and *users* receiving *wastewater service* from *KUB* and apply to all *wastewater services* received by *customers*, whether the service is based upon contract, agreement, signed application or otherwise:
 - i. the *Wastewater Division Rate Schedules*;
 - ii. these *Rules and Regulations* as may be amended from time to time; and

- iii. any rules of procedure established by *KUB* to implement these *Rules and Regulations*.

In the event of a conflict between the documents listed above, the order of precedence shall govern.

2. **Severability.** If any clause, sentence, paragraph, section or part of these *Rules and Regulations*, any applicable *Wastewater Division Rate Schedule*, or any rules of procedure shall be declared invalid or unconstitutional, it shall not affect the validity of the remaining parts of these *Rules and Regulations* or the applicable *Wastewater Division Rate Schedule*, or the applicable rules of procedure.
3. **Authority.** Subject to the limitations set forth in the Charter, these *Rules and Regulations*, applicable *Rate Schedules* and any other official *Board* action or resolution, the *President and CEO*, and his/her designees, has all rights, powers, duties and authorities to implement, and enforce these *Rules and Regulations*. The *President and CEO*, and his/her designees, has all rights, powers, duties, and authorities to establish and enforce rules of procedure and other such policies and programs necessary to implement these *Rules and Regulations*.
4. **Rules and Regulations Oversight Committee.** The *Rules and Regulations* Oversight Committee shall consist of the *Chief Operating Officer* (COO), the vice president and/or director responsible for the plants and *collection system* of *KUB's wastewater system*, and other members of *KUB* management, as so designated by the *President and CEO*. The *Rules and Regulations* Oversight Committee will provide oversight of the implementation, enforcement and administration of the *Rules and Regulations* and assure that the purposes set forth in the *Rules and Regulations* are adhered to as well as assuring that operating requirements for *KUB's wastewater system* are met according to the requirements established by federal, state, and local laws, regulations, orders or consent decrees. The *Rules and Regulations* Oversight Committee is responsible for recommending changes to the *Rules and Regulations* to the *President and CEO*. Any substantive amendments or changes to these *Rules and Regulations* are subject to the approval of the *President and CEO* and adoption by the *Board* in accordance with the *Board's* procedures.
5. **Access to Premises.** The *customer, user, and if a different person, owner of premises* to which *wastewater service* is provided shall, by its receipt and acceptance of *wastewater service*, grant to *KUB* permission to access the *premises* at all times for the purpose of:

- i. Reading meters;
- ii. Installing, testing, inspecting, repairing, operating, maintaining, removing, and replacing any *KUB wastewater system* component;
- iii. Clearing hazards away from *KUB's wastewater system*;
- iv. Inspecting and operating the *customer's, user's*, and if a different person, owner's wastewater facilities;
- v. Inspecting the *premises*; and
- vi. Providing notifications

in order to determine that *KUB's Rules and Regulations* and/or any rules of procedure implementing these *Rules and Regulations*, and the regulations and requirements of the applicable Tennessee state regulatory authority, are being complied with and to ensure compliance with all applicable federal, state, and local law(s) and regulation(s).

6. **Responsibility for KUB's Property.** The *customer, user*, and if a different person, owner shall provide a space for and exercise proper care to protect any *KUB* property located on the *premises*; and in the event of loss or damage to *KUB's* property, arising from the negligence to care for said property, the cost of necessary repairs or replacements shall be paid by the negligent party.

No person shall perform excavation without a valid TN811 locate request ticket. The Tennessee Underground Utility Damage Prevention Act specifies the requirements for safe digging or other work near utilities.

7. **Responsibility for Compliance with Rules and Regulations.** Every *customer, user*, and if a different person, owner shall comply with these *Rules and Regulations, Rate Schedules of the Wastewater Division* adopted by the *Board*, and any rules of procedure established by *KUB* to implement these *Rules and Regulations*.

8. **Promotion of Technology.** *KUB* may establish and maintain processes consistent with these *Rules and Regulations* that promote and utilize new technologies for the operation of its *wastewater system* which improve system reliability, increase operational flexibility and/or lower costs of operation. Examples include, but are not limited to, automated remote metering, estimated metering, etc.

9. **Health and Safety.** All *Rules and Regulations* and rules of procedure established to implement these *Rules and Regulations* affecting health and safety, including (without limitation) all provisions relating to inspection, general safety precautions for utilization, operation and maintenance of *KUB's wastewater system*, and rules governing *customer connections* are for the guidance and benefit of *customers, users*, and if a

different person, owners, and *KUB* shall not be responsible for the health and safety thereof, or for any loss, damage, or injury resulting from any violation thereof, but *KUB* reserves the right, in its discretion, to refuse to furnish wastewater service, or to discontinue furnishing water service and/or wastewater service, if applicable, where the customer, user, and if a different person, owner fails to comply therewith.

10. Interpretation. It is the intent of *KUB* that these *Rules and Regulations* be liberally interpreted.

Section III. Definitions

For the purpose of these *Rules and Regulations*, and unless the context specifically indicates otherwise, the following terms shall have the meaning ascribed:

Wherever the context shall require, words used herein in the singular shall include the plural, words used in the plural shall include the singular, words used in the masculine shall include the feminine, and words used in the feminine shall include the masculine.

Act or *the act* or *CWA* shall mean the Federal Water Pollution Control Act, also known as the Clean Water Act as it may be amended, 33 U.S.C. 1251, et seq.

Basic frontage shall mean a frontage of one hundred (100) feet measured at the building line.

Best management practice or *BMP* shall mean schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in state rule 1200-4-14-.05(1)(a) and (2). *BMPs* may also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.

B.O.D. (Biochemical oxygen demand) shall mean the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedures in five (5) days at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit), expressed in milligrams per liter.

Board shall mean the *KUB Board of Commissioners*, as appointed from time to time by the Mayor and City Council of the City of Knoxville, Tennessee.

Categorical pretreatment standard or *categorical standard* shall mean any regulation containing pollutant discharge limits promulgated by *EPA* in accordance with sections 307(b) and (c) of the *CWA* which apply to specific

categories of users and which appear in 40 CFR Chapter 1, Subchapter N, Parts 405-471, as may be amended.

C.O.D. (chemical oxygen demand) shall mean the quantity of oxygen utilized in the rapid oxidation of organic matter by a strong chemical oxidant in accordance with "Standard Methods," expressed in milligrams per liter.

Chief Executive Officer or President and CEO shall mean the *President* and *Chief Executive Officer* of the *Knoxville Utilities Board*.

Chief Operating Officer or COO shall mean the *Chief Operating Officer* of the *Knoxville Utilities Board*. The COO, subject to the supervision of the CEO, shall administer, implement, and enforce the provisions of these *Rules and Regulations*.

Chlorine demand shall mean the amount of chlorine required to produce a free chlorine residual of 0.1 mg/l after thirty (30) minutes contact time, expressed in milligrams per liter.

City shall mean the City of Knoxville, Tennessee.

Collection system shall mean sewers, wastewater mains, pump stations and other equipment for the conveyance of wastewater to the *treatment works*.

Color shall be measured by a Nessler tube colorimeter utilizing a standard platinum cobalt color wheel for the determination of *color* in water.

Commercial and industrial use shall mean all uses with the exception of *domestic use* as defined in these *Rules and Regulations*.

Compatible waste shall mean biochemical oxygen demand, *suspended solids*, *pH* and fecal coliform bacteria; plus any additional *pollutants* identified in a *publicly-owned treatment works NPDES permit*, for which the *publicly-owned treatment works* is designed to treat such *pollutants* and in fact does treat such *pollutants* to a substantial degree.

Composite sample shall mean a collection of individual *grab samples* obtained at regular intervals, either based on time intervals or flow intervals (e.g. every two hours during a 24-hour time span or every 1000 gallons of process wastewater produced). Each individual *grab sample* is either combined with the others or analyzed individually and the results averaged.

Connection shall mean any physical tie or hookup made to the *KUB wastewater system*.

Connection charge shall mean that charge levied to defray the expenditure required to process the application, inspect the *connection* and approve the discharge permit.

Contribution in Aid of Construction (CIAC) shall mean a payment required of the customer for the extension of *KUB's wastewater system*.

Cooling water shall mean the water used for heat exchange and discharged from any system of condensation, air conditioning, cooling, refrigeration, or other such system, but which has not been in direct contact with any polluting material.

Customer shall mean any *person* who receives *wastewater service* from *KUB* under either an express or implied contract requiring such *person* to pay *KUB* for such service. The term shall also include *illicit users* of *wastewater service* from *KUB*.

Domestic use of the *wastewater system* shall be defined and limited to single-family, multifamily, apartment or other *dwelling unit* or *dwelling unit equivalent* containing sanitary facilities for disposal of domestic *wastewater* and used for residential purposes only.

Dwelling unit shall mean any structure occupied by one or more *persons* of a single family for residential purposes. Apartment buildings and other structures occupied by more than one family shall be considered multiple *dwelling units*.

Dwelling unit equivalent is that daily *wastewater* flow volume equal to the daily *wastewater* flow volume of one single-family *dwelling unit* which, for the purposes intended in these regulations, is established at one hundred sixty seven (167) gallons per day or two hundred fifty (250) gallons per day with peaking factor.

Environmental Protection Agency or *EPA* means an agency of the United States or, where appropriate, the term may also be used as a designation for the administrator or duly authorized official of said agency.

Extra strength wastewater shall be defined as any *wastewater* that has any characteristic or combination of characteristics exceeding the characteristics of *normal domestic wastewater* and that requires effort or expenditure over and above that required for *treatment* of *normal domestic wastewater*.

Fee is any amount levied that is: (1) infrequent in nature, and/or (2) generally not consumption based, and/or (3) set at the discretion of management of *KUB* as authorized by the *Board*, but does not include a *rate*.

Floating oil and grease is oil, fat or grease in a physical state such that it will separate by gravity from *wastewater* by *treatment* in an approved *pretreatment*

facility. Wastewater shall be considered free of floatable oil and grease if it is properly pretreated and does not interfere with the wastewater system.

Food processing industry means any commercial user whose primary business is the preparation of food products.

Food service facility or *FSF* means any restaurant, eatery, food caterer, cafeteria, or other institution processing and serving food.

Grab sample is an individual sample taken from a waste stream without regard to the flow in the waste stream and collected over a period of time not exceeding fifteen (15) minutes and must be representative of the discharge.

Grease and oil shall mean the group of substances with similar physical characteristics, which includes fatty acids, soaps, fats, waxes, oil and any other material solvent extracted and not volatilized during evaporation of the solvent.

Incompatible waste shall mean all *pollutants* other than compatible as defined within.

Industrial user (IU) shall mean a source of discharge of *industrial wastewater* into the *treatment works* that does not constitute a "discharge of *pollutants*" under regulations issued pursuant to Section 402, of the *Act*.

Industrial wastewater is the solid, liquid and gaseous wastes, other than domestic wastewater, resulting from processes or operations employed in industrial or commercial establishments.

Infiltration means groundwater and surface water which leaks into the wastewater system through cracked pipes, joints, manholes, *private service laterals* or other openings.

Inflow means water that flows into the wastewater system from the surface, streams, roof drains, down spouts, *private service laterals* or other sources.

Influent means the wastewaters arriving at the *treatment plants*.

Interference shall mean a discharge which, alone or in conjunction with a discharge or discharges from other sources, inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal, or exceeds the design capacity of the treatment works or the *collection system*, including but not limited to events,

- A. which are a cause of or significantly contributes to a violation of any requirement of *KUB's NPDES permit* (including an increase in the magnitude or duration of a violation); or

- B. which cause or significantly contribute to an increase in the discharge of *pollutants* above normal conditions or an increase in the cost of operation of the *treatment plants* above normal conditions; or
- C. which cause or significantly contribute to the prevention of sludge use or disposal by *KUB*. An *industrial user* significantly contributes to such *interference* or prevention of sludge use or disposal whenever such user:
 - i. discharges a daily *pollutant* load in excess of that permitted by the provisions of these *Rules and Regulations* or by federal or state law and regulations;
 - ii. discharges *wastewater* which substantially differs in nature or constituents from the user's average discharge; or
 - iii. knows or has reason to know that the user's discharge, along or in conjunction with discharge from other sources, would result in a *NPDES permit* violation by *KUB* or would prevent sludge use or disposal.

Knoxville Utilities Board, or *KUB*, shall mean the *Knoxville Utilities Board* of the City of Knoxville, Tennessee, or, as the context requires, the management of *KUB*, its contractors or agents.

Meeting means an informal compliance meeting with the industrial, domestic or commercial user to resolve recurring noncompliance.

Maintenance, operations and management (MOM) program means the program for the efficient and proper operation and maintenance of the *wastewater collection system* and includes, but is not limited to, a *collection system* operations plan, a *grease management plan*, a *maintenance management plan* and a training program for appropriate personnel of the *Wastewater Division* of *KUB*.

Natural outlet shall mean any outlet, including *storm sewer* overflows, into a water-course pond, ditch, lake or other body of surface or groundwater.

National pretreatment standards or pretreatment standards shall mean any regulation containing *pollutant* discharge limits promulgated by the *EPA* in accordance with Section 307 (b) and (c) of the *Act* (33 U.S.C. 1347), which applies to *industrial users*. This term includes prohibitive discharge limits established pursuant to Tennessee Rule 0400-40-14-.05.

National pollutant discharge elimination system or NPDES permit shall mean a permit issued to a *POTW* pursuant to Section 402 of the Act.

New Source means any building, structure, facility or installation from which there is or may be a discharge of *pollutants*, the construction of which commenced after the publication of proposed *Pretreatment Standards* under section 307(c) of the Act which will be applicable to such source if such standards are thereafter promulgated in accordance with that section, provided that:

- A. The building, structure, facility or installation is constructed at a site at which no other source is located; or
- B. The building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of *pollutants* at an existing source; or
- C. The production or *wastewater* generating processes of the building, structure, facility or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity, as the existing source should be considered.
 - i. Construction on a site at which an existing source is located results in a modification rather than a *new source* if the construction does not create a new building, structure, facility or installation meeting the criteria of this section but otherwise alters, replaces, or adds to existing process or production equipment.
 - ii. Construction of a *new source* as defined under this paragraph has commenced if the owner or operator has:
 - a. Begun, or caused to begin as part of a continuous onsite construction program:
 - 1. Any placement, assembly, or installation of facilities or equipment; or
 - 2. Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or

- installation of *new source* facilities or equipment; or
- b. Entered into a binding contractual obligation for the purchase of facilities or equipment, which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph.

Normal domestic wastewater shall be regarded as "normal" for Knoxville.

Normal domestic wastewater shall contain a daily average of not more than two thousand five hundred (2,500) pounds (three hundred (300) milligrams per liter) of *suspended solids*; not more than two thousand (2,000) pounds (two hundred forty (240) milligrams per liter) of *B.O.D.*; and not more than four hundred seventeen (417) pounds (fifty (50) milligrams per liter) of *grease and oil*, each, per million gallons.

NONC means *Notice of Non-Compliance*, which is a verbal or written notice sent to a *user* who is not complying with the *Wastewater Rules and Regulations* which may result in issuance of a *Notice of Violation* if the *user* does not come into compliance within a specified time frame. It is not required that KUB issue an NONC before taking more stringent enforcement action.

NOV means *Notice of Violation*, which is a written enforcement action issued to a *user* who fails to abide by the *Wastewater Rules and Regulations* that may result in further enforcement action including, but not limited to, termination of *water* and *wastewater services*, if the violation is not corrected within a specified time frame.

Pass through means a discharge which exits the *treatment plant* into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of *KUB's NPDES permit* (including an increase in the magnitude or duration of a violation).

PC means *Pretreatment Coordinator*.

Person shall mean any individual, partnership, firm, company, association, society, corporation, limited liability company, trust, estate, governmental entity, or any other legal entity, or its legal representatives, agents, or assigns. This definition includes all federal, state and local governmental entities and shall also include illicit users of *wastewater service* from *KUB*.

pH shall mean the logarithm of the reciprocal of the weight of hydrogen ions in grams per liter of solution. A stabilized *pH* will be considered as a *pH* which does not change beyond the specified limits of 5.5 to 9.5 when the waste is subjected to aeration.

Plumbing inspector shall mean the *plumbing inspector* of the *City* and the like official for Knox County.

Pollutant means any dredged material, spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discharged equipment, rock, sand, cellar dirt and industrial, municipal, or agricultural waste discharge into water.

Premises shall mean any structure, group of structures, or property, whether occupied or unoccupied, operated as a single business, enterprise, or *dwelling unit*, but shall not include more than one *dwelling unit*.

Pretreatment or *treatment* shall mean the reduction of the amount of *pollutants*, the elimination of *pollutants*, or the alteration of the nature of *pollutant* properties and *wastewater* to a less harmful state prior to or in lieu of discharging or otherwise introducing such *pollutants* into the *POTW*. The reduction and alteration can be obtained by physical, chemical or biological process, process changes or by other means, except as prohibited by 40 CFR Section 403.6(d).

Private Service Lateral means that portion of a sanitary sewer pipe, including that portion in the public right of way, that extends from *KUB's wastewater main* to the single-family, multi-family, apartment or other dwelling unit, or other structure to which *wastewater service* has been provided. *Private service lateral* does not include connector joints that have been installed by *KUB*.

Private wastewater system is any *wastewater system* owned and maintained by the *customer*, whose operation is regulated by *KUB* and entities other than *KUB*, including but not limited to the applicable local or state regulatory authority.

Properly shredded garbage shall mean the wastes from the preparation, cooking and dispensing of food that have been shredded to such degree that all particles will be carried freely under the flow conditions normally prevailing in the *POTW*, with no particle greater than one-half (1/2) inch in any dimension.

Publicly-owned treatment works or *POTW* means a treatment works as defined by section 212 of the CWA (33 U.S.C. § 1292), including any devices or systems designed, intended, or used in the collection, storage, *treatment*, recycling and reclamation of *wastewater*.

Publish, unless otherwise indicated, means the publishing in a newspaper of general circulation the name, address, and date of a *user's* violation of KUB's Pretreatment Program or Grease Control Program as part of KUB's enforcement response.

Rate is any quantitative value used to determine an amount levied on a *customer* directly related to the provision of *wastewater service*, as set forth in a *Wastewater Division Rate Schedule* adopted by the *Board*.

Rules and Regulations means the rules and regulations adopted by the *Board* governing the operation and use of *KUB's wastewater system*.

Sanitary sewer is a pipe or conduit intended to receive domestic *wastewater* along with commercial and industrial waste, without the admixture of surface water and storm water.

Sanitary wastewater shall mean *wastewater* discharging from the sanitary conveniences of dwellings, including apartment houses and hotels, office buildings, factories or institutions, and shall be free from storm, ground, surface and other forms of *unpolluted water*.

SAR means Semi-Annual Report to the State from *KUB*.

Sewer shall mean a pipe or conduit for carrying *wastewater*.

Sewer improvement charge shall mean the amount charged to the owner or occupant of each occupied lot or parcel of land, which is furnished access to *wastewater* lines to finance and amortize construction of the *wastewater system* extension.

Sewer service charge and wastewater service charge shall be synonymous and shall mean the amount charged to the *customer* for operation, maintenance and capital improvements for the *wastewater system*.

Show Cause Order means an *Administrative Order* that calls for a formal meeting requiring the *industrial user*, *commercial user*, or *domestic customer* to appear and demonstrate why *KUB* should not take an appropriate enforcement action against the *person*. The meeting may also serve as a forum to discuss corrective actions and compliance schedules.

Significant Industrial User.

- A. Except as provided in paragraph B. of this section, the term *Significant Industrial User* means:

- i. All *industrial users* subject to *categorical pretreatment standards* under 40 CFR 403.6 and 40 CFR chapter I, subchapter N; and
 - ii. Any other *industrial user* that: discharges an average of 25,000 gallons per day or more of process wastewater to the *POTW* (excluding sanitary, noncontact cooling and boiler blow down wastewater); contributes a process waste stream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the *treatment plant*, or is designated as such by the Control Authority as defined in 40 CFR 403.12(a) on the basis that the *industrial user* has a reasonable potential for adversely affecting the *POTW's* operation or for violating any *pretreatment standard* or requirement (in accordance with 40 CFR 403.8(f)(6)).
 - iii. KUB may determine that an Industrial User subject to categorical Pretreatment Standards is a Non-Significant Categorical Industrial User rather than a Significant Industrial User on a finding that the Industrial User never discharges more than 100 gallons per day (gpd) of total categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater, unless specifically included in the Pretreatment Standard) and the following conditions are met:
 - a. The Industrial User, prior to KUB's finding, has consistently complied with all applicable categorical Pretreatment Standards and Requirements;
 - b. The Industrial User annually submits the certification statement required in Appendix A Section 24(B) together with any additional information necessary to support the certification statement; and
 - c. The Industrial User never discharges any untreated concentrated wastewater.
- B. Upon a finding that an *industrial user* meeting the criteria in paragraph (ii) of this section has no reasonable potential for adversely affecting the *POTW's* operation or for violating any *pretreatment standard* or requirement, *KUB* may at any time, on its own initiative or in response to a petition received from an *industrial user*, and in accordance with 40 CFR 403.8(f)(6), determine that such *industrial user* is not a *significant industrial user*.

Significant Non-Compliance or SNC means: An *industrial user* or commercial user is in *significant non-compliance* if its violation meets one or more of the

criteria set forth in *KUB's Pretreatment Program* (Appendix A) and in accordance with 40 CFR 403.8(f)(2)(vii).

Slug shall mean any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge, which has a reasonable potential to cause *interference or pass through*, or in any other way violate *KUB's* regulations, local limits or permit conditions.

SRH means Service Renewal Hearing. A meeting with the *customer* to determine whether service may be restored.

Standard industrial classification or *SIC* shall mean a classification pursuant to the National Industrial Classification Manual issued by the Executive of the President, Office of Management and Budget, 1972.

Standard Methods shall mean *Standard Methods for the Examination of Water and Wastewater*, latest edition, published by the American Public Health Association, the American Water Works Association, and the Water Environment Federation.

Storm sewer or *storm drain* shall mean a pipe, downspout or conduit, ditch or canal which carries storm and surface waters and drainage, *cooling water* or other water, but excludes *wastewater*.

Submission means:

- A. A request by *KUB* for approval of a *Pretreatment Program* to the *EPA* or *TDEC*;
- B. A request by *KUB* to the *EPA* or *TDEC* for authority to revise the discharge limits in *categorical Pretreatment Standards* to reflect *KUB pollutant* removals; or
- C. A request by *KUB* to the *EPA* by the State for approval of its State *pretreatment* program.

Suspended solids shall mean solids that either float on the surface of or are in suspension in *wastewater*, and which are removable by laboratory filtering.

TBI means Tennessee Bureau of Investigation.

Toxic pollutant shall mean any *pollutant* or combination of *pollutants* listed as toxic and which is under regulation promulgated by the administrator or the *Environmental Protection Agency* under the provision of 33 U.S.C. 1317, Section 307.

Treatment plant means that portion of the *POTW*, which is designed to provide *treatment* (including recycling and reclamation of municipal sewage and industrial waste).

Twenty-four-hour flow proportional composite sample shall mean a sample consisting of several effluent portions collected during a twenty-four-hour period in which the portions of sample are proportionate to the flow and combined to form a representative sample.

Unpolluted water is water of quality equal to or better than the effluent criteria in effect or water that would not cause violation of receiving water quality standards and would not be benefited by discharge to the *wastewater system*.

User shall mean any *premise* having a *connection* to the *KUB wastewater system* or having access thereto. The term shall include illicit *users* of *wastewater service* from *KUB*.

Wastewater and/or *wastewater service* shall mean the water-carried wastes from residences, business and commercial buildings, institutions and industrial establishments, singular or in any combination together via the *KUB wastewater system* with such unintended ground, surface and storm water as may be present.

Wastewater Division or *division* shall mean the part of the *KUB* system having charge of the physical operation and financial oversight of *KUB's wastewater system*.

Wastewater main shall mean the principal or major pipes in the *wastewater system* conveying *wastewater*.

Wastewater system shall mean all facilities for collecting, pumping, treating and disposing of *wastewater* and sludge.

Water Management Division Director means one of the Directors of the Water Management Divisions within the Regional offices of the *EPA* or this person's delegated representative.

Section IV. Initiation of Wastewater Service

1. **Residential use.** A formal request for either original or additional *wastewater service* must be made to *KUB* by the *customer* and be duly approved by *KUB* before *connection* to the *KUB wastewater system* is made. The receipt by *KUB* of a prospective *customer's* request for *wastewater service* shall not obligate *KUB* to render *wastewater service*. *KUB* may, at its sole discretion, require the *customer* to provide security,

assurance, or guaranty prior to *KUB* rendering wastewater service. If the service requested would cause *KUB* to exceed its capacity to collect, transport or treat the *customer's wastewater*, or such service cannot be supplied in accordance with *KUB's Rules and Regulations* and any rules of procedure established to implement these *Rules and Regulations*, the *customer* shall not be charged the *connection charge* and there shall be no liability on the part of *KUB* to the requestor for the refusal of such service.

2. Commercial and Industrial use; *Pretreatment Program*; and *Grease Control Program* A formal request for either original or additional wastewater service must be made to *KUB* and be duly approved before *connection* is made. The request shall be in the prescribed form according to the *Pretreatment Program*, which program is attached hereto as Appendix A and is incorporated in its entirety into the *Rules and Regulations* by reference. The receipt by *KUB* of a prospective *customer's* request for wastewater service shall not obligate *KUB* to render the wastewater service. *KUB* may, at its sole discretion, require the *customer* to provide security, assurance, or guaranty prior to *KUB* rendering wastewater service. If the service requested would cause *KUB* to exceed its capacity to collect, transport or treat the *customer's wastewater*, or such service cannot be supplied in accordance with *KUB's Rules and Regulations*, any rules of procedure established to implement these *Rules and Regulations*, and general practice, the *customer's* request for services will be denied by *KUB* and, in such event, the *customer* shall not be charged the *connection charge* and there shall be no liability of *KUB* to the requestor for refusal of such service. All food service facilities whose requests are accepted by *KUB* shall comply with the provisions of the *Grease Control Program* attached hereto as Appendix B and which Program is incorporated into these *Rules and Regulations* by reference.

3. Intergovernmental agreements. At *KUB*'s sole discretion, *KUB* may receive, treat and dispose of the wastewater of municipalities, utility districts, and unincorporated areas. Any person owning or controlling premises located beyond the current *KUB wastewater system* desiring to install a plumbing system for the purpose of discharging domestic wastewater and/or industrial waste into the *wastewater system* of *KUB* must comply with all applicable federal, state and local laws, ordinances, regulations and *KUB's Rules and Regulations* and any rules of procedure established to implement these *Rules and Regulations*. *KUB* may enter into an agreement with said municipalities and unincorporated areas at *KUB*'s sole discretion. There shall be no liability on the part of *KUB* to the requestor for refusal of such service.

4. Private wastewater systems. At *KUB*'s sole discretion, *KUB* may receive, treat and dispose of the wastewater of *private wastewater*

systems within or without the current *KUB wastewater system* area of service. Any person owning or controlling *premises* either within or without the current *KUB wastewater system* area of service desiring to install a plumbing system for the purpose of discharging domestic *wastewater*, commercial and/or industrial waste into the *wastewater system* of *KUB* must comply with all applicable federal, state and local laws, ordinances, regulations and *KUB's Rules and Regulations* and any rules of procedure established to implement these *Rules and Regulations*. *KUB* may enter into an agreement with said persons at *KUB's* sole discretion. There shall be no liability on the part of *KUB* to the requestor for refusal of such service.

Section V. *Connections to KUB Wastewater System*

- 1. Availability.** *Wastewater service* shall be deemed available if: (1) The property is improved with structures; (2) occupied structures are within 300 linear feet of the *wastewater system*; (3) the *wastewater system* contains sufficient capacity to allow for the collection, transportation and treatment of the added *wastewater volume*; and (4) either *wastewater mains* of sufficient depth to allow gravity flow from the main floor are adjacent to any property line or a pressurized *wastewater private service lateral connection* to the *wastewater main* is provided at the property line.

Notwithstanding the preceding requirements, *wastewater service* will not be considered available if: (1) the *wastewater system* is farther than 50 feet from the *customer's* property line; (2) an easement is required on a separate parcel to access the *wastewater system*; (3) a railroad crossing permit is required to access the *wastewater system*; or (4) a body of water or wetland lies between the occupied structure and the *wastewater system* that would prohibit the installation.

The *premises* will be further evaluated to determine availability of *wastewater service* by *KUB*, in its sole discretion, if: (1) *wastewater main* depth is in excess of 12 feet; (2) *wastewater main* size is greater than 12 inches; (3) a storm drain, other utility, road embankment, concrete barrier or other obstruction impedes the installation; or (4) there are other special situations not provided for in these *Rules and Regulations*.

- 2. *Connections; inspection and rehabilitation of private service laterals.***

- A. All *connections* to *KUB wastewater mains* are to be made in accordance with all applicable *KUB* standards and specifications.**

All costs and expenses incident to the installation, *connection* and inspection of the *private service lateral* shall be borne by the owner. If for any reason a *connection* cannot be made in accordance with *KUB* standards and specifications, exceptions may be approved by *KUB*, at its sole discretion.

- B. The *Plumbing Inspector* for the *City* for *connections* within the *City* and the appropriate regulatory authority for the area of *connection* outside the *City* must inspect and approve the *wastewater service connection* and all *private service laterals* before any underground portion is covered and/or placed in service.
- C. Whenever it comes to *KUB*'s attention that a *private service lateral* may contain defects and or improper *connections* that (1) are potential sources to the *wastewater system* of extraneous ground or surface water infiltration and inflow ("I/I") that may cause or contribute to wet weather overflows in the *wastewater system*, (2) allow for the possible exfiltration of *wastewater* onto or below the surface of the ground that could then enter the *City*'s municipal separate storm sewer system, or (3) allow roots/debris to enter the *wastewater system* through cracks, holes or poorly sealed joints thus restricting flow and leading to possible dry weather or wet weather overflows in the *wastewater system* reflecting that there has been a failure on the part of the property owner or *user* to maintain the *private service lateral*, in accordance with *KUB*'s standards and specifications and the Standard Plumbing Code of the *City* in violation of these *Rules and Regulations*, written notice shall be given by *KUB* to such *customer*, *user*, or if a different *person*, owner or duly authorized agent, of such failure. The notice, with a copy to the *City*'s *Plumbing Inspector*, will provide, to the extent such information is available, (i) details concerning lateral age, material, and construction standards, (ii) photos of smoke in vicinity of the *private service lateral*, (iii) mainline CCTV images of dyed water discharging from the *private service lateral*, (iv) CCTV photos of the interior of the *private service lateral* and (iv) written description of dye testing procedures used to identify cross connections or illicit discharges.

Such notice may be given either by personal service on the *customer*, *user*, or if a different *person*, owner, or duly authorized agent, or by certified letter addressed to the last known place of residence of such *customer*, *user*, or if a different *person*, owner or his duly authorized agent; and proof of the mailing of such letter shall satisfy that the notice requirement has been accomplished.

In the case of nonresident or unknown owners, service of the notice may be made by publication in a daily newspaper, published in the City or in a newspaper of general circulation within the service area, for a period of three (3) days. Upon completion of such publication, the notice requirement will be satisfied.

The notice in each case shall specify what is required of the *customer, user, or if a different person*, owner with respect to the *private service lateral*, in order to bring same into compliance with the standards, specifications, the Code and these *Rules and Regulations*. The notice shall advise the *customer, user, or if a different person*, owner that a plumbing permit must be obtained and the repair work completed by no later than one hundred twenty (120) days of the date of service of the notice, or, the *customer, user, or if a different person*, owner must initiate an appeal in accordance with the appeals process set forth in these *Rules and Regulations*. If the *customer, user, or if a different person*, owner fails to complete the work in the specified time or timely appeal such requirement, then the *customer, user, or if a different person*, owner may be subject to a finding of violation by *KUB* and be subject to enforcement in accordance with the provisions of these *Rules and Regulations*, which may include, at *KUB's* sole discretion, termination by *KUB* of water and/or wastewater services.

- D. *Private service laterals* that have been previously used but have been abandoned may be used in connection with new buildings only when approved by *KUB* and applicable local plumbing code. Abandoned *private service laterals* must be discontinued according to the standards and specifications of *KUB*.
- E. *KUB* may, at its sole discretion, inspect *private service laterals* to ensure proper operation and condition of such *private service laterals* in order to protect the *KUB wastewater system*.
- F. Each individual property owner shall be entirely responsible for the maintenance, including repair and rehabilitation, of the *private service lateral* in accordance with *KUB's* standards and specifications and these *Rules and Regulations*, and the most recent Standard Plumbing Code, as modified and adopted by the City or the appropriate regulatory authority for the area of connection outside of the City. However, *KUB* may, in its sole discretion, as a courtesy to the property owner, elect to be responsible for the repair and rehabilitation of the portion of the *private service lateral* located in the public right-of-way (the portion of the *private service lateral* extending from or near the property line to *KUB's* wastewater main).

3. Prohibited connections

- A. A *connection* which discharges any substance or solution which is not intended to be transported via the *wastewater system* is prohibited. In addition to the prohibitions contained in the Pretreatment Program (Appendix A), prohibited substances and solutions include, but are not limited to, storm water surface water, groundwater, roof run-off, subsurface drainage, *unpolluted water*, *cooling water*, and *grease*. *Connections* which discharge prohibited substances into *KUB's wastewater system* include, but are not limited to, *storm sewers*, *storm drains*, downspouts, leaking *private service laterals* or similar *connections*.
- B. The *person* who is discharging or causing to be discharged any prohibited substance or solution shall stop such discharge or bring the discharge into compliance with all applicable federal, state and local laws and *KUB's* standards and specifications and these *Rules and Regulations*.

4. Required connections

Any owner, tenant or occupant of a lot or parcel of land, upon which a building exists for residential, commercial or industrial use, shall be required to make a direct *connection* of such building to the *KUB wastewater system*, provided wastewater service is available as defined under Section V. (1.). Where *wastewater service* is available, it will be presumed that the required *connection* has been made and the *owner*, tenant or occupant will be billed for *wastewater service*. In the event *KUB* has knowledge that any such building is not connected to the *KUB wastewater system*, *KUB* reserves the right, in accordance with Tennessee state law (T.C.A. 7-35-201), and in addition to any other right or remedy it may have, to (a) refuse *water service* to such *owner*, *tenant* or *occupant* until such building is connected to the *KUB wastewater system* or (b) discontinue *water service* to such *owner*, *tenant* or *occupant* failing to connect such building to the *KUB wastewater system* within the time specified in the notice from *KUB* of the requirement to connect, but in no event later than one hundred eighty days (180) days from the receipt of such notice from *KUB*.

Section VI. Interruption of Wastewater Service

KUB shall not be liable for any damage resulting from failure of any *KUB wastewater system* component, or by discontinuing the operation of any segment of its *wastewater system* for repair, extensions or connections, or from the accidental failure of its *wastewater system* from any cause whatsoever or the termination of *water* and *wastewater services* as the result of violations by any

customer, user, and if a different person, owner, of any applicable federal, state and local laws and/or these Rules and Regulations and any rules of procedure established to implement these Rules and Regulations. In cases of emergency, KUB shall have the right to restrict the use of its wastewater system in any reasonable manner for the protection of KUB's wastewater system, customers, the public, and the environment.

Section VII. Termination of Wastewater Service; Refusal to Connect Wastewater Service

KUB has the right to terminate or refuse wastewater service to a customer by discontinuing water or wastewater service based on limited capacity of its wastewater system, outstanding debts owed to KUB related to the non-payment of utility bills, a dispute as to the ownership or right to occupancy of the premises requesting wastewater service, a violation of these Rules and Regulations, a violation of a customer contract, a violation of any rules of procedure established to implement these Rules and Regulations, non-payment of a utility bill by the customer, a violation of any other applicable rule, law, or ordinance, or any other legitimate reason deemed in KUB's best interests and the best interests of KUB's wastewater system.

Section VIII. Rates for Wastewater Service

Wastewater service rates shall be set forth in the Wastewater Division Rate Schedules as adopted by the KUB Board.

Section IX. Wastewater Charges

Charges for wastewater service shall be based upon the Rate Schedules of the Wastewater Division as adopted by the KUB Board.

1. **Single-point delivery.** The rates included in the Rate Schedules of the Wastewater Division are based upon the supply of service to the entire premises through a single delivery and metering point. If service is rendered to any customers or premises through more than one delivery point, KUB reserves the right to meter and to bill each such delivery point as a separate service.
2. **Multiple services through a single meter.** In the event KUB allows more than one customer or premise to be served through a single service line and meter, the amount of water used by all the customers and premises served through a single service line and meter shall be allocated to each separate customer or premise thus served in such a manner as determined by KUB in its sole discretion. The wastewater charge for each such customer or premise thus served shall be computed just as if each such customer or premise had received

through a separately metered service the amount of water so allocated to it, such computation to be made at *KUB's applicable wastewater rates*, including the provisions as to minimum bills. The separate charges for each *customer* or *premise* served through a single service line and meter shall then be added together and the sum thereof shall be billed to the *customer* in whose name the service is supplied.

3. **Secondary meters.** Any *customer* that desires to use a secondary meter to reduce wastewater charges for water not discharged to *KUB's wastewater system* must request such service from *KUB*. All costs and expenses incident to the installation of the secondary meter shall be borne by the *customer*. Once installed, the secondary meter shall become the property of *KUB's wastewater system*.
4. **Wastewater meters.** Any *customer* that needs to use a wastewater meter to separately meter discharges to the *wastewater system* must request such service from *KUB*. *KUB* may authorize the use of a wastewater meter at its sole discretion. All costs and expenses incident to the installation of the wastewater meter shall be borne by the *customer*. Once connected, the wastewater meter shall become property of *KUB's wastewater system*.
5. **Alternate water supplies.** Individuals with dwellings with wells or sources of water supply other than municipal water supplies that are available and/or subject to discharge to the *wastewater system* will be charged for wastewater services at the sole discretion of *KUB*.

Section X. Billing for Wastewater Service

The billing for wastewater service shall be in accordance with the *Rate Schedules* of the *Wastewater Division* as adopted by the *Board* and this section of these *Rules and Regulations*.

1. **Minimum charges.** The minimum charge, if any, will be as stated in the *Rate Schedules* of the *Wastewater Division*.
2. **Due dates.** Wastewater service bills must be paid on or before the due date shown, otherwise a late *fee* shall be applied. Failure to receive a bill will not release a *customer* from payment obligations, nor extend the due date. In the event bills are not paid on or before the due date, water service and/or *wastewater service* may be discontinued and not resumed again until all bills are paid, and *KUB* shall not be liable for damages on account of discontinued service at any time after the due date, even though payment of such bills be made on the same date either before or after service is actually discontinued.

3. **Estimated billing.** *KUB* may periodically estimate a *customer's wastewater* use and submit to *customer* for payment such estimated service bill.
4. **Billing adjustments.** *KUB* may adjust *customer* billing for reasons including but not limited to the following: billing for over or under registration of meters, for leaks, for the determination of water use by *customers* when meters have been inoperative, for an obviously incorrect meter reading, or for other recognized and proper adjustments as are determined by *KUB*.

Section XI. Authority to Levy Charges and Fees

Under the provisions of the City Charter and of the general laws of the State of Tennessee, *KUB* is authorized and empowered to fix, levy and collect fees, rents, tolls or other charges for the use of or in connection with the *KUB wastewater system*. This authorization includes but is not limited to the establishment, levy and collection of a service charge, *connection charge*, improvement charge, extra strength surcharge, or other charges deemed necessary. The *CEO* and/or his/her designee may establish policies addressing the establishment of charges and fees associated with *wastewater service*.

Section XII. KUB Wastewater System Extensions

1. General Extension Policy

- A. The investment that *KUB* will make, if any, toward an extension of the *KUB wastewater system* will be equitably determined by *KUB* on the basis of economic and/or technical feasibility. In making such determination, *KUB* shall consider the total capital cost, the anticipated revenues, the estimated expenses associated with the extension, such other economic factors as *KUB* may deem appropriate under the circumstances and the availability of adequate collection, transportation and treatment capacity in the *wastewater system*. *KUB* may require the person to pay a *CIA*.
- B. Persons desiring *wastewater system* extensions to and within new developments, including but not limited to land development projects and new subdivisions, shall be required to design and install all *wastewater mains* and related facilities to support the new development. In addition, such persons shall be required to pay a tap fee toward the cost of connecting the *wastewater mains* in the new development to the *wastewater system*.
- C. *KUB* may require the person to execute an extension agreement which requires and/or provides for assurances or other security or credit arrangements as may be required by *KUB* in its sole

discretion, with respect to the extension, including, but not limited to, refundable construction advances, minimum demand or bill requirements, and such other forms of security, assurance, and/or guaranty, as *KUB* determines to be necessary or appropriate to protect the interest of *KUB* and its *customers*. *KUB* shall not be obligated to provide refunds unless specified in a contract. In no event shall a refund be in excess of the amount of the advance for or actual cost of construction.

- D. *KUB* shall have the authority to extend its *wastewater system* in a manner different from that set forth in these *Rules and Regulations* and charge a *CAC* when any such extension is determined to be in the best interest of *KUB*, economic interest of the community, or to the benefit of the public health of the community.
- E. The authority to make *wastewater system* extensions is in *KUB*'s sole discretion even though all requirements have been met. Nothing contained herein shall be construed as requiring *KUB* to extend *wastewater service* to any property. *KUB wastewater system* extensions shall not be denied on the basis of race, sex, religion, color, age or national origin.

2. Construction of *KUB Wastewater System*

- A. *KUB's wastewater system* shall be constructed by *KUB personnel* or by a contractor acceptable to *KUB*.
- B. The size, type, and installation of *wastewater system* components shall comply with *KUB's standards and specifications* and must be approved by *KUB*.
- C. Construction work on *KUB's wastewater system* shall at all times be subject to inspection by *KUB* to assure that the work conforms to *KUB's standards and specifications*.
- D. No approval or inspection by *KUB* hereunder shall relieve the *customer, person* or the contractor of the *customer or person* of any liability for work performed on the *KUB wastewater system*.
- E. Upon the completion of construction and subsequent inspection and approval by *KUB* such construction shall become the property of *KUB* and thereafter become a part of *KUB's wastewater system*. The *persons* paying the cost of construction shall execute any written instrument requested by *KUB* to provide evidence of *KUB's* title. In consideration of such being transferred to *KUB*, *KUB* shall

incorporate such as an integral part of *KUB's wastewater system* in accordance with these *Rules and Regulations*.

- F. *KUB* may, at the request of a *person*, relocate or change existing *KUB wastewater system* components. The *person* may be required to reimburse *KUB* for costs of such relocation or change including but not limited to appropriate overheads and associated costs for easement acquisitions. When a public right-of-way is changed for the benefit of private interests and *KUB's wastewater system* must be adjusted to accommodate said change, the cost of such adjustments shall be paid in advance on a non-refundable basis by the requesting parties.
3. **Construction and Responsibility for *Private Wastewater Systems*.** *KUB* reserves the authority to allow and/or deny *private wastewater systems* within the *KUB wastewater system* service territory. Any such *private wastewater system* shall be approved by *KUB* and any other governing entities, including but not limited to the applicable local or state regulatory authority. The owner of the *private wastewater system*, such as the developer, the developer's legally authorized successor, property owner, etc. shall retain ownership of and be responsible for all operation and maintenance of the *private wastewater system*. If determined by *KUB* that the *private wastewater system* violates any applicable federal, state or local laws, or regulations or these *Rules and Regulations*, then *KUB* has the authority to require the owner of the *private wastewater system* to rectify the violation at the owner of the *private wastewater system*'s expense. *KUB* has the authority and reserves the right to enter on the property and to rectify the violation and seek reimbursement from the owner of the *private wastewater system* for fees, violations, and costs borne by *KUB* to rectify the violation.

Section XIII. Intergovernmental Agreements

At *KUB*'s sole discretion, *KUB* may enter into contracts with any municipality, county, incorporated district, or other governmental entity or agency or any *person*, firm or corporation for the treatment and disposal of *wastewater* collected and pumped or delivered to some part of the *KUB wastewater system*, provided, however, that the charges to be paid for the *treatment* and disposal of such *wastewater* shall not be less than an amount which is fair and equitable in accordance with the applicable *Rate Schedule* of the *Wastewater Division*, taking into account the cost to *KUB* of the treatment and disposal and other costs to its *Wastewater Division*.

Section XIV. KUB Wastewater System

KUB has the authority to prevent the introduction of *pollutants* into its *wastewater system* that will interfere with the operation of the *wastewater system* or *treatment plants*; contaminate sewage sludge; cause a violation of any federal or state permit (i.e. *NPDES Permit*), order or consent decree; or cause deterioration in *KUB's wastewater collection system*, force mains, pumping stations, and all other structures appurtenant to *KUB's wastewater system*. The *Board* shall adopt *Rules and Regulations* for the prevention of *pollutants* into *KUB's wastewater system*, including but not limited to provisions addressing compliance with federal and state law, final orders and consent decrees, permitting requirements for *KUB's wastewater system*, *treatment plants*, inspections and permitting of hauled waste providers, etc.

Section XV. Wastewater Rules and Regulations Enforcement

1. **Violation deemed public nuisance.** It shall constitute a public nuisance and shall be unlawful for any *customer*, *user*, and if a different person, owner to discharge into or otherwise use *KUB's wastewater system* in any manner in violation of these *Rules and Regulations* or of any condition of an industrial or commercial discharge permit.
2. **KUB to notify customer of violation.** Whenever *KUB* determines or has reasonable cause to believe that a discharge into or other use of *KUB's wastewater system* has occurred in violation of these *Rules and Regulations*, the *customer's*, *user's*, and if a different person, owner's wastewater discharge permit, or any other applicable law or regulation, then *KUB* shall notify the *customer*, *user*, and if a different person, owner of such violation. Failure of *KUB* to provide notice of a violation to a *customer*, *user*, and if a different person, owner shall not in any way relieve the *customer*, *user*, and if a different person, owner from any consequences of such a discharge or the *customer's*, *user's*, and if a different person, owner's responsibility to fully comply with the applicable requirements.
3. **Conciliation Meeting.** *KUB* may, but shall not be required to, invite the *customer*, *user*, and if a different person, owner and/or representatives of the *customer*, *user*, and if a different person, owner to a conciliation *meeting* to discuss the violation and methods of correcting the cause of violation. Such additional *meetings* as *KUB* and the *customer*, *user*, and if a different person, owner deem advisable may be held to resolve the problem. If the *customer*, *user*, and if a different person, owner and *KUB* can agree to appropriate remedial and preventative measures, they shall commit such agreement to writing with provisions for a reasonable compliance

schedule and the schedule shall be incorporated as a supplemental condition to the *customer's*, *user's*, and if a different person, owner's wastewater discharge permit, if applicable. KUB may terminate the conciliation process and commence enforcement action at any time to assure *customer's*, *user's*, and if a different person, owner's compliance.

4. **Show cause hearing.** KUB may issue a show cause notice to the *customer*, *user*, and if a different person, owner directing the *customer*, *user*, and if a different person, owner to appear before the designated KUB official at a specified date and time to show cause why the *customer*, *user*, and if a different person, owner should not be issued a civil penalty, have the *customer's*, *user's*, and if a different person, owner's wastewater discharge permit, if applicable, modified, suspended, or revoked, or have the *customer's*, *user's*, and if a different person, owner's water and/or wastewater services terminated, for causing or suffering a violation of these *Rules and Regulations* or other applicable laws or regulations. At least fourteen (14) days prior to the scheduled show cause hearing date, KUB will mail to the *customer*, *user*, and if a different person, owner, via certified mail, return receipt requested, or shall personally deliver to the *customer*, *user*, and if a different person, owner written notice of the nature of the violation, any proposed changes to the *customer's*, *user's*, and if a different person, owner's wastewater discharge permit, if applicable, and/or other control techniques necessary to rectify the violation.
5. **Injunctive Relief.** Upon a decision by the *President and CEO*, KUB shall have the right to file in circuit or chancery court of Knox County, Tennessee, or such other courts as may have jurisdiction, a suit seeking the issuance of an injunction, damages, and/or other appropriate relief to enforce the provisions of these *Rules and Regulations* and/or any and all applicable federal, state, and local laws and regulation(s). Suit may be brought to recover any and all damages, fines, and expenses suffered by KUB as a result of any action or inaction of any *customer*, *user*, and if a different person, owner who causes damage to occur to KUB's wastewater system or for any other expense, loss, or damage of any kind or nature suffered by KUB, including but not limited to, any penalties or fines imposed on KUB as the result of the violations of the *customer*, *user*, or if a different person, owner.
6. **Assessment of damages.** When a discharge into KUB's wastewater system in violation of these *Rules and Regulations* and/or any applicable federal, state or local law and regulation occurs and causes an obstruction, damage, or any other impairment of KUB's wastewater system, or any expense of whatever character or nature to KUB, then

KUB may assess the expenses it incurred to remedy the violation, clear the obstruction, repair damage to its *wastewater system*, and any other expense or damage incurred by *KUB*. *KUB* shall send a written claim to the *customer, user, and if a different person, owner* causing said damages to occur seeking reimbursement for any and all expenses or damages suffered by *KUB*. *KUB* may take such measures as shall be appropriate to recover any damages or other expense suffered by *KUB*, plus reasonable attorney's fees, if the claim is not paid by the *customer, user, and if a different person, owner* within 14 days or such other time as *KUB* shall specify of the date such claim was served on the *customer, user, and if a different person, owner* by personal service or by sending a registered letter to the *customer, user, and if a different person, owner*.

7. **Petition for federal or state enforcement.** In addition to other remedies for enforcement provided herein, *KUB* may petition the State of Tennessee or the United States *Environmental Protection Agency*, as appropriate, to exercise such methods or remedies as shall be available to such government entities to seek criminal or civil penalties, injunctive relief, or such other remedies as may be provided by applicable federal or state law to insure compliance by *customers, users, and if a different person, owners* of applicable *pretreatment standards*, to prevent the introduction of toxic *pollutants* or other regulated *pollutants* into the *KUB wastewater system*, or to prevent such violations of applicable federal, state and local laws or other water pollution as may be regulated by state or federal law.
8. **Emergency termination of service.** In the event of an actual or threatened discharge by any *customer, user, and if a different person, owner* to *KUB's wastewater system* which, in the sole opinion of *KUB*, presents or may present an imminent and substantial endangerment to the health or welfare of any *person* or the environment, or cause *interference* with the *wastewater system*, then in addition to any other remedy *KUB* has available to it, *KUB* reserves the right to immediately terminate water and *wastewater service* to said *customer, user, and if a different person, owner* causing the emergency and require assistance in abating the emergency until the emergency situation has been abated or corrected at the expense of the *customer, user, and if a different person, owner* causing the emergency. Nothing herein is intended to limit *KUB's* right to terminate *water and wastewater services* for any other reason provided for in these *Rules and Regulations* or federal or state laws.

9. Civil penalties and/or termination of services for violations of these *Rules and Regulations*.

A. Any person who:

- i. Violates an effluent standard or limitation;
- ii. Violates the terms or conditions of a *wastewater* discharge permit
- iii. Fails to complete a filing or reporting requirement
- iv. Fails to perform or properly report any required monitoring
- v. Violates any provision of 40 CFR Part 400 Subchapter N-Effluent Guidelines and Standards as may be amended, revised, or modified from time to time
- vi. Violates any provision of T.C.A. 69-3-101 et. seq., as may be amended or modified from time to time by an act of the Tennessee General Assembly
- vii. Violates a final order or determination of the Appeals Board
- viii. Fails to pay any established *wastewater service* charge, fine, penalty or industrial cost recovery charge; or
- ix. Otherwise violates any applicable federal, state or local law or regulation, or any of the provisions of these *Rules and Regulations*

may, at *KUB*'s sole discretion, and after receipt of a notice of violation, be subject to (a) a civil penalty of up to ten thousand dollars (\$10,000.00) per violation, (b) termination of *water* and/or *wastewater services*, (c) the suspension, modification or revocation of permit, if applicable, or any condition thereof, or (d) any combination thereof.

B. Each violation shall constitute a separate offense and each day of violation shall be deemed a separate and distinct violation.

C. In assessing civil penalties *KUB* may consider the following:

- i. Magnitude of the violation
- ii. Duration of the violation

- iii. Effect of the violation on *KUB's wastewater system*
- iv. Compliance history of the *customer, user, and if a different person, owner*
- v. Good faith efforts of the *customer, user, and if a different person, owner* to correct the violation
- vi. Economic benefit derived by the *customer, user, and if a different person, owner* as the result of the violation
- vii. The *customer's, user's, and if a different person, owner's ability to pay*

10. Enforcement Response Guides for *Pretreatment Program and Grease Program Violations.* The Enforcement Response Guide-*Pretreatment Program*, attached to these *Rules and Regulations* as Appendix C and the Enforcement Response Guide-*Grease Program*, attached to these *Rules and Regulations* as Appendix D, both of which are incorporated herein by reference, contain the general procedures summarizing how *KUB* investigates and responds to instances of *industrial user* and *commercial user* violations under the *Pretreatment Program* (Appendix A) and the *Grease Control Program* (Appendix B), respectively.

Section XVI. Appeals Board.

- 1. Duties and powers of the Appeals Board.** *KUB* shall have an appeals board consisting of the *Rules and Regulations* Oversight Committee and others as may be appointed by the *President and CEO* from time to time (the “Appeals Board”). The COO shall serve as the chairman of the Appeals Board and shall appoint an acting chairman from the other members of the Oversight Committee in the event the COO is unable to attend a meeting of the Appeals Board. The Appeals Board shall have the authority to:
 - A. Hear an appeal brought by a *KUB customer, user, and if a different person, owner* for any enforcement action taken by *KUB* in connection with these *Rules and Regulations*, or related to *KUB's enforcement of a wastewater discharge permit, or any federal, state, or local law or regulation provided that said enforcement action results in a civil penalty and/or termination of service;*
 - B. Grant exceptions pursuant to the *pretreatment and treatment provisions of these Rules and Regulations* and to determine such issues of law and fact necessary to perform this duty;

- C. Hold hearings upon appeals from orders or actions of *KUB* as may be provided under any provisions of these *Rules and Regulations* or federal, state, and local laws and regulations;
 - D. Issue subpoenas requiring attendance and testimony of witnesses and the production of documentary evidence relevant to any matter properly heard by the Appeals Board;
 - E. Administer oaths to those persons giving testimony before the Appeals Board.
2. **Right to Appeal.** A *customer* who claims to be aggrieved in connection with a finding by *KUB* of a violation of these *Rules and Regulations* or of a *wastewater* discharge permit, if applicable, that results in the issuance of a civil penalty; and/or of the termination of *water* and *wastewater services*, (except no appeal may be made for the emergency termination of services in accordance with Section XV, paragraph 8 of these *Rules and Regulations* or the Emergency Suspension of Services, Section VII.A., of the *Grease Control Program*, Appendix B) may file an appeal with the Appeals Board. The appeal must be submitted to the Appeals Board in writing within fourteen (14) days of receiving from *KUB* the notice of a finding of violation by the *customer* of these *Rules and Regulations*, or the violation of a *wastewater* discharge permit, if applicable, that results in the issuance of a civil penalty, or the termination of *water* and *wastewater services* by *KUB* as the result of such finding of violation.
3. **Appeals Board hearing procedures.**
- A. The Appeals Board shall schedule an adjudicatory hearing to resolve disputed questions of fact and law whenever provided by a provision of this Section.
 - B. At any such hearing, all testimony presented shall be under oath or upon solemn affirmation in lieu of oath. The Appeals Board shall make a record of such hearing, but the record need not be a verbatim record. Any party coming before the Appeals Board shall have the right to have said hearing recorded stenographically or electronically, but in such event the record need not be transcribed unless any party seeks judicial review of the order or action of the Appeals Board by common law writ of certiorari, and in such event the parties seeking such judicial review shall pay for the transcription and provide the Appeals Board with the original of the transcription so that it may be certified to the court.

- C. The chairman of the Appeals Board, or his designee, may issue subpoenas requiring attendance and testimony of a witness or the production of evidence, or both. A request for the issuance of a subpoena shall be made by lodging with the Appeals Board at least ten (10) days prior to the scheduled hearing date a written request for a subpoena setting forth the name and address of the party to be subpoenaed, and identifying any evidence to be produced. Upon endorsement of a subpoena by the chairman of the Appeals Board, the same shall be delivered to the chief of police for service by any police officer of the *City*. If the witness does not reside in the *City*, the Appeals Board shall issue a written request that the witness attend the hearing.
- D. Upon agreement of all parties, the testimony of any person may be taken by deposition or written interrogatories. Unless otherwise agreed, the deposition shall be taken in a manner consistent with the most recent version of Rules 26-33 of the Tennessee Rules of Civil Procedure, with the Appeals Board or its designees to rule on such matters as would require a ruling by the court under said rules.
- E. The party bringing the appeal bears the affirmative burden of proof and shall first call his witness, to be followed by the witness called by other parties, to be followed by any witness that the Appeals Board may desire to call. Rebuttal witnesses shall be called in the same order. The chairman of the Appeals Board, or his designee, shall rule on any evidentiary questions arising during such hearing, and shall make such other rulings as shall be necessary or advisable to facilitate an orderly hearing subject to the approval of the Appeals Board. The Appeals Board, the representatives of *KUB*, and all parties shall have the right to examine any witness. The Appeals Board shall not be bound by or limited to rules of evidence applicable to legal proceedings.
- F. Any *customer* aggrieved by any order or determination by *KUB* pertaining to the *customer's* violation of these *Rules and Regulations*, which includes the issuance of civil penalties may appeal said order or determination to the Appeals Board under the provisions of this section. A written notice of appeal shall be filed with the COO and said notice shall set forth with particularity the action or inaction of *KUB* complained of and the relief sought by the *customer* filing said appeal. A special meeting of the Appeals Board may be called by the chairman upon the filing of such appeal, and the Appeals Board may, in its discretion, suspend the operation of the order or determination of *KUB* appealed from until such time as the Appeals Board has acted upon the appeal.

Provided, however, that actions and determinations of *KUB* under the provisions of Section XV, paragraph 8, "Emergency Termination of Service," and under provisions of Section VII.A., "Emergency Suspension of Services", of the *Grease Control Program* (Appendix B) inclusive shall not be subject to review by the Appeals Board.

- G. Any *person* aggrieved by any final order or determination of the Appeals Board hereunder shall have the right of judicial review in the appropriate state court by common law writ of certiorari.
4. **Scope of Authority.** The Appeals Board shall address administrative related matters exclusively; it shall not have the authority to establish, amend or revoke *Rules and Regulations* or to make policy decisions.
 5. **Adequate Staffing.** *KUB* shall provide such staff services as may be required for the efficient and effective operation of the Appeals Board through its *Wastewater Division*.



June 10, 2016

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

Commissioners:

Resolution 1348 requests condemnation authority of three parcels, representing three property owners, in the Strawberry Plains Pike area. The authority is needed in order to replace and upgrade an existing 69kV transmission line that connects the Trentville and Ramsey substations in east Knox County.

We have obtained 74 easements from property owners for this project and are continuing to work to achieve consensus with the remaining property owners. However, to avoid delays to the construction schedule, KUB would like to be in a position to move forward with condemnation if necessary. Further information about the parcels is included for your review.

I recommend adoption of Resolution 1348.

Respectfully submitted,

A

Mintha E. Roach
President and CEO

Enclosures

RESOLUTION NO. 1348

A Resolution Authorizing the Condemnation and the Taking of Electric Utility Easements as May Be Necessary in Support of KUB's Strawberry Plains 69kV Transmission Line Project

Whereas, supplying the public need and demand for electric service makes it necessary and desirable for KUB to rehabilitate and improve the electric system and all related equipment (the "Facilities") on a portion of three certain properties located in the Strawberry Plains Pike area of Knox County, Tennessee and being more particularly described on Knox County Tax Maps: CLT 73H Parcel A29; CLT Map 84 Parcel 43; CLT Map 84 Parcel 6405; and

Whereas, KUB is making improvements to the Facilities in the Strawberry Plains Pike area to serve the needs of the community; and

Whereas, permanent utility easements and temporary construction easements across the aforesaid property must be obtained for the construction and location of the Facilities; and

Whereas, in the opinion of this Board, the easements for the properties described in this resolution best meet the needs and requirements of the public for the location of the Facilities; and

Whereas, time is of the essence in constructing the Facilities and it is advantageous for KUB officials to be authorized to condemn and acquire the necessary easements in the event that they cannot be acquired by negotiations at prices that KUB considers reasonably representative of the value of such property interests.

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

Section 1. That this Board finds and declares:

- (a) That public convenience and necessity require the installation of the Facilities in the easements for the properties described herein, so as to provide adequate utility service to the public, including the present and prospective customers of KUB's electric system.
- (b) That the cost of the easements, as mentioned in the preceding paragraph, shall be paid from appropriations heretofore made by this Board for the operation and construction program of the Electric Division.

- (c) That for the purpose of placing, constructing, repairing, maintaining, rehabilitating, improving and replacing the Facilities on the properties described herein, there shall be condemned such permanent utility and access easements and such temporary construction easements across the aforementioned properties, as may be determined to be necessary by the President and CEO or her designee.

Section 2. That the President and Chief Executive Officer and the General Counsel for KUB, are hereby authorized and directed to take all action and do all things necessary or desirable for the acquisition of said easements described in this resolution, by condemnation or otherwise, including, without limitation, the institution of a suit in the name of KUB against any and all persons having any interest in the affected easement properties, for the condemnation thereof, and the determination of the amount of any deposit to be made in connection with any such suit.

Section 3. That this resolution shall take effect upon its passage.

Nikitia Thompson, Chair

Mark Walker, Board Secretary

APPROVED ON 1st
& FINAL READING: _____
EFFECTIVE DATE: _____
MINUTE BOOK 36 PAGE _____

**Knoxville Utilities Board
Board Meeting
Minutes
Thursday, May 19, 2016, Noon**

Call to Order

The Knoxville Utilities Board met in regular session in the Larry A. Fleming Board Room at 445 S. Gay Street, on Thursday, May 19, 2016, pursuant to the public notice published in the January 2, 2016, edition of the *News Sentinel*. Chair Thompson called the meeting to order at 12:00 p.m.

Chair Thompson welcomed the six KUB Leadership Development Program employee participants and the program facilitator attending the Board Meeting today and asked the participants to introduce themselves.

Roll Call

Commissioners Present: Jerry Askew, Kathy Hamilton, Celeste Herbert, Sara Pinnell, Nikitia Thompson, Eston Williams, and John Worden

Commissioners Absent: None

Approval of Minutes

The Minutes of the April 21, 2016, Board Meeting were approved as distributed upon a motion by Commissioner Hamilton and seconded by Commissioner Williams.

Old Business

None

New Business

Resolution 1342, A Resolution Requesting the Council of the City of Knoxville, Tennessee to Provide for the Issuance of Not to Exceed Forty Million and No/100 Dollars (\$40,000,000) In Aggregate Principal Amount of Electric System Revenue Bonds, Series GG-2016; Issuance of Not to Exceed Twelve Million and No/100 Dollars (\$12,000,000) In Aggregate Principal Amount of Gas System Revenue Bonds, Series V-2016; Issuance of Not to Exceed Twenty-Five Million and No/100 Dollars (\$25,000,000) In Aggregate Principal Amount of Water System Revenue Bonds, Series DD-2016; Issuance of Not to Exceed Twenty Million and No/100 Dollars (\$20,000,000) In Aggregate Principal Amount of Wastewater System

May 19, 2016

Revenue Bonds, Series 2016A; and Issuance of Not to Exceed Twenty-Two Million and No/100 Dollars (\$22,000,000) In Aggregate Principal Amount of Water System Revenue Refunding Bonds, Series EE-2016

Resolution 1343, A Resolution Authorizing the Issuance of Not to Exceed Ten Million Dollars (\$10,000,000) in Aggregate Principal Amount of Gas System Revenue Anticipation Notes (Nonrevolving Line of Credit) of the Knoxville Utilities Board in Anticipation of the Collection of Revenues of the Natural Gas Distribution System of the City of Knoxville for the Purpose of Paying the Cost of Natural Gas Purchases and Storage and Pipeline Capacity

Resolution 1344, A Resolution Making and Fixing the Annual Budget Appropriations of the Knoxville Utilities Board From the Funds of the Electric Division, the Natural Gas Division, the Water Division, and the Wastewater Division for the Fiscal Year Beginning July 1, 2016, Providing for Expenditures Paid for the Period Beginning July 1, 2016, and Ending June 30, 2017

Resolution 1345, A Resolution Approving Commitment Appropriations For the Fiscal Year Beginning July 1, 2016, Thereby Authorizing the Commitment of Expenditures to be Paid Subsequent to June 30, 2017, for Contractual Commitments Executed and Other Obligations Incurred on or Before June 30, 2017

Chair Thompson stated that Resolutions 1342, 1343, 1344, and 1345 are related to the fiscal year 2017 budget and therefore would be discussed together before being considered individually.

President Roach reminded Commissioners that at last month's workshop session, staff provided an overview of the proposed budget for fiscal year 2017 including certain funding recommendations for the budget. She recognized John Williams, Manager and Assistant to the CFO, to review the components of the proposed budget, then Mark Walker, Senior Vice President and CFO, to discuss funding of the budget and the proposed bond issues and line of credit, as well as commitment appropriations for the upcoming fiscal year.

President Roach recommended adoption of Resolutions 1342, 1343, 1344, and 1345 on first and final reading. Her written recommendation is included in Attachment 1.

May 19, 2016

Upon a motion by Commissioner Williams and a second by Commissioner Herbert, Resolution 1342 (*Attachment 1*) was adopted by a roll call vote on first and final reading. The following Commissioners voted “aye”: Askew, Hamilton, Herbert, Pinnell, Thompson, Williams, and Worden. No Commissioner voted “nay”.

Upon a motion by Commissioner Askew and a second by Commissioner Pinnell, Resolution 1343 (*Attachment 2*) was adopted by a roll call vote on first and final reading. The following Commissioners voted “aye”: Askew, Hamilton, Herbert, Pinnell, Thompson, Williams, and Worden. No Commissioner voted “nay”.

Upon a motion by Commissioner Herbert and a second by Commissioner Williams, Resolution 1344 (*Attachment 3*) was adopted by a roll call vote on first and final reading. The following Commissioners voted “aye”: Askew, Hamilton, Herbert, Pinnell, Thompson, Williams, and Worden. No Commissioner voted “nay”.

Upon a motion by Commissioner Hamilton and a second by Commissioner Askew, Resolution 1345 (*Attachment 4*) was adopted by a roll call vote on first and final reading. The following Commissioners voted “aye”: Askew, Hamilton, Herbert, Pinnell, Thompson, Williams, and Worden. No Commissioner voted “nay”.

President's Report

Customer Sensitive Construction and South Northshore Century II Project Update

President Roach advised Commissioners that providing safe, reliable utility service involves construction, which can cause customer inconveniences. Ms. Roach recognized Mike Bolin, Vice President of Construction, to share how KUB strives to balance the need for utility construction while remaining sensitive to impacts on its customers, then Paul Randolph, Vice President of Electric and Gas Engineering, to provide details on Phase III of the South Northshore Project.

Other Business

None

May 19, 2016

Executive Session

Chair Thompson announced there is a matter involving security for the Board to discuss with Senior Staff and General Counsel. Therefore, the Board would convene in closed Executive Session immediately following adjournment of this meeting. Following the Executive Session, Board and Staff will have a lunch session that is open to the public. Chair Thompson declared the Board Meeting adjourned at 1:07 p.m.

The Executive Session was concluded at 1:20 p.m.

Nikitia Thompson, Chair

Mark Walker, Board Secretary

Attachments

Attachment 1	Recommendation Letter and Resolution 1342, A Resolution Requesting the Council of the City of Knoxville, Tennessee to Provide for the Issuance of Not to Exceed Forty Million and No/100 Dollars (\$40,000,000) In Aggregate Principal Amount of Electric System Revenue Bonds, Series GG-2016; Issuance of Not to Exceed Twelve Million and No/100 Dollars (\$12,000,000) In Aggregate Principal Amount of Gas System Revenue Bonds, Series V-2016; Issuance of Not to Exceed Twenty-Five Million and No/100 Dollars (\$25,000,000) In Aggregate Principal Amount of Water System Revenue Bonds, Series DD-2016; Issuance of Not to Exceed Twenty Million and No/100 Dollars (\$20,000,000) In Aggregate Principal Amount of Wastewater System Revenue Bonds, Series 2016A; and Issuance of Not to Exceed Twenty-Two Million and No/100 Dollars (\$22,000,000) In Aggregate Principal Amount of Water System Revenue Refunding Bonds, Series EE-2016	<u>Page(s)</u> 7296 - 7491
Attachment 2	Resolution 1343, A Resolution Authorizing the Issuance of Not to Exceed Ten Million Dollars (\$10,000,000) in Aggregate Principal Amount of Gas System Revenue Anticipation Notes (Nonrevolving Line of Credit) of the Knoxville Utilities Board in Anticipation of the Collection of Revenues of the Natural Gas Distribution System of the City of Knoxville for the Purpose of Paying the Cost of Natural Gas Purchases and Storage and Pipeline Capacity	7492 - 7500
Attachment 3	Resolution 1344, A Resolution Making and Fixing the Annual Budget Appropriations of the Knoxville Utilities Board From the Funds of the Electric Division, the Natural Gas Division, the Water Division, and the Wastewater Division for the Fiscal Year Beginning July 1, 2016, Providing for Expenditures Paid for the Period Beginning July 1, 2016, and Ending June 30, 2017	7501 - 7506
Attachment 4	Resolution 1345, A Resolution Approving Commitment Appropriations For the Fiscal Year Beginning July 1, 2016, Thereby Authorizing the Commitment of Expenditures to be Paid Subsequent to June 30, 2017, for Contractual Commitments Executed and Other Obligations Incurred on or Before June 30, 2017	7507 - 7512



May 13, 2016

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

Commissioners:

As discussed at the financial workshop in April, the May 19 Board meeting agenda includes the following official action items:

- Bonds for the Electric, Natural Gas, Water and Wastewater Divisions
- Refunding bonds for the Water Division
- Line of credit for the Natural Gas Division
- Budget appropriations for fiscal year 2017
- Commitment appropriations for fiscal year 2017

An overview of each official action item is provided below.

Resolution 1342

Resolution 1342 authorizes the issuance of up to \$97 million in revenue bonds, including \$40 million for the Electric Division, \$12 million for the Natural Gas Division, \$25 million for the Water Division and \$20 million for the Wastewater Division.

The proceeds of the bonds will be used to help fund the electric, natural gas, water and wastewater system capital budgets for fiscal year 2017, including each system's Century II infrastructure program. The proceeds will also cover issuance costs and underwriters' fees.

If approved, the bonds are expected to be sold during the month of July. The maturities of each series of bonds will extend over a period of 30 years. The budgeted interest rate on each series of bonds is 3.25 percent.

Resolution 1342 also authorizes the issuance of up to \$22 million in revenue refunding bonds for the Water Division for the purpose of refinancing outstanding water bonds sold in 2009 at lower interest rates. The proceeds of the revenue refunding bonds will be used to retire the outstanding bonds, pay interest payments on the outstanding bonds prior to the call date of the bonds, pay the underwriter's fee and cover all issuance costs related to the sale of the bonds.

Based on current bond market performance, the refunding bonds could be sold at rates providing a debt service savings of \$1.7 million over the life of the bonds, net of fees, which represents 7.2 percent of the refunded principal.

Resolution 1342 also requests City Council authorization to issue the revenue bonds and revenue refunding bonds, as Council approval is required for any debt issuance with a final maturity in excess of five years.

A summary of the major provisions of the proposed City Council bond resolutions is enclosed for your review.

Resolution 1343

Resolution 1343 authorizes the issuance of a one-year line of credit for the Natural Gas Division, not to exceed \$10 million. As you know, the Natural Gas Division is subject to seasonal cash flow variation. While the majority of natural gas sales occur during the winter heating season, natural gas purchases and other expenses are incurred throughout the year. The line of credit is an effective tool for managing potential cash flow difficulties associated with the seasonality of natural gas sales. The proposed line of credit would have a one-year maturity, with any balance drawn repaid prior to the end of the fiscal year.

Resolution 1344

Resolution 1344 adopts budget appropriations for fiscal year 2017 totaling \$893.8 million, including \$596.2 million for the Electric Division, \$109.2 million for the Natural Gas Division, \$73.1 million for the Water Division and \$115.3 million for the Wastewater Division.

The proposed budget provides \$466.8 million for wholesale energy purchases, \$135 million for operations and maintenance costs, \$183.7 million for capital expenditures, \$74.3 million for principal and interest payments on outstanding debt and \$34 million for taxes and tax equivalent payments. Mark Walker, KUB's Chief Financial Officer, has prepared a letter certifying the availability of funds for the proposed budget.

A summary of the proposed budget request for fiscal year 2017 is enclosed for your information.

Resolution 1345

Resolution 1345 provides commitment appropriations for fiscal year 2017, which authorizes KUB to execute contracts and incur obligations on or before June 30, 2017 that commit KUB to expenditures subsequent to June 30, 2017. The commitments total \$54.8 million, including \$11.5 million for the Electric Division, \$3.8 million for the Natural Gas Division, \$9.5 million for the Water Division and \$30 million for the Wastewater Division. Mr. Walker has also prepared a letter certifying the availability of funds for the proposed commitment appropriations.

A draft of each resolution, including the City Council resolutions for the bonds, is enclosed for your information.

I recommend adoption of Resolutions 1342, 1343, 1344 and 1345 on first and final reading.

Respectfully submitted,

A

Mintha E. Roach
President and Chief Executive Officer

Enclosures

RESOLUTION NO. 1342

A Resolution Requesting the Council of the City of Knoxville, Tennessee to Provide for the Issuance of Not to Exceed Forty Million and No/100 Dollars (\$40,000,000) In Aggregate Principal Amount of Electric System Revenue Bonds, Series GG-2016; Issuance of Not to Exceed Twelve Million and No/100 Dollars (\$12,000,000) In Aggregate Principal Amount of Gas System Revenue Bonds, Series V-2016; Issuance of Not to Exceed Twenty-Five Million and No/100 Dollars (\$25,000,000) In Aggregate Principal Amount of Water System Revenue Bonds, Series DD-2016; Issuance of Not to Exceed Twenty Million and No/100 Dollars (\$20,000,000) In Aggregate Principal Amount of Wastewater System Revenue Bonds, Series 2016A; and Issuance of Not to Exceed Twenty-Two Million and No/100 Dollars (\$22,000,000) In Aggregate Principal Amount of Water System Revenue Refunding Bonds, Series EE-2016

Whereas, by the provisions of the City Charter of the City of Knoxville, Tennessee (the "City"), the management and operation of the City's electrical power distribution system (the "Electric System"); the City's natural gas distribution system (the "Gas System"); the City's water system (the "Water System"); and the City's wastewater system (the "Wastewater System") have been placed under the jurisdiction of the Board of Commissioners (the "Board") of the Knoxville Utilities Board ("KUB"); and

Whereas, the Board, after due investigation and consideration, deems it in the best interest of the City for the City to issue and sell not to exceed \$40,000,000 in aggregate principal amount of Electric System Revenue Bonds, Series GG-2016 (the "Electric Bonds") for the purpose of providing funds to finance the cost of improvements and extensions to the electrical power distribution system of the City, including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the Electric Bonds; and

Whereas, the Board, after due investigation and consideration, deems it in the best interest of the City for the City to issue and sell not to exceed \$12,000,000 in aggregate principal amount of Gas System Revenue Bonds, Series V-2016 (the "Gas Bonds") for the purpose of providing funds to finance the cost of improvements and extensions to the natural gas distribution system of the City, including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the Gas Bonds; and

Whereas, the Board, after due investigation and consideration, deems it in the best interest of the City for the City to issue and sell not to exceed \$25,000,000 in aggregate principal amount of Water System Revenue Bonds, Series DD-2016 (the "Water Bonds") for the purpose of providing funds to finance the cost of improvements and extensions to the water system of the City, including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the Water Bonds; and

Whereas, the Board, after due investigation and consideration, deems it in the best interest of the City for the City to issue and sell not to exceed \$20,000,000 in aggregate principal amount of Wastewater System Revenue Bonds, Series 2016A (the "Wastewater Bonds") for the purpose of providing funds to finance the cost of improvements and extensions to the wastewater system of the City, including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the Wastewater Bonds; and

Whereas, the Board, after due investigation and consideration, deems it in the best interest of the City for the City to issue and sell not to exceed \$22,000,000 in aggregate principal amount of Water System Revenue Refunding Bonds, Series EE-2016 (the "Water Refunding Bonds") for the purpose of providing funds to refinance the outstanding principal amount of the City's outstanding Water System Revenue Bonds, Series U-2009, dated November 12, 2009, maturing March 1, 2020 and thereafter, including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the Water Refunding Bonds; and

Whereas, the Board has had prepared for passage by the Council of the City a resolution authorizing the issuance of the Electric Bonds, a copy of which is attached hereto and made a part hereof (the "Electric Resolution"); a resolution authorizing the issuance of the Gas Bonds, a copy of which is attached hereto and made a part hereof (the "Gas Resolution"); a resolution authorizing the issuance of the Water Bonds, a copy of which is attached hereto and made a part hereof (the "Water Resolution"); a resolution authorizing the issuance of the Wastewater Bonds, a copy of which is attached hereto and made a part hereof (the "Wastewater Resolution"); and a resolution authorizing the issuance of the Water Refunding Bonds, a copy of which is attached hereto and made a part hereof (the "Water Refunding Resolution").

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

Section 1. The Board hereby determines and finds that it is in the best interest of the City that the Council of the City adopt the Electric Resolution, in substantially the form presented to this meeting with only such changes as the Chief Financial Officer of KUB shall deem necessary, and authorize the issuance and sale of the Electric Bonds pursuant thereto, the description of the Electric Bonds, the security therefor and the purposes for which said Electric Bonds are to be issued, being more fully stated in the Electric Resolution.

Section 2. The Board hereby determines and finds that it is in the best interest of the City that the Council of the City adopt the Gas Resolution, in substantially the form presented to this meeting with only such changes as the Chief Financial Officer of KUB shall deem necessary, and authorize the issuance and sale of the Gas Bonds pursuant thereto, the description of the Gas Bonds, the security therefor and the purposes for which said Gas Bonds are to be issued, being more fully stated in the Gas Resolution.

Section 3. The Board hereby determines and finds that it is in the best interest of the City that the Council of the City adopt the Water Resolution, in substantially the form presented to this meeting with only such changes as the Chief Financial Officer of KUB shall deem necessary, and authorize the issuance and sale of the Water Bonds pursuant thereto, the description of the Water Bonds, the security therefor and the purposes for which said Water Bonds are to be issued, being more fully stated in the Water Resolution.

Section 4. The Board hereby determines and finds that it is in the best interest of the City that the Council of the City adopt the Wastewater Resolution, in substantially the form presented to this meeting with only such changes as the Chief Financial Officer of KUB shall deem necessary, and authorize the issuance and sale of the Wastewater Bonds pursuant thereto, the description of the Wastewater Bonds, the security therefor and the purposes for which said Wastewater Bonds are to be issued, being more fully stated in the Wastewater Resolution.

Section 5. The Board hereby determines and finds that it is in the best interest of the City that the Council of the City adopt the Water Refunding Resolution, in substantially the form presented to this meeting with only such changes as the Chief Financial Officer of KUB shall deem necessary, and authorize the issuance and sale of the Water Refunding Bonds pursuant thereto, the description of the Water Refunding Bonds, the security therefor and the purposes for which said Bonds are to be issued, being more fully stated in the Water Refunding Resolution.

Section 6. As required by the State Funding Board of the State of Tennessee, KUB has heretofore adopted its Debt Management Policy. The Board hereby finds that the issuance of the Electric Bonds, Gas Bonds, Water Bonds, Wastewater Bonds and Water Refunding Bonds, as proposed herein, is consistent with the Debt Management Policy.

Section 7. The Board hereby formally requests the Council of the City to pass the Electric Resolution, the Gas Resolution, the Water Resolution, the Wastewater Resolution and the Water Refunding Resolution, and the Board does hereby adopt, ratify, approve, consent and agree to each and every provision contained in the Electric Resolution, the Gas Resolution, the Water Resolution, the Wastewater Resolution and the Water Refunding Resolution upon adoption.

Section 8. The Board has elected and does hereby elect that the Electric Bonds be issued under the Electric Resolution, the Gas Bonds be issued under the Gas Resolution, the Water Bonds be issued under the Water Resolution, the Wastewater Bonds be issued under the Wastewater Resolution and the Water Refunding Bonds be issued under the Water Refunding Resolution.

Section 9. The Secretary of the Board shall deliver a certified copy of this Resolution to the Mayor and the Council of the City as formal evidence of this Board's action in connection therewith.

Section 10. The Board hereby states its intent to reimburse itself from the proceeds of the Electric Bonds, the Gas Bonds, the Water Bonds, and the Wastewater Bonds, respectively, for expenditures made on or after the date that is sixty (60) days prior to the date of this resolution to make improvements to the Electric System, the Gas System, the Water System and the Wastewater System, respectively.

Section 11. This Resolution shall take effect from and after its passage.

Nikitia Thompson/s

Nikitia Thompson, Chair

Mark Walker/s
Mark Walker, Board Secretary

APPROVED ON 1st

& FINAL READING: 5-19-16

EFFECTIVE DATE: 5-19-16

MINUTE BOOK 36 PAGE 7298-7491

A RESOLUTION SUPPLEMENTING RESOLUTION NO. 1644
ADOPTED BY THE CITY COUNCIL OF THE CITY OF
KNOXVILLE, TENNESSEE ON JANUARY 4, 1949 ENTITLED "A
RESOLUTION PROVIDING FOR THE ISSUANCE OF ELECTRIC
SYSTEM REVENUE BONDS" SO AS TO PROVIDE FOR THE
ISSUANCE OF NOT TO EXCEED FORTY MILLION AND NO/100
DOLLARS (\$40,000,000) OF ELECTRIC SYSTEM REVENUE
BONDS, SERIES GG-2016.

RESOLUTION NO: _____

REQUESTED BY: _____

PREPARED BY: _____

APPROVED AS TO FORM

CORRECTNESS: _____

Law Director

FINANCIAL IMPACT STATEMENT:

Director of Finance

APPROVED: _____

APPROVED AS AN
EMERGENCY MEASURE: _____

MINUTE BOOK ____ PAGE ____

WHEREAS, the City of Knoxville (the "City"), pursuant to a resolution entitled "A Resolution Providing for the Issuance of Electric System Revenue Bonds," being Resolution No. 1644 of the City Council adopted January 4, 1949 (which resolution as heretofore amended is hereinafter sometimes referred to as "1949 Resolution"), authorized an issue of Electric System Revenue Bonds; and

WHEREAS, pursuant to the 1949 Resolution, and for the purpose of financing the cost of the extensions and improvements to the City's electrical power distribution system (the "System") and the refinancing of indebtedness issued for that purpose, the City issued Electric System Revenue Bonds, the series of which, the amount issued, and the amount outstanding as of June 1, 2016, are as follows:

<u>Series</u>	<u>Amount Issued</u>	<u>Amount Outstanding</u>
W-2005	\$38,710,000	\$29,480,000
Y-2009	\$40,000,000	\$ 5,275,000
Z-2010 (BABS)	\$30,000,000	\$23,920,000
AA-2012	\$36,815,000	\$33,850,000
BB-2012	\$35,000,000	\$33,225,000
CC-2013	\$ 9,660,000	\$ 9,485,000
DD-2014	\$40,000,000	\$39,325,000
EE-2015	\$28,550,000	\$28,425,000
FF-2015	\$35,000,000	\$35,000,000

WHEREAS, it is desirable that an additional series of bonds be issued to finance the costs of the extensions and improvements to the System, including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the bonds, pursuant to the authority of 1949 Resolution and pursuant to the authority of this resolution; and

WHEREAS, the Board of Commissioners (the "Board") of the Knoxville Utilities Board ("KUB") has duly adopted a resolution requesting the City Council of the City to adopt this resolution authorizing the issuance of bonds for the purposes and in the manner hereinafter more fully stated; and

WHEREAS, it is the intention of the City Council of the City to adopt this resolution for the purpose of authorizing not to exceed \$40,000,000 in aggregate principal amount of electric system revenue bonds for the purposes described above, establishing the terms of such bonds, providing for the issuance, sale and payment of the bonds and disposition of proceeds therefrom, and collection of revenues from the System and the application thereof to the payment of principal of, premium, if any, and interest on said bonds.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Knoxville, Tennessee, as follows:

Section 1. Authority. The bonds authorized by this resolution are issued pursuant to Sections 7-34-101 et seq. and 9-21-101 et seq., Tennessee Code Annotated, and other applicable provisions of law.

Section 2. Definitions. Capitalized terms used herein and not defined in this Section 2 shall have the meanings ascribed to them in the 1949 Resolution (as hereinbelow defined). The following terms shall have the following meanings in this resolution unless the text expressly or by necessary implication requires otherwise.

- (a) "Board" shall mean the Board of Commissioners of the Knoxville Utilities Board;

(b) "Bond Purchase Agreement" means a Bond Purchase Agreement, dated as of the sale of the Series GG-2016 Bonds, entered into by and between KUB and the Underwriter, in substantially the form of the document attached hereto as Exhibit A, subject to such changes as permitted by Section 9 hereof, as approved by the President and Chief Executive Officer of KUB, consistent with the terms of this resolution;

(c) "Book-Entry Form" or "Book-Entry System" means a form or system, as applicable, under which physical Bond certificates in fully registered form are issued to a Depository, or to its nominee as Registered Owner, with the certificated Bonds being held by and "immobilized" in the custody of such Depository, and under which records maintained by persons, other than the City, KUB or the Registration Agent, constitute the written record that identifies, and records the transfer of, the beneficial "book-entry" interests in those Bonds;

(d) "City" shall mean the City of Knoxville, Tennessee;

(e) "Code" shall mean the Internal Revenue Code of 1986, as amended, and any lawful regulations promulgated or proposed thereunder;

(f) "Depository" means any securities depository that is a clearing agency under federal laws operating and maintaining, with its participants or otherwise, a Book-Entry System, including, but not limited to, DTC;

(g) "DTC" means the Depository Trust Company, a limited purpose company organized under the laws of the State of New York, and its successors and assigns;

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

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

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

(k) "1949 Resolution" shall mean Resolution No. 1644 of the Governing Body, adopted January 4, 1949, as amended and supplemented by Resolution No. 2171 adopted February 22, 1955; Resolution No. 3491 of the Governing Body, adopted February 21, 1967, Resolution R-317-90 of the Governing Body adopted October 30, 1990; Resolution No. R-469-92 of the Governing Body adopted October 13, 1992; Resolution No. R-472-93 of the Governing Body adopted October 26, 1993; Resolution No. R-95-95 of the Governing Body adopted February 28, 1995; Resolution No. R-422-98 of the Governing Body adopted October 20, 1998; Resolution No. R-64-01 of the Governing Body adopted February 20, 2001; Resolution No. R-148-01 of the Governing Body adopted January 20, 2001; Resolution No. R-480-01 of the Governing Body adopted October 30, 2001; Resolution No. R-59-04 of the Governing Body adopted January 2, 2004, Resolution No. R-261-05 of the Governing Body adopted July 5, 2005, Resolution No. R-78-06 of the Governing Body adopted February 28, 2006, Resolution No. R-251-08 of the Governing Body adopted July 29, 2008, Resolution No. R-332-2010 of the Governing Body adopted November 2, 2010, Resolution No. R-335-2011 of the Governing Body adopted December 13, 2011, Resolution No. R-289-2012 of the Governing Body adopted October 16, 2012, Resolution No. R-321-2012 of the Governing Body adopted November 13, 2012, Resolution No. R-213-2014 of the Governing Body adopted June 24, 2014, Resolution No. R-81-2015 of the Governing Body adopted March 3, 2015 and Resolution No. R-129-2015 of the Governing Body adopted March 31, 2015;

(l) "Outstanding Bonds" shall mean the City's outstanding Electric System Revenue Refunding Bonds, Series W-2005, dated August 10, 2005, maturing July 1, 2016 and thereafter, the City's outstanding Electric System Revenue Bonds, Series Y-2009, dated July 1, 2015, maturing July 1, 2017 and July 1, 2018, the City's outstanding Electric System Revenue Bonds, Series Z-2010 (Federally Taxable Build America Bonds), dated December 8, 2010, maturing July 1, 2016 and thereafter, the City's outstanding Electric System Revenue Refunding Bonds, Series AA-2012, dated April 20, 2012, maturing July 1, 2016 and thereafter, the City's outstanding Electric System Revenue Bonds, Series BB-2012, maturing July 1, 2016 and thereafter, the City's outstanding Electric System Revenue Refunding Bonds, Series CC-2013, dated March 15, 2013, maturing July 1, 2016 and thereafter, the City's outstanding Electric System Revenue Bonds, Series DD-2014, dated September 18, 2014, maturing July 1, 2016 and thereafter, the City's outstanding Electric System Revenue Refunding Bonds, Series EE-2015, dated May 1, 2015, maturing July 1, 2016 and thereafter, and the City's outstanding Electric System Revenue Bonds, Series FF-2015, dated May 20, 2015, maturing July 1, 2016 and thereafter;

(m) "Parity Bonds" shall mean any bonds issued on a parity with the Series GG-2016 Bonds and the Outstanding Bonds pursuant to the 1949 Resolution;

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

(o) "Registration Agent" shall mean the registration and paying agent for the Series GG-2016 Bonds designated by the President and Chief Executive Officer of KUB, or any successor as designated by the Board;

(p) "Series GG-2016 Bonds" shall mean the City's Electric System Revenue Bonds, Series GG-2016, dated the date of their issuance or such other date as shall be determined by the Board pursuant to Section 9 hereof, authorized to be issued by the 1949 Resolution and this resolution in an aggregate principal amount not to exceed \$40,000,000;

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

(r) "Underwriter" shall mean an investment banking firm qualified to underwrite bonds such as the Series GG-2016 Bonds in the State of Tennessee selected by the President and Chief Executive Officer of KUB.

Section 3. Declarations. It is hereby determined that all requirements of the 1949 Resolution have been or will have been met upon the issuance of the Series GG-2016 Bonds so that the Series GG-2016 Bonds will be issued as Parity Bonds.

Section 4. Authorization and Terms of the Series GG-2016 Bonds. (a) For the purpose of providing funds to finance the costs of construction of the Project, including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the Series GG-2016 Bonds as more fully set out in Section 9 hereof, there are hereby authorized to be issued revenue bonds of the City in the aggregate principal amount of not to exceed \$40,000,000. The Series GG-2016 Bonds shall be issued in fully registered form, without coupons, shall be known as "Electric System Revenue Bonds, Series GG-2016" and shall be dated the date of their issuance or such other date as shall be determined by the Board or the President and Chief Executive Officer of KUB as its designee pursuant to Section 9 hereof. The Series GG-2016 Bonds shall bear interest at a rate or rates not to exceed five percent (5.00%) per annum, payable semi-annually on January 1 and July 1 in each year, commencing January 1, 2017 or such later date as is permitted pursuant to Section 9 hereof. The Series GG-2016 Bonds shall be initially issued in \$5,000 denominations or integral multiples thereof as shall be requested by the purchaser thereof. The Series GG-2016 Bonds shall mature and be payable either serially or

through mandatory redemption on each July 1 in such years as is established by the Board or the President and Chief Executive Officer of KUB as its designee pursuant to Section 9, provided that the final maturity date shall not be later than July 1, 2046. The final maturity schedule shall be established by the award resolution or certificate awarding the Series GG-2016 Bonds to the successful purchaser thereof or in the Bond Purchase Agreement provided for in Section 9 if the Series GG-2016 Bonds are sold by negotiated sale.

(b) Subject to adjustment pursuant to Section 9 hereof, the Series GG-2016 Bonds maturing on or before July 1, 2025 shall mature without option of prior redemption, and Series GG-2016 Bonds maturing on July 1, 2026 and thereafter shall be subject to redemption prior to maturity at the option of the City, acting through the Board, on or after July 1, 2025, as a whole or in part at any time at a redemption price equal to the principal amount plus interest accrued to the redemption date.

If less than all the Series GG-2016 Bonds shall be called for redemption, the maturities to be redeemed shall be selected by the Board in its discretion. If less than all the Series GG-2016 Bonds within a single maturity shall be called for redemption, the interests within the maturity to be redeemed shall be selected as follows:

(i) if the Series GG-2016 Bonds are being held under a Book-Entry System by DTC, or a successor Depository, the amount of the interest of each DTC Participant in the Series GG-2016 Bonds to be redeemed shall be determined by DTC, or such successor Depository, by lot or such other manner as DTC, or such successor Depository, shall determine; or

(ii) if the Series GG-2016 Bonds are not being held under a Book-Entry System by DTC, or a successor Depository, the Series GG-2016 Bonds within the maturity to be redeemed shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall determine.

(c) Pursuant to Section 9 hereof, KUB is authorized to sell the Series GG-2016 Bonds, or any maturities thereof, as term bonds with mandatory redemption requirements corresponding to the maturities set forth herein or as determined by KUB. In the event any or all the Series GG-2016 Bonds are sold as term bonds, KUB shall redeem such term bonds on redemption dates corresponding to the maturity dates set forth in the award resolution or certificate awarding the Series GG-2016 Bonds, in amounts so as to achieve an amortization of the indebtedness approved by the Board or the President and Chief Executive Officer of KUB as its designee. DTC, as Depository for the Series GG-2016 Bonds, or any successor Depository for the Series GG-2016 Bonds, shall determine the interest of each Participant in the Series GG-2016 Bonds to be redeemed using its procedures generally in use at that time. If DTC or another securities depository is no longer serving as Depository for the Series GG-2016 Bonds, the Series GG-2016 Bonds to be redeemed within a maturity shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall select.

At its option, to be exercised on or before the forty-fifth (45th) day next preceding any such redemption date, KUB may (i) deliver to the Registration Agent for cancellation Series GG-2016 Bonds to be redeemed, in any aggregate principal amount desired, and/or (ii) receive a credit in respect of its redemption obligation under this mandatory redemption provision for any Series GG-2016 Bonds of the maturity to be redeemed which prior to said date have been purchased or redeemed (otherwise than through the operation of this mandatory sinking fund redemption provision) and canceled by the Registration Agent and not theretofore applied as a credit against any redemption obligation under this mandatory sinking fund provision. Each Series GG-2016 Bond so delivered or previously purchased or redeemed shall be credited by the Registration Agent at 100% of the principal amount thereof on the obligation of KUB on such payment date and any excess shall be credited on future redemption

obligations in chronological order, and the principal amount of Series GG-2016 Bonds to be redeemed by operation of this mandatory sinking fund provision shall be accordingly reduced. KUB shall on or before the forty-fifth (45th) day next preceding each payment date furnish the Registration Agent with its certificate indicating whether or not and to what extent the provisions of clauses (i) and (ii) of this subsection are to be availed of with respect to such payment and confirm that funds for the balance of the next succeeding prescribed payment will be paid on or before the next succeeding payment date.

(d) Notice of call for redemption, whether optional or mandatory, shall be given by the Registration Agent not less than twenty (20) nor more than sixty (60) days prior to the date fixed for redemption by sending an appropriate notice to the registered owners of the Series GG-2016 Bonds to be redeemed by first-class mail, postage prepaid, at the addresses shown on the bond registration records of the Registration Agent as of the date of the notice; but neither failure to mail such notice nor any defect in any such notice so mailed shall affect the sufficiency of the proceedings for redemption of any of the Series GG-2016 Bonds for which proper notice was given. The notice may state that it is conditioned upon the deposit of moneys in an amount equal to the amount necessary to affect the redemption with the Registration Agent no later than the redemption date ("Conditional Redemption"). As long as DTC, or a successor Depository, is the registered owner of the Series GG-2016 Bonds, all redemption notices shall be mailed by the Registration Agent to DTC, or such successor Depository, as the registered owner of the Series GG-2016 Bonds, as and when above provided, and neither KUB, the City, nor the Registration Agent shall be responsible for mailing notices of redemption to DTC Participants or Beneficial Owners. Failure of DTC, or any successor Depository, to provide notice to any DTC Participant or Beneficial Owner will not affect the validity of such redemption. The Registration Agent shall mail said notices, in the case of term bonds with mandatory redemption requirements as and when provided herein and in the Series GG-2016 Bonds and, in the case of optional redemption, as and when directed by the Board pursuant to written instructions from an authorized representative of the Board given at least forty-five (45) days prior to the redemption date (unless a shorter notice period shall be satisfactory to the Registration Agent). From and after the redemption date, all Series GG-2016 Bonds called for redemption shall cease to bear interest if funds are available at the office of the Registration Agent for the payment thereof and if notice has been duly provided as set forth herein. In the case of a Conditional Redemption, the failure of the City or KUB to make funds available in part or in whole on or before the redemption date shall not constitute an event of default, and the Registration Agent shall give immediate notice to the Depository or the affected Bondholders that the redemption did not occur and that the Bonds called for redemption and not so paid remain outstanding.

(e) The Series GG-2016 Bonds shall be executed in such manner as may be prescribed by applicable law, in the name, and on behalf, of the City with the manual or facsimile signature of the Chair of the Board and attested by the manual or facsimile signature of the Secretary of the Board.

(f) The City hereby authorizes and directs the Board to appoint a Registration Agent and paying agent for the Series GG-2016 Bonds, and the Registration Agent so appointed is authorized and directed to maintain Bond registration records with respect to the Series GG-2016 Bonds, to authenticate and deliver the Series GG-2016 Bonds as provided herein, either at original issuance, upon transfer, or as otherwise directed by the Board, to effect transfers of the Series GG-2016 Bonds, to give all notices of redemption as required herein, to make all payments of principal and interest with respect to the Series GG-2016 Bonds as provided herein, to cancel and destroy Series GG-2016 Bonds which have been paid at maturity or upon earlier redemption or submitted for exchange or transfer, to furnish KUB at least annually a certificate of destruction with respect to Series GG-2016 Bonds canceled and destroyed, and to furnish KUB at least annually an audit confirmation of Bonds paid, Bonds outstanding and payments made with respect to interest on the Series GG-2016 Bonds. The Chair of the Board is hereby authorized to execute and the Secretary of the Board is hereby authorized to attest such written agreement between KUB and the Registration Agent as they shall deem necessary or proper with respect to the obligations,

duties and rights of the Registration Agent. The payment of all reasonable fees and expenses of the Registration Agent for the discharge of its duties and obligations hereunder or under any such agreement is hereby authorized and directed. The Board hereby delegates to the President and Chief Executive Officer of KUB the authority to select and appoint the Registration Agent and any paying agents for the Series GG-2016 Bonds.

(g) The Series GG-2016 Bonds shall be payable, principal and interest, in lawful money of the United States of America at the principal corporate trust office of the Registration Agent. The Registration Agent shall make all interest payments with respect to the Bonds on each interest payment date directly to the registered owners as shown on the Bond registration records maintained by the Registration Agent as of the close of business on the fifteenth day of the month next preceding the interest payment date (the "Regular Record Date") by check or draft mailed to such owners at their addresses shown on said Bond registration records, without, except for final payment, the presentation or surrender of such registered Series GG-2016 Bonds, and all such payments shall discharge the obligations of KUB in respect of such Series GG-2016 Bonds to the extent of the payments so made. Payment of principal of the Series GG-2016 Bonds shall be made upon presentation and surrender of such Series GG-2016 Bonds to the Registration Agent as the same shall become due and payable. All rates of interest specified herein shall be computed on the basis of a three hundred sixty (360) day year composed of twelve (12) months of thirty (30) days each. In the event the Series GG-2016 Bonds are no longer registered in the name of DTC, or a successor Depository, if requested by the Owner of at least \$1,000,000 in aggregate principal amount of the Series GG-2016 Bonds, payment of interest on such Series GG-2016 Bonds shall be paid by wire transfer to a bank within the continental United States or deposited to a designated account if such account is maintained with the Registration Agent and written notice of any such election and designated account is given to the Registration Agent prior to the record date.

(h) Any interest on any Series GG-2016 Bond which is payable but is not punctually paid or duly provided for on any interest payment date (hereinafter "Defaulted Interest") shall forthwith cease to be payable to the registered owner on the relevant Regular Record Date; and, in lieu thereof, such Defaulted Interest shall be paid to the persons in whose names the Series GG-2016 Bonds are registered at the close of business on a date (the "Special Record Date") for the payment of such Defaulted Interest, which shall be fixed in the following manner: KUB shall notify the Registration Agent in writing of the amount of Defaulted Interest proposed to be paid on each Series GG-2016 Bond and the date of the proposed payment, and at the same time KUB shall deposit with the Registration Agent an amount of money equal to the aggregate amount proposed to be paid in respect of such Defaulted Interest or shall make arrangements satisfactory to the Registration Agent for such deposit prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the persons entitled to such Defaulted Interest as in this Section 4 provided. Thereupon, not less than ten (10) days after the receipt by the Registration Agent of the notice of the proposed payment, the Registration Agent shall fix a Special Record Date for the payment of such Defaulted Interest which Date shall be not more than fifteen (15) nor less than ten (10) days prior to the date of the proposed payment to the registered owners. The Registration Agent shall promptly notify KUB of such Special Record Date and, in the name and at the expense of KUB, not less than ten (10) days prior to such Special Record Date, shall cause notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor to be mailed, first class postage prepaid, to each registered owner at the address thereof as it appears in the Bond registration records maintained by the Registration Agent as of the date of such notice. Nothing contained in this Section 4 or in the Series GG-2016 Bonds shall impair any statutory or other rights in law or in equity of any registered owner arising as a result of the failure of KUB to punctually pay or duly provide for the payment of principal of, premium, if any, and interest on the Series GG-2016 Bonds when due.

(i) The Series GG-2016 Bonds are transferable only by presentation to the Registration Agent by the registered owner, or his legal representative duly authorized in writing, of the registered

Series GG-2016 Bond(s) to be transferred with the form of assignment on the reverse side thereof completed in full and signed with the name of the registered owner as it appears upon the face of the Series GG-2016 Bond(s) accompanied by appropriate documentation necessary to prove the legal capacity of any legal representative of the registered owner. Upon receipt of the Series GG-2016 Bond(s) in such form and with such documentation, if any, the Registration Agent shall issue a new Series GG-2016 Bond or Series GG-2016 Bonds to the assignee(s) in \$5,000 denominations, or integral multiples thereof, as requested by the registered owner requesting transfer. The Registration Agent shall not be required to transfer or exchange any Series GG-2016 Bond during the period commencing on a Regular or Special Record Date and ending on the corresponding interest payment date of such Series GG-2016 Bond, nor to transfer or exchange any Series GG-2016 Bond after notice calling such Series GG-2016 Bond for redemption has been made, nor to transfer or exchange any Series GG-2016 Bond during the period following the receipt of instructions from KUB to call such Series GG-2016 Bond for redemption; provided, the Registration Agent, at its option, may make transfers after any of said dates. No charge shall be made to any registered owner for the privilege of transferring any Series GG-2016 Bond, provided that any transfer tax relating to such transaction shall be paid by the registered owner requesting transfer. The person in whose name any Series GG-2016 Bond shall be registered shall be deemed and regarded as the absolute owner thereof for all purposes and neither KUB nor the Registration Agent shall be affected by any notice to the contrary whether or not any payments due on the Series GG-2016 Bonds shall be overdue. Series GG-2016 Bonds, upon surrender to the Registration Agent, may, at the option of the registered owner, be exchanged for an equal aggregate principal amount of Series GG-2016 Bonds of the same maturity in any authorized denomination or denominations. This subsection shall be applicable only if the Series GG-2016 Bonds are no longer held by a Depository, and as long as the Series GG-2016 Bonds are held by a Depository, transfers of ownership interests in the Series GG-2016 Bonds shall be governed by the rules of the Depository.

(j) Except as otherwise authorized herein, the Series GG-2016 Bonds shall be registered in the name of Cede & Co., as nominee of DTC, which will act as the Depository for the Series GG-2016 Bonds except as otherwise provided herein. References in this Section 4 to a Series GG-2016 Bond or the Series GG-2016 Bonds shall be construed to mean the Series GG-2016 Bond or the Series GG-2016 Bonds that are held under the Book-Entry System. One Series GG-2016 Bond for each maturity of the Series GG-2016 Bonds shall be issued to DTC and immobilized in its custody or a custodian of DTC. The Bond Registrar is a custodian and agent for DTC, and the Series GG-2016 Bond will be immobilized in its custody. A Book-Entry System shall be employed, evidencing ownership of the Series GG-2016 Bonds in authorized denominations, with transfers of beneficial ownership effected on the records of DTC and the DTC Participants pursuant to rules and procedures established by DTC.

Each DTC Participant shall be credited in the records of DTC with the amount of such DTC Participant's interest in the Series GG-2016 Bonds. Beneficial ownership interests in the Series GG-2016 Bonds may be purchased by or through DTC Participants. The holders of these beneficial ownership interests are hereinafter referred to as the "Beneficial Owners." The Beneficial Owners shall not receive the Series GG-2016 Bonds representing their beneficial ownership interests. The ownership interests of each Beneficial Owner shall be recorded through the records of the DTC Participant from which such Beneficial Owner purchased its Series GG-2016 Bonds. Transfers of ownership interests in the Series GG-2016 Bonds shall be accomplished by book entries made by DTC and, in turn, by DTC Participants acting on behalf of Beneficial Owners. SO LONG AS CEDE & CO., AS NOMINEE FOR DTC, IS THE REGISTERED OWNER OF THE SERIES GG-2016 BONDS, THE REGISTRATION AGENT SHALL TREAT CEDE & CO., AS THE ONLY HOLDER OF THE SERIES GG-2016 BONDS FOR ALL PURPOSES UNDER THIS RESOLUTION, INCLUDING RECEIPT OF ALL PRINCIPAL OF, PREMIUM, IF ANY, AND INTEREST ON THE SERIES GG-2016 BONDS, RECEIPT OF NOTICES, VOTING AND TAKING OR NOT TAKING, OR CONSENTING TO, CERTAIN ACTIONS UNDER THIS RESOLUTION.

Payments of principal, interest, and redemption premium, if any, with respect to the Series GG-2016 Bonds, so long as DTC is the only owner of the Series GG-2016 Bonds, shall be paid by the Registration Agent directly to DTC or its nominee, Cede & Co. as provided in the Letter of Representation relating to the Series GG-2016 Bonds from the City, acting by and through KUB, and the Registration Agent to DTC (the "Letter of Representation"). DTC shall remit such payments to DTC Participants, and such payments thereafter shall be paid by DTC Participants to the Beneficial Owners. Neither the City, KUB nor the Registration Agent shall be responsible or liable for payment by DTC or DTC Participants, for sending transaction statements or for maintaining, supervising or reviewing records maintained by DTC or DTC Participants.

In the event that (1) DTC determines not to continue to act as Depository for the Series GG-2016 Bonds or (2) to the extent permitted by the rules of DTC, the Board determines to discontinue the Book-Entry System, the Book-Entry System with DTC shall be discontinued. If the Board fails to identify another qualified securities depository to replace DTC, the Board shall cause the Registration Agent to authenticate and deliver replacement Series GG-2016 Bonds in the form of fully registered Series GG-2016 Bonds to each Beneficial Owner.

NEITHER THE CITY, KUB NOR THE REGISTRATION AGENT SHALL HAVE ANY RESPONSIBILITY OR OBLIGATIONS TO ANY DTC PARTICIPANT OR ANY BENEFICIAL OWNER WITH RESPECT TO (i) THE SERIES GG-2016 BONDS; (ii) THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC OR ANY DTC PARTICIPANT; (iii) THE PAYMENT BY DTC OR ANY DTC PARTICIPANT OF ANY AMOUNT DUE TO ANY BENEFICIAL OWNER IN RESPECT OF THE PRINCIPAL OF AND INTEREST ON THE SERIES GG-2016 BONDS; (iv) THE DELIVERY OR TIMELINESS OF DELIVERY BY DTC OR ANY DTC PARTICIPANT OF ANY NOTICE DUE TO ANY BENEFICIAL OWNER THAT IS REQUIRED OR PERMITTED UNDER THE TERMS OF THIS RESOLUTION TO BE GIVEN TO BENEFICIAL OWNERS, (v) THE SELECTION OF BENEFICIAL OWNERS TO RECEIVE PAYMENTS IN THE EVENT OF ANY PARTIAL REDEMPTION OF THE SERIES GG-2016 BONDS; OR (vi) ANY CONSENT GIVEN OR OTHER ACTION TAKEN BY DTC, OR ITS NOMINEE, CEDE & CO., AS OWNER.

If the purchaser or Underwriter certifies that it intends to hold the Series GG-2016 Bonds for its own account, then the City may issue, acting by and through KUB, certificated Bonds without the utilization of DTC and the Book-Entry System.

(k) In case any Series GG-2016 Bond shall become mutilated, or be lost, stolen, or destroyed, the City, acting by and through KUB, in its discretion, shall issue, and the Registration Agent, upon written direction from KUB, shall authenticate and deliver, a new Series GG-2016 Bond of like tenor, amount, maturity and date, in exchange and substitution for, and upon the cancellation of, the mutilated Series GG-2016 Bond, or in lieu of and in substitution for such lost, stolen or destroyed Series GG-2016 Bond, or if any such Series GG-2016 Bond shall have matured or shall be about to mature, instead of issuing a substituted Series GG-2016 Bond KUB may pay or authorize payment of such Series GG-2016 Bond without surrender thereof. In every case the applicant shall furnish evidence satisfactory to KUB and the Registration Agent of the destruction, theft or loss of such Series GG-2016 Bond, and indemnity satisfactory to KUB and the Registration Agent; and KUB may charge the applicant for the issue of such new Series GG-2016 Bond an amount sufficient to reimburse KUB for the expense incurred by it in the issue thereof.

(l) The Registration Agent is hereby authorized to authenticate and deliver the Series GG-2016 Bonds to DTC, on behalf of the initial purchaser thereof, or an agent of DTC, upon receipt by KUB of the proceeds of the sale thereof, subject to the rules of the depository, and to authenticate and deliver

Series GG-2016 Bonds in exchange for Series GG-2016 Bonds of the same principal amount delivered for transfer upon receipt of the Series GG-2016 Bond(s) to be transferred in proper form with proper documentation as hereinabove described. The Series GG-2016 Bonds shall not be valid for any purpose unless authenticated by the Registration Agent by the manual signature of an authorized representative thereof on the certificate set forth herein on the Series GG-2016 Bond form.

(m) The Registration Agent is hereby authorized to take such action as may be necessary from time to time to qualify and maintain the Series GG-2016 Bonds for deposit with DTC, including but not limited to, wire transfers of interest and principal payments with respect to the Series GG-2016 Bonds, utilization of electronic book entry data received from DTC in place of actual delivery of Series GG-2016 Bonds and provision of notices with respect to Series GG-2016 Bonds registered by DTC (or any of its designees identified to the Registration Agent) by overnight delivery, courier service, telegram, telecopy or other similar means of communication. No such arrangements with DTC may adversely affect the interest of any of the Beneficial Owners of the Series GG-2016 Bonds, provided, however, that the Registration Agent shall not be liable with respect to any such arrangements it may make pursuant to this Section 4.

Section 5. Source of Payment. The Series GG-2016 Bonds shall be payable solely from and be secured by a pledge of the Net Revenues of the System as hereinafter provided and as provided in the 1949 Resolution on a parity and equality of lien with the Outstanding Bonds. The punctual payment of principal of and interest on the Series GG-2016 Bonds, the Outstanding Bonds and any Parity Bonds shall be secured equally and ratably by the Net Revenues of the System, without priority by reason of series, number or time of sale and delivery. The owners of the Series GG-2016 Bonds shall have no recourse to the power of taxation of the City.

Section 6. Form of Series GG-2016 Bonds. The Series GG-2016 Bonds shall be in substantially the following form, the omissions to be appropriately completed when the Series GG-2016 Bonds are prepared and delivered:

(Form of Series GG-2016 Bond)

REGISTERED
Number _____

REGISTERED
\$ _____

UNITED STATES OF AMERICA
STATE OF TENNESSEE
COUNTY OF KNOX
CITY OF KNOXVILLE
ELECTRIC SYSTEM REVENUE BOND, SERIES GG-2016

Interest Rate: Maturity Date: Date of Bond: CUSIP No.:

Registered Owner:
Principal Amount:

KNOW ALL PERSONS BY THESE PRESENTS: That the City of Knoxville, a municipal corporation lawfully organized and existing in Knox County, Tennessee (the "City"), acting by and through the Knoxville Utilities Board ("KUB"), for value received hereby promises to pay to the registered owner hereof, hereinabove named, or registered assigns, in the manner hereinafter provided, the principal amount hereinabove set forth on the maturity date hereinabove set forth, or upon earlier

redemption, as set forth herein, and to pay interest (computed on the basis of a 360-day year of twelve 30-day months) on said principal amount at the annual rate of interest hereinabove set forth from the date hereof until said maturity date or redemption date, said interest being payable on January 1, 2017, and semi-annually thereafter on the first day of January and July in each year until this Bond matures or is redeemed. Both principal hereof and interest hereon are payable in lawful money of the United States of America by check or draft at the designated corporate trust office of _____, _____, Tennessee, as registration agent and paying agent (the "Registration Agent"). The Registration Agent shall make all interest payments with respect to this Bond by check or draft on each interest payment date directly to the registered owner hereof shown on the bond registration records maintained by the Registration Agent as of the close of business on the day which is the fifteenth (15th) day of the month next preceding the interest payment date (the "Regular Record Date") by depositing said payment in the United States mail, postage prepaid, addressed to such owner at such owner's address shown on said bond registration records, without, except for final payment, the presentation or surrender of this Bond, and all such payments shall discharge the obligations of the City and KUB to the extent of the payments so made. Any such interest not so punctually paid or duly provided for on any interest payment date shall forthwith cease to be payable to the registered owner on the relevant Regular Record Date; and, in lieu thereof, such defaulted interest shall be payable to the person in whose name this Bond is registered at the close of business on the date (the "Special Record Date") for payment of such defaulted interest to be fixed by the Registration Agent, notice of which shall be given to the owners of the Bonds of the issue of which this Bond is one not less than ten (10) days prior to such Special Record Date. Payment of principal of and premium, if any, on the Bonds shall be made when due upon presentation and surrender of this Bond to the Registration Agent.

Except as otherwise provided herein or in the Resolution, as hereinafter defined, this Bond shall be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"), which will act as securities depository for the Bonds of the series of which this Bond is one. One Bond for each maturity of the Bonds shall be issued to DTC and immobilized in its custody or a custodian of DTC. The Bond Registrar is a custodian and agent for DTC, and the Bond will be immobilized in its custody. A book-entry system (the "Book-Entry System") shall be employed, evidencing ownership of the Bonds in \$5,000 denominations, or multiples thereof, with transfers of beneficial ownership effected on the records of DTC and the DTC Participants, as defined in the Resolution, pursuant to rules and procedures established by DTC. So long as Cede & Co., as nominee for DTC, is the registered owner of the Bonds, the City, KUB and the Registration Agent shall treat Cede & Co., as the only owner of the Bonds for all purposes under the Resolution, including receipt of all principal of, premium, if any, and interest on the Bonds, receipt of notices, voting and requesting or taking or not taking, or consenting to, certain actions hereunder. Payments of principal, maturity amounts, interest, and redemption premium, if any, with respect to the Bonds, so long as DTC is the only owner of the Bonds, shall be paid directly to DTC or its nominee, Cede & Co. DTC shall remit such payments to DTC Participants, and such payments thereafter shall be paid by DTC Participants to the Beneficial Owners, as defined in the Resolution. Neither the City, KUB, nor the Registration Agent shall be responsible or liable for payment by DTC or DTC Participants, for sending transaction statements or for maintaining, supervising or reviewing records maintained by DTC or DTC Participants. In the event that (1) DTC determines not to continue to act as securities depository for the Bonds or (2) to the extent permitted by the rules of DTC, the Board determines to discontinue the Book-Entry System, the Book-Entry System with DTC shall be discontinued. If the Board fails to identify another qualified securities depository to replace DTC, the Board shall cause the Registration Agent to authenticate and deliver replacement Bonds in the form of fully registered Bonds to each Beneficial Owner. Neither the City, KUB nor the Registration Agent shall have any responsibility or obligations to any DTC Participant or any Beneficial Owner with respect to (i) the Bonds; (ii) the accuracy of any records maintained by DTC or any DTC Participant; (iii) the payment by DTC or any DTC Participant of any amount due to any Beneficial Owner in respect of the principal or maturity amounts of and interest on the Bonds; (iv) the

delivery or timeliness of delivery by DTC or any DTC Participant of any notice due to any Beneficial Owner that is required or permitted under the terms of the Resolution to be given to Beneficial Owners, (v) the selection of Beneficial Owners to receive payments in the event of any partial redemption of the Bonds; or (vi) any consent given or other action taken by DTC, or its nominee, Cede & Co., as owner.

The Bonds of the issue of which this Bond is one maturing on or before July 1, 2025 shall mature without option of prior redemption. The Bonds maturing on July 1, 2026 and thereafter shall be subject to redemption prior to maturity at the option of the City, acting through the Board, on or after July 1, 2025, as a whole or in part at any time at a redemption price equal to the principal amount plus interest accrued to the redemption date.

[If less than all the Bonds shall be called for redemption, the maturities to be redeemed shall be selected by the Board in its discretion. If less than all of the Bonds within a single maturity shall be called for redemption, the interests within the maturity to be redeemed shall be selected as follows:

(i) if the Bonds are being held under a Book-Entry System by DTC, or a successor Depository, the amount of the interest of each DTC Participant in the Bonds to be redeemed shall be determined by DTC, or such successor Depository, by lot or such other manner as DTC, or such successor Depository, shall determine; or

(ii) if the Series Bonds are not being held under a Book-Entry System by DTC, or a successor Depository, the Bonds within the maturity to be redeemed shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall determine.]

[Subject to the credit hereinafter provided, the City acting by and through KUB, shall redeem Bonds maturing on the redemption dates set forth below opposite such maturity date, in aggregate principal amounts equal to the respective dollar amounts set forth below opposite the redemption dates at a price of par plus accrued interest thereon to the date of redemption. DTC, as securities depository for the series of Bonds of which this Bond is one, or any successor Depository for the Bonds, shall determine the interest of each Participant in the Bonds to be redeemed using its procedures generally in use at that time. If DTC, or another securities depository is no longer serving as securities depository for the Bonds, the Bonds to be redeemed within a maturity shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall select. The dates of redemption and amount of Bonds to be redeemed on said dates are as follows:

<u>Maturity</u>	<u>Redemption Date</u>	<u>Principal Amount of Bonds to be Redeemed</u>
-----------------	------------------------	---

*final maturity

At its option, to be exercised on or before the forty-fifth (45th) day next preceding any such redemption date, the City, acting through KUB, may (i) deliver to the Registration Agent for cancellation Bonds to be redeemed, in any aggregate principal amount desired, and/or (ii) receive credit in respect of its redemption obligation under the mandatory redemption provision for any Bonds to be redeemed which prior to said date have been purchased or redeemed (otherwise than by mandatory redemption) and canceled by the Registration Agent and not theretofore applied as a credit against any redemption

obligation under the mandatory redemption provision. Each Bond so delivered or previously purchased or redeemed shall be credited by the Registration Agent at 100% of the principal amount thereof on the obligation of KUB on such payment date and any excess shall be credited on future redemption obligations in chronological order, and the principal amount of the Bonds to be redeemed by operation of the mandatory redemption provision shall be accordingly reduced. KUB shall on or before the forty-fifth (45th) day next preceding each payment date furnish the Registration Agent with its certificate indicating whether or not and to what extent the provisions of clauses (i) and (ii) of this paragraph are to be availed of with respect to such payment and confirm that funds for the balance of the next succeeding prescribed payment will be paid on or before the next succeeding payment date.

Notice of call for redemption, whether optional or mandatory shall be given by the Registration Agent on behalf of the City, but only upon direction of the Board, not fewer than twenty (20) nor more than sixty (60) days prior to the date fixed for redemption by sending an appropriate notice to the registered owners of the Bonds to be redeemed by first-class mail, postage prepaid, at the addresses shown on the Bond registration records of the Registration Agent as of the date of the notice; but neither failure to mail such notice nor any defect in any such notice so mailed shall affect the sufficiency of the proceedings for the redemption of any of the Bonds for which proper notice was given. The notice may state that it is conditioned upon the deposit of moneys in an amount equal to the amount necessary to affect the redemption with the Registration Agent no later than the redemption date ("Conditional Redemption"). From and after any redemption date, all Bonds called for redemption shall cease to bear interest if funds are available at the office of the Registration Agent for the payment thereof and if notice has been duly given as set forth in the Resolution, as hereafter defined. In the case of a Conditional Redemption, the failure of the City or KUB to make funds available in part or in whole on or before the redemption date shall not constitute an event of default, and the Registration Agent shall give immediate notice to the Depository or the affected Bondholders that the redemption did not occur and that the Bonds called for redemption and not so paid remain outstanding.]

The Bonds of the issue of which this Bond is one are issuable only as fully registered Bonds, without coupons, in the denomination of Five Thousand Dollars (\$5,000) or any authorized integral multiple thereof. At the designated corporate trust office of the Registration Agent, in the manner and subject to the limitations, conditions and charges provided in the Resolution, fully registered Bonds may be exchanged for an equal aggregate principal amount of fully registered Bonds of the same maturity, of authorized denominations, and bearing interest at the same rate. The Bonds shall be numbered consecutively from one upwards and will be made eligible for the Book-Entry System of DTC. Except as otherwise provided in this paragraph and the Resolution, as hereinafter defined, the Bonds shall be registered in the name of Cede & Co., as nominee of DTC. The Board may discontinue use of DTC for Bonds at any time upon determination by the Board that the use of DTC is no longer in the best interest of the beneficial owners of the Bonds. Upon such determination, registered ownership of the Bonds may be transferred on the registration books maintained by the Registration Agent, and the Bonds may be delivered in physical form to the following:

i. any successor of DTC or its nominee;

ii. any substitute depository to which the Registration Agent does not unreasonably object, upon (a) the resignation of DTC or its successor (or any substitute depository or its successor) from its functions as depository, or (b) a determination by the Board that DTC or its successor (or any substitute depository or its successor) is no longer able to carry out its functions as depository; or

iii. any person, upon (a) the resignation of DTC or its successor (or substitute depository or its successor) from its functions as depository, or (b) termination by the Board of the use of DTC (or substitute depository or its successor).

In the event that this Bond is no longer held in a Book-Entry System by DTC, this Bond shall be transferable by the registered owner hereof in person or by such owner's attorney duly authorized in writing at the principal corporate trust office of the Registration Agent set forth on the front side hereof, but only in the manner, subject to limitations and upon payment of the charges provided in the Resolution and upon surrender and cancellation of this Bond. Upon such transfer a new Bond or Bonds of authorized denomination or denominations of the same maturity and interest rate for the same aggregate principal amount will be issued to the transferee in exchange therefor. The person in whose name this Bond is registered shall be deemed and regarded as the absolute owner thereof for all purposes and neither the City, KUB nor the Registration Agent shall be affected by any notice to the contrary whether or not any payments due on the Bond shall be overdue. Bonds, upon surrender to the Registration Agent, may, at the option of the registered owner thereof, be exchanged for an equal aggregate principal amount of the Bonds of the same maturity in authorized denomination or denominations, upon the terms set forth in the Resolution. The Registration Agent shall not be required to transfer or exchange any Bond during the period commencing on a Regular Record Date or Special Record Date and ending on the corresponding interest payment date of such Bond, nor to transfer or exchange any Bond after the notice calling such Bond for redemption has been made, nor during a period following the receipt of instructions from the Board to call such Bond for redemption.

This Bond is one of a total authorized issue aggregating \$40,000,000 and issued by the City for the purpose of providing funds to finance the construction of extensions and improvements to the City's electrical power distribution system (the "System"), including the payment of legal, fiscal and administrative costs incident thereto and costs incident to the issuance of the Bonds, under and in full compliance with the Constitution and statutes of the State of Tennessee, including Sections 7-34-101 et seq. and Section 9-21-101 et seq., Tennessee Code Annotated, and pursuant to Resolution No. 1644 duly adopted by the City Council of the City on January 4, 1949, as supplemented and amended by Resolution No. 2171 duly adopted by the City Council of the City on February 22, 1955, Resolution No. 3491 duly adopted by the City Council of the City on February 21, 1967, Resolution No. R-317-90 duly adopted by the City Council of the City on October 30, 1990, Resolution No. R-469-92 duly adopted by the City Council of the City on October 13, 1992, Resolution No. R-472-93 duly adopted by the City Council of the City on October 26, 1993, Resolution No. R-95-95 duly adopted by the City Council of the City on February 28, 1995, Resolution No. R-422-98 duly adopted by the City Council of the City on October 20, 1998, Resolution No. R-64-01 duly adopted by the City Council of the City on February 20, 2001, Resolution No. R-149-01 duly adopted by the City Council of the City on March 20, 2001, Resolution No. R-480-01 duly adopted by the City Council of the City on October 30, 2001, Resolution No. R-59-04 duly adopted by the City Council of the City on March 2, 2004, Resolution No. R-261-05 duly adopted by the City Council on July 5, 2005, Resolution No. R-78-06 duly adopted by the City Council on February 28, 2006, Resolution No. R-251-08 duly adopted by the City Council of the City on July 29, 2008, Resolution No. R-332-2010 duly adopted by the City Council of the City on November 2, 2010, Resolution No. R-335-2011 duly adopted by the City Council of the City on December 13, 2011, Resolution No. R-289-2012 duly adopted by the City Council of the City on October 16, 2012, Resolution No. R-321-2012 duly adopted by the City Council of the City on November 13, 2012, Resolution No. R-213-2014 duly adopted by the City Council of the City on June 24, 2014, Resolution No. R-81-2015 duly adopted by the City Council of the City on March 3, 2015, Resolution No. R-129-2015 duly adopted by the City Council of the City on March 31, 2015 and Resolution No. R____-2016 duly adopted by the City Council of the City on _____, 2016 (as supplemented and amended, the "Resolution").

This Bond, and interest hereon, are payable solely from and secured by a pledge of the income and revenues to be derived from the operation of the System, subject only to the payment of the reasonable and necessary costs of operating, maintaining, repairing, and insuring the System. The Bonds of the series of which this Bond is one shall enjoy complete parity and equality of lien with the City's outstanding Electric System Revenue Refunding Bonds, Series W-2005, dated August 10, 2005, maturing July 1, 2016 and thereafter, the City's outstanding Electric System Revenue Bonds, Series Y-2009, dated July 1, 2015, maturing July 1, 2017 and July 1, 2018, the City's outstanding Electric System Revenue Bonds, Series Z-2010 (Federally Taxable Build America Bonds), dated December 8, 2010, maturing July 1, 2016 and thereafter, the City's outstanding Electric System Revenue Refunding Bonds, Series AA-2012, dated April 20, 2012, maturing July 1, 2016 and thereafter, the City's outstanding Electric System Revenue Bonds, Series BB-2012, dated December 18, 2012, maturing July 1, 2016 and thereafter, its Electric System Revenue Refunding Bonds, Series CC-2013, dated March 15, 2013, maturing July 1, 2016 and thereafter, the City's outstanding Electric System Revenue Bonds, Series DD-2014, dated September 18, 2014, maturing July 1, 2016 and thereafter, the City's outstanding Electric System Revenue Refunding Bonds, Series EE-2015, dated May 1, 2015, maturing July 1, 2016 and thereafter, and City's outstanding Electric System Revenue Bonds, Series FF-2015, dated May 20, 2015, maturing July 1, 2016 and thereafter (collectively, the "Outstanding Bonds"). As provided in the Resolution, the punctual payment of principal of, premium, if any, and interest on the series of Bonds of which this Bond is one, the Outstanding Bonds, and any other bonds issued on a parity therewith pursuant to the terms of the Resolution shall be secured equally and ratably by said revenues without priority by reason of series, number or time of sale or delivery. The owner of this Bond shall have no recourse to the power of taxation of the City. The Board has covenanted that it will fix and impose such rates and charges for the services rendered by the System and will collect and account for sufficient revenues to pay promptly the principal of and interest on this Bond and the issue of which it is a part, as each payment becomes due. For a more complete statement of the revenues from which and conditions under which this Bond is payable, a statement of the conditions on which obligations may hereafter be issued on a parity with this Bond, the general covenants and provisions pursuant to which this Bond is issued and the terms upon which the Resolution may be modified, reference is hereby made to the Resolution.

Under existing law, this Bond and the income therefrom are exempt from all present state, county and municipal taxation in Tennessee except (a) inheritance, transfer and estate taxes, (b) Tennessee excise taxes on all or a portion of the interest on this Bond during the period such Bond is held or beneficially owned by any organization or entity, other than a sole proprietorship or general partnership, doing business in the State of Tennessee, and (c) Tennessee franchise taxes by reason of the inclusion of the book value of this Bond in the Tennessee franchise tax base or any organization or entity, other than a sole proprietorship or general partnership, doing business in the State of Tennessee.

It is hereby certified, recited, and declared that all acts, conditions and things required to exist, happen and be performed precedent to and in the issuance of this Bond exist, have happened and have been performed in due time, form and manner as required by law, and that the amount of this Bond, together with all other indebtedness of either the City or KUB, does not exceed any limitation prescribed by the constitution and statutes of the State of Tennessee.

IN WITNESS WHEREOF, the City acting by and through the Board has caused this Bond to be signed by the Chair of the Board by her manual or facsimile signature and attested by the Secretary of the Board by his manual or facsimile signature, all as of the date hereinabove set forth.

CITY OF KNOXVILLE
by and through the
KNOXVILLE UTILITIES BOARD

By: _____
Chair

ATTESTED:

Secretary

Transferable and payable at the
designated corporate trust office of: _____
_____, Tennessee

Date of Registration: _____

This Bond is one of the issue of Bonds issued pursuant to the Resolution hereinabove described.

Registration Agent

By: _____
Authorized Representative

FORM OF ASSIGNMENT

FOR VALUE RECEIVED, the undersigned sells, assigns, and transfers unto _____, [Please insert Federal Tax Identification Number or Social Security Number of Assignee _____] whose address is _____, the within bond of the City of Knoxville, Tennessee, and does hereby irrevocably constitute and appoint _____, _____, Tennessee, attorney, to transfer the said bond on the records kept for registration thereof with full power of substitution in the premises.

Dated: _____

NOTICE: The signature to this assignment must correspond with the name of the registered owner as it appears on the face of the within Bond in every particular, without alteration or enlargement or any change whatsoever.

Signature guaranteed:

NOTICE: Signature(s) must be guaranteed by a member firm of a Medallion Program acceptable to the Registration Agent.

Section 7. Equality of Lien; Pledge of Net Revenues. The punctual payment of principal of, premium, if any, and interest on the Series GG-2016 Bonds, the Outstanding Bonds and any Parity Bonds shall be secured equally and ratably by the Net Revenues of the System without priority by reason of series, number or time of sale or execution or delivery, and the Net Revenues of the System are hereby irrevocably pledged to the punctual payment of such principal, premium and interest as the same become due.

Section 8. Applicability of the 1949 Resolution. The Series GG-2016 Bonds are issued in compliance with the 1949 Resolution so as to be on a parity with the Outstanding Bonds, and, when duly delivered, the Series GG-2016 Bonds shall constitute a series of bonds issued under the authority of the 1949 Resolution. All recitals, provisions, covenants and agreements contained in the 1949 Resolution, as supplemented and amended herein (except insofar as any of said recitals, provisions, covenants and agreements necessarily relate exclusively to any series of the Outstanding Bonds) are hereby ratified and confirmed and incorporated herein by reference and, for so long as any of the Series GG-2016 Bonds shall be outstanding and unpaid either as to principal or interest, or until discharge and satisfaction of the Series GG-2016 Bonds as provided in Section 12 hereof, shall be applicable to the Series GG-2016 Bonds, shall inure to the benefit of owners of the Series GG-2016 Bonds as if set out in full herein, and shall be fully enforceable by the owner of any Series GG-2016 Bond.

All references to "holder" or "holders" in the 1949 Resolution shall be deemed to include owners of the Series GG-2016 Bonds, and all references to "Bonds" in the 1949 Resolution shall be deemed to include the Series GG-2016 Bonds.

Section 9. Sale of Series GG-2016 Bonds.

(a) The Series GG-2016 Bonds or any emission thereof may be sold at negotiated sale to the Underwriter or at public sale as determined by the President and Chief Executive Officer of KUB at a price of not less than 98.00% of par, exclusive of original issue discount, plus accrued interest, if any, provided, however, that no emission of Series GG-2016 Bonds may be sold at negotiated sale unless the Audit and Finance Committee of the Board has previously approved the sale of such emission at negotiated sale. The sale of any emission of the Series GG-2016 Bonds to the Underwriter or by public sale shall be binding on the City and KUB, and no further action of the Board with respect thereto shall be required.

(b) The President and Chief Executive Officer of KUB, as the designee of the Board, is further authorized with respect to each emission of Series GG-2016 Bonds to:

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

(2) specify or change the series designation of the Series GG-2016 Bonds to a designation other than "Electric System Revenue Bonds, Series GG-2016";

(3) change the first interest payment date to a date other than January 1, 2017, provided that such date is not later than twelve months from the dated date of such emission of Series GG-2016 Bonds;

(4) establish and adjust the principal and interest payment dates and determine maturity or mandatory redemption amounts of the Series GG-2016 Bonds or any emission thereof, provided that (A) the total principal amount of all emissions of the Series GG-2016 Bonds does not exceed the total amount of Series GG-2016 Bonds authorized herein, (B) the final maturity date of each emission shall be not later than July 1, 2046 and (C) the debt service payable in each fiscal year after the completion of the Project shall be approximately level;

(5) modify or remove the optional redemption provisions contained herein, provided that the premium amount to be paid in connection with any redemption provision shall not exceed two percent (2%) of the principal amount thereof;

(6) sell the Series GG-2016 Bonds, or any emission thereof, or any maturities thereof as term bonds with mandatory redemption requirements as determined by the Board, as it shall deem most advantageous to KUB; and

(7) cause all or a portion of the Series GG-2016 Bonds to be insured by a bond insurance policy issued by a nationally recognized bond insurance company to achieve the purposes set forth herein and to serve the best interests of KUB and to enter into agreements with such insurance company to the extent not inconsistent with this resolution.

(c) If any emission of Series GG-2016 Bonds is sold at negotiated sale, the President and Chief Executive Officer of KUB is authorized to execute a Bond Purchase Agreement with respect to such emission of Series GG-2016 Bonds, providing for the purchase and sale of the Series GG-2016 Bonds, or any emission thereof. Each Bond Purchase Agreement shall be in substantially the form attached hereto as Exhibit A, with such changes as the President and Chief Executive Officer deems necessary or advisable in connection with the sale of such Series GG-2016 Bonds, provided any such changes are not inconsistent with the terms of this Section 9. If the Underwriter does not intend to reoffer the Series GG-2016 Bonds to the public, then the Bond Purchase Agreement shall be conformed to reflect such intention. The form of the Series GG-2016 Bond set forth in Section 6 hereof shall be conformed to reflect any changes made pursuant to this Section 9.

(d) The President and Chief Executive Officer and the Chief Financial Officer of KUB, or either of them, are authorized to cause the Series GG-2016 Bonds, in book-entry form (except as otherwise authorized herein), to be authenticated and delivered by the Registration Agent to the purchaser(s), and to execute, publish, and deliver all certificates and documents, including an official statement, the Bond Purchase Agreement and closing certificates, as they shall deem necessary in connection with the sale and delivery of each emission of the Bonds.

(e) If the Series GG-2016 Bonds are sold at public sale, the Series GG-2016 Bonds shall be awarded by the President and Chief Executive Officer of KUB to the bidder that offers to purchase the Bonds for the lowest true interest cost to KUB.

Section 10. Disposition of Series GG-2016 Bond Proceeds. The proceeds of the sale of the Series GG-2016 Bonds shall be paid to KUB and used and applied by KUB as follows:

(a) All accrued interest, if any, shall be deposited to the Debt Service Fund created under the 1949 Resolution and used to pay interest on the Series GG-2016 Bonds on the first interest payment date following delivery of the Series GG-2016 Bonds; and

(b) The remainder of the proceeds of the sale of the Series GG-2016 Bonds shall be deposited with a financial institution regulated by the Federal Deposit Insurance Corporation or similar federal agency, in the "Electric System Expansion and Replacement Fund" (the "Construction Fund") to be kept separate and apart from all other funds of KUB. The funds in the Construction Fund shall be disbursed solely to pay the costs of constructing the Project and costs related to the issuance and sale of the Series GG-2016 Bonds, including necessary legal, accounting, engineering and fiscal expenses, printing, engraving, advertising and similar expenses, administrative and clerical costs, rating agency fees, Registration Agent fees, and other necessary miscellaneous expenses incurred in connection with the Project and the issuance and sale of the Series GG-2016 Bonds. Money in the Construction Fund shall be secured in the manner prescribed by applicable statutes relative to the securing of public or trust funds, if any, or, in the absence of such a statute, by a pledge of readily marketable securities having at all times a market value of not less than the amount in said Construction Fund. Money in the Construction Fund shall be expended only for the purposes authorized by this resolution. Any funds remaining in the Construction Fund after completion of the Project and payment of authorized expenses shall be deposited to the Bond Fund and used to retire Series GG-2016 Bonds on the earliest date possible. Moneys in the Construction Fund shall be invested as directed by the Chief Financial Officer in such investments as shall be permitted by applicable law. All income derived from such investments shall be deposited to the Construction Fund.

Section 11. Discharge and Satisfaction of Series GG-2016 Bonds. If KUB, on behalf of the City, shall pay and discharge the indebtedness evidenced by any of the Series GG-2016 Bonds or Parity Bonds (referred to hereinafter, collectively, in this Section 11 as the "Bonds") in any one or more of the following ways:

(a) By paying or causing to be paid, by deposit of sufficient funds as and when required with the Registration Agent, the principal of and interest on such Bonds as and when the same become due and payable;

(b) By depositing or causing to be deposited with any financial institution which has trust powers and which is regulated by and the deposits of which are insured by the Federal Deposit Insurance Corporation or similar federal agency ("an Agent"; which Agent may be the Registration Agent), in trust or escrow, on or before the date of maturity or redemption, sufficient money or Defeasance Obligations, the principal of and interest on which, when due and payable, will provide sufficient moneys to pay or redeem such Bonds and to pay premium, if any, and interest thereon when due until the maturity or redemption date (provided, if such Bonds are to be redeemed prior to maturity thereof, proper notice of such redemption shall have been given or adequate provision shall have been made for the giving of such notice); or

(c) By delivering such Bonds to the Registration Agent, for cancellation by it;

and if KUB, on behalf of the City, shall also pay or cause to be paid all other sums payable hereunder by KUB, on behalf of the City with respect to such Bonds or make adequate provision therefor, and by resolution of the Board instruct any such Agent to pay amounts when and as required to the Registration Agent for the payment of principal of and interest and redemption premiums, if any, on such Bonds when due, then and in that case the indebtedness evidenced by such Bonds shall be discharged and satisfied and all covenants, liens, pledges, agreements and obligations entered into, created, or imposed hereunder, including the pledge of and lien on the Net Revenues of the System set forth herein, shall be fully

discharged and satisfied with respect to such Bonds and the owners thereof and shall thereupon cease, terminate and become void.

If KUB, on behalf of the City, shall pay and discharge or cause to be paid and discharged the indebtedness evidenced by any of the Bonds in the manner provided in either clause (a) or clause (b) above, then the registered owners thereof shall thereafter be entitled only to payment out of the money or Defeasance Obligations deposited as aforesaid.

Except as otherwise provided in this Section 11, neither Defeasance Obligations nor moneys deposited with the Agent pursuant to this Section 11 nor principal or interest payments on any such Defeasance Obligations shall be withdrawn or used for any purpose other than, and shall be held in trust for, the payment of the principal of and premium, if any, and interest on said Bonds; provided that any cash received from such principal or interest payments on such Defeasance Obligations deposited with the Agent, (A) to the extent such cash will not be required at any time for such purpose, shall be paid over to KUB as received by the Agent and (B) to the extent such cash will be required for such purpose at a later date, shall, to the extent practicable, be reinvested in Defeasance Obligations maturing at times and in amounts sufficient to pay when due the principal and premium, if any, and interest to become due on said Bonds on or prior to such redemption date or maturity date thereof, as the case may be, and interest earned from such reinvestments, to the extent not needed for the payment of such principal, premium and interest, shall be paid over to KUB, as received by the Agent. For the purposes of this Section 11, Defeasance Obligations shall mean direct obligations of, or obligations, the principal of and interest on which are guaranteed by, the United States of America, or any agency thereof, obligations of any agency or instrumentality of the United States or any other obligations at the time of the purchase thereof are permitted investments under Tennessee Law for the purposes described in this Section 11, which bonds or other obligations shall not be subject to redemption prior to their maturity other than at the option of the registered owner thereof.

No redemption privilege shall be exercised with respect to the Series GG-2016 Bonds or any Parity Bonds except at the option and election of the Board. The right of redemption set forth herein shall not be exercised by any Registration Agent or Agent unless expressly so directed in writing by an authorized representative of the Board.

Section 12. Federal Tax Matters. The City and KUB recognize that the purchasers and owners of the Series GG-2016 Bonds will have accepted them on, and paid therefor a price that reflects, the understanding that interest thereon will not be included in gross income for purposes of federal income taxation under laws in force on the date of delivery of the Series GG-2016 Bonds. In this connection, KUB, on behalf of the City, agrees that it shall take no action which may render the interest on any of the Series GG-2016 Bonds includable in gross income for purposes of federal income taxation. It is the reasonable expectation of the City and KUB that the proceeds of the Series GG-2016 Bonds will not be used in a manner which will cause the Series GG-2016 Bonds to be "arbitrage bonds" within the meaning of Section 148 of the Code, and to this end the said proceeds of the Series GG-2016 Bonds and other related funds established for the purposes herein set out, shall be used and spent expeditiously for the purposes described herein. In the event Section 148(f) of the Code shall require the payment of any investment proceeds of the Series GG-2016 Bonds to the United States government, KUB will make such payments as and when required by said Section 148(f) and will take such other actions as shall be necessary or permitted to prevent the interest on the Series GG-2016 Bonds from becoming taxable. The Chair of the Board, the Secretary of the Board, the President and Chief Executive Officer of KUB and Chief Financial Officer of KUB, or any of them, are authorized and directed to make such certifications in this regard in connection with the sale of the Bonds as any or all shall deem appropriate, and such certifications shall constitute a representation and certification of the City and KUB.

Section 13. Official Statement. The President and Chief Executive Officer of KUB, or her designee, is hereby authorized and directed to provide for the preparation and distribution of a Preliminary Official Statement describing the Series GG-2016 Bonds. After the Series GG-2016 Bonds have been awarded, the President and Chief Executive Officer of KUB, or her designee, shall make such completions, omissions, insertions and changes in the Preliminary Official Statement not inconsistent with this resolution as are necessary or desirable to complete it as a final Official Statement for purposes of Rule 15c2-12(e)(3) of the Securities and Exchange Commission. The President and Chief Executive Officer of KUB, or her designee, shall arrange for the delivery to the purchaser of the Series GG-2016 Bonds of a reasonable number of copies of the Official Statement within seven business days after the Series GG-2016 Bonds have been awarded for subsequent delivery by the purchaser to each potential investor requesting a copy of the Official Statement and to each person to whom such purchaser and members of his group initially sell the Series GG-2016 Bonds.

The President and Chief Executive Officer of KUB, or her designee is authorized, on behalf of the Board, to deem the Preliminary Official Statement and the Official Statement in final form, each to be final as of its date within the meaning of Rule 15c2-12(b)(1), except for the omission in the Preliminary Official Statement of certain pricing and other information allowed to be omitted pursuant to such Rule 15c2-12(b)(1). The distribution of the Preliminary Official Statement and the Official Statement in final form shall be conclusive evidence that each has been deemed in final form as of its date by the Board except for the omission in the Preliminary Official Statement of such pricing and other information.

Section 14. Continuing Disclosure. The City hereby covenants and agrees that KUB will provide annual financial information and material event notices for the Series GG-2016 Bonds as required by Rule 15c2-12 of the Securities and Exchange Commission. The Chief Financial Officer of KUB is authorized to execute at the closing of the sale of the Series GG-2016 Bonds, an agreement for the benefit of and enforceable by the owners of the Series GG-2016 Bonds specifying the details of the financial information and material event notices to be provided and its obligations relating thereto. Failure of KUB to comply with the undertaking herein described and to be detailed in said closing agreement, shall not be a default hereunder, but any such failure shall entitle the owner or owners of any of the Bonds to take such actions and to initiate such proceedings as shall be necessary and appropriate to cause KUB to comply with its undertaking as set forth herein and in said agreement, including the remedies of mandamus and specific performance.

Section 15. Separability. If any section, paragraph or provision of this resolution shall be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph or provision shall not affect any of the remaining provisions of this resolution.

Section 16. Repeal of Conflicting Resolutions and Effective Date. All other resolutions and orders, or parts thereof, in conflict with the provisions of this resolution, are, to the extent of such conflict, hereby repealed and this resolution shall be in immediate effect from and after its adoption.

Adopted and approved this _____ day of _____, 2016.

Mayor

ATTEST:

City Recorder

STATE OF TENNESSEE)
)
COUNTY OF KNOX)

I, Will Johnson, hereby certify that I am the duly qualified and acting City Recorder of the City of Knoxville, Tennessee, and as such official I further certify that attached hereto is a copy of excerpts from the minutes of a regular meeting of the governing body of the City Council held on Tuesday, _____, 2016; that these minutes were promptly and fully recorded and are open to public inspection; that I have compared said copy with the original minute record of said meeting in my official custody; and that said copy is a true, correct and complete transcript from said original minute record insofar as said original records relate to an amount not to exceed \$40,000,000 Electric System Revenue Bonds, Series GG-2016.

WITNESS my official signature and seal of the City of Knoxville, Tennessee, this ____ day of _____, 2016.

(seal)

City Recorder

EXHIBIT A

**\$40,000,000
CITY OF KNOXVILLE, TENNESSEE
ACTING ON BEHALF OF KNOXVILLE UTILITIES BOARD
ELECTRIC SYSTEM REVENUE BONDS, SERIES GG-2016**

BOND PURCHASE AGREEMENT

_____, 2016

Knoxville Utilities Board
445 South Gay Street
Knoxville, Tennessee 37902

Ladies and Gentlemen:

The undersigned (the "Underwriter") offers to enter into this agreement with Knoxville Utilities Board ("KUB") which, upon your acceptance of this offer, will be binding upon you and upon us.

This offer is made subject to your acceptance of this agreement on or before 5:00 p.m., Eastern Standard Time, on _____, 2016.

1. Purchase Price.

Upon the terms and conditions and upon the basis of the respective representations, warranties and covenants set forth herein, the Underwriter hereby agrees to purchase from KUB, and KUB hereby agrees to sell to the Underwriter, all (but not less than all) of \$40,000,000 aggregate principal amount of KUB's Electric System Revenue Bonds, Series GG-2016 (the "Bonds"). The purchase price is \$_____ plus accrued interest and shall be paid in accordance with paragraph 6 hereof. The purchase price is equal to the par amount of the Bonds less \$_____ original issue discount, less \$_____ underwriter's discount and plus accrued interest. The Bonds are to be issued under and pursuant to, and are to be secured by the Resolution (the "Bond Resolution") adopted on _____, 2016, by the City Council of the City of Knoxville (the "City") at the request of KUB. The Bonds shall mature on the dates and shall bear interest at the rates all as described in the Official Statement referred to in Section 3 hereof. The maturities, rates and discount at which the Bonds are being sold are more fully described on **Schedule I** attached hereto.

The Bonds are being issued to provide funds to finance the cost of extensions and improvements to the electrical power distribution system operated by KUB on behalf of the City (the "System"), including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the Bonds.

2. Public Offering.

The Underwriter intends to make an initial bona fide public offering of all of the Bonds at not in excess of the public offering prices set forth on the cover of the Official Statement and may subsequently change such offering price without any requirement of prior notice. The Underwriter may offer and sell Bonds to certain dealers (including dealers depositing bonds into investment trusts) and others at prices lower than the public offering prices stated on the cover of the Official Statement. The Underwriter reserves the right (i) to over-allot or effect transactions that stabilize or maintain the market prices of the Bonds at levels above those which might otherwise prevail in the open market; and (ii) to discontinue such stabilizing, if commenced at any time without prior notice.

3. Official Statement.

(a) KUB has provided the Underwriter with information that constitutes a "deemed final" official statement for purposes of Rule 15c2-12 under the Securities Exchange Act of 1934 ("Rule 15c2-12"). Concurrently with KUB's acceptance of this Bond Purchase Agreement, KUB shall deliver or cause to be delivered to the Underwriter two copies of the Official Statement (as hereinafter defined) relating to the Bonds dated the date hereof substantially in the same form as the Preliminary Official Statement with only such changes as shall have been accepted by the Underwriter.

(b) Within seven (7) business days from the date hereof and within sufficient time to accompany any confirmation requesting payment from any customers of the Underwriter, KUB shall deliver to the Underwriter copies of the Official Statement of KUB, dated the date hereof, relating to the Bonds, in sufficient quantity as may reasonably be requested by the Underwriter in order to comply with Rule 15c2-12 and any applicable rules of the Municipal Securities Rulemaking Board, in substantially the form approved by KUB (which, together with the cover page, and all exhibits, appendices, and statements included therein or attached thereto and any amendments and supplements that may be authorized for use with respect to the Bonds is herein called the "Official Statement"), executed on behalf of KUB by a duly authorized officer of KUB. You hereby authorize and approve the Official Statement and other pertinent documents referred to in Section 7 hereof to be lawfully used in connection with the offering and sale of the Bonds. You also acknowledge and ratify the use by the Underwriter, prior to the date hereof, of the Preliminary Official Statement in connection with a public offering of the Bonds.

(c) If, prior to the Closing (as defined in Section 5 below) or within twenty-five (25) days subsequent to the end of the underwriting period as such term is used for purposes of Rule 15c2-12, any event shall occur with respect to KUB or KUB shall receive notice of the occurrence of any other event that might or would cause the information contained in the Official Statement to contain any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading, KUB shall so notify the Underwriter. KUB agrees to amend or supplement the Official Statement whenever requested by the Underwriter when in the reasonable judgment of the Underwriter such amendment or supplementation is required and to furnish the Underwriter with sufficient quantities of such amendment or supplement in order to permit the Underwriter to comply with Rule 15c2-12.

4. Representations and Warranties.

KUB hereby represents and warrants to the Underwriter that:

(a) KUB is duly existing pursuant to the Charter of the City and is authorized by such Charter to operate and manage the System. KUB has duly authorized all necessary action to be taken by it for: (i) the issuance and sale of the Bonds upon the terms set forth herein and in the Official

Statement; (ii) the approval of the Official Statement and the signing of the Official Statement by a duly authorized officer; (iii) the execution, delivery and receipt of this Bond Purchase Agreement, the Bonds and any and all such other agreements and documents as may be required to be executed, delivered and received by KUB in order to carry out, give effect to, and consummate the transactions contemplated hereby, by the Bonds, the Official Statement and the Bond Resolution;

(b) When executed by the respective parties thereto, this Bond Purchase Agreement will constitute legal, valid and binding obligation of KUB enforceable in accordance with its terms;

(c) The information and statements contained in the Preliminary Official Statement, as of its date and as of the date hereof, did not and do not contain any untrue statement of a material fact or omit to state any material fact which was necessary in order to make such information and statements, in the light of the circumstances under which they were made, not misleading;

(d) The information and statements contained in the Official Statement, as of its date and as of the Closing, are and will be correct and complete in all material respects and do not and will not contain any untrue statement of a material fact or omit to state any material fact which is necessary in order to make such information and statements, in the light of the circumstances under which they were made, not misleading;

(e) KUB has complied, and will at the Closing be in compliance, in all respects with the obligations on its part contained in the Bond Resolution and the laws of the State of Tennessee (the "State"), including the Act;

(f) The City has duly adopted the Bond Resolution, and the City and KUB have (a) duly authorized and approved the distribution of the Preliminary Official Statement, (b) duly authorized and approved the execution and delivery of the Official Statement, (c) duly authorized and approved the execution and delivery of, and the performance by KUB of the obligations on its part contained in, the Bonds, the Bond Resolution and this Bond Purchase Agreement, and (d) duly authorized and approved the consummation by it of all other transactions contemplated by this Bond Purchase Agreement and the Official Statement;

(g) KUB is not in breach of or default under any applicable law or administrative regulation of the State or the United States in any manner related to or affecting the transactions contemplated hereby or in breach of or default under any applicable judgment or decree or any loan agreement, note, resolution, ordinance, agreement or other instrument to which KUB is a party or to which it or any of its property is otherwise subject; and the execution and delivery of this Bond Purchase Agreement, the Bonds and the adoption of the Bond Resolution, and compliance with the provisions of each thereof, will not conflict with or constitute a breach of or default under any law, administrative regulation, judgment, decree, loan agreement, note, resolution, ordinance, agreement or other instrument to which KUB is a party or to which it or any of its property is otherwise subject;

(h) Except as may be required under the securities or "blue sky" laws of any state, all approvals, consents, authorizations and orders of, filings with or certifications by any governmental authority, board, agency or commission having jurisdiction, which would constitute a condition precedent to the performance by KUB of its obligations hereunder and under the Bond Resolution and the Bonds, have been obtained;

(i) There is no action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, public board or body, pending or, to the knowledge of KUB, threatened against KUB or others (a) affecting KUB or the corporate existence of KUB or the titles of its officers to their

respective offices, (b) seeking to prohibit, restrain or enjoin the sale, issuance or delivery of the Bonds or the collection of Net Revenues pledged to pay the principal of and interest on the Bonds, or the pledge thereof, (c) in any way contesting or affecting the transactions contemplated hereby or by the Official Statement or by the validity or enforceability of the Bonds, the Bond Resolution or this Bond Purchase Agreement, (d) contesting in any way the completeness or accuracy of the Preliminary Official Statement or the Official Statement, or (e) contesting the powers or authority of KUB for the issuance of the Bonds, the adoption of the Bond Resolution or the execution and delivery of this Bond Purchase Agreement;

(j) KUB will not take or omit to take any action that will in any way cause the proceeds from the sale of the Bonds and other moneys of KUB to be transferred on the date of issuance of the Bonds to be applied or result in such proceeds and other moneys being applied in a manner other than as provided in or permitted by the Bond Resolution and consistent with the utilization described in the Official Statement;

(k) KUB agrees reasonably to cooperate with the Underwriter and its counsel in any endeavor to qualify the Bonds for offering and sale under the securities or "blue sky" laws of such jurisdictions of the United States as the Underwriter may request. KUB hereby consents to the use of the Official Statement and the Bond Resolution by the Underwriter in obtaining any qualification required;

(l) If at any time from the date of this Bond Purchase Agreement through 25 days following the "end of the underwriting period" (as defined in Rule 15c2-12 described below) any event shall occur that might or would cause the Official Statement to contain any untrue statement of a material fact or to omit to state any material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, KUB shall notify the Underwriter and if, in the opinion of the Underwriter, such event requires the preparation and publication of a supplement or amendment to the Official Statement, KUB will supplement or amend the Official Statement in a form and in a manner approved by the Underwriter. If the Official Statement is so supplemented or amended prior to the Closing, such approval by the Underwriter of a supplement or amendment to the Official Statement shall not preclude the Underwriter from thereafter terminating this Bond Purchase Agreement, and if the Official Statement is so amended or supplemented subsequent to the date hereof and prior to the Closing, the Underwriter may terminate this Bond Purchase Agreement by notification to KUB at any time prior to the Closing if, in the judgment of the Underwriter, such amendment or supplement has or will have a material adverse effect on the marketability of the Bonds;

(m) KUB has duly authorized and approved the execution and delivery of this Bond Purchase Agreement and the performance by KUB of the obligations on its part contained herein;

(n) KUB is not, nor has it at any time, been in default in the payment of principal of or interest on any obligation issued or guaranteed by KUB;

(o) Any certificate signed by an authorized officer of KUB and delivered to the Underwriter at or prior to the Closing shall be deemed a representation and warranty by KUB in connection with this Bond Purchase Agreement to the Underwriter as to the statements made therein upon which the Underwriter shall be entitled to rely. KUB covenants that between the date hereof and the Closing, it will not take any action that will cause the representations and warranties made herein to be untrue as of the Closing;

(p) The Bonds, when issued, authenticated and delivered in accordance with the Bond Resolution and sold to the Underwriter as provided herein, will be validly issued and outstanding special obligations of KUB entitled to the benefits of the Bond Resolution;

(q) KUB has lawful authority to operate the System, to consummate the transactions contemplated by the Official Statement and collect revenues, fees and other charges in connection with the System and through its Board of Commissioners, to fix the rates, fees and other charges with respect to the System; and

(r) KUB hereby covenants and agrees to enter into a written agreement or contract, constituting an undertaking (the "Undertaking") to provide ongoing disclosure about KUB, for the benefit of the beneficial owners of the Bonds on or before the date of delivery of the Bonds as required under paragraph (b)(5) of Rule 15c2-12. The Undertaking shall be as described in the Preliminary Official Statement, with such changes as may be agreed in writing by the Underwriter. KUB represents that it has complied in all respects with its obligations to provide continuing disclosure of certain information as described in that certain Continuing Disclosure Certificate entered into in connection with the issuance of the Bonds.

5. Delivery of, and Payment for, the Bonds.

At 10:00 a.m. on or about _____, 2016, or at such other time or date as shall have been mutually agreed upon by KUB and the Underwriter, KUB will deliver, or cause to be delivered, to the Underwriter the other documents hereinafter mentioned and, subject to the conditions contained herein, the Underwriter will accept such delivery and pay the purchase price of the Bonds plus accrued interest payable to the order of KUB, in federal funds or other immediately available funds by delivering to KUB such funds by wire transfer to KUB or its designated agent except that physical delivery of the Bonds shall be made through the facilities of the Depository Trust Company.

Payment for the Bonds shall be confirmed and delivery of the documents as aforesaid shall be made at the offices of KUB, or such other place as may be agreed upon by the Underwriter and KUB. Such payment and delivery is herein called the "Closing." The Bonds will be delivered as fully registered bonds in such names and in such denominations as shall be designated in writing by the Underwriter to KUB at Closing.

6. Certain Conditions to Underwriter's Obligations.

The obligations of the Underwriter hereunder shall be subject to (i) the performance by KUB of its obligations to be performed hereunder, (ii) the accuracy in all material respects of the representations and warranties of KUB herein as of the date hereof and as of the date of the Closing, and (iii) to the following conditions:

(a) At the time of Closing, (i) the Bond Resolution shall be in full force and effect and shall not have been amended, modified or supplemented except as may have been agreed to in writing by the Underwriter, (ii) the proceeds of the sale of the Bonds shall be applied as described in the Official Statement, and (iii) KUB shall have duly adopted and there shall be in full force and effect such other resolutions as, in the opinion of Bass, Berry & Sims PLC, Knoxville, Tennessee ("Bond Counsel"), shall be necessary in connection with the transactions contemplated hereby;

(b) At or prior to the Closing, the Underwriter shall have received an executed copy of each of the following documents:

(1) the approving opinion dated the date of the Closing, of Bond Counsel addressed to KUB and the Underwriter, relating to, among other things, the validity of the Bonds [and the exclusion from gross income of the interest on the Bonds for federal and State of Tennessee income tax purposes,] in substantially the form set forth as Appendix _ to the Official Statement;

(2) a supplemental opinion, dated the date of the Closing, of Bond Counsel addressed to the Underwriter in substantially the form of Exhibit A hereto;

(3) an opinion, dated the date of the Closing, of Hodges, Doughty & Carson, Knoxville, Tennessee, counsel to KUB, addressed to KUB, Bond Counsel and the Underwriter in substantially the form of Exhibit B hereto;

(4) a certificate of KUB, dated the date of the Closing and signed by a duly authorized officer of KUB and in form and substance reasonably satisfactory to the Underwriter, to the effect that (i) since the execution of the Bond Purchase Agreement no material and adverse change has occurred in the financial position of the System or results of operations of the System; (ii) KUB has not incurred any material liabilities secured by the Net Revenues of the System other than in the ordinary course of business or as set forth in or contemplated by the Official Statement; and (iii) no event affecting KUB has occurred since the date of the Official Statement which should be disclosed in the Official Statement for the purpose for which it is to be used or which is necessary to be disclosed therein in order to make the statements and information therein not misleading as of the date of Closing;

(5) the Official Statement executed on behalf of KUB by a duly authorized officer thereof;

(6) the Bond Resolution and the Bonds;

(7) a certificate of a duly authorized officer of KUB, satisfactory to the Underwriter, dated the date of Closing, stating that such officer is charged, either alone or with others, with the responsibility for issuing the Bonds; setting forth, in the manner permitted by Section 148 of the Internal Revenue Code of 1986, as amended (the "Code"), the reasonable expectations of KUB as of such date as to the use of proceeds of the Bonds and of any other funds of KUB expected to be used to pay principal or interest on the Bonds and the facts and estimates on which such expectations are based; and stating that, to the best of the knowledge and belief of the certifying officer, KUB's expectations are reasonable;

(8) evidence indicating a rating on the Bonds of "___" by [rating agency];

(9) other certificates of KUB listed on a Closing Memorandum to be approved by counsel to KUB, Bond Counsel and counsel to the Underwriter, including any certificates or representations required in order for Bond Counsel to deliver the opinion referred to in Paragraph 7(b) (1) of this Bond Purchase Agreement; and such additional legal opinions, certificates, proceedings, instruments and other documents as the counsel to the Underwriter or Bond Counsel may reasonably request to evidence compliance by KUB with legal requirements, the truth and accuracy, as of the time of Closing, of the representations of KUB contained herein and the due performance or satisfaction by KUB at or prior to such time of all agreements then to be performed and all conditions then to be satisfied by KUB.

All such opinions, certificates, letters, agreements and documents will be in compliance with the provisions hereof only if they are satisfactory in form and substance to the Underwriter and counsel to the Underwriter. KUB will furnish the Underwriter with such conformed copies or photocopies of such opinions, certificates, letters, agreements and documents as the Underwriter may reasonably request.

(c) The Underwriter shall have received within seven (7) business days from the date hereof and within sufficient time to accompany any confirmation requesting payment from any customers of the Underwriter, the Official Statement in sufficient quantity as may be reasonably requested by the Underwriter in order to comply with Rule 15(c) 2-12.

7. Termination.

The Underwriter shall have the right to cancel its obligation to purchase the Bonds if (i) between the date hereof and the Closing, legislation shall be enacted or recommended to the Congress or otherwise endorsed for passage (by press release, other form of notice or otherwise) by the President of the United States, the Treasury Department of the United States, the Internal Revenue Service or the Chairman or ranking minority member of the Committee on Finance of the United States Senate or the Committee on Ways and Means of the United States House of Representatives or favorably reported for passage to either House of the Congress by any committee of such House to which such legislation has been referred for consideration, or a bill to amend the Internal Revenue Code (which, if enacted, would take effect in whole or in part prior to the Closing) shall be filed in either house, or recommended for passage by the Congress by any joint or conference committee thereof, or a decision by a court of the United States or the United States Tax Court shall be rendered, or a ruling, regulation or statement by or on behalf of the Treasury Department of the United States, the Internal Revenue Service or other governmental agency shall be made or proposed to be made, with respect to the federal taxation upon interest on obligations of the general character of the Bonds, or other action or events shall have transpired which may have the purpose or effect, directly or indirectly of changing the federal income tax consequences of any of the transactions contemplated in connection herewith, including the tax-exempt status of KUB and, in the opinion of the Underwriter, materially adversely affects the market price of the Bonds, or the market price generally of obligations of the general character of the Bonds, or (ii) there shall exist any event which in the Underwriter's judgment either (a) makes untrue or incorrect in any material respect any statement or information contained in the Official Statement or (b) is not reflected in the Official Statement but should be reflected therein in order to make the statements and information contained therein not misleading in any material respect, or (iii) there shall have occurred any outbreak of hostilities or any national or international calamity or crisis including financial crisis, or a financial crisis or a default with respect to the debt obligations of, or the institution of proceedings under the federal or the state bankruptcy laws by or against the State of Tennessee or any subdivision, agency or instrumentality of such State, the effect of which on the financial markets of the United States being such as, in the reasonable judgment of the Underwriter, would make it impracticable for the Underwriter to market the Bonds or to enforce contracts for the sale of the Bonds, or (iv) there shall be in force a general suspension of trading on the New York Stock Exchange, or (v) a general banking moratorium shall have been declared by either federal, Tennessee or New York authorities, or (vi) there shall have occurred since the date of this Bond Purchase Agreement any material adverse change in the financial position of the System, except for changes which the Official Statement discloses have occurred or may occur, or (vii) legislation shall be enacted or any action shall be taken by the Securities and Exchange Commission which, in the opinion of counsel for the Underwriter, has the effect of requiring the contemplated distribution of the Bonds to be registered under the Securities Act of 1933, as amended, or the Bond Resolution or any other document executed in connection with the transactions contemplated hereof to be qualified under the Trust Indenture Act of 1939, as amended, or (viii) a stop order, ruling, regulation or official statement by or on behalf of the Securities and Exchange Commission shall be issued or made to the effect that the issuance, offering or sale of the Bonds, or of obligations of the general character of the Bonds as contemplated hereby, or the offering of any other obligation which may be represented by the Bonds is in violation of any provision of the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, or the Trust Indenture Act of 1939, as amended, or (ix) any state blue sky or securities commission shall have withheld registration, exemption or clearance of the offering, and in the reasonable judgment of the Underwriter the market for the Bonds is materially affected thereby.

If KUB shall be unable to satisfy any of the conditions to the obligations of the Underwriter contained in this Bond Purchase Agreement and such condition is not waived by the Underwriter, or if the obligations of the Underwriter to purchase and accept delivery of the Bonds shall be terminated or canceled for any reason permitted by this Bond Purchase Agreement, this Bond Purchase Agreement shall terminate and neither the Underwriter nor KUB shall be under further obligation hereunder; except that the respective obligations to pay expenses, as provided in Section 11 hereof, shall continue in full force and effect.

8. Particular Covenants.

KUB covenants and agrees with the Underwriter as follows:

(a) KUB shall use its best efforts to furnish or cause to be furnished to the Underwriter, without charge, as many copies of the Official Statement as the Underwriter may reasonably request;

(b) Before revising, amending or supplementing the Official Statement, KUB shall furnish a copy of the revised Official Statement or such amendment or supplement to the Underwriter. If in the opinion of KUB and the Underwriter a supplement or amendment to the Official Statement is required, KUB will supplement or amend the Official Statement in a form and in a manner approved by the Underwriter and its counsel.

9. Survival of Representations.

All representations, warranties and agreements of KUB hereunder shall remain operative and in full force and effect, regardless of any investigation made by or on behalf of the Underwriter and shall survive the delivery of the Bonds.

10. Payment of Expenses.

Whether or not the Bonds are sold to the Underwriter by KUB, KUB shall pay, but only out of the proceeds of the sale of the Bonds or other funds made available by KUB, any expenses incident to the performance of its obligations hereunder, including but not limited to: (i) the cost of the preparation and printing of the Official Statement and any supplements thereto, together with a number of copies which the Underwriter deems reasonable; (ii) the cost of the preparation and printing of the definitive Bonds; (iii) the rating agency fees; and (iv) the fees and disbursements of Counsel to KUB and Bond Counsel and any other experts or consultants retained by KUB.

Whether or not the Bonds are sold to the Underwriter, the Underwriter shall pay (i) all advertising expenses in connection with the public offering of the Bonds; (ii) the cost of preparing and printing the blue sky memorandum, if any, and filing fees in connection with the aforesaid blue sky memorandum other than the costs of preparation of the Preliminary Official Statement and the Official Statement; and (iii) all other expenses incurred by the Underwriter in connection with its public offering and distribution of the Bonds, including the fees and expenses of the Underwriter's counsel.

11. No Advisory or Fiduciary Role.

KUB acknowledges and agrees that (i) the purchase and sale of the Bonds pursuant to this Bond Purchase Agreement is an arm's-length commercial transaction between KUB and the Underwriter, (ii) in connection therewith and with the discussions, undertakings and procedures leading up to the consummation of such transaction, the Underwriter is and has been acting solely as principal and are not

acting as the agent, advisor or fiduciary of KUB, (iii) the Underwriter has not assumed an advisory or fiduciary responsibility in favor of KUB with respect to the offering contemplated hereby or the discussions, undertakings and procedures leading thereto (irrespective of whether the Underwriter, or any affiliates of the Underwriter, has provided other services or are currently providing other services to KUB on other matters) and the Underwriter has no obligation to KUB with respect to the offering contemplated hereby except the obligations expressly set forth in this Bond Purchase Agreement, (iv) the Underwriter has financial and other interests that differ from those of KUB and (v) KUB has consulted its own legal, financial and other advisors to the extent it has deemed appropriate.

KUB and the Underwriter represent and warrant that no finder or other agent has been employed by either KUB or the Underwriter in connection with this transaction.

12. Notices.

Any notice or other communication to be given to KUB under this Bond Purchase Agreement may be given by delivering the same in writing at its address set forth above, and any notice or other communication to be given to the Underwriter under this Bond Purchase Agreement may be given by delivering the same in writing to _____, _____,
_____, _____.

13. Parties.

This Bond Purchase Agreement is made solely for the benefit of KUB and the Underwriter (including the successors or assigns of the Underwriter) and no other person shall acquire or have any right hereunder or by virtue hereof.

14. Governing Law.

This Bond Purchase Agreement shall be governed by and construed in accordance with the laws of the State of Tennessee.

15. General.

This Bond Purchase Agreement may be executed in several counterparts, each of which shall be regarded as an original and all of which will constitute one and the same instrument. The section headings of this Bond Purchase Agreement are for convenience of reference only and shall not affect its interpretation. This Bond Purchase Agreement shall become effective upon your acceptance hereof.

Very truly yours,

By: _____
Its: _____

Accepted and agreed to as of
the date first above written:

KNOXVILLE UTILITIES BOARD

By: _____
President and Chief Executive Officer

EXHIBIT A TO BOND PURCHASE AGREEMENT

[LETTERHEAD OF BASS BERRY & SIMS PLC]

[Closing Date]

Ladies and Gentlemen:

This opinion is being rendered to you pursuant to Paragraph 7(b)(2) of the Bond Purchase Agreement, dated _____, 2016 (the "Bond Purchase Agreement"), between _____ (the "Underwriter"), and Knoxville Utilities Board ("KUB"), relating to the sale by KUB of its Electric System Revenue Bonds, Series GG-2016, in the aggregate principal amount of \$40,000,000 (the "Bonds"). Terms which are used herein and not otherwise defined shall have the meanings assigned to them in the Bond Purchase Agreement.

Of even date herewith, we have delivered our approving opinion in connection with the issuance of the Bonds. In our capacity as Bond Counsel, we have reviewed a record of proceedings in connection with the issuance of the Bonds and we have participated in conferences from time to time with counsel to KUB, representatives of the Underwriter and counsel to the Underwriter, relative to the Official Statement, dated _____, 2016, relating to the Bonds, and the related documents described below. We have also examined such other agreements, documents and certificates, and have made such investigations of law, as we have deemed necessary or appropriate in rendering the opinions set forth below.

Based on the foregoing, we are of the opinion that, as of the date hereof:

1. The offer and sale of the Bonds to the public do not require any registration under the Securities Act of 1933, as amended, and, in connection therewith, the Bond Resolution does not need to be qualified under the Trust Indenture Act of 1939, as amended.

2. The statements contained in the Official Statement under the captions "Introduction" to the extent the narrative thereunder purports to describe the terms of the Bonds and the legal authority by which they are issued, "The Bonds," and in Appendix A to the Official Statement, insofar as such statements purport to summarize certain provisions of the Bonds and the Bond Resolution, fairly summarize such provisions. The statements contained in the Official Statement under the caption "Opinion of Bond Counsel" are correct as to matters of law.

This opinion may be relied upon only by the Underwriter and by other persons to whom written permission to rely hereon is granted by us.

Very truly yours,

EXHIBIT B TO BOND PURCHASE AGREEMENT

_____, 2016

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

Ladies and Gentlemen:

Re: City of Knoxville, Tennessee acting on behalf of the Knoxville Utilities Board \$40,000,000 Electric System Revenue Bonds, Series GG-2016

Ladies and Gentlemen:

You have requested that the undersigned, General Counsel to the Knoxville Utilities Board of the City of Knoxville, Tennessee ("KUB"), render this opinion in connection with the execution, delivery and sale of the captioned bonds (the "Bonds"), the proceeds of which will be used to finance extensions and improvements to the electrical power distribution system described herein.

It is our opinion that KUB is duly established and validly existing pursuant to the Charter of the City of Knoxville, Tennessee (the "Municipality"), and, pursuant to said Charter and the electrical power distribution system of the Municipality (the "System") is under the jurisdiction, control and management of KUB.

The undersigned does hereby certify that no litigation of any nature is now pending or, to our knowledge, threatened

- (1) seeking to restrain or enjoin the issuance, sale, execution or delivery of the Bonds;
- (2) seeking to restrain or enjoin the charging of sufficient rates to pay the cost of operating, maintaining, repairing and insuring the System and to pay principal of and interest on the Bonds and all outstanding obligations payable from the revenues of the System;
- (3) in any manner questioning the proceedings or authority pursuant to which the Bonds are authorized or issued or such rates are charged;
- (4) in any manner questioning or relating to the validity of the Bonds;
- (5) contesting in any way the completeness or accuracy of the Official Statement prepared and distributed in connection with the sale of the Bonds;
- (6) in any way contesting the corporate existence or boundaries of the Municipality, except for various pending actions challenging past or present annexation efforts of the Municipality, which will have no material adverse effect on the revenues of the System;

(7) contesting the title of the present officers of KUB to their respective offices; or

(8) contesting the powers of KUB or the authority of KUB with respect to the Bonds, or proceedings authorizing the Bonds, or any act to be done or document or certificate to be executed or delivered in connection with the issuance and delivery of the Bonds.

Neither the voters of the Municipality nor its governing body nor the Board of Commissioners of KUB have approved any special, local or private act or legislation passed by the General Assembly of the State of Tennessee at its most recent session or any amendments to the Charter of the Municipality affecting the power of the Municipality to issue the Bonds or pay the principal of, premium, if any, and interest on the Bonds when due or affecting the power of the Board of Commissioners of KUB to manage and control the System.

I hereby certify that _____ and _____ are the duly qualified, appointed and acting Chair and Secretary, respectively, of the Board of Commissioners of KUB with full power to act as such officers on behalf of KUB in connection with the execution and delivery of the Bonds.

Yours truly,

A RESOLUTION SUPPLEMENTING RESOLUTION NO. R-25-88
ADOPTED BY THE CITY COUNCIL OF THE CITY OF
KNOXVILLE, TENNESSEE ON FEBRUARY 9, 1988 ENTITLED "A
RESOLUTION PROVIDING FOR THE ISSUANCE OF GAS
SYSTEM REVENUE BONDS" SO AS TO PROVIDE FOR THE
ISSUANCE OF NOT TO EXCEED TWELVE MILLION AND NO/100
DOLLARS (\$12,000,000) OF GAS SYSTEM REVENUE BONDS,
SERIES V-2016.

RESOLUTION NO: _____

REQUESTED BY: _____

PREPARED BY: _____

APPROVED AS TO FORM

CORRECTNESS: _____

Law Director

FINANCIAL IMPACT STATEMENT:

Director of Finance

APPROVED: _____

APPROVED AS AN
EMERGENCY MEASURE: _____

MINUTE BOOK ____ PAGE ____

7340

WHEREAS, the City of Knoxville (the "City"), pursuant to a resolution entitled "A Resolution Providing for the Issuance of Gas System Revenue Bonds," being Resolution No. R-25-88 of the City Council adopted February 9, 1988 (which resolution as heretofore amended is hereinafter sometimes referred to as "Resolution No. R-25-88"), authorized an issue of Gas System Revenue Bonds; and

WHEREAS, pursuant to Resolution No. R-25-88, and for the purpose of financing the cost of the improvement, betterment and extension of the City's gas distribution system (the "System") and the refinancing of indebtedness issued for that purpose, the City issued Gas System Revenue Bonds, the series of which, the amount issued, and the amount outstanding as of June 1, 2016, are as follows:

<u>Series</u>	<u>Amount Issued</u>	<u>Amount Outstanding</u>
L-2005	\$13,985,000	\$10,020,000
N-2007	\$12,000,000	\$ 550,000
P-2010 (BABS)	\$12,000,000	\$12,000,000
Q-2012	\$24,920,000	\$22,645,000
R-2012	\$12,000,000	\$ 9,400,000
S-2013	\$11,530,000	\$11,430,000
T-2013	\$25,000,000	\$24,400,000
U-2015	\$11,780,000	\$11,680,000

WHEREAS, it is desirable that an additional series of bonds be issued to finance the costs of the extensions and improvements to the System, including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the bonds, pursuant to the authority of Resolution No. R-25-88 and pursuant to the authority of this resolution; and

WHEREAS, the Board of Commissioners (the "Board") of the Knoxville Utilities Board ("KUB") has duly adopted a resolution requesting the City Council of the City to adopt this resolution authorizing the issuance of bonds for the purposes and in the manner hereinafter more fully stated; and

WHEREAS, it is the intention of the City Council of the City to adopt this resolution for the purpose of authorizing not to exceed \$12,000,000 in aggregate principal amount of gas system revenue bonds for the purposes described above, establishing the terms of such bonds, providing for the issuance, sale and payment of the bonds and disposition of proceeds therefrom, and collection of revenues from the System and the application thereof to the payment of principal of, premium, if any, and interest on said bonds.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Knoxville, Tennessee, as follows:

Section 1. Authority. The bonds authorized by this resolution are issued pursuant to Sections 7-34-101 et seq. and 9-21-101 et seq., Tennessee Code Annotated, and other applicable provisions of law.

Section 2. Definitions. Capitalized terms used herein and not defined in this Section 2 shall have the meanings ascribed to them in the 1988 Resolution (as hereinbelow defined). The following terms shall have the following meanings in this resolution unless the text expressly or by necessary implication requires otherwise.

- (a) "Board" shall mean the Board of Commissioners of the Knoxville Utilities Board;

(b) "Bond Purchase Agreement" means a Bond Purchase Agreement, dated as of the sale of the Series V-2016 Bonds, entered into by and between KUB and the Underwriter, in substantially the form of the document attached hereto as Exhibit A, subject to such changes as permitted by Section 9 hereof, as approved by the President and Chief Executive Officer of KUB, consistent with the terms of this resolution;

(c) "Book-Entry Form" or "Book-Entry System" means a form or system, as applicable, under which physical Bond certificates in fully registered form are issued to a Depository, or to its nominee as Registered Owner, with the certificated Bonds being held by and "immobilized" in the custody of such Depository, and under which records maintained by persons, other than the City, KUB or the Registration Agent, constitute the written record that identifies, and records the transfer of, the beneficial "book-entry" interests in those Bonds;

(d) "City" shall mean the City of Knoxville, Tennessee;

(e) "Code" shall mean the Internal Revenue Code of 1986, as amended, and any lawful regulations promulgated or proposed thereunder;

(f) "Depository" means any securities depository that is a clearing agency under federal laws operating and maintaining, with its participants or otherwise, a Book-Entry System, including, but not limited to, DTC;

(g) "DTC" means the Depository Trust Company, a limited purpose company organized under the laws of the State of New York, and its successors and assigns;

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

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

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

(k) "1988 Resolution" shall mean Resolution No. R-25-88 of the Governing Body, adopted February 9, 1988, as supplemented and amended by Resolution No. R-59-88 adopted March 22, 1988, Resolution No. R-227-91 of the Governing Body adopted June 25, 1991, Resolution No. R-471-92 adopted October 13, 1992 (as amended by Resolution No. R-5-93 of the Governing Body adopted January 5, 1993), Resolution No. R-475-93 of the Governing Body adopted October 26, 1993, Resolution No. R-22-97 of the Governing Body adopted January 14, 1997, Resolution No. R-421-98 of the Governing Body adopted October 20, 1998, Resolution No. R-66-01 of the Governing Body adopted February 20, 2001, Resolution No. R-150-01 of the Governing Body adopted March 20, 2001, Resolution No. R-479-01 of the Governing Body adopted October 30, 2001, Resolution No. R-58-04 of the Governing Body adopted March 2, 2004, Resolution No. R-262-05 of the Governing Body adopted July 5, 2005, Resolution No. R-79-06 of the Governing Body adopted February 28, 2006, Resolution No. R-345-07 of the Governing Body adopted August 28, 2007, Resolution No. R-132-10 of the Governing Body adopted May 4, 2010, Resolution No. R-333-2010 of the Governing Body adopted November 2, 2010, Resolution No. R-336-2011 of the Governing Body adopted December 13, 2011, Resolution No. R-290-2012 of the Governing Body adopted October 16, 2012, Resolution No. R-322-2012 of the Governing Body adopted November 13, 2012, Resolution No. R-242-2013 of the Governing Body adopted July 23, 2013 and Resolution No. R-82-2015 of the Governing Body adopted March 3, 2015;

(l) "Outstanding Bonds" shall mean the City's outstanding Gas System Revenue Refunding Bonds, Series L-2005, dated August 10, 2005, maturing March 1, 2017 and thereafter, the City's

outstanding Gas System Revenue Bonds, Series N-2007, dated November 1, 2007, maturing March 1, 2017, the City's outstanding Gas System Revenue Bonds, Series P-2010 (Federally Taxable Build America Bonds), dated December 8, 2010, maturing March 1, 2017 and thereafter, the City's outstanding Gas System Revenue Refunding Bonds, Series Q-2012, dated April 20, 2012, maturing March 1, 2017 and thereafter, the City's Outstanding Gas System Revenue Bonds, Series R-2012, dated December 18, 2012, maturing March 1, 2017 and thereafter, the City's outstanding Gas System Revenue Refunding Bonds, Series S-2013, dated March 15, 2013, maturing March 1, 2017 and thereafter, the City's outstanding Gas System Revenue Bonds, Series T-2013, dated October 1, 2013, maturing March 1, 2017 and thereafter, and the City's outstanding Gas System Revenue Refunding Bonds, Series U-2015, dated May 1, 2015, maturing March 1, 2017 and thereafter;

(m) "Parity Bonds" shall mean any bonds issued on a parity with the Series V-2016 Bonds and the Outstanding Bonds pursuant to the 1988 Resolution;

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

(o) "Registration Agent" shall mean the registration and paying agent for the Series V-2016 Bonds designated by the President and Chief Executive Officer of KUB, or any successor as designated by the Board;

(p) "Series V-2016 Bonds" shall mean the City's Gas System Revenue Bonds, Series V-2016, dated the date of their issuance or such other date as shall be determined by the Board pursuant to Section 9 hereof, authorized to be issued by the 1988 Resolution and this resolution in an aggregate principal amount not to exceed \$12,000,000;

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

(r) "Underwriter" shall mean an investment banking firm qualified to underwrite bonds such as the Series V-2016 Bonds in the State of Tennessee selected by the President and Chief Executive Officer of KUB.

Section 3. Declarations. It is hereby determined that all requirements of the 1988 Resolution have been or will have been met upon the issuance of the Series V-2016 Bonds so that the Series V-2016 Bonds will be issued as Parity Bonds.

Section 4. Authorization and Terms of the Series V-2016 Bonds. (a) For the purpose of providing funds to finance the costs of construction of the Project including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the Series V-2016 Bonds as more fully set out in Section 9 hereof, there are hereby authorized to be issued revenue bonds of the City in the aggregate principal amount of not to exceed \$12,000,000. The Series V-2016 Bonds shall be issued in fully registered form, without coupons, shall be known as "Gas System Revenue Bonds, Series V-2016" and shall be dated the date of their issuance or such other date as shall be determined by the Board or the President and Chief Executive Officer of KUB as its designee pursuant to Section 9 hereof. The Series V-2016 Bonds shall bear interest at a rate or rates not to exceed five percent (5.00%) per annum, payable semi-annually on March 1 and September 1 in each year, commencing September 1, 2016 or such later date as is permitted pursuant to Section 9 hereof. The Series V-2016 Bonds shall be initially issued in \$5,000 denominations or integral multiples thereof as shall be requested by the purchaser thereof. The Series V-2016 Bonds shall mature and be payable either serially or through mandatory redemption on each March 1 in such years as is established by the Board or the President and Chief Executive Officer of KUB as its designee pursuant to Section 9, provided that the final maturity date shall not be later than March 1, 2046. The final maturity schedule shall be established by the award resolution or certificate awarding the Series V-2016 Bonds to the successful purchaser thereof or in the

Bond Purchase Agreement provided for in Section 9 if the Series V-2016 Bonds are sold by negotiated sale.

(b) Subject to adjustment pursuant to Section 9 hereof, the Series V-2016 Bonds maturing on or before March 1, 2025 shall mature without option of prior redemption. Series V-2016 Bonds maturing on March 1, 2026 and thereafter shall be subject to redemption prior to maturity at the option of the City, acting through the Board, on or after March 1, 2025, as a whole or in part at any time at a redemption price equal to the principal amount plus interest accrued to the redemption date.

If less than all the Series V-2016 Bonds shall be called for redemption, the maturities to be redeemed shall be selected by the Board in its discretion. If less than all the Series V-2016 Bonds within a single maturity shall be called for redemption, the interests within the maturity to be redeemed shall be selected as follows:

(i) if the Series V-2016 Bonds are being held under a Book-Entry System by DTC, or a successor Depository, the amount of the interest of each DTC Participant in the Series V-2016 Bonds to be redeemed shall be determined by DTC, or such successor Depository, by lot or such other manner as DTC, or such successor Depository, shall determine; or

(ii) if the Series V-2016 Bonds are not being held under a Book-Entry System by DTC, or a successor Depository, the Series V-2016 Bonds within the maturity to be redeemed shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall determine.

(c) Pursuant to Section 9 hereof, KUB is authorized to sell the Series V-2016 Bonds, or any maturities thereof, as term bonds with mandatory redemption requirements corresponding to the maturities set forth herein or as determined by KUB. In the event any or all the Series V-2016 Bonds are sold as term bonds, KUB shall redeem term bonds on redemption dates corresponding to the maturity dates set forth in the award resolution or certificate awarding the Series V-2016 Bonds, in amounts so as to achieve an amortization of the indebtedness approved by the Board or the President and Chief Executive Officer of KUB as its designee. DTC, as Depository for the Series V-2016 Bonds, or any successor Depository for the Series V-2016 Bonds, shall determine the interest of each Participant in the Series V-2016 Bonds to be redeemed using its procedures generally in use at that time. If DTC, or another securities depository is no longer serving as Depository for the Series V-2016 Bonds, the Series V-2016 Bonds to be redeemed within a maturity shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall select.

At its option, to be exercised on or before the forty-fifth (45th) day next preceding any such redemption date, KUB may (i) deliver to the Registration Agent for cancellation Series V-2016 Bonds to be redeemed, in any aggregate principal amount desired, and/or (ii) receive a credit in respect of its redemption obligation under this mandatory redemption provision for any Series V-2016 Bonds of the maturity to be redeemed which prior to said date have been purchased or redeemed (otherwise than through the operation of this mandatory sinking fund redemption provision) and canceled by the Registration Agent and not theretofore applied as a credit against any redemption obligation under this mandatory sinking fund provision. Each Series V-2016 Bond so delivered or previously purchased or redeemed shall be credited by the Registration Agent at 100% of the principal amount thereof on the obligation of KUB on such payment date and any excess shall be credited on future redemption obligations in chronological order, and the principal amount of Series V-2016 Bonds to be redeemed by operation of this mandatory sinking fund provision shall be accordingly reduced. KUB shall on or before the forty-fifth (45th) day next preceding each payment date furnish the Registration Agent with its certificate indicating whether or not and to what extent the provisions of clauses (i) and (ii) of this

subsection are to be availed of with respect to such payment and confirm that funds for the balance of the next succeeding prescribed payment will be paid on or before the next succeeding payment date.

(d) Notice of call for redemption, whether optional or mandatory, shall be given by the Registration Agent not less than twenty (20) nor more than sixty (60) days prior to the date fixed for redemption by sending an appropriate notice to the registered owners of the Series V-2016 Bonds to be redeemed by first-class mail, postage prepaid, at the addresses shown on the bond registration records of the Registration Agent as of the date of the notice; but neither failure to mail such notice nor any defect in any such notice so mailed shall affect the sufficiency of the proceedings for redemption of any of the Series V-2016 Bonds for which proper notice was given. The notice may state that it is conditioned upon the deposit of moneys in an amount equal to the amount necessary to affect the redemption with the Registration Agent no later than the redemption date ("Conditional Redemption"). As long as DTC, or a successor Depository, is the registered owner of the Series V-2016 Bonds, all redemption notices shall be mailed by the Registration Agent to DTC, or such successor Depository, as the registered owner of the Series V-2016 Bonds, as and when above provided, and neither KUB, the City, nor the Registration Agent shall be responsible for mailing notices of redemption to DTC Participants or Beneficial Owners. Failure of DTC, or any successor Depository, to provide notice to any DTC Participant or Beneficial Owner will not affect the validity of such redemption. The Registration Agent shall mail said notices, in the case of term bonds with mandatory redemption requirements as and when provided herein and in the Series V-2016 Bonds and, in the case of optional redemption, as and when directed by the Board pursuant to written instructions from an authorized representative of the Board given at least forty-five (45) days prior to the redemption date (unless a shorter notice period shall be satisfactory to the Registration Agent). From and after the redemption date, all Series V-2016 Bonds called for redemption shall cease to bear interest if funds are available at the office of the Registration Agent for the payment thereof and if notice has been duly provided as set forth herein. In the case of a Conditional Redemption, the failure of the City or KUB to make funds available in part or in whole on or before the redemption date shall not constitute an event of default, and the Registration Agent shall give immediate notice to the Depository or the affected Bondholders that the redemption did not occur and that the Bonds called for redemption and not so paid remain outstanding.

(e) The Series V-2016 Bonds shall be executed in such manner as may be prescribed by applicable law, in the name, and on behalf, of the City with the manual or facsimile signature of the Chair of the Board and attested by the manual or facsimile signature of the Secretary of the Board.

(f) The City hereby authorizes and directs the Board to appoint a Registration Agent and paying agent for the Series V-2016 Bonds, and the Registration Agent so appointed is authorized and directed to maintain Bond registration records with respect to the Series V-2016 Bonds, to authenticate and deliver the Series V-2016 Bonds as provided herein, either at original issuance, upon transfer, or as otherwise directed by the Board, to effect transfers of the Series V-2016 Bonds, to give all notices of redemption as required herein, to make all payments of principal and interest with respect to the Series V-2016 Bonds as provided herein, to cancel and destroy Series V-2016 Bonds which have been paid at maturity or upon earlier redemption or submitted for exchange or transfer, to furnish KUB at least annually a certificate of destruction with respect to Series V-2016 Bonds canceled and destroyed, and to furnish KUB at least annually an audit confirmation of Bonds paid, Bonds outstanding and payments made with respect to interest on the Series V-2016 Bonds. The Chair of the Board is hereby authorized to execute and the Secretary of the Board is hereby authorized to attest such written agreement between KUB and the Registration Agent as they shall deem necessary or proper with respect to the obligations, duties and rights of the Registration Agent. The payment of all reasonable fees and expenses of the Registration Agent for the discharge of its duties and obligations hereunder or under any such agreement is hereby authorized and directed.

(g) The Series V-2016 Bonds shall be payable, principal and interest, in lawful money of the United States of America at the principal corporate trust office of the Registration Agent. The Registration Agent shall make all interest payments with respect to the Bonds on each interest payment date directly to the registered owners as shown on the Bond registration records maintained by the Registration Agent as of the close of business on the fifteenth day of the month next preceding the interest payment date (the "Regular Record Date") by check or draft mailed to such owners at their addresses shown on said Bond registration records, without, except for final payment, the presentation or surrender of such registered Series V-2016 Bonds, and all such payments shall discharge the obligations of KUB in respect of such Series V-2016 Bonds to the extent of the payments so made. Payment of principal of the Series V-2016 Bonds shall be made upon presentation and surrender of such Series V-2016 Bonds to the Registration Agent as the same shall become due and payable. All rates of interest specified herein shall be computed on the basis of a three hundred sixty (360) day year composed of twelve (12) months of thirty (30) days each. In the event the Series V-2016 Bonds are no longer registered in the name of DTC, or a successor Depository, if requested by the Owner of at least \$1,000,000 in aggregate principal amount of the Series V-2016 Bonds, payment of interest on such Series V-2016 Bonds shall be paid by wire transfer to a bank within the continental United States or deposited to a designated account if such account is maintained with the Registration Agent and written notice of any such election and designated account is given to the Registration Agent prior to the record date.

(h) Any interest on any Series V-2016 Bond which is payable but is not punctually paid or duly provided for on any interest payment date (hereinafter "Defaulted Interest") shall forthwith cease to be payable to the registered owner on the relevant Regular Record Date; and, in lieu thereof, such Defaulted Interest shall be paid to the persons in whose names the Series V-2016 Bonds are registered at the close of business on a date (the "Special Record Date") for the payment of such Defaulted Interest, which shall be fixed in the following manner: KUB shall notify the Registration Agent in writing of the amount of Defaulted Interest proposed to be paid on each Series V-2016 Bond and the date of the proposed payment, and at the same time KUB shall deposit with the Registration Agent an amount of money equal to the aggregate amount proposed to be paid in respect of such Defaulted Interest or shall make arrangements satisfactory to the Registration Agent for such deposit prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the persons entitled to such Defaulted Interest as in this Section 4 provided. Thereupon, not less than ten (10) days after the receipt by the Registration Agent of the notice of the proposed payment, the Registration Agent shall fix a Special Record Date for the payment of such Defaulted Interest which Date shall be not more than fifteen (15) nor less than ten (10) days prior to the date of the proposed payment to the registered owners. The Registration Agent shall promptly notify KUB of such Special Record Date and, in the name and at the expense of KUB, not less than ten (10) days prior to such Special Record Date, shall cause notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor to be mailed, first class postage prepaid, to each registered owner at the address thereof as it appears in the Bond registration records maintained by the Registration Agent as of the date of such notice. Nothing contained in this Section 4 or in the Series V-2016 Bonds shall impair any statutory or other rights in law or in equity of any registered owner arising as a result of the failure of KUB to punctually pay or duly provide for the payment of principal of, premium, if any, and interest on the Series V-2016 Bonds when due.

(i) The Series V-2016 Bonds are transferable only by presentation to the Registration Agent by the registered owner, or his legal representative duly authorized in writing, of the registered Series V-2016 Bond(s) to be transferred with the form of assignment on the reverse side thereof completed in full and signed with the name of the registered owner as it appears upon the face of the Series V-2016 Bond(s) accompanied by appropriate documentation necessary to prove the legal capacity of any legal representative of the registered owner. Upon receipt of the Series V-2016 Bond(s) in such form and with such documentation, if any, the Registration Agent shall issue a new Series V-2016 Bond or Series V-2016 Bonds to the assignee(s) in \$5,000 denominations, or integral multiples thereof, as requested by the registered owner requesting transfer. The Registration Agent shall not be required to transfer or exchange

any Series V-2016 Bond during the period commencing on a Regular or Special Record Date and ending on the corresponding interest payment date of such Series V-2016 Bond, nor to transfer or exchange any Series V-2016 Bond after notice calling such Series V-2016 Bond for redemption has been made, nor to transfer or exchange any Series V-2016 Bond during the period following the receipt of instructions from KUB to call such Series V-2016 Bond for redemption; provided, the Registration Agent, at its option, may make transfers after any of said dates. No charge shall be made to any registered owner for the privilege of transferring any Series V-2016 Bond, provided that any transfer tax relating to such transaction shall be paid by the registered owner requesting transfer. The person in whose name any Series V-2016 Bond shall be registered shall be deemed and regarded as the absolute owner thereof for all purposes and neither KUB nor the Registration Agent shall be affected by any notice to the contrary whether or not any payments due on the Series V-2016 Bonds shall be overdue. Series V-2016 Bonds, upon surrender to the Registration Agent, may, at the option of the registered owner, be exchanged for an equal aggregate principal amount of Series V-2016 Bonds of the same maturity in any authorized denomination or denominations. This subsection shall be applicable only if the Series V-2016 Bonds are no longer held by a Depository, and as long as the Series V-2016 Bonds are held by a Depository, transfers of ownership interests in the Series V-2016 Bonds shall be governed by the rules of the Depository.

(j) Except as otherwise authorized herein, the Series V-2016 Bonds shall be registered in the name of Cede & Co., as nominee of DTC, which will act as the Depository for the Series V-2016 Bonds except as otherwise provided herein. References in this Section 4 to a Series V-2016 Bond or the Series V-2016 Bonds shall be construed to mean the Series V-2016 Bond or the Series V-2016 Bonds that are held under the Book-Entry System. One Series V-2016 Bond for each maturity of the Series V-2016 Bonds shall be issued to DTC and immobilized in its custody or a custodian of DTC. The Bond Registrar is a custodian and agent for DTC, and the Series V-2016 Bond will be immobilized in its custody. A Book-Entry System shall be employed, evidencing ownership of the Series V-2016 Bonds in authorized denominations, with transfers of beneficial ownership effected on the records of DTC and the DTC Participants pursuant to rules and procedures established by DTC.

Each DTC Participant shall be credited in the records of DTC with the amount of such DTC Participant's interest in the Series V-2016 Bonds. Beneficial ownership interests in the Series V-2016 Bonds may be purchased by or through DTC Participants. The holders of these beneficial ownership interests are hereinafter referred to as the "Beneficial Owners." The Beneficial Owners shall not receive the Series V-2016 Bonds representing their beneficial ownership interests. The ownership interests of each Beneficial Owner shall be recorded through the records of the DTC Participant from which such Beneficial Owner purchased its Series V-2016 Bonds. Transfers of ownership interests in the Series V-2016 Bonds shall be accomplished by book entries made by DTC and, in turn, by DTC Participants acting on behalf of Beneficial Owners. SO LONG AS CEDE & CO., AS NOMINEE FOR DTC, IS THE REGISTERED OWNER OF THE SERIES V-2016 BONDS, THE REGISTRATION AGENT SHALL TREAT CEDE & CO., AS THE ONLY HOLDER OF THE SERIES V-2016 BONDS FOR ALL PURPOSES UNDER THIS RESOLUTION, INCLUDING RECEIPT OF ALL PRINCIPAL OF, PREMIUM, IF ANY, AND INTEREST ON THE SERIES V-2016 BONDS, RECEIPT OF NOTICES, VOTING AND TAKING OR NOT TAKING, OR CONSENTING TO, CERTAIN ACTIONS UNDER THIS RESOLUTION.

Payments of principal, interest, and redemption premium, if any, with respect to the Series V-2016 Bonds, so long as DTC is the only owner of the Series V-2016 Bonds, shall be paid by the Registration Agent directly to DTC or its nominee, Cede & Co. as provided in the Letter of Representation relating to the Series V-2016 Bonds from the City, acting by and through KUB, and the Registration Agent to DTC (the "Letter of Representation"). DTC shall remit such payments to DTC Participants, and such payments thereafter shall be paid by DTC Participants to the Beneficial Owners. Neither the City, KUB nor the Registration Agent shall be responsible or liable for payment by DTC or

DTC Participants, for sending transaction statements or for maintaining, supervising or reviewing records maintained by DTC or DTC Participants.

In the event that (1) DTC determines not to continue to act as Depository for the Series V-2016 Bonds or (2) to the extent permitted by the rules of DTC, the Board determines to discontinue the Book-Entry System, the Book-Entry System with DTC shall be discontinued. If the Board fails to identify another qualified securities depository to replace DTC, the Board shall cause the Registration Agent to authenticate and deliver replacement Series V-2016 Bonds in the form of fully registered Series V-2016 Bonds to each Beneficial Owner.

NEITHER THE CITY, KUB NOR THE REGISTRATION AGENT SHALL HAVE ANY RESPONSIBILITY OR OBLIGATIONS TO ANY DTC PARTICIPANT OR ANY BENEFICIAL OWNER WITH RESPECT TO (i) THE SERIES V-2016 BONDS; (ii) THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC OR ANY DTC PARTICIPANT; (iii) THE PAYMENT BY DTC OR ANY DTC PARTICIPANT OF ANY AMOUNT DUE TO ANY BENEFICIAL OWNER IN RESPECT OF THE PRINCIPAL OF AND INTEREST ON THE SERIES V-2016 BONDS; (iv) THE DELIVERY OR TIMELINESS OF DELIVERY BY DTC OR ANY DTC PARTICIPANT OF ANY NOTICE DUE TO ANY BENEFICIAL OWNER THAT IS REQUIRED OR PERMITTED UNDER THE TERMS OF THIS RESOLUTION TO BE GIVEN TO BENEFICIAL OWNERS, (v) THE SELECTION OF BENEFICIAL OWNERS TO RECEIVE PAYMENTS IN THE EVENT OF ANY PARTIAL REDEMPTION OF THE SERIES V-2016 BONDS; OR (vi) ANY CONSENT GIVEN OR OTHER ACTION TAKEN BY DTC, OR ITS NOMINEE, CEDE & CO., AS OWNER.

If the purchaser or Underwriter certifies that it intends to hold the Series V-2016 Bonds for its own account, then the City may issue, acting by and through KUB, certified Bonds without the utilization of DTC and the Book-Entry System.

(k) In case any Series V-2016 Bond shall become mutilated, or be lost, stolen, or destroyed, the City, acting by and through KUB, in its discretion, shall issue, and the Registration Agent, upon written direction from KUB, shall authenticate and deliver, a new Series V-2016 Bond of like tenor, amount, maturity and date, in exchange and substitution for, and upon the cancellation of, the mutilated Series V-2016 Bond, or in lieu of and in substitution for such lost, stolen or destroyed Series V-2016 Bond, or if any such Series V-2016 Bond shall have matured or shall be about to mature, instead of issuing a substituted Series V-2016 Bond KUB may pay or authorize payment of such Series V-2016 Bond without surrender thereof. In every case the applicant shall furnish evidence satisfactory to KUB and the Registration Agent of the destruction, theft or loss of such Series V-2016 Bond, and indemnity satisfactory to KUB and the Registration Agent; and KUB may charge the applicant for the issue of such new Series V-2016 Bond an amount sufficient to reimburse KUB for the expense incurred by it in the issue thereof.

(l) The Registration Agent is hereby authorized to authenticate and deliver the Series V-2016 Bonds to DTC, on behalf of the initial purchaser thereof, or an agent of DTC, upon receipt by KUB of the proceeds of the sale thereof, subject to the rules of the depository, and to authenticate and deliver Series V-2016 Bonds in exchange for Series V-2016 Bonds of the same principal amount delivered for transfer upon receipt of the Series V-2016 Bond(s) to be transferred in proper form with proper documentation as hereinabove described. The Series V-2016 Bonds shall not be valid for any purpose unless authenticated by the Registration Agent by the manual signature of an authorized representative thereof on the certificate set forth herein on the Series V-2016 Bond form.

(m) The Registration Agent is hereby authorized to take such action as may be necessary from time to time to qualify and maintain the Series V-2016 Bonds for deposit with DTC, including but not limited to, wire transfers of interest and principal payments with respect to the Series V-2016 Bonds,

utilization of electronic book entry data received from DTC in place of actual delivery of Series V-2016 Bonds and provision of notices with respect to Series V-2016 Bonds registered by DTC (or any of its designees identified to the Registration Agent) by overnight delivery, courier service, telegram, telecopy or other similar means of communication. No such arrangements with DTC may adversely affect the interest of any of the Beneficial Owners of the Series V-2016 Bonds, provided, however, that the Registration Agent shall not be liable with respect to any such arrangements it may make pursuant to this Section 4.

Section 5. Source of Payment. The Series V-2016 Bonds shall be payable solely from and be secured by a pledge of the Net Revenues of the System as hereinafter provided and as provided in the 1988 Resolution on a parity and equality of lien with the Outstanding Bonds. The punctual payment of principal of and interest on the Series V-2016 Bonds, the Outstanding Bonds and any Parity Bonds shall be secured equally and ratably by the Net Revenues of the System, without priority by reason of series, number or time of sale and delivery. The owners of the Series V-2016 Bonds shall have no recourse to the power of taxation of the City.

Section 6. Form of Series V-2016 Bonds. The Series V-2016 Bonds shall be in substantially the following form, the omissions to be appropriately completed when the Series V-2016 Bonds are prepared and delivered:

(Form of Series V-2016 Bond)

REGISTERED
Number _____

REGISTERED
\$ _____

UNITED STATES OF AMERICA
STATE OF TENNESSEE
COUNTY OF KNOX
CITY OF KNOXVILLE
GAS SYSTEM REVENUE BOND, SERIES V-2016

Interest Rate: Maturity Date: Date of Bond: CUSIP No.:

Registered Owner:
Principal Amount:

KNOW ALL PERSONS BY THESE PRESENTS: That the City of Knoxville, a municipal corporation lawfully organized and existing in Knox County, Tennessee (the "City"), acting by and through the Knoxville Utilities Board ("KUB"), for value received hereby promises to pay to the registered owner hereof, hereinabove named, or registered assigns, in the manner hereinafter provided, the principal amount hereinabove set forth on the maturity date hereinabove set forth, or upon earlier redemption, as set forth herein, and to pay interest (computed on the basis of a 360-day year of twelve 30-day months) on said principal amount at the annual rate of interest hereinabove set forth from the date hereof until said maturity date or redemption date, said interest being payable on September 1, 2016, and semi-annually thereafter on the first day of March and September in each year until this Bond matures or is redeemed. Both principal hereof and interest hereon are payable in lawful money of the United States of America by check or draft at the designated corporate trust office of _____, _____, Tennessee, as registration agent and paying agent (the "Registration Agent"). The Registration Agent shall make all interest payments with respect to this Bond by check or draft on each interest payment date directly to the registered owner hereof shown on the bond registration records maintained by the Registration Agent as of the close of business on the day which is the fifteenth (15th)

day of the month next preceding the interest payment date (the "Regular Record Date") by depositing said payment in the United States mail, postage prepaid, addressed to such owner at such owner's address shown on said bond registration records, without, except for final payment, the presentation or surrender of this Bond, and all such payments shall discharge the obligations of the City and KUB to the extent of the payments so made. Any such interest not so punctually paid or duly provided for on any interest payment date shall forthwith cease to be payable to the registered owner on the relevant Regular Record Date; and, in lieu thereof, such defaulted interest shall be payable to the person in whose name this Bond is registered at the close of business on the date (the "Special Record Date") for payment of such defaulted interest to be fixed by the Registration Agent, notice of which shall be given to the owners of the Bonds of the issue of which this Bond is one not less than ten (10) days prior to such Special Record Date. Payment of principal of and premium, if any, on the Bonds shall be made when due upon presentation and surrender of this Bond to the Registration Agent.

Except as otherwise provided herein or in the Resolution, as hereinafter defined, this Bond shall be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"), which will act as securities depository for the Bonds of the series of which this Bond is one. One Bond for each maturity of the Bonds shall be issued to DTC and immobilized in its custody or a custodian of DTC. The Bond Registrar is a custodian and agent for DTC, and the Bond will be immobilized in its custody. A book-entry system (the "Book-Entry System") shall be employed, evidencing ownership of the Bonds in \$5,000 denominations, or multiples thereof, with transfers of beneficial ownership effected on the records of DTC and the DTC Participants, as defined in the Resolution, pursuant to rules and procedures established by DTC. So long as Cede & Co., as nominee for DTC, is the registered owner of the Bonds, the City, KUB and the Registration Agent shall treat Cede & Co., as the only owner of the Bonds for all purposes under the Resolution, including receipt of all principal of, premium, if any, and interest on the Bonds, receipt of notices, voting and requesting or taking or not taking, or consenting to, certain actions hereunder. Payments of principal, maturity amounts, interest, and redemption premium, if any, with respect to the Bonds, so long as DTC is the only owner of the Bonds, shall be paid directly to DTC or its nominee, Cede & Co. DTC shall remit such payments to DTC Participants, and such payments thereafter shall be paid by DTC Participants to the Beneficial Owners, as defined in the Resolution. Neither the City, KUB, nor the Registration Agent shall be responsible or liable for payment by DTC or DTC Participants, for sending transaction statements or for maintaining, supervising or reviewing records maintained by DTC or DTC Participants. In the event that (1) DTC determines not to continue to act as securities depository for the Bonds or (2) to the extent permitted by the rules of DTC, the Board determines to discontinue the Book-Entry System, the Book-Entry System with DTC shall be discontinued. If the Board fails to identify another qualified securities depository to replace DTC, the Board shall cause the Registration Agent to authenticate and deliver replacement Bonds in the form of fully registered Bonds to each Beneficial Owner. Neither the City, KUB nor the Registration Agent shall have any responsibility or obligations to any DTC Participant or any Beneficial Owner with respect to (i) the Bonds; (ii) the accuracy of any records maintained by DTC or any DTC Participant; (iii) the payment by DTC or any DTC Participant of any amount due to any Beneficial Owner in respect of the principal or maturity amounts of and interest on the Bonds; (iv) the delivery or timeliness of delivery by DTC or any DTC Participant of any notice due to any Beneficial Owner that is required or permitted under the terms of the Resolution to be given to Beneficial Owners, (v) the selection of Beneficial Owners to receive payments in the event of any partial redemption of the Bonds; or (vi) any consent given or other action taken by DTC, or its nominee, Cede & Co., as owner.

The Bonds of the issue of which this Bond is one maturing on or before March 1, 2025 shall mature without option of prior redemption. The Bonds maturing on March 1, 2026 and thereafter shall be subject to redemption prior to maturity at the option of the City, acting through the Board, on or after March 1, 2025, as a whole or in part at any time at a redemption price equal to the principal amount plus interest accrued to the redemption date.

[If less than all the Bonds shall be called for redemption, the maturities to be redeemed shall be selected by the Board in its discretion. If less than all of the Bonds within a single maturity shall be called for redemption, the interests within the maturity to be redeemed shall be selected as follows:

(i) if the Bonds are being held under a Book-Entry System by DTC, or a successor Depository, the amount of the interest of each DTC Participant in the Bonds to be redeemed shall be determined by DTC, or such successor Depository, by lot or such other manner as DTC, or such successor Depository, shall determine; or

(ii) if the Series Bonds are not being held under a Book-Entry System by DTC, or a successor Depository, the Bonds within the maturity to be redeemed shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall determine.]

[Subject to the credit hereinafter provided, the City acting by and through KUB, shall redeem Bonds maturing on the redemption dates set forth below opposite such maturity date, in aggregate principal amounts equal to the respective dollar amounts set forth below opposite the redemption dates at a price of par plus accrued interest thereon to the date of redemption. DTC, as securities depository for the series of Bonds of which this Bond is one, or any successor Depository for the Bonds, shall determine the interest of each Participant in the Bonds to be redeemed using its procedures generally in use at that time. If DTC, or another securities depository is no longer serving as securities depository for the Bonds, the Bonds to be redeemed within a maturity shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall select. The dates of redemption and amount of Bonds to be redeemed on said dates are as follows:

<u>Maturity</u>	<u>Redemption Date</u>	<u>Principal Amount of Bonds to be Redeemed</u>
-----------------	------------------------	---

*final maturity

At its option, to be exercised on or before the forty-fifth (45th) day next preceding any such redemption date, the City, acting through KUB, may (i) deliver to the Registration Agent for cancellation Bonds to be redeemed, in any aggregate principal amount desired, and/or (ii) receive credit in respect of its redemption obligation under the mandatory redemption provision for any Bonds to be redeemed which prior to said date have been purchased or redeemed (otherwise than by mandatory redemption) and canceled by the Registration Agent and not theretofore applied as a credit against any redemption obligation under the mandatory redemption provision. Each Bond so delivered or previously purchased or redeemed shall be credited by the Registration Agent at 100% of the principal amount thereof on the obligation of KUB on such payment date and any excess shall be credited on future redemption obligations in chronological order, and the principal amount of the Bonds to be redeemed by operation of the mandatory redemption provision shall be accordingly reduced. KUB shall on or before the forty-fifth (45th) day next preceding each payment date furnish the Registration Agent with its certificate indicating whether or not and to what extent the provisions of clauses (i) and (ii) of this paragraph are to be availed of with respect to such payment and confirm that funds for the balance of the next succeeding prescribed payment will be paid on or before the next succeeding payment date.]

Notice of call for redemption, whether optional or mandatory, shall be given by the Registration Agent on behalf of the City, but only upon direction of the Board, not fewer than twenty (20) nor more

than sixty (60) days prior to the date fixed for redemption by sending an appropriate notice to the registered owners of the Bonds to be redeemed by first-class mail, postage prepaid, at the addresses shown on the Bond registration records of the Registration Agent as of the date of the notice; but neither failure to mail such notice nor any defect in any such notice so mailed shall affect the sufficiency of the proceedings for the redemption of any of the Bonds for which proper notice was given. The notice may state that it is conditioned upon the deposit of moneys in an amount equal to the amount necessary to affect the redemption with the Registration Agent no later than the redemption date ("Conditional Redemption"). From and after any redemption date, all Bonds called for redemption shall cease to bear interest if funds are available at the office of the Registration Agent for the payment thereof and if notice has been duly given as set forth in the Resolution, as hereafter defined. In the case of a Conditional Redemption, the failure of the City or KUB to make funds available in part or in whole on or before the redemption date shall not constitute an event of default, and the Registration Agent shall give immediate notice to the Depository or the affected Bondholders that the redemption did not occur and that the Bonds called for redemption and not so paid remain outstanding.

The Bonds of the issue of which this Bond is one are issuable only as fully registered Bonds, without coupons, in the denomination of Five Thousand Dollars (\$5,000) or any authorized integral multiple thereof. At the designated trust office of the Registration Agent, in the manner and subject to the limitations, conditions and charges provided in the Resolution, fully registered Bonds may be exchanged for an equal aggregate principal amount of fully registered Bonds of the same maturity, of authorized denominations, and bearing interest at the same rate. The Bonds shall be numbered consecutively from one upwards and will be made eligible for the Book-Entry System of DTC. Except as otherwise provided in this paragraph and the Resolution, as hereinafter defined, the Bonds shall be registered in the name of Cede & Co. as nominee of DTC. The Board may discontinue use of DTC for Bonds at any time upon determination by the Board that the use of DTC is no longer in the best interest of the beneficial owners of the Bonds. Upon such determination, registered ownership of the Bonds may be transferred on the registration books maintained by the Registration Agent, and the Bonds may be delivered in physical form to the following:

- i. any successor of DTC or its nominee;
- ii. any substitute depository to which the Registration Agent does not unreasonably object, upon (a) the resignation of DTC or its successor (or any substitute depository or its successor) from its functions as depository, or (b) a determination by the Board that DTC or its successor (or any substitute depository or its successor) is no longer able to carry out its functions as depository; or
- iii. any person, upon (a) the resignation of DTC or its successor (or substitute depository or its successor) from its functions as depository, or (b) termination by the Board of the use of DTC (or substitute depository or its successor).

In the event that this Bond is no longer held in a Book-Entry System by DTC, this Bond shall be transferable by the registered owner hereof in person or by such owner's attorney duly authorized in writing at the designated trust office of the Registration Agent set forth on the front side hereof, but only in the manner, subject to limitations and upon payment of the charges provided in the Resolution and upon surrender and cancellation of this Bond. Upon such transfer a new Bond or Bonds of authorized denomination or denominations of the same maturity and interest rate for the same aggregate principal amount will be issued to the transferee in exchange therefor. The person in whose name this Bond is registered shall be deemed and regarded as the absolute owner thereof for all purposes and neither the City, KUB nor the Registration Agent shall be affected by any notice to the contrary whether or not any payments due on the Bond shall be overdue. Bonds, upon surrender to the Registration Agent, may, at the option of the registered owner thereof, be exchanged for an equal aggregate principal amount of the

Bonds of the same maturity in authorized denomination or denominations, upon the terms set forth in the Resolution. The Registration Agent shall not be required to transfer or exchange any Bond during the period commencing on a Regular Record Date or Special Record Date and ending on the corresponding interest payment date of such Bond, nor to transfer or exchange any Bond after the notice calling such Bond for redemption has been made, nor during a period following the receipt of instructions from the Board to call such Bond for redemption.

This Bond is one of a total authorized issue aggregating \$12,000,000 and issued by the City for the purpose of providing funds to finance the construction of extensions and improvements to the City's gas distribution system (the "System"), including the payment of legal, fiscal and administrative costs incident thereto and costs incident to the issuance of the Bonds, under and in full compliance with the Constitution and statutes of the State of Tennessee, including Sections 7-34-101 et seq. and Section 9-21-101 et seq., Tennessee Code Annotated, and pursuant to Resolution No. R-25-88 duly adopted by the City Council of the City on February 9, 1988, as supplemented and amended by Resolution No. R-59-88 duly adopted by the City Council of the City on March 22, 1988, Resolution No. R-227-91 duly adopted by the City Council of the City on June 25, 1991, Resolution No. R-471-92 duly adopted by the City Council of the City on October 13, 1992 (as amended by Resolution No. R-5-93 duly adopted by the City Council of the City on January 5, 1993), Resolution No. R-475-93 duly adopted by the City Council of the City on October 26, 1993, Resolution No. R-22-97 duly adopted by the City Council of the City on January 14, 1997, Resolution No. R-421-98 duly adopted by the City Council of the City on October 20, 1998, Resolution No. R-66-01 duly adopted by the City Council of the City on February 20, 2001, Resolution No. R-150-01 duly adopted by the City Council of the City on March 20, 2001, Resolution No. R-479-01 duly adopted by the City Council of the City on October 30, 2001, Resolution No. R-58-04 duly adopted by the City Council of the City on March 2, 2004, Resolution No. R-262-05 duly adopted by the City Council of the City on July 5, 2005, Resolution No. R-79-06 duly adopted by the City Council of the City on February 28, 2006, Resolution No. R-345-07 duly adopted by the City Council of the City on August 28, 2007, Resolution No. R-132-210 duly adopted by the City Council of the City on May 4, 2010, Resolution No. R-333-2010, duly adopted by the City Council of the City on November 2, 2010, Resolution No. R-336-2011, duly adopted by the City Council of the City on December 13, 2011, Resolution No. R-290-2012, duly adopted by the City Council of the City on October 16, 2012, Resolution No. R-322-2012 duly adopted by the City Council of the City on November 13, 2012, Resolution No. R-242-2013 duly adopted by the City Council of the City on July 23, 2013, Resolution No. R-82-2015 duly adopted by the City Council of the City on March 3, 2015 and Resolution No. R-_____2016 of the Governing Body adopted _____, 2016 (as supplemented and amended, the "Resolution").

This Bond, and interest hereon, are payable solely from and secured by a pledge of the income and revenues to be derived from the operation of the System, subject only to the payment of the reasonable and necessary costs of operating, maintaining, repairing, and insuring the System. The Bonds of the series of which this Bond is one shall enjoy complete parity and equality of lien with the City's outstanding Gas System Revenue Refunding Bonds, Series L-2005, dated August 10, 2005, maturing March 1, 2017 and thereafter, the City's Gas System Revenue Bonds, Series N-2007, dated November 1, 2007, maturing March 1, 2017, the City's Gas System Revenue Bonds, Series P-2010 (Federally Taxable Build America Bonds), dated December 8, 2010, maturing March 1, 2017 and thereafter, the City's Gas System Revenue Refunding Bonds, Series Q-2012, dated April 20, 2012, maturing March 1, 2017 and thereafter, the City's Outstanding Gas System Revenue Bonds, Series R-2012, dated December 18, 2012, maturing March 1, 2017 and thereafter, the City's outstanding Gas System Revenue Refunding Bonds, Series S-2013, dated March 15, 2013, maturing March 1, 2017 and thereafter, and the City's outstanding Gas System Revenue Bonds, Series T-2013, dated October 1, 2013, maturing March 1, 2017 and thereafter, and the City's outstanding Gas System Revenue Refunding Bonds, Series U-2015, dated May 1, 2015, maturing March 1, 2017 and thereafter (collectively, the "Outstanding Bonds"). As provided in the Resolution, the punctual payment of principal of, premium, if any, and interest on the series of Bonds

of which this Bond is one, the Outstanding Bonds, and any other bonds issued on a parity therewith pursuant to the terms of the Resolution shall be secured equally and ratably by said revenues without priority by reason of series, number or time of sale or delivery. The owner of this Bond shall have no recourse to the power of taxation of the City. The Board has covenanted that it will fix and impose such rates and charges for the services rendered by the System and will collect and account for sufficient revenues to pay promptly the principal of and interest on this Bond and the issue of which it is a part, as each payment becomes due. For a more complete statement of the revenues from which and conditions under which this Bond is payable, a statement of the conditions on which obligations may hereafter be issued on a parity with this Bond, the general covenants and provisions pursuant to which this Bond is issued and the terms upon which the Resolution may be modified, reference is hereby made to the Resolution.

Under existing law, this Bond and the income therefrom are exempt from all present state, county and municipal taxation in Tennessee except (a) inheritance, transfer and estate taxes, (b) Tennessee excise taxes on all or a portion of the interest on this Bond during the period such Bond is held or beneficially owned by any organization or entity, other than a sole proprietorship or general partnership, doing business in the State of Tennessee, and (c) Tennessee franchise taxes by reason of the inclusion of the book value of this Bond in the Tennessee franchise tax base or any organization or entity, other than a sole proprietorship or general partnership, doing business in the State of Tennessee.

It is hereby certified, recited, and declared that all acts, conditions and things required to exist, happen and be performed precedent to and in the issuance of this Bond exist, have happened and have been performed in due time, form and manner as required by law, and that the amount of this Bond, together with all other indebtedness of either the City or KUB, does not exceed any limitation prescribed by the constitution and statutes of the State of Tennessee.

IN WITNESS WHEREOF, the City acting by and through the Board has caused this Bond to be signed by the Chair of the Board by her manual or facsimile signature and attested by the Secretary of the Board by his manual or facsimile signature, all as of the date hereinabove set forth.

CITY OF KNOXVILLE
by and through the
KNOXVILLE UTILITIES BOARD

By: _____
Chair

ATTESTED:

Secretary

Transferable and payable at the
designated corporate trust office of: _____
_____, Tennessee

Date of Registration: _____

This Bond is one of the issue of Bonds issued pursuant to the Resolution hereinabove described.

Registration Agent

By: _____
Authorized Representative

FORM OF ASSIGNMENT

FOR VALUE RECEIVED, the undersigned sells, assigns, and transfers unto _____, [Please insert Federal Tax Identification Number or Social Security Number of Assignee _____] whose address is _____, the within bond of the City of Knoxville, Tennessee, and does hereby irrevocably constitute and appoint _____, Tennessee, attorney, to transfer the said bond on the records kept for registration thereof with full power of substitution in the premises.

Dated: _____

NOTICE: The signature to this assignment must correspond with the name of the registered owner as it appears on the face of the within Bond in every particular, without alteration or enlargement or any change whatsoever.

Signature guaranteed:

NOTICE: Signature(s) must be guaranteed by a member firm of a Medallion Program acceptable to the Registration Agent.

Section 7. Equality of Lien; Pledge of Net Revenues. The punctual payment of principal of, premium, if any, and interest on the Series V-2016 Bonds, the Outstanding Bonds and any Parity Bonds shall be secured equally and ratably by the Net Revenues of the System without priority by reason of series, number or time of sale or execution or delivery, and the Net Revenues of the System are hereby irrevocably pledged to the punctual payment of such principal, premium and interest as the same become due.

Section 8. Applicability of the 1988 Resolution. The Series V-2016 Bonds are issued in compliance with the 1988 Resolution so as to be on a parity with the Outstanding Bonds, and, when duly delivered, the Series V-2016 Bonds shall constitute a series of bonds issued under the authority of the 1988 Resolution. All recitals, provisions, covenants and agreements contained in the 1988 Resolution, as supplemented and amended herein (except insofar as any of said recitals, provisions, covenants and agreements necessarily relate exclusively to any series of the Outstanding Bonds) are hereby ratified and confirmed and incorporated herein by reference and, for so long as any of the Series V-2016 Bonds shall be outstanding and unpaid either as to principal or interest, or until discharge and satisfaction of the Series V-2016 Bonds as provided in Section 12 hereof, shall be applicable to the Series V-2016 Bonds, shall

inure to the benefit of owners of the Series V-2016 Bonds as if set out in full herein, and shall be fully enforceable by the owner of any Series V-2016 Bond.

All references to "holder" or "holders" in the 1988 Resolution shall be deemed to include owners of the Series V-2016 Bonds, and all references to "Bonds" in the 1988 Resolution shall be deemed to include the Series V-2016 Bonds.

Section 9. Sale of Series V-2016 Bonds.

(a) The Series V-2016 Bonds or any emission thereof may be sold at negotiated sale to the Underwriter or at public sale as determined by the President and Chief Executive Officer of KUB at a price of not less than 98.00% of par, exclusive of original issue discount, plus accrued interest, if any, provided, however, that no emission of Series V-2016 Bonds may be sold at negotiated sale unless the Audit and Finance Committee of the Board has previously approved the sale of such emission at negotiated sale. The sale of any emission of the Series V-2016 Bonds to the Underwriter or by public sale shall be binding on the City and KUB, and no further action of the Board with respect thereto shall be required.

(b) The President and Chief Executive Officer of KUB, as the designee of the Board, is further authorized with respect to each emission of Series V-2016 Bonds to:

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

(2) specify or change the series designation of the Series V-2016 Bonds to a designation other than "Gas System Revenue Bonds, Series V-2016";

(3) change the first interest payment date to a date other than September 1, 2016, provided that such date is not later than twelve months from the dated date of such emission of Series V-2016 Bonds;

(4) establish and adjust the principal and interest payment dates and determine maturity or mandatory redemption amounts of the Series V-2016 Bonds or any emission thereof, provided that (A) the total principal amount of all emissions of the Series V-2016 Bonds does not exceed the total amount of Series V-2016 Bonds authorized herein, (B) the final maturity date of each emission shall be not later than March 1, 2046, and (C) the debt service payable in each fiscal year after the completion of the Project shall be approximately level;

(5) modify the optional redemption provisions contained herein, provided that the premium amount to be paid in connection with any redemption provision shall not exceed two percent (2%) of the principal amount thereof;

(6) sell the Series V-2016 Bonds, or any emission thereof, or any maturities thereof as term bonds with mandatory redemption requirements as determined by the Board, as it shall deem most advantageous to KUB; and

(7) cause all or a portion of the Series V-2016 Bonds to be insured by a bond insurance policy issued by a nationally recognized bond insurance company to achieve the purposes set forth herein and to serve the best interests of KUB and to enter into agreements with such insurance company to the extent not inconsistent with this resolution.

(c) If any emission of Series V-2016 Bonds is sold at negotiated sale, the President and Chief Executive Officer of KUB is authorized to execute a Bond Purchase Agreement with respect to such

emission of Series V-2016 Bonds, providing for the purchase and sale of the Series V-2016 Bonds, or any emission thereof. Each Bond Purchase Agreement shall be in substantially the form attached hereto as Exhibit A, with such changes as the President and Chief Executive Officer deems necessary or advisable in connection with the sale of such Series V-2016 Bonds, provided any such changes are not inconsistent with the terms of this Section 9. If the Underwriter does not intend to reoffer the Series V-2016 Bonds to the public, then the Bond Purchase Agreement shall be conformed to reflect such intention. The form of the Series V-2016 Bond set forth in Section 7 hereof shall be conformed to reflect any changes made pursuant to this Section 9.

(d) The President and Chief Executive Officer and the Chief Financial Officer of KUB, or either of them, are authorized to cause the Series V-2016 Bonds, in book-entry form (except as otherwise authorized herein), to be authenticated and delivered by the Registration Agent to the purchaser(s), and to execute, publish, and deliver all certificates and documents, including an official statement, the Bond Purchase Agreement and closing certificates, as they shall deem necessary in connection with the sale and delivery of each emission of the Bonds.

(e) If the Series V-2016 Bonds are sold at public sale, the Series V-2016 Bonds shall be awarded by the President and Chief Executive Officer of KUB to the bidder that offers to purchase the Bonds for the lowest true interest cost to KUB.

Section 10. Disposition of Series V-2016 Bond Proceeds. The proceeds of the sale of the Series V-2016 Bonds shall be paid to KUB and used and applied by KUB as follows:

(a) All accrued interest, if any, shall be deposited to the Debt Service Fund created under the 1988 Resolution and used to pay interest on the Series V-2016 Bonds on the first interest payment date following delivery of the Series V-2016 Bonds; and

(b) The remainder of the proceeds of the sale of the Series V-2016 Bonds shall be deposited with a financial institution regulated by the Federal Deposit Insurance Corporation or similar federal agency in a special fund known as the "Gas System Construction Fund" (the "Construction Fund") to be kept separate and apart from all other funds of the Board. The funds in the Construction Fund shall be disbursed solely to pay the costs of the Project and issuance of the Series V-2016 Bonds, including necessary legal, accounting, engineering, and fiscal expenses, printing, engraving, advertising and similar expenses, administrative and clerical costs, rating agency fees, Registration Agent fees, and other necessary miscellaneous expenses incurred in connection with the Project and the issuance and sale of the Series V-2016 Bonds. Money in the Construction Fund shall be secured in the manner prescribed by applicable statutes relative to the securing of public or trust funds, if any, or, in the absence of such a statute, by a pledge of readily marketable securities having at all times a market value of not less than the amount in said Construction Fund. Money in the Construction Fund shall be expended only for the purposes authorized by this resolution. Any funds remaining in the Construction Fund after completion of the Project and payment of authorized expenses shall be used to retire Series V-2016 Bonds on the earliest possible date. Moneys in the Construction Fund shall be invested as directed by the Chief Financial Officer in such investments as shall be permitted by applicable law. All income derived from such investments shall be deposited to the Construction Fund.

Section 11. Discharge and Satisfaction of Series V-2016 Bonds. If KUB, on behalf of the City, shall pay and discharge the indebtedness evidenced by any of the Series V-2016 Bonds or Parity Bonds (referred to hereinafter, collectively, in this Section 11 as the "Bonds") in any one or more of the following ways:

(a) By paying or causing to be paid, by deposit of sufficient funds as and when required with the Registration Agent, the principal of and interest on such Bonds as and when the same become due and payable;

(b) By depositing or causing to be deposited with any financial institution which has trust powers and which is regulated by and the deposits of which are insured by the Federal Deposit Insurance Corporation or similar federal agency ("an Agent"; which Agent may be the Registration Agent), in trust or escrow, on or before the date of maturity or redemption, sufficient money or Defeasance Obligations, the principal of and interest on which, when due and payable, will provide sufficient moneys to pay or redeem such Bonds and to pay premium, if any, and interest thereon when due until the maturity or redemption date (provided, if such Bonds are to be redeemed prior to maturity thereof, proper notice of such redemption shall have been given or adequate provision shall have been made for the giving of such notice); or

(c) By delivering such Bonds to the Registration Agent, for cancellation by it;

and if KUB, on behalf of the City, shall also pay or cause to be paid all other sums payable hereunder by KUB or the City with respect to such Bonds or make adequate provision therefor, and by resolution of the Board instruct any such Agent to pay amounts when and as required to the Registration Agent for the payment of principal of and interest and redemption premiums, if any, on such Bonds when due, then and in that case the indebtedness evidenced by such Bonds shall be discharged and satisfied and all covenants, liens, pledges, agreements and obligations entered into, created, or imposed hereunder, including the pledge of and lien on the Net Revenues of the System set forth herein, shall be fully discharged and satisfied with respect to such Bonds and the owners thereof and shall thereupon cease, terminate and become void.

If KUB, on behalf of the City, shall pay and discharge or cause to be paid and discharged the indebtedness evidenced by any of the Bonds in the manner provided in either clause (a) or clause (b) above, then the registered owners thereof shall thereafter be entitled only to payment out of the money or Defeasance Obligations deposited as aforesaid.

Except as otherwise provided in this Section 11, neither Defeasance Obligations nor moneys deposited with the Agent pursuant to this Section 11 nor principal or interest payments on any such Defeasance Obligations shall be withdrawn or used for any purpose other than, and shall be held in trust for, the payment of the principal of and premium, if any, and interest on said Bonds; provided that any cash received from such principal or interest payments on such Defeasance Obligations deposited with the Agent, (A) to the extent such cash will not be required at any time for such purpose, shall be paid over to KUB as received by the Agent and (B) to the extent such cash will be required for such purpose at a later date, shall, to the extent practicable, be reinvested in Defeasance Obligations maturing at times and in amounts sufficient to pay when due the principal and premium, if any, and interest to become due on said Bonds on or prior to such redemption date or maturity date thereof, as the case may be, and interest earned from such reinvestments, to the extent not needed for the payment of such principal, premium and interest, shall be paid over to KUB, as received by the Agent. For the purposes of this Section 11, Defeasance Obligations shall mean direct obligations of, or obligations, the principal of and interest on which are guaranteed by, the United States of America, or any agency thereof, obligations of any agency or instrumentality of the United States or any other obligations at the time of the purchase thereof are permitted investments under Tennessee Law for the purposes described in this Section 11, which bonds or other obligations shall not be subject to redemption prior to their maturity other than at the option of the registered owner thereof.

No redemption privilege shall be exercised with respect to the Series V-2016 Bonds or any Parity Bonds except at the option and election of the Board. The right of redemption set forth herein shall not be

exercised by any Registration Agent or Agent unless expressly so directed in writing by an authorized representative of the Board.

Section 12. Federal Tax Matters. The City and KUB recognize that the purchasers and owners of the Series V-2016 Bonds will have accepted them on, and paid therefor a price that reflects the understanding that interest thereon will not be included in gross income for purposes of federal income taxation under laws in force on the date of delivery of the Series V-2016 Bonds. In this connection, KUB, on behalf of the City, agrees that it shall take no action which may render the interest on any of the Series V-2016 Bonds includable in gross income for purposes of federal income taxation. It is the reasonable expectation of the City and KUB that the proceeds of the Series V-2016 Bonds will not be used in a manner which will cause the Series V-2016 Bonds to be "arbitrage bonds" within the meaning of Section 148 of the Code, and to this end the said proceeds of the Series V-2016 Bonds and other related funds established for the purposes herein set out, shall be used and spent expeditiously for the purposes described herein. In the event Section 148(f) of the Code shall require the payment of any investment proceeds of the Series V-2016 Bonds to the United States government, KUB will make such payments as and when required by said Section 148(f) and will take such other actions as shall be necessary or permitted to prevent the interest on the Series V-2016 Bonds from becoming taxable. The Chair of the Board, the Secretary of the Board, the President and Chief Executive Officer of KUB and Chief Financial Officer of KUB, or any of them, are authorized and directed to make such certifications in this regard in connection with the sale of the Bonds as any or all shall deem appropriate, and such certifications shall constitute a representation and certification of the City and KUB.

Section 13. Official Statement. The President and Chief Executive Officer of KUB, or her designee, is hereby authorized and directed to provide for the preparation and distribution of a Preliminary Official Statement describing the Series V-2016 Bonds. After the Series V-2016 Bonds have been awarded, the President and Chief Executive Officer of KUB, or her designee, shall make such completions, omissions, insertions and changes in the Preliminary Official Statement not inconsistent with this resolution as are necessary or desirable to complete it as a final Official Statement for purposes of Rule 15c2-12(e)(3) of the Securities and Exchange Commission. The President and Chief Executive Officer of KUB, or her designee, shall arrange for the delivery to the purchaser of the Series V-2016 Bonds of a reasonable number of copies of the Official Statement within seven business days after the Series V-2016 Bonds have been awarded for subsequent delivery by the purchaser, to each potential investor requesting a copy of the Official Statement and to each person to whom such purchaser and members of his group initially sell the Series V-2016 Bonds.

The President and Chief Executive Officer of KUB, or her designee is authorized, on behalf of the Board, to deem the Preliminary Official Statement and the Official Statement in final form, each to be final as of its date within the meaning of Rule 15c2-12(b)(1), except for the omission in the Preliminary Official Statement of certain pricing and other information allowed to be omitted pursuant to such Rule 15c2-12(b)(1). The distribution of the Preliminary Official Statement and the Official Statement in final form shall be conclusive evidence that each has been deemed in final form as of its date by the Board except for the omission in the Preliminary Official Statement of such pricing and other information.

Section 14. Continuing Disclosure. The City hereby covenants and agrees that KUB will provide annual financial information and material event notices for the Series V-2016 Bonds as required by Rule 15c2-12 of the Securities and Exchange Commission. The Chief Financial Officer of KUB is authorized to execute at the closing of the sale of the Series V-2016 Bonds, an agreement for the benefit of and enforceable by the owners of the Series V-2016 Bonds specifying the details of the financial information and material event notices to be provided and its obligations relating thereto. Failure of KUB to comply with the undertaking herein described and to be detailed in said closing agreement, shall not be a default hereunder, but any such failure shall entitle the owner or owners of any of the Bonds to take such actions and to initiate such proceedings as shall be necessary and appropriate to cause KUB to comply with its

undertaking as set forth herein and in said agreement, including the remedies of mandamus and specific performance.

Section 15. Separability. If any section, paragraph or provision of this resolution shall be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph or provision shall not affect any of the remaining provisions of this resolution.

Section 16. Repeal of Conflicting Resolutions and Effective Date. All other resolutions and orders, or parts thereof, in conflict with the provisions of this resolution, are, to the extent of such conflict, hereby repealed and this resolution shall be in immediate effect from and after its adoption.

Adopted and approved this ____ day of _____, 2016.

Mayor

ATTEST:

City Recorder

STATE OF TENNESSEE)
)
COUNTY OF KNOX)

I, Will Johnson, hereby certify that I am the duly qualified and acting City Recorder of the City of Knoxville, Tennessee, and as such official I further certify that attached hereto is a copy of excerpts from the minutes of a regular meeting of the governing body of the City Council held on Tuesday, _____, 2016; that these minutes were promptly and fully recorded and are open to public inspection; that I have compared said copy with the original minute record of said meeting in my official custody; and that said copy is a true, correct and complete transcript from said original minute record insofar as said original records relate to an amount not to exceed \$12,000,000 Gas System Revenue Bonds, Series V-2016.

WITNESS my official signature and seal of the City of Knoxville, Tennessee, this ____ day of _____, 2016.

(seal)

City Recorder

EXHIBIT A

**\$12,000,000
CITY OF KNOXVILLE, TENNESSEE
ACTING ON BEHALF OF KNOXVILLE UTILITIES BOARD
GAS SYSTEM REVENUE BONDS, SERIES V-2016**

BOND PURCHASE AGREEMENT

_____, 2016

Knoxville Utilities Board
445 South Gay Street
Knoxville, Tennessee 37902

Ladies and Gentlemen:

The undersigned (the "Underwriter") offers to enter into this agreement with Knoxville Utilities Board ("KUB") which, upon your acceptance of this offer, will be binding upon you and upon us.

This offer is made subject to your acceptance of this agreement on or before 5:00 p.m., Eastern Standard Time, on _____, 2016.

1. Purchase Price.

Upon the terms and conditions and upon the basis of the respective representations, warranties and covenants set forth herein, the Underwriter hereby agrees to purchase from KUB, and KUB hereby agrees to sell to the Underwriter, all (but not less than all) of \$12,000,000 aggregate principal amount of KUB's Gas System Revenue Bonds, Series V-2016 (the "Bonds"). The purchase price is \$_____ plus accrued interest and shall be paid in accordance with paragraph 6 hereof. The purchase price is equal to the par amount of the Bonds less \$_____ original issue discount, less \$_____ underwriter's discount and plus accrued interest. The Bonds are to be issued under and pursuant to, and are to be secured by the Resolution (the "Bond Resolution") adopted on _____, 2016, by the City Council of the City of Knoxville (the "City") at the request of KUB. The Bonds shall mature on the dates and shall bear interest at the rates all as described in the Official Statement referred to in Section 3 hereof. The maturities, rates and discount at which the Bonds are being sold are more fully described on **Schedule I** attached hereto.

The Bonds are being issued to provide funds to finance the cost of extensions and improvements to the gas distribution system operated by KUB on behalf of the City (the "System"), including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the Bonds.

2. Public Offering.

The Underwriter intends to make an initial bona fide public offering of all of the Bonds at not in excess of the public offering prices set forth on the cover of the Official Statement and may subsequently change such offering price without any requirement of prior notice. The Underwriter may

offer and sell Bonds to certain dealers (including dealers depositing bonds into investment trusts) and others at prices lower than the public offering prices stated on the cover of the Official Statement. The Underwriter reserves the right (i) to over-allot or effect transactions that stabilize or maintain the market prices of the Bonds at levels above those which might otherwise prevail in the open market; and (ii) to discontinue such stabilizing, if commenced at any time without prior notice.

3. Official Statement.

(a) KUB has provided the Underwriter with information that constitutes a "deemed final" official statement for purposes of Rule 15c2-12 under the Securities Exchange Act of 1934 ("Rule 15c2-12"). Concurrently with KUB's acceptance of this Bond Purchase Agreement, KUB shall deliver or cause to be delivered to the Underwriter two copies of the Official Statement (as hereinafter defined) relating to the Bonds dated the date hereof substantially in the same form as the Preliminary Official Statement with only such changes as shall have been accepted by the Underwriter.

(b) Within seven (7) business days from the date hereof and within sufficient time to accompany any confirmation requesting payment from any customers of the Underwriter, KUB shall deliver to the Underwriter copies of the Official Statement of KUB, dated the date hereof, relating to the Bonds, in sufficient quantity as may reasonably be requested by the Underwriter in order to comply with Rule 15c2-12 and any applicable rules of the Municipal Securities Rulemaking Board, in substantially the form approved by KUB (which, together with the cover page, and all exhibits, appendices, and statements included therein or attached thereto and any amendments and supplements that may be authorized for use with respect to the Bonds is herein called the "Official Statement"), executed on behalf of KUB by a duly authorized officer of KUB. You hereby authorize and approve the Official Statement and other pertinent documents referred to in Section 6 hereof to be lawfully used in connection with the offering and sale of the Bonds. You also acknowledge and ratify the use by the Underwriter, prior to the date hereof, of the Preliminary Official Statement in connection with a public offering of the Bonds.

(c) If, prior to the Closing (as defined in Section 5 below) or within twenty-five (25) days subsequent to the end of the underwriting period as such term is used for purposes of Rule 15c2-12, any event shall occur with respect to KUB or KUB shall receive notice of the occurrence of any other event that might or would cause the information contained in the Official Statement to contain any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading, KUB shall so notify the Underwriter. KUB agrees to amend or supplement the Official Statement whenever requested by the Underwriter when in the reasonable judgment of the Underwriter such amendment or supplementation is required and to furnish the Underwriter with sufficient quantities of such amendment or supplement in order to permit the Underwriter to comply with Rule 15c2-12.

4. Representations and Warranties.

KUB hereby represents and warrants to the Underwriter that:

(a) KUB is duly existing pursuant to the Charter of the City and is authorized by such Charter to operate and manage the System. KUB has duly authorized all necessary action to be taken by it for: (i) the issuance and sale of the Bonds upon the terms set forth herein and in the Official Statement; (ii) the approval of the Official Statement and the signing of the Official Statement by a duly authorized officer; (iii) the execution, delivery and receipt of this Bond Purchase Agreement, the Bonds and any and all such other agreements and documents as may be required to be executed, delivered and received by KUB in order to carry out, give effect to, and consummate the transactions contemplated hereby, by the Bonds, the Official Statement and the Bond Resolution;

(b) When executed by the respective parties thereto, this Bond Purchase Agreement will constitute legal, valid and binding obligation of KUB enforceable in accordance with its terms;

(c) The information and statements contained in the Preliminary Official Statement, as of its date and as of the date hereof, did not and do not contain any untrue statement of a material fact or omit to state any material fact which was necessary in order to make such information and statements, in the light of the circumstances under which they were made, not misleading;

(d) The information and statements contained in the Official Statement, as of its date and as of the Closing, are and will be correct and complete in all material respects and do not and will not contain any untrue statement of a material fact or omit to state any material fact which is necessary in order to make such information and statements, in the light of the circumstances under which they were made, not misleading;

(e) KUB has complied, and will at the Closing be in compliance, in all respects with the obligations on its part contained in the Bond Resolution and the laws of the State of Tennessee (the "State"), including the Act;

(f) The City has duly adopted the Bond Resolution, and the City and KUB have (a) duly authorized and approved the distribution of the Preliminary Official Statement, (b) duly authorized and approved the execution and delivery of the Official Statement, (c) duly authorized and approved the execution and delivery of, and the performance by KUB of the obligations on its part contained in, the Bonds, the Bond Resolution and this Bond Purchase Agreement, and (d) duly authorized and approved the consummation by it of all other transactions contemplated by this Bond Purchase Agreement and the Official Statement;

(g) KUB is not in breach of or default under any applicable law or administrative regulation of the State or the United States in any manner related to or affecting the transactions contemplated hereby or in breach of or default under any applicable judgment or decree or any loan agreement, note, resolution, ordinance, agreement or other instrument to which KUB is a party or to which it or any of its property is otherwise subject; and the execution and delivery of this Bond Purchase Agreement, the Bonds and the adoption of the Bond Resolution, and compliance with the provisions of each thereof, will not conflict with or constitute a breach of or default under any law, administrative regulation, judgment, decree, loan agreement, note, resolution, ordinance, agreement or other instrument to which KUB is a party or to which it or any of its property is otherwise subject;

(h) Except as may be required under the securities or "blue sky" laws of any state, all approvals, consents, authorizations and orders of, filings with or certifications by any governmental authority, board, agency or commission having jurisdiction, which would constitute a condition precedent to the performance by KUB of its obligations hereunder and under the Bond Resolution and the Bonds, have been obtained;

(i) There is no action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, public board or body, pending or, to the knowledge of KUB, threatened against KUB or others (a) affecting KUB or the corporate existence of KUB or the titles of its officers to their respective offices, (b) seeking to prohibit, restrain or enjoin the sale, issuance or delivery of the Bonds or the collection of Net Revenues pledged to pay the principal of and interest on the Bonds, or the pledge thereof, (c) in any way contesting or affecting the transactions contemplated hereby or by the Official Statement or by the validity or enforceability of the Bonds, the Bond Resolution or this Bond Purchase Agreement, (d) contesting in any way the completeness or accuracy of the Preliminary Official Statement or the Official Statement, or (e) contesting the powers or authority of KUB for the issuance of the Bonds, the adoption of the Bond Resolution or the execution and delivery of this Bond Purchase Agreement;

(j) KUB will not take or omit to take any action that will in any way cause the proceeds from the sale of the Bonds and other moneys of KUB to be transferred on the date of issuance of the Bonds to be applied or result in such proceeds and other moneys being applied in a manner other than as provided in or permitted by the Bond Resolution and consistent with the utilization described in the Official Statement;

(k) KUB agrees reasonably to cooperate with the Underwriter and its counsel in any endeavor to qualify the Bonds for offering and sale under the securities or "blue sky" laws of such jurisdictions of the United States as the Underwriter may request. KUB hereby consents to the use of the Official Statement and the Bond Resolution by the Underwriter in obtaining any qualification required;

(l) If at any time from the date of this Bond Purchase Agreement through 25 days following the "end of the underwriting period" (as defined in Rule 15c2-12 described below) any event shall occur that might or would cause the Official Statement to contain any untrue statement of a material fact or to omit to state any material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, KUB shall notify the Underwriter and if, in the opinion of the Underwriter, such event requires the preparation and publication of a supplement or amendment to the Official Statement, KUB will supplement or amend the Official Statement in a form and in a manner approved by the Underwriter. If the Official Statement is so supplemented or amended prior to the Closing, such approval by the Underwriter of a supplement or amendment to the Official Statement shall not preclude the Underwriter from thereafter terminating this Bond Purchase Agreement, and if the Official Statement is so amended or supplemented subsequent to the date hereof and prior to the Closing, the Underwriter may terminate this Bond Purchase Agreement by notification to KUB at any time prior to the Closing if, in the judgment of the Underwriter, such amendment or supplement has or will have a material adverse effect on the marketability of the Bonds;

(m) KUB has duly authorized and approved the execution and delivery of this Bond Purchase Agreement and the performance by KUB of the obligations on its part contained herein;

(n) KUB is not, nor has it at any time, been in default in the payment of principal of or interest on any obligation issued or guaranteed by KUB;

(o) Any certificate signed by an authorized officer of KUB and delivered to the Underwriter at or prior to the Closing shall be deemed a representation and warranty by KUB in connection with this Bond Purchase Agreement to the Underwriter as to the statements made therein upon which the Underwriter shall be entitled to rely. KUB covenants that between the date hereof and the Closing, it will not take any action that will cause the representations and warranties made herein to be untrue as of the Closing;

(p) The Bonds, when issued, authenticated and delivered in accordance with the Bond Resolution and sold to the Underwriter as provided herein, will be validly issued and outstanding special obligations of KUB entitled to the benefits of the Bond Resolution;

(q) KUB has lawful authority to operate the System, to consummate the transactions contemplated by the Official Statement and collect revenues, fees and other charges in connection with the System and through its Board of Commissioners, to fix the rates, fees and other charges with respect to the System; and

(r) KUB hereby covenants and agrees to enter into a written agreement or contract, constituting an undertaking (the "Undertaking") to provide ongoing disclosure about KUB, for the benefit of the beneficial owners of the Bonds on or before the date of delivery of the Bonds as required under paragraph (b)(5) of Rule 15c2-12. The Undertaking shall be as described in the Preliminary Official Statement, with such changes as may be agreed in writing by the Underwriter. KUB represents that it has

complied in all respects with its obligations to provide continuing disclosure of certain information as described in that certain Continuing Disclosure Certificate entered into in connection with the issuance of the Bonds.

5. Delivery of, and Payment for, the Bonds.

At 10:00 a.m. on or about _____, 2016, or at such other time or date as shall have been mutually agreed upon by KUB and the Underwriter, KUB will deliver, or cause to be delivered, to the Underwriter the other documents hereinafter mentioned and, subject to the conditions contained herein, the Underwriter will accept such delivery and pay the purchase price of the Bonds plus accrued interest payable to the order of KUB, in federal funds or other immediately available funds by delivering to KUB such funds by wire transfer to KUB or its designated agent except that physical delivery of the Bonds shall be made through the facilities of the Depository Trust Company.

Payment for the Bonds shall be confirmed and delivery of the documents as aforesaid shall be made at the offices of KUB, or such other place as may be agreed upon by the Underwriter and KUB. Such payment and delivery is herein called the "Closing." The Bonds will be delivered as fully registered bonds in such names and in such denominations as shall be designated in writing by the Underwriter to KUB at Closing.

6. Certain Conditions to Underwriter's Obligations.

The obligations of the Underwriter hereunder shall be subject to (i) the performance by KUB of its obligations to be performed hereunder, (ii) the accuracy in all material respects of the representations and warranties of KUB herein as of the date hereof and as of the date of the Closing, and (iii) to the following conditions:

(a) At the time of Closing, (i) the Bond Resolution shall be in full force and effect and shall not have been amended, modified or supplemented except as may have been agreed to in writing by the Underwriter, (ii) the proceeds of the sale of the Bonds shall be applied as described in the Official Statement, and (iii) KUB shall have duly adopted and there shall be in full force and effect such other resolutions as, in the opinion of Bass, Berry & Sims PLC, Knoxville, Tennessee ("Bond Counsel"), shall be necessary in connection with the transactions contemplated hereby;

(b) At or prior to the Closing, the Underwriter shall have received an executed copy of each of the following documents:

(1) the approving opinion dated the date of the Closing, of Bond Counsel addressed to KUB and the Underwriter, relating to, among other things, the validity of the Bonds [and the exclusion from gross income of the interest on the Bonds for federal and State of Tennessee income tax purposes,] in substantially the form set forth as Appendix _ to the Official Statement;

(2) a supplemental opinion, dated the date of the Closing, of Bond Counsel addressed to the Underwriter in substantially the form of Exhibit A hereto;

(3) an opinion, dated the date of the Closing, of Hodges, Doughty & Carson, Knoxville, Tennessee, counsel to KUB, addressed to KUB, Bond Counsel and the Underwriter in substantially the form of Exhibit B hereto;

(4) a certificate of KUB, dated the date of the Closing and signed by a duly authorized officer of KUB and in form and substance reasonably satisfactory to the Underwriter, to the effect that (i) since the execution of the Bond Purchase Agreement no material and adverse change has occurred in the financial position of the System or results of operations of the System;

(ii) KUB has not incurred any material liabilities secured by the Net Revenues of the System other than in the ordinary course of business or as set forth in or contemplated by the Official Statement; and (iii) no event affecting KUB has occurred since the date of the Official Statement which should be disclosed in the Official Statement for the purpose for which it is to be used or which is necessary to be disclosed therein in order to make the statements and information therein not misleading as of the date of Closing;

(5) the Official Statement executed on behalf of KUB by a duly authorized officer thereof;

(6) the Bond Resolution and the Bonds;

(7) a certificate of a duly authorized officer of KUB, satisfactory to the Underwriter, dated the date of Closing, stating that such officer is charged, either alone or with others, with the responsibility for issuing the Bonds; setting forth, in the manner permitted by Section 148 of the Internal Revenue Code of 1986, as amended (the "Code"), the reasonable expectations of KUB as of such date as to the use of proceeds of the Bonds and of any other funds of KUB expected to be used to pay principal or interest on the Bonds and the facts and estimates on which such expectations are based; and stating that, to the best of the knowledge and belief of the certifying officer, KUB's expectations are reasonable;

(8) evidence indicating a rating on the Bonds of "___" by [rating agency];

(9) other certificates of KUB listed on a Closing Memorandum to be approved by counsel to KUB, Bond Counsel and counsel to the Underwriter, including any certificates or representations required in order for Bond Counsel to deliver the opinion referred to in Paragraph 7(b) (1) of this Bond Purchase Agreement; and such additional legal opinions, certificates, proceedings, instruments and other documents as the counsel to the Underwriter or Bond Counsel may reasonably request to evidence compliance by KUB with legal requirements, the truth and accuracy, as of the time of Closing, of the representations of KUB contained herein and the due performance or satisfaction by KUB at or prior to such time of all agreements then to be performed and all conditions then to be satisfied by KUB.

All such opinions, certificates, letters, agreements and documents will be in compliance with the provisions hereof only if they are satisfactory in form and substance to the Underwriter and counsel to the Underwriter. KUB will furnish the Underwriter with such conformed copies or photocopies of such opinions, certificates, letters, agreements and documents as the Underwriter may reasonably request.

(c) The Underwriter shall have received within seven (7) business days from the date hereof and within sufficient time to accompany any confirmation requesting payment from any customers of the Underwriter, the Official Statement in sufficient quantity as may be reasonably requested by the Underwriter in order to comply with Rule 15(c) 2-12.

7. Termination.

The Underwriter shall have the right to cancel its obligation to purchase the Bonds if (i) between the date hereof and the Closing, legislation shall be enacted or recommended to the Congress or otherwise endorsed for passage (by press release, other form of notice or otherwise) by the President of the United States, the Treasury Department of the United States, the Internal Revenue Service or the Chairman or ranking minority member of the Committee on Finance of the United States Senate or the Committee on Ways and Means of the United States House of Representatives or favorably reported for passage to either House of the Congress by any committee of such House to which such legislation has

been referred for consideration, or a bill to amend the Internal Revenue Code (which, if enacted, would take effect in whole or in part prior to the Closing) shall be filed in either house, or recommended for passage by the Congress by any joint or conference committee thereof, or a decision by a court of the United States or the United States Tax Court shall be rendered, or a ruling, regulation or statement by or on behalf of the Treasury Department of the United States, the Internal Revenue Service or other governmental agency shall be made or proposed to be made, with respect to the federal taxation upon interest on obligations of the general character of the Bonds, or other action or events shall have transpired which may have the purpose or effect, directly or indirectly of changing the federal income tax consequences of any of the transactions contemplated in connection herewith, including the tax-exempt status of KUB and, in the opinion of the Underwriter, materially adversely affects the market price of the Bonds, or the market price generally of obligations of the general character of the Bonds, or (ii) there shall exist any event which in the Underwriter's judgment either (a) makes untrue or incorrect in any material respect any statement or information contained in the Official Statement or (b) is not reflected in the Official Statement but should be reflected therein in order to make the statements and information contained therein not misleading in any material respect, or (iii) there shall have occurred any outbreak of hostilities or any national or international calamity or crisis including financial crisis, or a financial crisis or a default with respect to the debt obligations of, or the institution of proceedings under the federal or the state bankruptcy laws by or against the State of Tennessee or any subdivision, agency or instrumentality of such State, the effect of which on the financial markets of the United States being such as, in the reasonable judgment of the Underwriter, would make it impracticable for the Underwriter to market the Bonds or to enforce contracts for the sale of the Bonds, or (iv) there shall be in force a general suspension of trading on the New York Stock Exchange, or (v) a general banking moratorium shall have been declared by either federal, Tennessee or New York authorities, or (vi) there shall have occurred since the date of this Bond Purchase Agreement any material adverse change in the financial position of the System, except for changes which the Official Statement discloses have occurred or may occur, or (vii) legislation shall be enacted or any action shall be taken by the Securities and Exchange Commission which, in the opinion of counsel for the Underwriter, has the effect of requiring the contemplated distribution of the Bonds to be registered under the Securities Act of 1933, as amended, or the Bond Resolution or any other document executed in connection with the transactions contemplated hereof to be qualified under the Trust Indenture Act of 1939, as amended, or (viii) a stop order, ruling, regulation or official statement by or on behalf of the Securities and Exchange Commission shall be issued or made to the effect that the issuance, offering or sale of the Bonds, or of obligations of the general character of the Bonds as contemplated hereby, or the offering of any other obligation which may be represented by the Bonds is in violation of any provision of the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, or the Trust Indenture Act of 1939, as amended, or (ix) any state blue sky or securities commission shall have withheld registration, exemption or clearance of the offering, and in the reasonable judgment of the Underwriter the market for the Bonds is materially affected thereby.

If KUB shall be unable to satisfy any of the conditions to the obligations of the Underwriter contained in this Bond Purchase Agreement and such condition is not waived by the Underwriter, or if the obligations of the Underwriter to purchase and accept delivery of the Bonds shall be terminated or canceled for any reason permitted by this Bond Purchase Agreement, this Bond Purchase Agreement shall terminate and neither the Underwriter nor KUB shall be under further obligation hereunder; except that the respective obligations to pay expenses, as provided in Section 10 hereof, shall continue in full force and effect.

8. Particular Covenants.

KUB covenants and agrees with the Underwriter as follows:

(a) KUB shall use its best efforts to furnish or cause to be furnished to the Underwriter, without charge, as many copies of the Official Statement as the Underwriter may reasonably request;

(b) Before revising, amending or supplementing the Official Statement, KUB shall furnish a copy of the revised Official Statement or such amendment or supplement to the Underwriter. If in the opinion of KUB and the Underwriter a supplement or amendment to the Official Statement is required, KUB will supplement or amend the Official Statement in a form and in a manner approved by the Underwriter and its counsel.

9. Survival of Representations.

All representations, warranties and agreements of KUB hereunder shall remain operative and in full force and effect, regardless of any investigation made by or on behalf of the Underwriter and shall survive the delivery of the Bonds.

10. Payment of Expenses.

Whether or not the Bonds are sold to the Underwriter by KUB, KUB shall pay, but only out of the proceeds of the sale of the Bonds or other funds made available by KUB, any expenses incident to the performance of its obligations hereunder, including but not limited to: (i) the cost of the preparation and printing of the Official Statement and any supplements thereto, together with a number of copies which the Underwriter deems reasonable; (ii) the cost of the preparation and printing of the definitive Bonds; (iii) the rating agency fees; and (iv) the fees and disbursements of Counsel to KUB and Bond Counsel and any other experts or consultants retained by KUB.

Whether or not the Bonds are sold to the Underwriter, the Underwriter shall pay (i) all advertising expenses in connection with the public offering of the Bonds; (ii) the cost of preparing and printing the blue sky memorandum, if any, and filing fees in connection with the aforesaid blue sky memorandum other than the costs of preparation of the Preliminary Official Statement and the Official Statement; and (iii) all other expenses incurred by the Underwriter in connection with its public offering and distribution of the Bonds, including the fees and expenses of the Underwriter's counsel.

11. No Advisory or Fiduciary Role.

KUB acknowledges and agrees that (i) the purchase and sale of the Bonds pursuant to this Bond Purchase Agreement is an arm's-length commercial transaction between KUB and the Underwriter, (ii) in connection therewith and with the discussions, undertakings and procedures leading up to the consummation of such transaction, the Underwriter is and has been acting solely as principal and are not acting as the agent, advisor or fiduciary of KUB, (iii) the Underwriter has not assumed an advisory or fiduciary responsibility in favor of KUB with respect to the offering contemplated hereby or the discussions, undertakings and procedures leading thereto (irrespective of whether the Underwriter, or any affiliates of the Underwriter, has provided other services or are currently providing other services to KUB on other matters) and the Underwriter has no obligation to KUB with respect to the offering contemplated hereby except the obligations expressly set forth in this Bond Purchase Agreement, (iv) the Underwriter has financial and other interests that differ from those of KUB and (v) KUB has consulted its own legal, financial and other advisors to the extent it has deemed appropriate.

KUB and the Underwriter represent and warrant that no finder or other agent has been employed by either KUB or the Underwriter in connection with this transaction.

12. Notices.

Any notice or other communication to be given to KUB under this Bond Purchase Agreement may be given by delivering the same in writing at its address set forth above, and any notice or other communication to be given to the Underwriter under this Bond Purchase Agreement may be

given by delivering the same in writing to _____, _____,
_____, _____.

13. Parties.

This Bond Purchase Agreement is made solely for the benefit of KUB and the Underwriter (including the successors or assigns of the Underwriter) and no other person shall acquire or have any right hereunder or by virtue hereof.

14. Governing Law.

This Bond Purchase Agreement shall be governed by and construed in accordance with the laws of the State of Tennessee.

15. General.

This Bond Purchase Agreement may be executed in several counterparts, each of which shall be regarded as an original and all of which will constitute one and the same instrument. The section headings of this Bond Purchase Agreement are for convenience of reference only and shall not affect its interpretation. This Bond Purchase Agreement shall become effective upon your acceptance hereof.

Very truly yours,

By: _____
Its: _____

Accepted and agreed to as of
the date first above written:

KNOXVILLE UTILITIES BOARD

By: _____
Chief Executive Officer

EXHIBIT A

[LETTERHEAD OF BASS BERRY & SIMS PLC]

[Closing Date]

Ladies and Gentlemen:

This opinion is being rendered to you pursuant to Paragraph 7(b)(2) of the Bond Purchase Agreement, dated _____, 2016 (the "Bond Purchase Agreement"), between _____ (the "Underwriter"), and Knoxville Utilities Board ("KUB"), relating to the sale by KUB of its Gas System Revenue Bonds, Series V-2016, in the aggregate principal amount of \$12,000,000 (the "Bonds"). Terms which are used herein and not otherwise defined shall have the meanings assigned to them in the Bond Purchase Agreement.

Of even date herewith, we have delivered our approving opinion in connection with the issuance of the Bonds. In our capacity as Bond Counsel, we have reviewed a record of proceedings in connection with the issuance of the Bonds and we have participated in conferences from time to time with counsel to KUB, representatives of the Underwriter and counsel to the Underwriter, relative to the Official Statement, dated _____, 2016, relating to the Bonds, and the related documents described below. We have also examined such other agreements, documents and certificates, and have made such investigations of law, as we have deemed necessary or appropriate in rendering the opinions set forth below.

Based on the foregoing, we are of the opinion that, as of the date hereof:

1. The offer and sale of the Bonds to the public do not require any registration under the Securities Act of 1933, as amended, and, in connection therewith, the Bond Resolution does not need to be qualified under the Trust Indenture Act of 1939, as amended.

2. The statements contained in the Official Statement under the captions "Introduction" to the extent the narrative thereunder purports to describe the terms of the Bonds and the legal authority by which they are issued, "The Bonds," and in Appendix A to the Official Statement, insofar as such statements purport to summarize certain provisions of the Bonds and the Bond Resolution, fairly summarize such provisions. The statements contained in the Official Statement under the caption "Opinion of Bond Counsel" are correct as to matters of law.

This opinion may be relied upon only by the Underwriter and by other persons to whom written permission to rely hereon is granted by us.

Very truly yours,

EXHIBIT B

_____, 2016

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

Re: City of Knoxville, Tennessee acting on behalf of the Knoxville Utilities Board \$12,000,000 Gas System Revenue Bonds, Series V-2016

Ladies and Gentlemen:

You have requested that the undersigned, General Counsel to the Knoxville Utilities Board of the City of Knoxville, Tennessee ("KUB"), render this opinion in connection with the execution, delivery and sale of the captioned bonds (the "Bonds"), the proceeds of which will be used to finance extensions and improvements to the gas distribution system described herein.

It is our opinion that KUB is duly established and validly existing pursuant to the Charter of the City of Knoxville, Tennessee (the "Municipality"), and, pursuant to said Charter and the natural gas distribution system of the Municipality (the "System") is under the jurisdiction, control and management of KUB.

The undersigned does hereby certify that no litigation of any nature is now pending or, to our knowledge, threatened

- (1) seeking to restrain or enjoin the issuance, sale, execution or delivery of the Bonds;
- (2) seeking to restrain or enjoin the charging of sufficient rates to pay the cost of operating, maintaining, repairing and insuring the System and to pay principal of and interest on the Bonds and all outstanding obligations payable from the revenues of the System;
- (3) in any manner questioning the proceedings or authority pursuant to which the Bonds are authorized or issued or such rates are charged;
- (4) in any manner questioning or relating to the validity of the Bonds;
- (5) contesting in any way the completeness or accuracy of the Official Statement prepared and distributed in connection with the sale of the Bonds;
- (6) in any way contesting the corporate existence or boundaries of the Municipality, except for various pending actions challenging past or present annexation efforts of the Municipality, which will have no material adverse effect on the revenues of the System;
- (7) contesting the title of the present officers of KUB to their respective offices; or

(8) contesting the powers of KUB or the authority of KUB with respect to the Bonds, or proceedings authorizing the Bonds, or any act to be done or document or certificate to be executed or delivered in connection with the issuance and delivery of the Bonds.

Neither the voters of the Municipality nor its governing body nor the Board of Commissioners of KUB have approved any special, local or private act or legislation passed by the General Assembly of the State of Tennessee at its most recent session or any amendments to the Charter of the Municipality affecting the power of the Municipality to issue the Bonds or pay the principal of, premium, if any, and interest on the Bonds when due or affecting the power of Board of Commissioners of KUB to manage and control the System.

I hereby certify that _____ and _____ are the duly qualified, appointed and acting Chair and Secretary, respectively, of the Board of Commissioners of KUB with full power to act as such officers on behalf of KUB in connection with the execution and delivery of the Bonds.

Yours truly,

RESOLUTION SUPPLEMENTING RESOLUTION NO. R-129-90
ADOPTED BY THE CITY COUNCIL OF THE CITY OF
KNOXVILLE, TENNESSEE ON MAY 15, 1990 PROVIDING FOR
THE ISSUANCE OF NOT TO EXCEED TWENTY MILLION AND
NO/100 DOLLARS (\$20,000,000) OF WASTEWATER SYSTEM
REVENUE BONDS, SERIES 2016A.

RESOLUTION NO: _____

REQUESTED BY: _____

PREPARED BY: _____

APPROVED AS TO FORM

CORRECTNESS: _____

Law Director

FINANCIAL IMPACT STATEMENT:

Director of Finance

APPROVED: _____

APPROVED AS AN

EMERGENCY MEASURE: _____

MINUTE BOOK ____ PAGE ____

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

WHEREAS, pursuant to the 1990 Resolution, and for the purpose of financing the cost of the extensions and improvements to the City's wastewater system (the "System") and the refinancing of indebtedness issued for that purpose, the City issued Wastewater System Revenue Bonds, the series of which, the amount issued and the amount outstanding as of June 1, 2016, are as follows:

Series	Amount <u>Issued</u>	Amount <u>Outstanding</u>
2005B	\$ 21,850,000	\$ 14,635,000
2008	\$ 45,000,000	\$ 6,550,000
2010 (BABS)	\$ 30,000,000	\$ 30,000,000
2010C(BABS)	\$ 70,000,000	\$ 64,500,000
2012A	\$ 17,070,000	\$ 14,595,000
2012B	\$ 65,000,000	\$ 62,350,000
2013A	\$113,340,000	\$111,715,000
2014A	\$ 30,000,000	\$ 29,200,000
2015A	\$129,825,000	\$129,360,000
2015B	\$ 30,000,000	\$ 29,425,000

WHEREAS, it is desirable that an additional series of bonds be issued to finance the costs of the extensions and improvements to the System, including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the bonds, pursuant to the authorization contained in the 1990 Resolution and this resolution; and

WHEREAS, the Board of Commissioners (the "Board") of the Knoxville Utilities Board ("KUB") has duly adopted a resolution requesting the City Council of the City to adopt this resolution authorizing the issuance of bonds for the purposes and in the manner hereinafter more fully stated; and

WHEREAS, it is the intention of the City Council of the City to adopt this resolution for the purpose of authorizing not to exceed \$20,000,000 in aggregate principal amount of wastewater system revenue bonds for the purposes described above, establishing the terms of such bonds, providing for the issuance, sale and payment of the bonds and disposition of proceeds therefrom, and collection of revenues from the wastewater system of the City and the application thereof to the payment of principal of, premium, if any, and interest on said bonds.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Knoxville, Tennessee, as follows:

Section 1. Authority. The bonds authorized by this resolution are issued pursuant to Sections 7-34-101 et seq. and 9-21-101, et seq., Tennessee Code Annotated, and other applicable provisions of law.

Section 2. Definitions. Capitalized terms used herein and not defined in this Section 2 shall have the meanings ascribed to them in the 1990 Resolution (as hereinbelow defined). The following terms shall have the following meanings in this resolution unless the text expressly or by necessary implication requires otherwise.

- (a) "Board" shall mean the Board of Commissioners of the Knoxville Utilities Board;

(b) "Bond Purchase Agreement" means a Bond Purchase Agreement, dated as of the sale of the Series 2016A Bonds, entered into by and between KUB and the Underwriter, in substantially the form of the document attached hereto as Exhibit A, subject to such changes as permitted by Section 9 hereof, as approved by the President and Chief Executive Officer of KUB, consistent with the terms of this resolution;

(c) "Book-Entry Form" or "Book-Entry System" means a form or system, as applicable, under which physical Bond certificates in fully registered form are issued to a Depository, or to its nominee as Registered Owner, with the certificated Bonds being held by and "immobilized" in the custody of such Depository, and under which records maintained by persons, other than the City, KUB or the Registration Agent, constitute the written record that identifies, and records the transfer of, the beneficial "book-entry" interests in those Bonds;

(d) "City" shall mean the City of Knoxville, Tennessee;

(e) "Code" shall mean the Internal Revenue Code of 1986, as amended, and any lawful regulations promulgated or proposed thereunder;

(f) "Depository" means any securities depository that is a clearing agency under federal laws operating and maintaining, with its participants or otherwise, a Book-Entry System, including, but not limited to, DTC;

(g) "DTC" means the Depository Trust Company, a limited purpose company organized under the laws of the State of New York, and its successors and assigns;

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

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

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

(k) "1990 Resolution" shall mean Resolution No. R-129-90 of the Governing Body, adopted May 15, 1990, as supplemented and amended by Resolution No. R-130-90 adopted May 15, 1990, Resolution No. R-473-93 of the Governing Body, adopted October 26, 1993, Resolution No. R-5-98 of the Governing Body, adopted January 27, 1998, Resolution No. R-67-01 of the Governing Body, adopted February 20, 2001, Resolution No. R-148-01 of the Governing Body, adopted March 20, 2001, Resolution No. R-481-01 of the Governing Body, adopted October 30, 2001, Resolution No. R-56-04 of the City Council of the City, adopted March 2, 2004, Resolution No. R-264-05 of the City Council of the City, adopted July 5, 2005, Resolution No. R-347-07 of the City Council of the City, adopted August 28, 2007, Resolution No. R-252-08 of the City Council of the City, adopted July 29, 2008, Resolution No. 11-S of the City Council of the City, adopted December 15, 2009, Resolution No. R-134-10 of the City Council of the City, adopted May 4, 2010, Resolution No. R-334-2010 of the City Council of the City, adopted November 2, 2010, Resolution No. R-338-2011 of the City Council of the City, adopted December 13, 2011, Resolution No. R-291-2012 of the City Council of the City, adopted October 16, 2012, Resolution No. R-324-2012 of the City Council of the City, adopted November 13, 2012, Resolution No. R-212-2014 of the City Council of the City, adopted June 24, 2014, Resolution No. R-84-2015 of the City Council of the City, adopted March 3, 2015 and Resolution No. R-128-2015 of the City Council of the City, adopted March 31, 2015;

(l) "Outstanding Bonds" shall mean the City's outstanding its outstanding Wastewater System Revenue Refunding Bonds, Series 2005B, dated August 10, 2005, maturing April 1, 2017 and thereafter, its outstanding Wastewater System Revenue Bonds, Series 2008, dated December 23, 2008, maturing April 1, 2017 and April 1, 2018, its outstanding Wastewater System Revenue Bonds, Series 2010 (Federally Taxable Build America Bonds), dated February 20, 2010, maturing April 1, 2043 and thereafter, its outstanding Wastewater System Revenue Bonds, Series 2010C (Federally Taxable Build America Bonds), dated December 8, 2010, maturing April 1, 2017 and thereafter, its outstanding Wastewater System Revenue Refunding Bonds, Series 2012A, dated April 20, 2012, maturing April 1, 2017 and thereafter, its outstanding Wastewater System Revenue Bonds, Series 2012B, dated December 18, 2012, maturing April 1, 2017 and thereafter, its outstanding Wastewater System Revenue Refunding Bonds, Series 2013A, dated March 15, 2013, maturing April 1, 2017 and thereafter, its outstanding Wastewater System Revenue Bonds, Series 2014A, dated September 18, 2014, maturing April 1, 2017 and thereafter, its outstanding Wastewater System Revenue Refunding Bonds, Series 2015A, dated May 1, 2015, maturing April 1, 2017 and thereafter, and its outstanding Wastewater System Revenue Bonds, Series 2015B, dated May 20, 2015, maturing April 1, 2017 and thereafter;

(m) "Parity Bonds" shall mean any bonds issued pursuant to the 1990 Resolution on a parity with the Series 2016A Bonds and the Outstanding Bonds;

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

(o) "Registration Agent" shall mean the registration and paying agent for the Series 2016A Bonds designated by the President and Chief Executive Officer of KUB, or any successor as designated by the Board;

(p) "Series 2016A Bonds" shall mean the City's Wastewater System Revenue Bonds, Series 2016A, issued pursuant to this resolution, to be dated the date of their issuance, or such other date as shall be determined by the Board pursuant to Section 9 hereof, authorized to be issued by the 1990 Resolution and this resolution in an aggregate principal amount not to exceed \$20,000,000;

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

(r) "Underwriter" shall mean an investment banking firm qualified to underwrite bonds such as the Series 2016A Bonds in the State of Tennessee selected by the President and Chief Executive Officer of KUB.

Section 3. Declarations. It is hereby determined that all requirements of the 1990 Resolution have been or will have been met upon the issuance of the Series 2016A Bonds so that the Series 2016A Bonds will be issued as Parity Bonds.

Section 4. Authorization and Terms of the Series 2016A Bonds. (a) For the purpose of providing funds to finance the costs of construction of the Project including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the Series 2016A Bonds as more fully set out in Section 9 hereof, there are hereby authorized to be issued revenue bonds of the City in the aggregate principal amount of not to exceed \$20,000,000. The Series 2016A Bonds shall be issued in fully registered form, without coupons, shall be known as "Wastewater System Revenue Bonds, Series 2016A" and shall be dated the date of their issuance or such other date as shall be determined by the Board or the President and Chief Executive Officer of KUB as its designee pursuant to Section 9 hereof. The Series 2016A Bonds shall bear interest at a rate or rates not to exceed five percent (5.00%) per annum, payable semi-annually on April 1 and October 1 in each year, commencing October 1, 2016 or such later date as is permitted pursuant to Section 9 hereof. The Series 2016A Bonds shall be initially

issued in \$5,000 denominations or integral multiples thereof as shall be requested by the purchaser thereof. The Series 2016A Bonds shall mature and be payable either serially or through mandatory redemption on each April 1 in such years as is established by the Board or the President and Chief Executive Officer of KUB as its designee pursuant to Section 9, provided that the final maturity date shall not be later than April 1, 2046. The final maturity schedule shall be established by the award resolution or certificate awarding the Series 2016A Bonds to the successful purchaser thereof or in the Bond Purchase Agreement provided for in Section 9 if the Series 2016A Bonds are sold by negotiated sale.

(b) Subject to adjustment pursuant to Section 9 hereof, the Series 2016A Bonds maturing on or before April 1, 2025 shall mature without option of prior redemption, and Series 2016A Bonds maturing on April 1, 2026 and thereafter shall be subject to redemption prior to maturity at the option of the City, acting through the Board, on or after April 1, 2025, as a whole or in part at any time at a redemption price equal to the principal amount plus interest accrued to the redemption date.

If less than all of the Series 2016A Bonds shall be called for redemption, the maturities to be redeemed shall be selected by the Board in its discretion. If less than all of the Series 2016A Bonds within a single maturity shall be called for redemption, the interests within the maturity to be redeemed shall be selected as follows:

(i) if the Series 2016A Bonds are being held under a Book-Entry System by DTC, or a successor Depository, the amount of the interest of each DTC Participant in the Series 2016A Bonds to be redeemed shall be determined by DTC, or such successor Depository, by lot or such other manner as DTC, or such successor Depository, shall determine; or

(ii) if the Series 2016A Bonds are not being held under a Book-Entry System by DTC, or a successor Depository, the Series 2016A Bonds within the maturity to be redeemed shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall determine.

(c) Pursuant to Section 9 hereof, KUB is authorized to sell each of the Series 2016A Bonds, or any maturities thereof, as term bonds with mandatory redemption requirements corresponding to the maturities set forth herein or as determined by KUB. In the event any or all of the Series 2016A Bonds are sold as term bonds, KUB shall redeem such term bonds on redemption dates corresponding to the maturity dates set forth in the award resolution or certificate awarding the Series 2016A Bonds, in amounts so as to achieve an amortization of the indebtedness approved by the Board or the President and Chief Executive Officer of KUB as its designee. DTC, as Depository for the Series 2016A Bonds, or any successor Depository for the Series 2016A Bonds, shall determine the interest of each Participant in the Series 2016A Bonds to be redeemed using its procedures generally in use at that time. If DTC, or another securities depository is no longer serving as Depository for the Series 2016A Bonds, the Series 2016A Bonds to be redeemed within a maturity shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall select.

At its option, to be exercised on or before the forty-fifth (45th) day next preceding any such redemption date, KUB may (i) deliver to the Registration Agent for cancellation Series 2016A Bonds to be redeemed, in any aggregate principal amount desired, and/or (ii) receive a credit in respect of its redemption obligation under this mandatory redemption provision for any Series 2016A Bonds of the maturity to be redeemed which prior to said date have been purchased or redeemed (otherwise than through the operation of this mandatory sinking fund redemption provision) and canceled by the Registration Agent and not theretofore applied as a credit against any redemption obligation under this mandatory sinking fund provision. Each Series 2016A Bond so delivered or previously purchased or redeemed shall be credited by the Registration Agent at 100% of the principal amount thereof on the

obligation of KUB on such payment date and any excess shall be credited on future redemption obligations in chronological order, and the principal amount of Series 2016A Bonds to be redeemed by operation of this mandatory sinking fund provision shall be accordingly reduced. KUB shall on or before the forty-fifth (45th) day next preceding each payment date furnish the Registration Agent with its certificate indicating whether or not and to what extent the provisions of clauses (i) and (ii) of this subsection are to be availed of with respect to such payment and confirm that funds for the balance of the next succeeding prescribed payment will be paid on or before the next succeeding payment date.

(d) Notice of call for redemption, whether optional or mandatory, shall be given by the Registration Agent not less than twenty (20) nor more than sixty (60) days prior to the date fixed for redemption by sending an appropriate notice to the registered owners of the Series 2016A Bonds to be redeemed by first-class mail, postage prepaid, at the addresses shown on the bond registration records of the Registration Agent as of the date of the notice; but neither failure to mail such notice nor any defect in any such notice so mailed shall affect the sufficiency of the proceedings for redemption of any of the Series 2016A Bonds for which proper notice was given. The notice may state that it is conditioned upon the deposit of moneys in an amount equal to the amount necessary to affect the redemption with the Registration Agent no later than the redemption date ("Conditional Redemption"). As long as DTC, or a successor Depository, is the registered owner of the Series 2016A Bonds, all redemption notices shall be mailed by the Registration Agent to DTC, or such successor Depository, as the registered owner of the Series 2016A Bonds, as and when above provided, and neither KUB, the City, nor the Registration Agent shall be responsible for mailing notices of redemption to DTC Participants or Beneficial Owners. Failure of DTC, or any successor Depository, to provide notice to any DTC Participant or Beneficial Owner will not affect the validity of such redemption. The Registration Agent shall mail said notices, in the case of term bonds with mandatory redemption requirements as and when provided herein and in the Series 2016A Bonds and, in the case of optional redemption, as and when directed by the Board pursuant to written instructions from an authorized representative of the Board given at least forty-five (45) days prior to the redemption date (unless a shorter notice period shall be satisfactory to the Registration Agent). From and after the redemption date, all Series 2016A Bonds called for redemption shall cease to bear interest if funds are available at the office of the Registration Agent for the payment thereof and if notice has been duly provided as set forth herein. In the case of a Conditional Redemption, the failure of the City or KUB to make funds available in part or in whole on or before the redemption date shall not constitute an event of default, and the Registration Agent shall give immediate notice to the Depository or the affected Bondholders that the redemption did not occur and that the Bonds called for redemption and not so paid remain outstanding.

(e) The Series 2016A Bonds shall be executed in such manner as may be prescribed by applicable law, in the name, and on behalf, of the City with the manual or facsimile signature of the Chair of the Board and attested by the manual or facsimile signature of the Secretary of the Board.

(f) The City hereby authorizes and directs the Board to appoint a Registration Agent and paying agent for the Series 2016A Bonds, and the Registration Agent so appointed is authorized and directed to maintain Bond registration records with respect to the Series 2016A Bonds, to authenticate and deliver the Series 2016A Bonds as provided herein, either at original issuance, upon transfer, or as otherwise directed by the Board, to effect transfers of the Series 2016A Bonds, to give all notices of redemption as required herein, to make all payments of principal and interest with respect to the Series 2016A Bonds as provided herein, to cancel and destroy Series 2016A Bonds which have been paid at maturity or upon earlier redemption or submitted for exchange or transfer, to furnish KUB at least annually a certificate of destruction with respect to Series 2016A Bonds canceled and destroyed, and to furnish KUB at least annually an audit confirmation of Bonds paid, Bonds outstanding and payments made with respect to interest on the Series 2016A Bonds. The Chair of the Board is hereby authorized to execute and the Secretary of the Board is hereby authorized to attest such written agreement between

KUB and the Registration Agent as they shall deem necessary or proper with respect to the obligations, duties and rights of the Registration Agent. The payment of all reasonable fees and expenses of the Registration Agent for the discharge of its duties and obligations hereunder or under any such agreement is hereby authorized and directed.

(g) The Series 2016A Bonds shall be payable, principal and interest, in lawful money of the United States of America at the principal corporate trust office of the Registration Agent. The Registration Agent shall make all interest payments with respect to the Series 2016A Bonds on each interest payment date directly to the registered owners as shown on the Bond registration records maintained by the Registration Agent as of the close of business on the fifteenth day of the month next preceding the interest payment date (the "Regular Record Date") by check or draft mailed to such owners at their addresses shown on said Bond registration records, without, except for final payment, the presentation or surrender of such Series 2016A Bonds, and all such payments shall discharge the obligations of KUB in respect of such Series 2016A Bonds to the extent of the payments so made. Payment of principal of the Series 2016A Bonds shall be made upon presentation and surrender of such registered Series 2016A Bonds to the Registration Agent as the same shall become due and payable. All rates of interest specified herein shall be computed on the basis of a three hundred sixty (360) day year composed of twelve (12) months of thirty (30) days each. In the event the Series 2016A Bonds are no longer registered in the name of DTC, or a successor Depository, if requested by the Owner of at least \$1,000,000 in aggregate principal amount of the Series 2016A Bonds, payment of interest on such Series 2016A Bonds shall be paid by wire transfer to a bank within the continental United States or deposited to a designated account if such account is maintained with the Registration Agent and written notice of any such election and designated account is given to the Registration Agent prior to the record date.

(h) Any interest on any Series 2016A Bond which is payable but is not punctually paid or duly provided for on any interest payment date (hereinafter "Defaulted Interest") shall forthwith cease to be payable to the registered owner on the relevant Regular Record Date; and, in lieu thereof, such Defaulted Interest shall be paid to the persons in whose names the Series 2016A Bonds are registered at the close of business on a date (the "Special Record Date") for the payment of such Defaulted Interest, which shall be fixed in the following manner: KUB shall notify the Registration Agent in writing of the amount of Defaulted Interest proposed to be paid on each Series 2016A Bond and the date of the proposed payment, and at the same time KUB shall deposit with the Registration Agent an amount of money equal to the aggregate amount proposed to be paid in respect of such Defaulted Interest or shall make arrangements satisfactory to the Registration Agent for such deposit prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the persons entitled to such Defaulted Interest as in this Section 4 provided. Thereupon, not less than ten (10) days after the receipt by the Registration Agent of the notice of the proposed payment, the Registration Agent shall fix a Special Record Date for the payment of such Defaulted Interest which Date shall be not more than fifteen (15) nor less than ten (10) days prior to the date of the proposed payment to the registered owners. The Registration Agent shall promptly notify KUB of such Special Record Date and, in the name and at the expense of KUB, not less than ten (10) days prior to such Special Record Date, shall cause notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor to be mailed, first class postage prepaid, to each registered owner at the address thereof as it appears in the Bond registration records maintained by the Registration Agent as of the date of such notice. Nothing contained in this Section 4 or in any of the Series 2016A Bonds shall impair any statutory or other rights in law or in equity of any registered owner arising as a result of the failure of KUB to punctually pay or duly provide for the payment of principal of, premium, if any, and interest on any of the Series 2016A Bonds when due.

(i) The Series 2016A Bonds are transferable only by presentation to the Registration Agent by the registered owner, or his legal representative duly authorized in writing, of the registered Series 2016A Bond(s) to be transferred with the form of assignment on the reverse side thereof completed in full

and signed with the name of the registered owner as it appears upon the face of the Series 2016A Bond(s) accompanied by appropriate documentation necessary to prove the legal capacity of any legal representative of the registered owner. Upon receipt of the Series 2016A Bond(s) in such form and with such documentation, if any, the Registration Agent shall issue a new Series 2016A Bond or Series 2016A Bonds to the assignee(s) in \$5,000 denominations, or integral multiples thereof, as requested by the registered owner requesting transfer. The Registration Agent shall not be required to transfer or exchange any Series 2016A Bond during the period commencing on a Regular or Special Record Date and ending on the corresponding interest payment date of such Series 2016A Bond, nor to transfer or exchange any Series 2016A Bond after notice calling such Series 2016A Bond for redemption has been made, nor to transfer or exchange any Series 2016A Bond during the period following the receipt of instructions from KUB to call such Series 2016A Bond for redemption; provided, the Registration Agent, at its option, may make transfers after any of said dates. No charge shall be made to any registered owner for the privilege of transferring any Series 2016A Bond, provided that any transfer tax relating to such transaction shall be paid by the registered owner requesting transfer. The person in whose name any Series 2016A Bond shall be registered shall be deemed and regarded as the absolute owner thereof for all purposes and neither KUB nor the Registration Agent shall be affected by any notice to the contrary whether or not any payments due on the Series 2016A Bonds shall be overdue. Series 2016A Bonds, upon surrender to the Registration Agent, may, at the option of the registered owner, be exchanged for an equal aggregate principal amount of Series 2016A Bonds of the same maturity in any authorized denomination or denominations. This subsection shall be applicable only if the Series 2016A Bonds are no longer held by a Depository, and as long as the Series 2016A Bonds are held by a Depository, transfers of ownership interests in the Series 2016A Bonds shall be governed by the rules of the Depository.

(j) Except as otherwise authorized herein, the Series 2016A Bonds shall be registered in the name of Cede & Co., as nominee of DTC, which will act as the Depository for the Series 2016A Bonds except as otherwise provided herein. References in this Section 4 to a Series 2016A Bond or the Series 2016A Bonds shall be construed to mean the Series 2016A Bond or the Series 2016A Bonds that are held under the Book-Entry System. One Series 2016A Bond for each maturity of the Series 2016A Bonds shall be issued to DTC and immobilized in its custody or a custodian of DTC. The Bond Registrar is a custodian and agent for DTC, and the Series 2016A Bond will be immobilized in its custody. A Book-Entry System shall be employed, evidencing ownership of the Series 2016A Bonds in authorized denominations, with transfers of beneficial ownership effected on the records of DTC and the DTC Participants pursuant to rules and procedures established by DTC.

Each DTC Participant shall be credited in the records of DTC with the amount of such DTC Participant's interest in the Series 2016A Bonds. Beneficial ownership interests in the Series 2016A Bonds may be purchased by or through DTC Participants. The holders of these beneficial ownership interests are hereinafter referred to as the "Beneficial Owners." The Beneficial Owners shall not receive the Series 2016A Bonds representing their beneficial ownership interests. The ownership interests of each Beneficial Owner shall be recorded through the records of the DTC Participant from which such Beneficial Owner purchased its Series 2016A Bonds. Transfers of ownership interests in the Series 2016A Bonds shall be accomplished by book entries made by DTC and, in turn, by DTC Participants acting on behalf of Beneficial Owners. SO LONG AS CEDE & CO., AS NOMINEE FOR DTC, IS THE REGISTERED OWNER OF THE SERIES 2016A BONDS, THE REGISTRATION AGENT SHALL TREAT CEDE & CO., AS THE ONLY HOLDER OF THE SERIES 2016A BONDS FOR ALL PURPOSES UNDER THIS RESOLUTION, INCLUDING RECEIPT OF ALL PRINCIPAL OF, PREMIUM, IF ANY, AND INTEREST ON THE SERIES 2016A BONDS, RECEIPT OF NOTICES, VOTING AND TAKING OR NOT TAKING, OR CONSENTING TO, CERTAIN ACTIONS UNDER THIS RESOLUTION.

Payments of principal, interest, and redemption premium, if any, with respect to the Series 2016A Bonds, so long as DTC is the only owner of the Series 2016A Bonds, shall be paid by the Registration Agent directly to DTC or its nominee, Cede & Co. as provided in the Letter of Representation relating to the Series 2016A Bonds from the City, acting by and through KUB, and the Registration Agent to DTC (the "Letter of Representation"). DTC shall remit such payments to DTC Participants, and such payments thereafter shall be paid by DTC Participants to the Beneficial Owners. Neither the City, KUB nor the Registration Agent shall be responsible or liable for payment by DTC or DTC Participants, for sending transaction statements or for maintaining, supervising or reviewing records maintained by DTC or DTC Participants.

In the event that (1) DTC determines not to continue to act as Depository for the Series 2016A Bonds or (2) to the extent permitted by the rules of DTC, the Board determines to discontinue the Book-Entry System, the Book-Entry System with DTC shall be discontinued. If the Board fails to identify another qualified securities depository to replace DTC, the Board shall cause the Registration Agent to authenticate and deliver replacement Series 2016A Bonds in the form of fully registered Series 2016A Bonds to each Beneficial Owner.

NEITHER THE CITY, KUB NOR THE REGISTRATION AGENT SHALL HAVE ANY RESPONSIBILITY OR OBLIGATIONS TO ANY DTC PARTICIPANT OR ANY BENEFICIAL OWNER WITH RESPECT TO (i) THE SERIES 2016A BONDS; (ii) THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC OR ANY DTC PARTICIPANT; (iii) THE PAYMENT BY DTC OR ANY DTC PARTICIPANT OF ANY AMOUNT DUE TO ANY BENEFICIAL OWNER IN RESPECT OF THE PRINCIPAL OF AND INTEREST ON THE SERIES 2016A BONDS; (iv) THE DELIVERY OR TIMELINESS OF DELIVERY BY DTC OR ANY DTC PARTICIPANT OF ANY NOTICE DUE TO ANY BENEFICIAL OWNER THAT IS REQUIRED OR PERMITTED UNDER THE TERMS OF THIS RESOLUTION TO BE GIVEN TO BENEFICIAL OWNERS, (v) THE SELECTION OF BENEFICIAL OWNERS TO RECEIVE PAYMENTS IN THE EVENT OF ANY PARTIAL REDEMPTION OF THE SERIES 2016A BONDS; OR (vi) ANY CONSENT GIVEN OR OTHER ACTION TAKEN BY DTC, OR ITS NOMINEE, CEDE & CO., AS OWNER.

If the purchaser or Underwriter certifies that it intends to hold the Series 2016A Bonds for its own account, then the City may issue, acting by and through KUB, certificated Bonds without the utilization of DTC and the Book-Entry System.

(k) In case any Series 2016A Bond shall become mutilated, or be lost, stolen, or destroyed, the City, acting by and through KUB, in its discretion, shall issue, and the Registration Agent, upon written direction from KUB, shall authenticate and deliver, a new Series 2016A Bond of like tenor, amount, maturity and date, in exchange and substitution for, and upon the cancellation of, the mutilated Series 2016A Bond, or in lieu of and in substitution for such lost, stolen or destroyed Series 2016A Bond, or if any such Series 2016A Bond shall have matured or shall be about to mature, instead of issuing a substituted Series 2016A Bond KUB may pay or authorize payment of such Series 2016A Bond without surrender thereof. In every case the applicant shall furnish evidence satisfactory to KUB and the Registration Agent of the destruction, theft or loss of such Series 2016A Bond, and indemnity satisfactory to KUB and the Registration Agent; and KUB may charge the applicant for the issue of such new Series 2016A Bond an amount sufficient to reimburse KUB for the expense incurred by it in the issue thereof.

(l) The Registration Agent is hereby authorized to authenticate and deliver the Series 2016A Bonds to DTC, on behalf of the initial purchaser thereof, or an agent of DTC, upon receipt by KUB of the proceeds of the sale thereof and, subject to the rules of the Depository, to authenticate and deliver Series 2016A Bonds in exchange for Series 2016A Bonds of the same principal amount delivered for transfer upon receipt of the Series 2016A Bond(s) to be transferred in proper form with proper documentation as

hereinabove described. The Series 2016A Bonds shall not be valid for any purpose unless authenticated by the Registration Agent by the manual signature of an authorized representative thereof on the certificate set forth herein on the Series 2016A Bond form.

(m) The Registration Agent is hereby authorized to take such action as may be necessary from time to time to qualify and maintain the Series 2016A Bonds for deposit with DTC, including but not limited to, wire transfers of interest and principal payments with respect to the Series 2016A Bonds, utilization of electronic book entry data received from DTC in place of actual delivery of Series 2016A Bonds and provision of notices with respect to Series 2016A Bonds registered by DTC (or any of its designees identified to the Registration Agent) by overnight delivery, courier service, telegram, telecopy or other similar means of communication. No such arrangements with DTC may adversely affect the interest of any of the Beneficial Owners of the Series 2016A Bonds, provided, however, that the Registration Agent shall not be liable with respect to any such arrangements it may make pursuant to this Section 4.

Section 5. Source of Payment. The Series 2016A Bonds shall be payable solely from and be secured by a pledge of the Net Revenues of the System as hereinafter provided and as provided in the 1990 Resolution on a parity and equality of lien with the Outstanding Bonds. The punctual payment of principal of and interest on the Series 2016A Bonds, the Outstanding Bonds, and any Parity Bonds shall be secured equally and ratably by the Net Revenues of the System without priority by reason of series, number or time of sale and delivery. The owners of the Series 2016A Bonds shall have no recourse to the power of taxation of the City.

Section 6. Form of Series 2016A Bonds. The Series 2016A Bonds shall be in substantially the following form, the omissions to be appropriately completed when the Series 2016A Bonds are prepared and delivered:

REGISTERED Number _____	(Form of Series 2016A Bond)	REGISTERED \$ _____
UNITED STATES OF AMERICA STATE OF TENNESSEE COUNTY OF KNOX CITY OF KNOXVILLE WASTEWATER SYSTEM REVENUE BOND, SERIES 2016A		

Interest Rate: Maturity Date: Date of Bond: CUSIP No.

Registered Owner:
Principal Amount:

KNOW ALL PERSONS BY THESE PRESENTS: That the City of Knoxville, a municipal corporation lawfully organized and existing in Knox County, Tennessee (the "City"), acting by and through the Knoxville Utilities Board ("KUB"), for value received hereby promises to pay to the registered owner hereof, hereinabove named, or registered assigns, in the manner hereinafter provided, the principal amount hereinabove set forth on the maturity date hereinabove set forth, or upon earlier redemption, as set forth herein, and to pay interest (computed on the basis of a 360-day year of twelve 30-day months) on said principal amount at the annual rate of interest hereinabove set forth from the date hereof until said maturity date or redemption date, said interest being payable on October 1, 2016, and

semi-annually thereafter on the first day of April and October in each year until this Bond matures or is redeemed. Both principal hereof and interest hereon are payable in lawful money of the United States of America by check or draft at the designated corporate trust office of _____, _____, Tennessee, as registration agent and paying agent (the "Registration Agent"). The Registration Agent shall make all interest payments with respect to this Bond by check or draft on each interest payment date directly to the registered owner hereof shown on the bond registration records maintained by the Registration Agent as of the close of business on the day which is the fifteenth (15th) day of the month next preceding the interest payment date (the "Regular Record Date") by depositing said payment in the United States mail, postage prepaid, addressed to such owner at such owner's address shown on said bond registration records, without, except for final payment, the presentation or surrender of this Bond, and all such payments shall discharge the obligations of the City and KUB to the extent of the payments so made. Any such interest not so punctually paid or duly provided for on any interest payment date shall forthwith cease to be payable to the registered owner on the relevant Regular Record Date; and, in lieu thereof, such defaulted interest shall be payable to the person in whose name this Bond is registered at the close of business on the date (the "Special Record Date") for payment of such defaulted interest to be fixed by the Registration Agent, notice of which shall be given to the owners of the Bonds of the issue of which this Bond is one not less than ten (10) days prior to such Special Record Date. Payment of principal of and premium, if any, on the Bonds shall be made when due upon presentation and surrender of this Bond to the Registration Agent.

Except as otherwise provided herein or in the Resolution, as hereinafter defined, this Bond shall be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"), which will act as securities depository for the Bonds of the series of which this Bond is one. One Bond for each maturity of the Bonds shall be issued to DTC and immobilized in its custody or a custodian of DTC. The Bond Registrar is a custodian and agent for DTC, and the Bond will be immobilized in its custody. A book-entry system (the "Book-Entry System") shall be employed, evidencing ownership of the Bonds in \$5,000 denominations, or multiples thereof, with transfers of beneficial ownership effected on the records of DTC and the DTC Participants, as defined in the Resolution, pursuant to rules and procedures established by DTC. So long as Cede & Co., as nominee for DTC, is the registered owner of the Bonds, the City, KUB and the Registration Agent shall treat Cede & Co., as the only owner of the Bonds for all purposes under the Resolution, including receipt of all principal of, premium, if any, and interest on the Bonds, receipt of notices, voting and requesting or taking or not taking, or consenting to, certain actions hereunder. Payments of principal, maturity amounts, interest, and redemption premium, if any, with respect to the Bonds, so long as DTC is the only owner of the Bonds, shall be paid directly to DTC or its nominee, Cede & Co. DTC shall remit such payments to DTC Participants, and such payments thereafter shall be paid by DTC Participants to the Beneficial Owners, as defined in the Resolution. Neither the City, KUB, nor the Registration Agent shall be responsible or liable for payment by DTC or DTC Participants, for sending transaction statements or for maintaining, supervising or reviewing records maintained by DTC or DTC Participants. In the event that (1) DTC determines not to continue to act as securities depository for the Bonds or (2) to the extent permitted by the rules of DTC, the Board determines to discontinue the Book-Entry System, the Book-Entry System with DTC shall be discontinued. If the Board of Commissioners of KUB (the "Board") fails to identify another qualified securities depository to replace DTC, the Board shall cause the Registration Agent to authenticate and deliver replacement Bonds in the form of fully registered Bonds to each Beneficial Owner. Neither the City, KUB nor the Registration Agent shall have any responsibility or obligations to any DTC Participant or any Beneficial Owner with respect to (i) the Bonds; (ii) the accuracy of any records maintained by DTC or any DTC Participant; (iii) the payment by DTC or any DTC Participant of any amount due to any Beneficial Owner in respect of the principal or maturity amounts of and interest on the Bonds; (iv) the delivery or timeliness of delivery by DTC or any DTC Participant of any notice due to any Beneficial Owner that is required or permitted under the terms of the Resolution to be given to Beneficial Owners, (v) the selection of Beneficial Owners to receive payments

in the event of any partial redemption of the Bonds; or (vi) any consent given or other action taken by DTC, or its nominee, Cede & Co., as owner.

The Bonds of the issue of which this Bond is one maturing on or before April 1, 2025 shall mature without option of prior redemption. The Bonds maturing on April 1, 2026 and thereafter shall be subject to redemption prior to maturity at the option of the City, acting through the Board, on or after April 1, 2025, as a whole or in part at any time at a redemption price equal to the principal amount plus interest accrued to the redemption date.

[If less than all the Bonds shall be called for redemption, the maturities to be redeemed shall be selected by the Board in its discretion. If less than all of the Bonds within a single maturity shall be called for redemption, the interests within the maturity to be redeemed shall be selected as follows:

(i) if the Bonds are being held under a Book-Entry System by DTC, or a successor Depository, the amount of the interest of each DTC Participant in the Bonds to be redeemed shall be determined by DTC, or such successor Depository, by lot or such other manner as DTC, or such successor Depository, shall determine; or

(ii) if the Series Bonds are not being held under a Book-Entry System by DTC, or a successor Depository, the Bonds within the maturity to be redeemed shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall determine.]

[Subject to the credit hereinafter provided, the City acting by and through KUB, shall redeem Bonds maturing on the redemption dates set forth below opposite such maturity date, in aggregate principal amounts equal to the respective dollar amounts set forth below opposite the redemption dates at a price of par plus accrued interest thereon to the date of redemption. DTC, as securities depository for the series of Bonds of which this Bond is one, or any successor Depository for the Bonds, shall determine the interest of each Participant in the Bonds to be redeemed using its procedures generally in use at that time. If DTC, or another securities depository is no longer serving as securities depository for the Bonds, the Bonds to be redeemed within a maturity shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall select. The dates of redemption and amount of Bonds to be redeemed on said dates are as follows:

<u>Maturity</u>	<u>Redemption Date</u>	<u>Principal Amount of Bonds to be Redeemed</u>
-----------------	------------------------	---

*final maturity

At its option, to be exercised on or before the forty-fifth (45th) day next preceding any such redemption date, the City, acting through KUB, may (i) deliver to the Registration Agent for cancellation Bonds to be redeemed, in any aggregate principal amount desired, and/or (ii) receive credit in respect of its redemption obligation under the mandatory redemption provision for any Bonds to be redeemed which prior to said date have been purchased or redeemed (otherwise than by mandatory redemption) and canceled by the Registration Agent and not theretofore applied as a credit against any redemption obligation under the mandatory redemption provision. Each Bond so delivered or previously purchased

or redeemed shall be credited by the Registration Agent at 100% of the principal amount thereof on the obligation of KUB on such payment date and any excess shall be credited on future redemption obligations in chronological order, and the principal amount of the Bonds to be redeemed by operation of the mandatory redemption provision shall be accordingly reduced. KUB shall on or before the forty-fifth (45th) day next preceding each payment date furnish the Registration Agent with its certificate indicating whether or not and to what extent the provisions of clauses (i) and (ii) of this paragraph are to be availed of with respect to such payment and confirm that funds for the balance of the next succeeding prescribed payment will be paid on or before the next succeeding payment date.

Notice of call for redemption, whether optional or mandatory shall be given by the Registration Agent on behalf of the City, but only upon direction of the Board, not fewer than twenty (20) nor more than sixty (60) days prior to the date fixed for redemption by sending an appropriate notice to the registered owners of the Bonds to be redeemed by first-class mail, postage prepaid, at the addresses shown on the Bond registration records of the Registration Agent as of the date of the notice; but neither failure to mail such notice nor any defect in any such notice so mailed shall affect the sufficiency of the proceedings for the redemption of any of the Bonds for which proper notice was given. The notice may state that it is conditioned upon the deposit of moneys in an amount equal to the amount necessary to affect the redemption with the Registration Agent no later than the redemption date ("Conditional Redemption"). From and after any redemption date, all Bonds called for redemption shall cease to bear interest if funds are available at the office of the Registration Agent for the payment thereof and if notice has been duly given as set forth in the Resolution, as hereafter defined. In the case of a Conditional Redemption, the failure of the City or KUB to make funds available in part or in whole on or before the redemption date shall not constitute an event of default, and the Registration Agent shall give immediate notice to the Depository or the affected Bondholders that the redemption did not occur and that the Bonds called for redemption and not so paid remain outstanding.]

The Bonds of the issue of which this Bond is one are issuable only as fully registered Bonds, without coupons, in the denomination of Five Thousand Dollars (\$5,000) or any authorized integral multiple thereof. At the designated corporate trust office of the Registration Agent, in the manner and subject to the limitations, conditions and charges provided in the Resolution, fully registered Bonds may be exchanged for an equal aggregate principal amount of fully registered Bonds of the same maturity, of authorized denominations, and bearing interest at the same rate. The Bonds shall be numbered consecutively from one upwards and will be made eligible for the Book-Entry System of DTC. Except as otherwise provided in this paragraph and the Resolution, as hereinafter defined, the Bonds shall be registered in the name of Cede & Co. as nominee of DTC. The Board may discontinue use of DTC for Bonds at any time upon determination by the Board that the use of DTC is no longer in the best interest of the beneficial owners of the Bonds. Upon such determination, registered ownership of the Bonds may be transferred on the registration books maintained by the Registration Agent, and the Bonds may be delivered in physical form to the following:

- i. any successor of DTC or its nominee;
- ii. any substitute depository to which the Registration Agent does not unreasonably object, upon (a) the resignation of DTC or its successor (or any substitute depository or its successor) from its functions as depository, or (b) a determination by the Board that DTC or its successor (or any substitute depository or its successor) is no longer able to carry out its functions as depository; or
- iii. any person, upon (a) the resignation of DTC or its successor (or substitute depository or its successor) from its functions as depository, or (b) termination by the Board of the use of DTC (or substitute depository or its successor).

In the event that this Bond is no longer held in a Book-Entry System by DTC, this Bond shall be transferable by the registered owner hereof in person or by such owner's attorney duly authorized in writing at the principal corporate trust office of the Registration Agent set forth on the front side hereof, but only in the manner, subject to limitations and upon payment of the charges provided in the Resolution, and upon surrender and cancellation of this Bond. Upon such transfer a new Bond or Bonds of authorized denomination or denominations of the same maturity and interest rate for the same aggregate principal amount will be issued to the transferee in exchange therefor. The person in whose name this Bond is registered shall be deemed and regarded as the absolute owner thereof for all purposes and neither the City, KUB nor the Registration Agent shall be affected by any notice to the contrary whether or not any payments due on the Bond shall be overdue. Bonds, upon surrender to the Registration Agent, may, at the option of the registered owner thereof, be exchanged for an equal aggregate principal amount of the Bonds of the same maturity in authorized denomination or denominations, upon the terms set forth in the Resolution. The Registration Agent shall not be required to transfer or exchange any Bond during the period commencing on a Regular Record Date or Special Record Date and ending on the corresponding interest payment date of such Bond, nor to transfer or exchange any Bond after the notice calling such Bond for redemption has been made, nor during a period following the receipt of instructions from the Board to call such Bond for redemption.

This Bond is one of a total authorized issue aggregating \$20,000,000 and issued by the City for the purpose of providing funds to finance the construction of extensions and improvements to the City's wastewater system (the "System"), including the payment of legal, fiscal and administrative costs incident thereto and costs incident to the issuance of the Bonds, under and in full compliance with the constitution and statutes of the State of Tennessee, including Sections 7-34-101 et seq. and Section 9-21-101 et seq., Tennessee Code Annotated, and pursuant to Resolution No. R-129-90 duly adopted by the City Council of the City on May 15, 1990, as supplemented and amended by Resolution No. R-130-90 duly adopted by the City Council of the City on May 15, 1990, Resolution No. R-473-93 duly adopted by the City Council on October 26, 1993, Resolution No. R-5-98 duly adopted by the City Council on January 27, 1998, Resolution No. R-67-01 duly adopted by the City Council on February 20, 2001, Resolution No. R-148-01 duly adopted by the City Council on March 20, 2001, Resolution No. R-481-01 duly adopted by the City Council on October 30, 2001, Resolution No. R-56-04 duly adopted by the City Council on March 2, 2004, Resolution R-264-05 duly adopted by the City Council on July 5, 2005, Resolution No. R-347-07 duly adopted by the City on August 28, 2007, Resolution No. R-252-08 duly adopted by the City Council on July 29, 2008, Resolution No. 11-S duly adopted by the City Council on December 15, 2009, Resolution No. R-134-10 duly adopted by the City Council on May 4, 2010, Resolution No. R-334-2010 duly adopted by the City Council on November 2, 2010, Resolution No. R-338-2011 duly adopted by the City Council on December 13, 2011, Resolution No. R-324-2012 duly adopted by the City Council on November 13, 2012, Resolution No. R-212-2014, duly adopted by the City Council on June 24, 2012, Resolution No. R-84-2015, duly adopted by the City Council on March 3, 2015, Resolution No. R-128-2015, duly adopted by the City Council on March 31, 2015, and Resolution No. R____-2016, duly adopted by the City Council on _____, 2016 (as supplemented and amended, the "Resolution").

This Bond, and interest hereon, are payable solely from and secured by a pledge of the income and the revenues to be derived from the operation of the System, subject to the payment of the reasonable and necessary costs of operating, maintaining, repairing, and insuring the System. The Bonds of the series of which this Bond is one shall enjoy complete parity and equality of lien with the City's outstanding Wastewater System Revenue Refunding Bonds, Series 2005B, dated August 10, 2005, maturing April 1, 2017 and thereafter, the City's outstanding Wastewater System Revenue Bonds, Series 2008, dated December 23, 2008, maturing April 1, 2017 and April 1, 2018, the City's outstanding Wastewater System Revenue Bonds, Series 2010 (Federally Taxable Build America Bonds), dated

February 10, 2010, maturing April 1, 2043 and thereafter, the City's outstanding Wastewater System Revenue Bonds, Series 2010C (Federally Taxable Build America Bonds), dated December 8, 2010, maturing April 1, 2017 and thereafter, the City's outstanding Wastewater System Revenue Refunding Bonds, Series 2012A, dated April 20, 2012, maturing April 1, 2017 and thereafter, the City's outstanding Wastewater System Revenue Bonds, Series 2012B, dated December 18, 2012, maturing April 1, 2017 and thereafter, the City's outstanding Wastewater System Revenue Refunding Bonds, Series 2013A, dated March 15, 2013, maturing April 1, 2017 and thereafter, the City's outstanding Wastewater System Revenue Bonds, dated September 18, 2014, maturing April 1, 2017 and thereafter, the City's outstanding Wastewater System Revenue Refunding Bonds, Series 2015A, dated May 1, 2015, maturing April 1, 2017 and thereafter, and the City's outstanding Wastewater System Revenue Bonds, Series 2015B, dated May 20, 2015, maturing April 1, 2017 and thereafter (collectively the "Outstanding Bonds") and any bonds or other obligations hereafter issued on a parity therewith. As provided in the Resolution, the punctual payment of principal of, premium, if any, and interest on the series of Bonds of which this Bond is one, the Outstanding Bonds and any other bonds issued on a parity therewith pursuant to the terms of the Resolution shall be secured equally and ratably by said revenues without priority by reason of series, number or time of sale or delivery. The owner of this Bond shall have no recourse to the power of taxation of the City. The Board has covenanted that it will fix and impose such rates and charges for the services rendered by the System and will collect and account for sufficient revenues to pay promptly the principal of and interest on this Bond and the issue of which it is a part, as each payment becomes due. For a more complete statement of the revenues from which and conditions under which this Bond is payable, a statement of the conditions on which obligations may hereafter be issued on a parity with this Bond, the general covenants and provisions pursuant to which this Bond is issued and the terms upon which the Resolution may be modified, reference is hereby made to the Resolution.

Under existing law, this Bond and the income therefrom are exempt from all present state, county and municipal taxation in Tennessee except (a) inheritance, transfer and estate taxes, (b) Tennessee excise taxes on all or a portion of the interest on this Bond during the period such Bond is held or beneficially owned by any organization or entity, other than a sole proprietorship or general partnership, doing business in the State of Tennessee, and (c) Tennessee franchise taxes by reason of the inclusion of the book value of this Bond in the Tennessee franchise tax base or any organization or entity, other than a sole proprietorship or general partnership, doing business in the State of Tennessee.

It is hereby certified, recited, and declared that all acts, conditions and things required to exist, happen and be performed precedent to and in the issuance of this Bond exist, have happened and have been performed in due time, form and manner as required by law, and that the amount of this Bond, together with all other indebtedness of either the City or KUB, does not exceed any limitation prescribed by the constitution and statutes of the State of Tennessee.

IN WITNESS WHEREOF, the City acting by and through the Board has caused this Bond to be signed by the Chair of the Board by her manual or facsimile signature and attested by the Secretary of the Board by his manual or facsimile signature, all as of the date hereinabove set forth.

CITY OF KNOXVILLE
by and through the
KNOXVILLE UTILITIES BOARD

By: _____
Chair

ATTESTED:

Secretary

Transferable and payable at the
designated corporate trust office of: _____
_____, Tennessee

Date of Registration: _____

This Bond is one of the issue of Bonds issued pursuant to the Resolution hereinabove described.

Registration Agent

By: _____
Authorized Representative

FORM OF ASSIGNMENT

FOR VALUE RECEIVED, the undersigned sells, assigns, and transfers unto _____, [Please insert Federal Tax Identification Number or Social Security Number of Assignee _____] whose address is _____, the within bond of the City of Knoxville, Tennessee, and does hereby irrevocably constitute and appoint _____, attorney, to transfer the said bond on the records kept for registration thereof with full power of substitution in the premises.

Dated: _____

NOTICE: The signature to this assignment must correspond with the name of the registered owner as it appears on the face of the within Bond in every particular, without alteration or enlargement or any change whatsoever.

Signature guaranteed:

NOTICE: Signature(s) must be guaranteed by a member firm of a Medallion Program acceptable to the Registration Agent.

Section 7. Equality of Lien; Pledge of Net Revenues. The punctual payment of principal of, premium, if any, and interest on the Outstanding Bonds, the Series 2016A Bonds authorized herein, and

any Parity Bonds shall be secured equally and ratably by the Net Revenues of the System without priority by reason of series, number or time of sale or execution or delivery, and the Net Revenues of the System are hereby irrevocably pledged to the punctual payment of such principal, premium and interest as the same become due.

Section 8. Applicability of the 1990 Resolution. The Series 2016A Bonds are issued in compliance with the 1990 Resolution so as to be on a parity with the Outstanding Bonds, and, when duly delivered, the Series 2016A Bonds shall constitute a series of bonds issued under the authority of the 1990 Resolution. All recitals, provisions, covenants and agreements contained in the 1990 Resolution, as supplemented and amended herein (except insofar as any of said recitals, provisions, covenants and agreements necessarily relate exclusively to any series of the Outstanding Bonds) are hereby ratified and confirmed and incorporated herein by reference and, for so long as any of the Series 2016A Bonds shall be Outstanding and unpaid either as to principal or interest, or until discharge and satisfaction of the Series 2016A Bonds as provided in Section 12 hereof, shall be applicable to the Series 2016A Bonds, shall inure to the benefit of owners of the Series 2016A Bonds as if set out in full herein, and shall be fully enforceable by the owner of any Series 2016A Bond.

All references to "holder" or "holders" in the 1990 Resolution shall be deemed to include owners of the Series 2016A Bonds, and all references to "Bonds" in the 1990 Resolution shall be deemed to include the Series 2016A Bonds.

Section 9. Sale of Series 2016A Bonds.

(a) The Series 2016A Bonds or any emission thereof may be sold at negotiated sale to the Underwriter or at public sale as determined by the President and Chief Executive Officer of KUB at a price of not less than 98.00% of par, exclusive of original issue discount, plus accrued interest, if any, provided, however, that no emission of Series 2016A Bonds may be sold at negotiated sale unless the Audit and Finance Committee of the Board has previously approved the sale of such emission at negotiated sale. The sale of any emission of the Series 2016A Bonds to the Underwriter or by public sale shall be binding on the City and KUB, and no further action of the Board with respect thereto shall be required.

(b) The President and Chief Executive Officer of KUB, as the designee of the Board, is further authorized with respect to each emission of Series 2016A Bonds to:

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

(2) specify or change the series designation, including any change to reflect whether the Series 2016A Bonds have been previously issued, or change the designation of the Series 2016A Bonds to a designation other than "Wastewater System Revenue Bonds, Series 2016A";

(3) change the first interest payment date to a date other than October 1, 2016, provided that such date is not later than twelve months from the dated date of such emission of Series 2016A Bonds;

(4) establish and adjust the principal and interest payment dates and determine maturity or mandatory redemption amounts of the Series 2016A Bonds or any emission thereof, provided that (A) the total principal amount of all emissions of the Series 2016A Bonds does not exceed the total amount of Series 2016A Bonds authorized herein, (B) the final maturity date of each emission shall be not later than April 1, 2046 and (C) the debt service payable in each fiscal year after the completion of the Project shall be approximately level or decreasing;

(5) modify or remove the optional redemption provisions contained herein, provided that the premium amount to be paid in connection with any redemption provision shall not exceed two percent (2%) of the principal amount thereof;

(6) sell the Series 2016A Bonds, or any emission thereof, or any maturities thereof as term bonds with mandatory redemption requirements as determined by the Board, as it shall deem most advantageous to KUB; and

(7) cause all or a portion of the Series 2016A Bonds to be insured by a bond insurance policy issued by a nationally recognized bond insurance company to achieve the purposes set forth herein and to serve the best interests of KUB and to enter into agreements with such insurance company to the extent not inconsistent with this resolution.

(c) If any emission of Series 2016A Bonds is sold at negotiated sale, the President and Chief Executive Officer of KUB is authorized to execute a Bond Purchase Agreement with respect to such emission of Series 2016A Bonds, providing for the purchase and sale of the Series 2016A Bonds, or any emission thereof. Each Bond Purchase Agreement shall be in substantially the form attached hereto as Exhibit A, with such changes as the President and Chief Executive Officer deems necessary or advisable in connection with the sale of such Series 2016A Bonds, provided any such changes are not inconsistent with the terms of this Section 9. If the Underwriter does not intend to reoffer the Series 2016A Bonds to the public, then the Bond Purchase Agreement shall be conformed to reflect such intention. The form of the Series 2016A Bond set forth in Section 7 hereof shall be conformed to reflect any changes made pursuant to this Section 9.

(d) The President and Chief Executive Officer and the Chief Financial Officer of KUB, or either of them, are authorized to cause the Series 2016A Bonds, in book-entry form (except as otherwise authorized herein), to be authenticated and delivered by the Registration Agent to the purchaser(s), and to execute, publish, and deliver all certificates and documents, including an official statement, the Bond Purchase Agreement and closing certificates, as they shall deem necessary in connection with the sale and delivery of each emission of the Bonds.

(e) If the Series 2016A Bonds are sold at public sale, the Series 2016A Bonds shall be awarded by the President and Chief Executive Officer of KUB to the bidder that offers to purchase the Bonds for the lowest true interest cost to KUB.

Section 10. Disposition of Series 2016A Bond Proceeds. The proceeds of the sale of the Series 2016A Bonds shall be paid to KUB and used and applied by KUB as follows:

(a) All accrued interest, if any, shall be deposited to the Debt Service Fund created under the 1990 Resolution and used to pay interest on the Series 2016A Bonds on the first interest payment date following delivery of the Series 2016A Bonds; and

(b) The remainder of the proceeds of the sale of the Series 2016A Bonds shall be deposited with a financial institution regulated by the Federal Deposit Insurance Corporation or similar federal agency in a special fund known as the "Wastewater System Construction Fund" (the "Construction Fund") to be kept separate and apart from all other funds of KUB. The funds in the Construction Fund shall be disbursed solely to pay the costs of the Project and issuance of the Series 2016A Bonds, including necessary legal, accounting, engineering, and fiscal expenses, printing, engraving, advertising and similar expenses, administrative and clerical costs, rating agency fees, Registration Agent fees, and other necessary miscellaneous expenses incurred in connection with the Project and the issuance and sale of the

Series 2016A Bonds. Money in the Construction Fund shall be secured in the manner prescribed by applicable statutes relative to the securing of public or trust funds, if any, or, in the absence of such a statute, by a pledge of readily marketable securities having at all times a market value of not less than the amount in said Construction Fund. Money in the Construction Fund shall be expended only for the purposes authorized by this resolution. Any funds remaining in the Construction Fund after completion of the Project and payment of authorized expenses shall be used to retire Series 2016A Bonds on the earliest possible date. Moneys in the Construction Fund shall be invested as directed by the Chief Financial Officer in such investments as shall be permitted by applicable law. All income derived from such investments shall be deposited to the Construction Fund.

Section 11. Discharge and Satisfaction of Series 2016A Bonds. The Series 2016A Bonds may be defeased, discharged and satisfied at any time as provided in Article XII of the 1990 Resolution.

Section 12. Federal Tax Matters. The City and KUB recognize that the purchasers and owners of the Series 2016A Bonds will have accepted them on, and paid therefor a price that reflects, the understanding that interest thereon will not be included in gross income for purposes of federal income taxation under laws in force on the date of delivery of the Series 2016A Bonds. In this connection, KUB, on behalf of the City, agrees that it shall take no action which may render the interest on any of the Series 2016A Bonds includable in gross income for purposes of federal income taxation. It is the reasonable expectation of the City and KUB that the proceeds of the Series 2016A Bonds will not be used in a manner which will cause the Series 2016A Bonds to be "arbitrage bonds" within the meaning of Section 148 of the Code, and to this end the said proceeds of the Series 2016A Bonds and other related funds established for the purposes herein set out, shall be used and spent expeditiously for the purposes described herein. In the event Section 148(f) of the Code shall require the payment of any investment proceeds of the Series 2016A Bonds to the United States government, KUB will make such payments as and when required by said Section 148(f) and will take such other actions as shall be necessary or permitted to prevent the interest on the Series 2016A Bonds from becoming taxable. The Chair of the Board, the Secretary of the Board, the President and Chief Executive Officer of KUB and Chief Financial Officer of KUB, or any of them, are authorized and directed to make such certifications in this regard in connection with the sale of the Bonds as any or all shall deem appropriate, and such certifications shall constitute a representation and certification of the City and KUB.

Section 13. Official Statement. The President and Chief Executive Officer of KUB, or her designee, is hereby authorized and directed to provide for the preparation and distribution of a Preliminary Official Statement describing the Series 2016A Bonds. After the Series 2016A Bonds have been awarded, the President and Chief Executive Officer of KUB, or her designee, shall make such completions, omissions, insertions and changes in the Preliminary Official Statement not inconsistent with this resolution as are necessary or desirable to complete it as a final Official Statement for purposes of Rule 15c2-12(e)(3) of the Securities and Exchange Commission. The President and Chief Executive Officer of KUB, or her designee, shall arrange for the delivery to the purchaser of the Series 2016A Bonds of a reasonable number of copies of the Official Statement within seven business days after the Series 2016A Bonds have been awarded for subsequent delivery by the purchaser, to each potential investor requesting a copy of the Official Statement and to each person to whom such purchaser and members of his group initially sell the Series 2016A Bonds.

The President and Chief Executive Officer of KUB, or her designee, is authorized, on behalf of the Board, to deem the Preliminary Official Statement and the Official Statement in final form, each to be final as of its date within the meaning of Rule 15c2-12(b)(1), except for the omission in the Preliminary Official Statement of certain pricing and other information allowed to be omitted pursuant to such Rule 15c2-12(b)(1). The distribution of the Preliminary Official Statement and the Official Statement in final

form shall be conclusive evidence that each has been deemed in final form as of its date by the Board except for the omission in the Preliminary Official Statement of such pricing and other information.

Section 14. Continuing Disclosure. The City hereby covenants and agrees that KUB will provide annual financial information and material event notices for the Series 2016A Bonds as required by Rule 15c2-12 of the Securities and Exchange Commission. The Chief Financial Officer of KUB is authorized to execute at the closing of the sale of the Series 2016A Bonds, an agreement for the benefit of and enforceable by the owners of the Series 2016A Bonds specifying the details of the financial information and material event notices to be provided and its obligations relating thereto. Failure of KUB to comply with the undertaking herein described and to be detailed in said closing agreement, shall not be a default hereunder, but any such failure shall entitle the owner or owners of any of the Bonds to take such actions and to initiate such proceedings as shall be necessary and appropriate to cause KUB to comply with its undertaking as set forth herein and in said agreement, including the remedies of mandamus and specific performance.

Section 15. Separability. If any section, paragraph or provision of this resolution shall be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph or provision shall not affect any of the remaining provisions of this resolution.

Section 16. Repeal of Conflicting Resolutions and Effective Date. All other resolutions and orders, or parts thereof, in conflict with the provisions of this resolution, are, to the extent of such conflict, hereby repealed and this resolution shall be in immediate effect from and after its adoption.

Adopted and approved this _____ day of _____, 2016.

Mayor

ATTEST:

City Recorder

STATE OF TENNESSEE)
)
COUNTY OF KNOX)

I, Will Johnson, hereby certify that I am the duly qualified and acting City Recorder of the City of Knoxville, Tennessee, and as such official I further certify that attached hereto is a copy of excerpts from the minutes of a regular meeting of the governing body of the City Council held on _____, 2016; that these minutes were promptly and fully recorded and are open to public inspection; that I have compared said copy with the original minute record of said meeting in my official custody; and that said copy is a true, correct and complete transcript from said original minute record insofar as said original records relate to an amount not to exceed \$20,000,000 Wastewater Revenue Bonds, Series 2016A.

WITNESS my official signature and seal of the City of Knoxville, Tennessee, this ____ day of
_____, 2016.

City Recorder
(seal)

EXHIBIT A

**\$20,000,0000
CITY OF KNOXVILLE, TENNESSEE
ACTING ON BEHALF OF KNOXVILLE UTILITIES BOARD
WASTEWATER SYSTEM REVENUE BONDS, SERIES 2016A**

BOND PURCHASE AGREEMENT

_____, 2016

Knoxville Utilities Board
445 South Gay Street
Knoxville, Tennessee 37902

Ladies and Gentlemen:

The undersigned (the "Underwriter") offers to enter into this agreement with Knoxville Utilities Board ("KUB") which, upon your acceptance of this offer, will be binding upon you and upon us.

This offer is made subject to your acceptance of this agreement on or before 5:00 p.m., Eastern Standard Time, on _____, 2016.

1. Purchase Price.

Upon the terms and conditions and upon the basis of the respective representations, warranties and covenants set forth herein, the Underwriter hereby agrees to purchase from KUB, and KUB hereby agrees to sell to the Underwriter, all (but not less than all) of \$20,000,0000 aggregate principal amount of KUB's Wastewater System Revenue Bonds, Series 2016A (the "Bonds"). The purchase price is \$_____ plus accrued interest and shall be paid in accordance with paragraph 6 hereof. The purchase price is equal to the par amount of the Bonds less \$_____ original issue discount, less \$_____ underwriter's discount and plus accrued interest. The Bonds are to be issued under and pursuant to, and are to be secured by the Resolution (the "Bond Resolution") adopted on _____, 2016, by the City Council of the City of Knoxville (the "City") at the request of KUB. The Bonds shall mature on the dates and shall bear interest at the rates all as described in the Official Statement referred to in Section 3 hereof. The maturities, rates and discount at which the Bonds are being sold are more fully described on **Schedule I** attached hereto.

The Bonds are being issued to provide funds to finance the cost of extensions and improvements to the wastewater system operated by KUB on behalf of the City (the "System"), including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the Bonds.

2. Public Offering.

The Underwriter intends to make an initial bona fide public offering of all of the Bonds at not in excess of the public offering prices set forth on the cover of the Official Statement and may subsequently change such offering price without any requirement of prior notice. The Underwriter may offer and sell Bonds to certain dealers (including dealers depositing bonds into investment trusts) and others at prices lower than the public offering prices stated on the cover of the Official Statement. The Underwriter reserves the right (i) to over-allot or effect transactions that stabilize or maintain the market prices of the Bonds at levels above those which might otherwise prevail in the open market; and (ii) to discontinue such stabilizing, if commenced at any time without prior notice.

3. Official Statement.

(a) KUB has provided the Underwriter with information that constitutes a "deemed final" official statement for purposes of Rule 15c2-12 under the Securities Exchange Act of 1934 ("Rule 15c2-12"). Concurrently with KUB's acceptance of this Bond Purchase Agreement, KUB shall deliver or cause to be delivered to the Underwriter two copies of the Official Statement (as hereinafter defined) relating to the Bonds dated the date hereof substantially in the same form as the Preliminary Official Statement with only such changes as shall have been accepted by the Underwriter.

(b) Within seven (7) business days from the date hereof and within sufficient time to accompany any confirmation requesting payment from any customers of the Underwriter, KUB shall deliver to the Underwriter copies of the Official Statement of KUB, dated the date hereof, relating to the Bonds, in sufficient quantity as may reasonably be requested by the Underwriter in order to comply with Rule 15c2-12 and any applicable rules of the Municipal Securities Rulemaking Board, in substantially the form approved by KUB (which, together with the cover page, and all exhibits, appendices, and statements included therein or attached thereto and any amendments and supplements that may be authorized for use with respect to the Bonds is herein called the "Official Statement"), executed on behalf of KUB by a duly authorized officer of KUB. You hereby authorize and approve the Official Statement and other pertinent documents referred to in Section 7 hereof to be lawfully used in connection with the offering and sale of the Bonds. You also acknowledge and ratify the use by the Underwriter, prior to the date hereof, of the Preliminary Official Statement in connection with a public offering of the Bonds.

(c) If, prior to the Closing (as defined in Section 5 below) or within twenty-five (25) days subsequent to the end of the underwriting period as such term is used for purposes of Rule 15c2-12, any event shall occur with respect to KUB or KUB shall receive notice of the occurrence of any other event that might or would cause the information contained in the Official Statement to contain any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading, KUB shall so notify the Underwriter. KUB agrees to amend or supplement the Official Statement whenever requested by the Underwriter when in the reasonable judgment of the Underwriter such amendment or supplementation is required and to furnish the Underwriter with sufficient quantities of such amendment or supplement in order to permit the Underwriter to comply with Rule 15c2-12.

4. Representations and Warranties.

KUB hereby represents and warrants to the Underwriter that:

(a) KUB is duly existing pursuant to the Charter of the City and is authorized by such Charter to operate and manage the System. KUB has duly authorized all necessary action to be taken by it for: (i) the issuance and sale of the Bonds upon the terms set forth herein and in the Official

Statement; (ii) the approval of the Official Statement and the signing of the Official Statement by a duly authorized officer; (iii) the execution, delivery and receipt of this Bond Purchase Agreement, the Bonds and any and all such other agreements and documents as may be required to be executed, delivered and received by KUB in order to carry out, give effect to, and consummate the transactions contemplated hereby, by the Bonds, the Official Statement and the Bond Resolution;

(b) When executed by the respective parties thereto, this Bond Purchase Agreement will constitute legal, valid and binding obligation of KUB enforceable in accordance with its terms;

(c) The information and statements contained in the Preliminary Official Statement, as of its date and as of the date hereof, did not and do not contain any untrue statement of a material fact or omit to state any material fact which was necessary in order to make such information and statements, in the light of the circumstances under which they were made, not misleading;

(d) The information and statements contained in the Official Statement, as of its date and as of the Closing, are and will be correct and complete in all material respects and do not and will not contain any untrue statement of a material fact or omit to state any material fact which is necessary in order to make such information and statements, in the light of the circumstances under which they were made, not misleading;

(e) KUB has complied, and will at the Closing be in compliance, in all respects with the obligations on its part contained in the Bond Resolution and the laws of the State of Tennessee (the "State"), including the Act;

(f) The City has duly adopted the Bond Resolution, and the City and KUB have (a) duly authorized and approved the distribution of the Preliminary Official Statement, (b) duly authorized and approved the execution and delivery of the Official Statement, (c) duly authorized and approved the execution and delivery of, and the performance by KUB of the obligations on its part contained in, the Bonds, the Bond Resolution and this Bond Purchase Agreement, and (d) duly authorized and approved the consummation by it of all other transactions contemplated by this Bond Purchase Agreement and the Official Statement;

(g) KUB is not in breach of or default under any applicable law or administrative regulation of the State or the United States in any manner related to or affecting the transactions contemplated hereby or in breach of or default under any applicable judgment or decree or any loan agreement, note, resolution, ordinance, agreement or other instrument to which KUB is a party or to which it or any of its property is otherwise subject; and the execution and delivery of this Bond Purchase Agreement, the Bonds and the adoption of the Bond Resolution, and compliance with the provisions of each thereof, will not conflict with or constitute a breach of or default under any law, administrative regulation, judgment, decree, loan agreement, note, resolution, ordinance, agreement or other instrument to which KUB is a party or to which it or any of its property is otherwise subject;

(h) Except as may be required under the securities or "blue sky" laws of any state, all approvals, consents, authorizations and orders of, filings with or certifications by any governmental authority, board, agency or commission having jurisdiction, which would constitute a condition precedent to the performance by KUB of its obligations hereunder and under the Bond Resolution and the Bonds, have been obtained;

(i) There is no action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, public board or body, pending or, to the knowledge of KUB, threatened against KUB or others (a) affecting KUB or the corporate existence of KUB or the titles of its officers to their

respective offices, (b) seeking to prohibit, restrain or enjoin the sale, issuance or delivery of the Bonds or the collection of Net Revenues pledged to pay the principal of and interest on the Bonds, or the pledge thereof, (c) in any way contesting or affecting the transactions contemplated hereby or by the Official Statement or by the validity or enforceability of the Bonds, the Bond Resolution or this Bond Purchase Agreement, (d) contesting in any way the completeness or accuracy of the Preliminary Official Statement or the Official Statement, or (e) contesting the powers or authority of KUB for the issuance of the Bonds, the adoption of the Bond Resolution or the execution and delivery of this Bond Purchase Agreement;

(j) KUB will not take or omit to take any action that will in any way cause the proceeds from the sale of the Bonds and other moneys of KUB to be transferred on the date of issuance of the Bonds to be applied or result in such proceeds and other moneys being applied in a manner other than as provided in or permitted by the Bond Resolution and consistent with the utilization described in the Official Statement;

(k) KUB agrees reasonably to cooperate with the Underwriter and its counsel in any endeavor to qualify the Bonds for offering and sale under the securities or "blue sky" laws of such jurisdictions of the United States as the Underwriter may request. KUB hereby consents to the use of the Official Statement and the Bond Resolution by the Underwriter in obtaining any qualification required;

(l) If at any time from the date of this Bond Purchase Agreement through 25 days following the "end of the underwriting period" (as defined in Rule 15c2-12 described below) any event shall occur that might or would cause the Official Statement to contain any untrue statement of a material fact or to omit to state any material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, KUB shall notify the Underwriter and if, in the opinion of the Underwriter, such event requires the preparation and publication of a supplement or amendment to the Official Statement, KUB will supplement or amend the Official Statement in a form and in a manner approved by the Underwriter. If the Official Statement is so supplemented or amended prior to the Closing, such approval by the Underwriter of a supplement or amendment to the Official Statement shall not preclude the Underwriter from thereafter terminating this Bond Purchase Agreement, and if the Official Statement is so amended or supplemented subsequent to the date hereof and prior to the Closing, the Underwriter may terminate this Bond Purchase Agreement by notification to KUB at any time prior to the Closing if, in the judgment of the Underwriter, such amendment or supplement has or will have a material adverse effect on the marketability of the Bonds;

(m) KUB has duly authorized and approved the execution and delivery of this Bond Purchase Agreement and the performance by KUB of the obligations on its part contained herein;

(n) KUB is not, nor has it at any time, been in default in the payment of principal of or interest on any obligation issued or guaranteed by KUB;

(o) Any certificate signed by an authorized officer of KUB and delivered to the Underwriter at or prior to the Closing shall be deemed a representation and warranty by KUB in connection with this Bond Purchase Agreement to the Underwriter as to the statements made therein upon which the Underwriter shall be entitled to rely. KUB covenants that between the date hereof and the Closing, it will not take any action that will cause the representations and warranties made herein to be untrue as of the Closing;

(p) The Bonds, when issued, authenticated and delivered in accordance with the Bond Resolution and sold to the Underwriter as provided herein, will be validly issued and outstanding special obligations of KUB entitled to the benefits of the Bond Resolution;

(q) KUB has lawful authority to operate the System, to consummate the transactions contemplated by the Official Statement and collect revenues, fees and other charges in connection with the System and through its Board of Commissioners, to fix the rates, fees and other charges with respect to the System; and

(r) KUB hereby covenants and agrees to enter into a written agreement or contract, constituting an undertaking (the "Undertaking") to provide ongoing disclosure about KUB, for the benefit of the beneficial owners of the Bonds on or before the date of delivery of the Bonds as required under paragraph (b)(5) of Rule 15c2-12. The Undertaking shall be as described in the Preliminary Official Statement, with such changes as may be agreed in writing by the Underwriter. KUB represents that it has complied in all respects with its obligations to provide continuing disclosure of certain information as described in that certain Continuing Disclosure Certificate entered into in connection with the issuance of the Bonds.

5. Delivery of, and Payment for, the Bonds.

At 10:00 a.m. on or about _____, 2016, or at such other time or date as shall have been mutually agreed upon by KUB and the Underwriter, KUB will deliver, or cause to be delivered, to the Underwriter the other documents hereinafter mentioned and, subject to the conditions contained herein, the Underwriter will accept such delivery and pay the purchase price of the Bonds plus accrued interest payable to the order of KUB, in federal funds or other immediately available funds by delivering to KUB such funds by wire transfer to KUB or its designated agent except that physical delivery of the Bonds shall be made through the facilities of the Depository Trust Company.

Payment for the Bonds shall be confirmed and delivery of the documents as aforesaid shall be made at the offices of KUB, or such other place as may be agreed upon by the Underwriter and KUB. Such payment and delivery is herein called the "Closing." The Bonds will be delivered as fully registered bonds in such names and in such denominations as shall be designated in writing by the Underwriter to KUB at Closing.

6. Certain Conditions to Underwriter's Obligations.

The obligations of the Underwriter hereunder shall be subject to (i) the performance by KUB of its obligations to be performed hereunder, (ii) the accuracy in all material respects of the representations and warranties of KUB herein as of the date hereof and as of the date of the Closing, and (iii) to the following conditions:

(a) At the time of Closing, (i) the Bond Resolution shall be in full force and effect and shall not have been amended, modified or supplemented except as may have been agreed to in writing by the Underwriter, (ii) the proceeds of the sale of the Bonds shall be applied as described in the Official Statement, and (iii) KUB shall have duly adopted and there shall be in full force and effect such other resolutions as, in the opinion of Bass, Berry & Sims PLC, Knoxville, Tennessee ("Bond Counsel"), shall be necessary in connection with the transactions contemplated hereby;

(b) At or prior to the Closing, the Underwriter shall have received an executed copy of each of the following documents:

(1) the approving opinion, dated the date of the Closing, of Bond Counsel addressed to KUB and the Underwriter, relating to, among other things, the validity of the Bonds [and the exclusion from gross income of the interest on the Bonds for federal and State of Tennessee income tax purposes,] in substantially the form set forth as Appendix _ to the Official Statement;

(2) a supplemental opinion, dated the date of the Closing, of Bond Counsel addressed to the Underwriter in substantially the form of Exhibit A hereto;

(3) an opinion, dated the date of the Closing, of Hodges, Doughty & Carson, Knoxville, Tennessee, counsel to KUB, addressed to KUB, Bond Counsel and the Underwriter in substantially the form of Exhibit B hereto;

(4) a certificate of KUB, dated the date of the Closing and signed by a duly authorized officer of KUB and in form and substance reasonably satisfactory to the Underwriter, to the effect that (i) since the execution of the Bond Purchase Agreement no material and adverse change has occurred in the financial position of the System or results of operations of the System; (ii) KUB has not incurred any material liabilities secured by the Net Revenues of the System other than in the ordinary course of business or as set forth in or contemplated by the Official Statement; and (iii) no event affecting KUB has occurred since the date of the Official Statement which should be disclosed in the Official Statement for the purpose for which it is to be used or which is necessary to be disclosed therein in order to make the statements and information therein not misleading as of the date of Closing;

(5) the Official Statement executed on behalf of KUB by a duly authorized officer thereof;

(6) the Bond Resolution and the Bonds;

(7) a certificate of a duly authorized officer of KUB, satisfactory to the Underwriter, dated the date of Closing, stating that such officer is charged, either alone or with others, with the responsibility for issuing the Bonds; setting forth, in the manner permitted by Section 148 of the Internal Revenue Code of 1986, as amended (the "Code"), the reasonable expectations of KUB as of such date as to the use of proceeds of the Bonds and of any other funds of KUB expected to be used to pay principal or interest on the Bonds and the facts and estimates on which such expectations are based; and stating that, to the best of the knowledge and belief of the certifying officer, KUB's expectations are reasonable;

(8) evidence indicating a rating on the Bonds of "____" by [rating agency];

(9) other certificates of KUB listed on a Closing Memorandum to be approved by counsel to KUB, Bond Counsel and counsel to the Underwriter, including any certificates or representations required in order for Bond Counsel to deliver the opinion referred to in Paragraph 7(b) (1) of this Bond Purchase Agreement; and such additional legal opinions, certificates, proceedings, instruments and other documents as the counsel to the Underwriter or Bond Counsel may reasonably request to evidence compliance by KUB with legal requirements, the truth and accuracy, as of the time of Closing, of the representations of KUB contained herein and the due performance or satisfaction by KUB at or prior to such time of all agreements then to be performed and all conditions then to be satisfied by KUB.

All such opinions, certificates, letters, agreements and documents will be in compliance with the provisions hereof only if they are satisfactory in form and substance to the Underwriter and counsel to the Underwriter. KUB will furnish the Underwriter with such conformed copies or photocopies of such opinions, certificates, letters, agreements and documents as the Underwriter may reasonably request.

(c) The Underwriter shall have received within seven (7) business days from the date hereof and within sufficient time to accompany any confirmation requesting payment from any customers of the Underwriter, the Official Statement in sufficient quantity as may be reasonably requested by the Underwriter in order to comply with Rule 15(c) 2-12.

7. Termination.

The Underwriter shall have the right to cancel its obligation to purchase the Bonds if (i) between the date hereof and the Closing, legislation shall be enacted or recommended to the Congress or otherwise endorsed for passage (by press release, other form of notice or otherwise) by the President of the United States, the Treasury Department of the United States, the Internal Revenue Service or the Chairman or ranking minority member of the Committee on Finance of the United States Senate or the Committee on Ways and Means of the United States House of Representatives or favorably reported for passage to either House of the Congress by any committee of such House to which such legislation has been referred for consideration, or a bill to amend the Internal Revenue Code (which, if enacted, would take effect in whole or in part prior to the Closing) shall be filed in either house, or recommended for passage by the Congress by any joint or conference committee thereof, or a decision by a court of the United States or the United States Tax Court shall be rendered, or a ruling, regulation or statement by or on behalf of the Treasury Department of the United States, the Internal Revenue Service or other governmental agency shall be made or proposed to be made, with respect to the federal taxation upon interest on obligations of the general character of the Bonds, or other action or events shall have transpired which may have the purpose or effect, directly or indirectly of changing the federal income tax consequences of any of the transactions contemplated in connection herewith, including the tax-exempt status of KUB and, in the opinion of the Underwriter, materially adversely affects the market price of the Bonds, or the market price generally of obligations of the general character of the Bonds, or (ii) there shall exist any event which in the Underwriter's judgment either (a) makes untrue or incorrect in any material respect any statement or information contained in the Official Statement or (b) is not reflected in the Official Statement but should be reflected therein in order to make the statements and information contained therein not misleading in any material respect, or (iii) there shall have occurred any outbreak of hostilities or any national or international calamity or crisis including financial crisis, or a financial crisis or a default with respect to the debt obligations of, or the institution of proceedings under the federal or the state bankruptcy laws by or against the State of Tennessee or any subdivision, agency or instrumentality of such State, the effect of which on the financial markets of the United States being such as, in the reasonable judgment of the Underwriter, would make it impracticable for the Underwriter to market the Bonds or to enforce contracts for the sale of the Bonds, or (iv) there shall be in force a general suspension of trading on the New York Stock Exchange, or (v) a general banking moratorium shall have been declared by either federal, Tennessee or New York authorities, or (vi) there shall have occurred since the date of this Bond Purchase Agreement any material adverse change in the financial position of the System, except for changes which the Official Statement discloses have occurred or may occur, or (vii) legislation shall be enacted or any action shall be taken by the Securities and Exchange Commission which, in the opinion of counsel for the Underwriter, has the effect of requiring the contemplated distribution of the Bonds to be registered under the Securities Act of 1933, as amended, or the Bond Resolution or any other document executed in connection with the transactions contemplated hereof to be qualified under the Trust Indenture Act of 1939, as amended, or (viii) a stop order, ruling, regulation or official statement by or on behalf of the Securities and Exchange Commission shall be issued or made to the effect that the issuance, offering or sale of the Bonds, or of obligations of the general character of the Bonds as contemplated hereby, or the offering of any other obligation which may be represented by the Bonds is in violation of any provision of the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, or the Trust Indenture Act of 1939, as amended, or (ix) any state blue sky or securities commission shall have withheld registration, exemption or clearance of the offering, and in the reasonable judgment of the Underwriter the market for the Bonds is materially affected thereby.

If KUB shall be unable to satisfy any of the conditions to the obligations of the Underwriter contained in this Bond Purchase Agreement and such condition is not waived by the Underwriter, or if the obligations of the Underwriter to purchase and accept delivery of the Bonds shall be terminated or canceled for any reason permitted by this Bond Purchase Agreement, this Bond Purchase Agreement shall terminate and neither the Underwriter nor KUB shall be under further obligation hereunder; except that the respective obligations to pay expenses, as provided in Section 11 hereof, shall continue in full force and effect.

8. Particular Covenants.

KUB covenants and agrees with the Underwriter as follows:

(a) KUB shall use its best efforts to furnish or cause to be furnished to the Underwriter, without charge, as many copies of the Official Statement as the Underwriter may reasonably request;

(b) Before revising, amending or supplementing the Official Statement, KUB shall furnish a copy of the revised Official Statement or such amendment or supplement to the Underwriter. If in the opinion of KUB and the Underwriter a supplement or amendment to the Official Statement is required, KUB will supplement or amend the Official Statement in a form and in a manner approved by the Underwriter and its counsel.

9. Survival of Representations.

All representations, warranties and agreements of KUB hereunder shall remain operative and in full force and effect, regardless of any investigation made by or on behalf of the Underwriter and shall survive the delivery of the Bonds.

10. Payment of Expenses.

Whether or not the Bonds are sold to the Underwriter by KUB, KUB shall pay, but only out of the proceeds of the sale of the Bonds or other funds made available by KUB, any expenses incident to the performance of its obligations hereunder, including but not limited to: (i) the cost of the preparation and printing of the Official Statement and any supplements thereto, together with a number of copies which the Underwriter deems reasonable; (ii) the cost of the preparation and printing of the definitive Bonds; (iii) the rating agency fees; and (iv) the fees and disbursements of Counsel to KUB and Bond Counsel and any other experts or consultants retained by KUB.

Whether or not the Bonds are sold to the Underwriter, the Underwriter shall pay (i) all advertising expenses in connection with the public offering of the Bonds; (ii) the cost of preparing and printing the blue sky memorandum, if any, and filing fees in connection with the aforesaid blue sky memorandum other than the costs of preparation of the Preliminary Official Statement and the Official Statement; and (iii) all other expenses incurred by the Underwriter in connection with its public offering and distribution of the Bonds, including the fees and expenses of the Underwriter's counsel.

11. No Advisory or Fiduciary Role.

KUB acknowledges and agrees that (i) the purchase and sale of the Bonds pursuant to this Bond Purchase Agreement is an arm's-length commercial transaction between KUB and the Underwriter, (ii) in connection therewith and with the discussions, undertakings and procedures leading up to the consummation of such transaction, the Underwriter is and has been acting solely as principal and

are not acting as the agent, advisor or fiduciary of KUB, (iii) the Underwriter has not assumed an advisory or fiduciary responsibility in favor of KUB with respect to the offering contemplated hereby or the discussions, undertakings and procedures leading thereto (irrespective of whether the Underwriter, or any affiliates of the Underwriter, has provided other services or are currently providing other services to KUB on other matters) and the Underwriter has no obligation to KUB with respect to the offering contemplated hereby except the obligations expressly set forth in this Bond Purchase Agreement, (iv) the Underwriter has financial and other interests that differ from those of KUB and (v) KUB has consulted its own legal, financial and other advisors to the extent it has deemed appropriate.

KUB and the Underwriter represent and warrant that no finder or other agent has been employed by either KUB or the Underwriter in connection with this transaction.

12. Notices.

Any notice or other communication to be given to KUB under this Bond Purchase Agreement may be given by delivering the same in writing at its address set forth above, and any notice or other communication to be given to the Underwriter under this Bond Purchase Agreement may be given by delivering the same in writing to _____, _____,
_____, _____.

13. Parties.

This Bond Purchase Agreement is made solely for the benefit of KUB and the Underwriter (including the successors or assigns of the Underwriter) and no other person shall acquire or have any right hereunder or by virtue hereof.

14. Governing Law.

This Bond Purchase Agreement shall be governed by and construed in accordance with the laws of the State of Tennessee.

15. General.

This Bond Purchase Agreement may be executed in several counterparts, each of which shall be regarded as an original and all of which will constitute one and the same instrument. The section headings of this Bond Purchase Agreement are for convenience of reference only and shall not affect its interpretation. This Bond Purchase Agreement shall become effective upon your acceptance hereof.

Very truly yours,

By: _____
Its: _____

Accepted and agreed to as of
the date first above written:

KNOXVILLE UTILITIES BOARD

By: _____
President and Chief Executive Officer

EXHIBIT A TO BOND PURCHASE AGREEMENT

[LETTERHEAD OF BASS BERRY & SIMS PLC]

[Closing Date]

Ladies and Gentlemen:

This opinion is being rendered to you pursuant to Paragraph 7(b)(2) of the Bond Purchase Agreement, dated _____, 2016 (the "Bond Purchase Agreement"), between _____ (the "Underwriter"), and Knoxville Utilities Board ("KUB"), relating to the sale by KUB of its Wastewater System Revenue Bonds, Series 2016A, in the aggregate principal amount of \$20,000,000 (the "Bonds"). Terms which are used herein and not otherwise defined shall have the meanings assigned to them in the Bond Purchase Agreement.

Of even date herewith, we have delivered our approving opinion in connection with the issuance of the Bonds. In our capacity as Bond Counsel, we have reviewed a record of proceedings in connection with the issuance of the Bonds and we have participated in conferences from time to time with counsel to KUB, representatives of the Underwriter and counsel to the Underwriter, relative to the Official Statement, dated _____, 2016, relating to the Bonds, and the related documents described below. We have also examined such other agreements, documents and certificates, and have made such investigations of law, as we have deemed necessary or appropriate in rendering the opinions set forth below.

Based on the foregoing, we are of the opinion that, as of the date hereof:

1. The offer and sale of the Bonds to the public do not require any registration under the Securities Act of 1933, as amended, and, in connection therewith, the Bond Resolution does not need to be qualified under the Trust Indenture Act of 1939, as amended.

2. The statements contained in the Official Statement under the captions "Introduction" to the extent the narrative thereunder purports to describe the terms of the Bonds and the legal authority by which they are issued, "The Bonds," and in Appendix A to the Official Statement, insofar as such statements purport to summarize certain provisions of the Bonds and the Bond Resolution, fairly summarize such provisions. The statements contained in the Official Statement under the caption "Opinion of Bond Counsel" are correct as to matters of law.

This opinion may be relied upon only by the Underwriter and by other persons to whom written permission to rely hereon is granted by us.

Very truly yours,

EXHIBIT B TO BOND PURCHASE AGREEMENT

_____, 2016

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

Re: City of Knoxville, Tennessee acting on behalf of the Knoxville Utilities Board \$20,000,000 Wastewater System Revenue Bonds, Series 2016A

Ladies and Gentlemen:

You have requested that the undersigned, General Counsel to the Knoxville Utilities Board of the City of Knoxville, Tennessee ("KUB"), render this opinion in connection with the execution, delivery and sale of the captioned bonds (the "Bonds"), the proceeds of which will be used to finance extensions and improvements to the wastewater system described below.

It is our opinion that KUB is duly established and validly existing pursuant to the Charter of the City of Knoxville, Tennessee (the "Municipality"), and, pursuant to said Charter and the wastewater system of the Municipality (the "System") is under the jurisdiction, control and management of KUB.

The undersigned does hereby certify that no litigation of any nature is now pending or, to our knowledge, threatened

- (1) seeking to restrain or enjoin the issuance, sale, execution or delivery of the Bonds;
- (2) seeking to restrain or enjoin the charging of sufficient rates to pay the cost of operating, maintaining, repairing and insuring the System and to pay principal of and interest on the Bonds and all outstanding obligations payable from the revenues of the System;
- (3) in any manner questioning the proceedings or authority pursuant to which the Bonds are authorized or issued or such rates are charged;
- (4) in any manner questioning or relating to the validity of the Bonds;
- (5) contesting in any way the completeness or accuracy of the Official Statement prepared and distributed in connection with the sale of the Bonds;
- (6) in any way contesting the corporate existence or boundaries of the Municipality, except for various pending actions challenging past or present annexation efforts of the Municipality, which will have no material adverse effect on the revenues of the System;
- (7) contesting the title of the present officers of KUB to their respective offices; or

(8) contesting the powers of KUB or the authority of KUB with respect to the Bonds, or proceedings authorizing the Bonds, or any act to be done or document or certificate to be executed or delivered in connection with the issuance and delivery of the Bonds.

Neither the voters of the Municipality nor its governing body nor the Board of Commissioners of KUB have approved any special, local or private act or legislation passed by the General Assembly of the State of Tennessee at its most recent session or any amendments to the Charter of the Municipality affecting the power of the Municipality to issue the Bonds or pay the principal of, premium, if any, and interest on the Bonds when due or affecting the power of the Board of Commissioners of KUB to manage and control the System.

I hereby certify that _____ and _____ are the duly qualified, appointed and acting Chair and Secretary, respectively, of the Board of Commissioners of KUB with full power to act as such officers on behalf of KUB in connection with the execution and delivery of the Bonds.

Yours truly,

A RESOLUTION SUPPLEMENTING RESOLUTION NO. 2075
ADOPTED BY THE CITY COUNCIL OF THE CITY OF
KNOXVILLE, TENNESSEE ON APRIL 20, 1954 ENTITLED "A
RESOLUTION PROVIDING FOR THE ISSUANCE OF WATER
REVENUE BONDS" SO AS TO PROVIDE FOR THE ISSUANCE OF
NOT TO EXCEED TWENTY-FIVE MILLION DOLLARS
(\$25,000,000) OF WATER SYSTEM REVENUE BONDS, SERIES
DD-2016.

RESOLUTION NO: _____

REQUESTED BY: _____

PREPARED BY: _____

APPROVED AS TO FORM

CORRECTNESS: _____

Law Director

FINANCIAL IMPACT STATEMENT:

Director of Finance

APPROVED: _____

APPROVED AS AN
EMERGENCY MEASURE: _____

MINUTE BOOK ____ PAGE ____

WHEREAS, the City of Knoxville (the "City"), pursuant to a resolution entitled "A Resolution Providing for the Issuance of Water Revenue Bonds," being Resolution No. 2075 of the City Council adopted April 20, 1954 (which resolution as heretofore amended is hereinafter sometimes referred to as "Resolution No. 2075"), authorized an issue of Water Revenue Bonds; and

WHEREAS, pursuant to Resolution No. 2075, and for the purpose of financing the cost of the extensions and improvements to the City's water distribution system (the "System") and the refinancing of indebtedness issued for that purpose, the City issued Water Revenue Bonds, the series of which, the amount issued, and the amount outstanding as of June 1, 2016 are as follows:

<u>Series</u>	<u>Amount Issued</u>	<u>Amount Outstanding</u>
S-2005	\$ 8,865,000	\$ 6,295,000
T-2007	\$25,000,000	\$ 750,000
U-2009	\$25,000,000	\$22,625,000
W-2011	\$25,000,000	\$22,800,000
X-2012	\$10,050,000	\$ 8,665,000
Y-2013	\$ 9,285,000	\$ 8,970,000
Z-2013	\$25,000,000	\$23,675,000
AA-2014	\$ 8,000,000	\$ 7,725,000
BB-2015	\$23,005,000	\$22,835,000
CC-2015	\$20,000,000	\$19,650,000

WHEREAS, the City has also authorized the issuance of its Water System Revenue Refunding Bonds, Series EE-2016 (the "Series EE-2016 Bonds") that are expected to be issued after the issuance of the Series DD-2016 Bonds; and

WHEREAS, it is desirable that an additional series of bonds be issued to finance the costs of the extensions and improvements to the System, including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the bonds, pursuant to the authority of Resolution No. 2075 and pursuant to the authority of this resolution; and

WHEREAS, the Board of Commissioners (the "Board") of the Knoxville Utilities Board has duly adopted a resolution requesting the City Council of the City to adopt this resolution authorizing the issuance of bonds for the purposes and in the manner hereinafter more fully stated; and

WHEREAS, it is the intention of the City Council of the City to adopt this resolution for the purpose of authorizing not to exceed \$25,000,000 in aggregate principal amount of water revenue bonds for the purposes described above, establishing the terms of such bonds, providing for the issuance, sale and payment of the bonds and disposition of proceeds therefrom, and collection of revenues from the System and the application thereof to the payment of principal of, premium, if any, and interest on said bonds.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Knoxville, Tennessee, as follows:

Section 1. Authority. The bonds authorized by this resolution are issued pursuant to Sections 7-34-101 et seq. and 9-21-101, et seq., Tennessee Code Annotated, and other applicable provisions of law.

Section 2. Definitions. Capitalized terms used herein and not defined in this Section 2 shall have the meanings ascribed to them in the 1954 Resolution (as hereinbelow defined). The following terms shall have the following meanings in this resolution unless the text expressly or by necessary implication requires otherwise.

- (a) "Board" shall mean the Board of Commissioners of the Knoxville Utilities Board;
- (b) "Bond Purchase Agreement" means a Bond Purchase Agreement, dated as of the sale of the Series DD-2016 Bonds, entered into by and between KUB and the Underwriter, in substantially the form of the document attached hereto as Exhibit A, subject to such changes as permitted by Section 9 hereof, as approved by the President and Chief Executive Officer of KUB, consistent with the terms of this resolution;
- (c) "Book-Entry Form" or "Book-Entry System" means a form or system, as applicable, under which physical Bond certificates in fully registered form are issued to a Depository, or to its nominee as Registered Owner, with the certificated Bonds being held by and "immobilized" in the custody of such Depository, and under which records maintained by persons, other than the City, KUB or the Registration Agent, constitute the written record that identifies, and records the transfer of, the beneficial "book-entry" interests in those Bonds;
- (d) "City" shall mean the City of Knoxville, Tennessee;
- (e) "Code" shall mean the Internal Revenue Code of 1986, as amended, and any lawful regulations promulgated or proposed thereunder;
- (f) "Depository" means any securities depository that is a clearing agency under federal laws operating and maintaining, with its participants or otherwise, a Book-Entry System, including, but not limited to, DTC;
- (g) "DTC" means the Depository Trust Company, a limited purpose company organized under the laws of the State of New York, and its successors and assigns;
- (h) "DTC Participant(s)" means securities brokers and dealers, banks, trust companies and clearing corporations that have access to the DTC system;
- (i) "Governing Body" shall mean the City Council of the City;
- (j) "KUB" shall mean the Knoxville Utilities Board;
- (k) "1954 Resolution" shall mean Resolution No. 2075 of the Governing Body, adopted April 20, 1954, as amended and supplemented by Resolution No. 3633 of the Governing Body adopted March 19, 1968; Resolution No. R-26-88, adopted February 9, 1988; Resolution No. R-318-90, adopted October 30, 1990; Resolution No. R-470-92, adopted October 13, 1992; Resolution No. R-474-93, adopted October 26, 1993; Resolution No. R-8-98, adopted January 27, 1998; Resolution No. R-65-01 adopted February 20, 2001; Resolution No. R-151-01, adopted March 20, 2001; Resolution No. R-482-01, adopted October 30, 2001; Resolution No. R-57-04, adopted March 2, 2004, Resolution No. R-263-05, adopted July 5, 2005, Resolution No. R-346-07, adopted August 28, 2007, Resolution No. R-211-09 adopted June 30, 2009, Resolution No. R-133-210 adopted May 4, 2010, Resolution No. R-285-2011 adopted October 4, 2011, Resolution No. R-337-2011 adopted December 13, 2011, Resolution No. R-323-2012 adopted November 13, 2012, Resolution No. R-243-2013 adopted July 23, 2013, Resolution No. R-214-2014 adopted June 24, 2014, Resolution No. R-83-2015 adopted March 3, 2015 and

Resolution No. R-127-2015 adopted March 31, 2015 authorizing the issuance from time-to-time of series of revenue bonds of the City payable from revenues of the System on a parity with any bonds issued pursuant to its provisions;

(l) "Outstanding Bonds" shall mean the City's outstanding Water System Revenue Refunding Bonds, Series S-2005, dated August 10, 2005, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Bonds, Series T-2007, dated November 1, 2007, maturing March 1, 2017, the City's outstanding Water System Revenue Bonds, Series U-2009, dated November 12, 2009, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Bonds, Series W-2011, dated December 1, 2011, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Refunding Bonds, Series X-2012, dated April 20, 2012, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Refunding Bonds, Series Y-2013, dated March 15, 2013, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Bonds, Series Z-2013, dated October 1, 2013, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Bonds, Series AA-2014, dated September 18, 2014, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Refunding Bonds, Series BB-2015, dated May 1, 2015, maturing March 1, 2017 and thereafter, and the City's outstanding Water System Revenue Bonds, Series CC-2015, dated May 20, 2015, maturing March 1, 2017 and thereafter;

(m) "Parity Bonds" shall mean any bonds issued on a parity with the Series DD-2016 Bonds and the Outstanding Bonds pursuant to the 1954 Resolution;

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

(o) "Registration Agent" shall mean the registration and paying agent for the Series DD-2016 Bonds designated by the President and Chief Executive Office of KUB, or any successor as designated by the Board;

(p) "Series DD-2016 Bonds" shall mean the City's Water System Revenue Bonds, Series DD-2016, dated the date of their issuance, or such other date as shall be determined by the Board pursuant to Section 9 hereof, authorized to be issued by the 1954 Resolution and this resolution in an aggregate principal amount not to exceed \$25,000,000;

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

(r) "Underwriter" shall mean an investment banking firm qualified to underwrite bonds such as the Series DD-2016 Bonds in the State of Tennessee selected by the President and Chief Executive Officer of KUB.

Section 3. Declarations. It is hereby determined that all requirements of the 1954 Resolution have been or will have been met upon the issuance of the Series DD-2016 Bonds so that the Series DD-2016 Bonds will be issued as Parity Bonds.

Section 4. Authorization and Terms of the Series DD-2016 Bonds. (a) For the purpose of providing funds to finance the costs of construction of the Project including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the Series DD-2016 Bonds as more fully set out in Section 9 hereof, there are hereby authorized to be issued revenue bonds of the City in the aggregate principal amount of not to exceed \$25,000,000. The Series DD-2016 Bonds shall be issued in fully registered form, without coupons, shall be known as "Water System Revenue Bonds, Series DD-2016," and shall be dated the date of their issuance, or such other date as shall be determined by the Board or the President and Chief Executive Officer of KUB as its designee pursuant to

Section 9 hereof. The Series DD-2016 Bonds shall bear interest at a rate or rates not to exceed five percent (5.00%) per annum, payable semi-annually on March 1 and September 1 in each year, commencing September 1, 2016 or such later date as is permitted pursuant to Section 9 hereof. The Series DD-2016 Bonds shall be initially issued in \$5,000 denominations or integral multiples thereof as shall be requested by the purchaser thereof. The Series DD-2016 Bonds shall mature and be payable either serially or through mandatory redemption on each March 1 in such years as is established by the Board or the President and Chief Executive Officer of KUB as its designee pursuant to Section 9, provided that the final maturity date shall not be later than March 1, 2046. The final maturity schedule shall be established by the award resolution or certificate awarding the Series DD-2016 Bonds to the successful purchaser thereof or in the Bond Purchase Agreement provided for in Section 9 if the Series DD-2016 Bonds are sold by negotiated sale.

(b) Subject to adjustment pursuant to Section 9 hereof, the Series DD-2016 Bonds maturing on or before March 1, 2025 shall mature without option of prior redemption. Series DD-2016 Bonds maturing on March 1, 2026 and thereafter shall be subject to redemption prior to maturity at the option of the City, acting through the Board, on or after March 1, 2025, as a whole or in part at any time at a redemption price equal to the principal amount plus interest accrued to the redemption date.

If less than all the Series DD-2016 Bonds shall be called for redemption, the maturities to be redeemed shall be selected by the Board in its discretion. If less than all the Series DD-2016 Bonds within a single maturity shall be called for redemption, the interests within the maturity to be redeemed shall be selected as follows:

(i) if the Series DD-2016 Bonds are being held under a Book-Entry System by DTC, or a successor Depository, the amount of the interest of each DTC Participant in the Series DD-2016 Bonds to be redeemed shall be determined by DTC, or such successor Depository, by lot or such other manner as DTC, or such successor Depository, shall determine; or

(ii) if the Series DD-2016 Bonds are not being held under a Book-Entry System by DTC, or a successor Depository, the Series DD-2016 Bonds within the maturity to be redeemed shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall determine.

(c) Pursuant to Section 9 hereof, KUB is authorized to sell the Series DD-2016 Bonds, or any maturities thereof, as term bonds with mandatory redemption requirements corresponding to the maturities set forth herein or as determined by KUB. In the event any or all of the Series DD-2016 Bonds are sold as term bonds, KUB shall redeem such term bonds on redemption dates corresponding to the maturity dates set forth in the award resolution or certificate awarding the Series DD-2016 Bonds, in amounts so as to achieve an amortization of the indebtedness approved by the Board or the President and Chief Executive Officer of KUB as its designee. DTC, as Depository for the Series DD-2016 Bonds, or any successor Depository for the Series DD-2016 Bonds, shall determine the interest of each Participant in the Series DD-2016 Bonds to be redeemed using its procedures generally in use at that time. If DTC, or another securities depository, is no longer serving as Depository for the Series DD-2016 Bonds, the Series DD-2016 Bonds to be redeemed within a maturity shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall select.

At its option, to be exercised on or before the forty-fifth (45th) day next preceding any such redemption date, KUB may (i) deliver to the Registration Agent for cancellation Series DD-2016 Bonds to be redeemed, in any aggregate principal amount desired, and/or (ii) receive a credit in respect of its redemption obligation under this mandatory redemption provision for any Series DD-2016 Bonds of the maturity to be redeemed which prior to said date have been purchased or redeemed (otherwise than

through the operation of this mandatory sinking fund redemption provision) and canceled by the Registration Agent and not theretofore applied as a credit against any redemption obligation under this mandatory sinking fund provision. Each Series DD-2016 Bond so delivered or previously purchased or redeemed shall be credited by the Registration Agent at 100% of the principal amount thereof on the obligation of KUB on such payment date and any excess shall be credited on future redemption obligations in chronological order, and the principal amount of Series DD-2016 Bonds to be redeemed by operation of this mandatory sinking fund provision shall be accordingly reduced. KUB shall on or before the forty-fifth (45th) day next preceding each payment date furnish the Registration Agent with its certificate indicating whether or not and to what extent the provisions of clauses (i) and (ii) of this subsection are to be availed of with respect to such payment and confirm that funds for the balance of the next succeeding prescribed payment will be paid on or before the next succeeding payment date.

(d) Notice of call for redemption, whether optional or mandatory, shall be given by the Registration Agent not less than twenty (20) nor more than sixty (60) days prior to the date fixed for redemption by sending an appropriate notice to the registered owners of the Series DD-2016 Bonds to be redeemed by first-class mail, postage prepaid, at the addresses shown on the bond registration records of the Registration Agent as of the date of the notice; but neither failure to mail such notice nor any defect in any such notice so mailed shall affect the sufficiency of the proceedings for redemption of any of the Series DD-2016 Bonds for which proper notice was given. The notice may state that it is conditioned upon the deposit of moneys in an amount equal to the amount necessary to affect the redemption with the Registration Agent no later than the redemption date ("Conditional Redemption"). As long as DTC, or a successor Depository, is the registered owner of the Series DD-2016 Bonds, all redemption notices shall be mailed by the Registration Agent to DTC, or such successor Depository, as the registered owner of the Series DD-2016 Bonds, as and when above provided, and neither KUB, the City, nor the Registration Agent shall be responsible for mailing notices of redemption to DTC Participants or Beneficial Owners. Failure of DTC, or any successor Depository, to provide notice to any DTC Participant or Beneficial Owner will not affect the validity of such redemption. The Registration Agent shall mail said notices, in the case of term bonds with mandatory redemption requirements as and when provided herein and in the Series DD-2016 Bonds and, in the case of optional redemption, as and when directed by the Board pursuant to written instructions from an authorized representative of the Board given at least forty-five (45) days prior to the redemption date (unless a shorter notice period shall be satisfactory to the Registration Agent). From and after the redemption date, all Series DD-2016 Bonds called for redemption shall cease to bear interest if funds are available at the office of the Registration Agent for the payment thereof and if notice has been duly provided as set forth herein. In the case of a Conditional Redemption, the failure of the City or KUB to make funds available in part or in whole on or before the redemption date shall not constitute an event of default, and the Registration Agent shall give immediate notice to the Depository or the affected Bondholders that the redemption did not occur and that the Bonds called for redemption and not so paid remain outstanding.

(e) The Series DD-2016 Bonds shall be executed in such manner as may be prescribed by applicable law, in the name, and on behalf, of the City with the manual or facsimile signature of the Chair of the Board and attested by the manual or facsimile signature of the Secretary of the Board.

(f) The City hereby authorizes and directs the Board to appoint a Registration Agent and paying agent for the Series DD-2016 Bonds, and the Registration Agent so appointed is authorized and directed to maintain Bond registration records with respect to the Series DD-2016 Bonds, to authenticate and deliver the Series DD-2016 Bonds as provided herein, either at original issuance, upon transfer, or as otherwise directed by the Board, to effect transfers of the Series DD-2016 Bonds, to give all notices of redemption as required herein, to make all payments of principal and interest with respect to the Series DD-2016 Bonds as provided herein, to cancel and destroy the Series DD-2016 Bonds which have been paid at maturity or upon earlier redemption or submitted for exchange or transfer, to furnish KUB at least

annually a certificate of destruction with respect to the Series DD-2016 Bonds canceled and destroyed, and to furnish KUB at least annually an audit confirmation of Bonds paid, Bonds outstanding and payments made with respect to interest on the Series DD-2016 Bonds. The Chair of the Board is hereby authorized to execute and the Secretary of the Board is hereby authorized to attest such written agreement between KUB and the Registration Agent as they shall deem necessary or proper with respect to the obligations, duties and rights of the Registration Agent. The payment of all reasonable fees and expenses of the Registration Agent for the discharge of its duties and obligations hereunder or under any such agreement is hereby authorized and directed.

(g) The Series DD-2016 Bonds shall be payable, principal and interest, in lawful money of the United States of America at the principal corporate trust office of the Registration Agent. The Registration Agent shall make all interest payments with respect to the Series DD-2016 Bonds on each interest payment date directly to the registered owners as shown on the Bond registration records maintained by the Registration Agent as of the close of business on the fifteenth day of the month next preceding the interest payment date (the "Regular Record Date") by check or draft mailed to such owners at their addresses shown on said Bond registration records, without, except for final payment, the presentation or surrender of such registered Series DD-2016 Bonds, and all such payments shall discharge the obligations of KUB in respect of such Series DD-2016 Bonds to the extent of the payments so made. Payment of principal of the Series DD-2016 Bonds shall be made upon presentation and surrender of such Series DD-2016 Bonds to the Registration Agent as the same shall become due and payable. All rates of interest specified herein shall be computed on the basis of a three hundred sixty (360) day year composed of twelve (12) months of thirty (30) days each. In the event the Series DD-2016 Bonds are no longer registered in the name of DTC, or a successor Depository, if requested by the Owner of at least \$1,000,000 in aggregate principal amount of the Series DD-2016 Bonds, payment of interest on such Series DD-2016 Bonds shall be paid by wire transfer to a bank within the continental United States or deposited to a designated account if such account is maintained with the Registration Agent and written notice of any such election and designated account is given to the Registration Agent prior to the record date.

(h) Any interest on any Series DD-2016 Bond which is payable but is not punctually paid or duly provided for on any interest payment date (hereinafter "Defaulted Interest") shall forthwith cease to be payable to the registered owner on the relevant Regular Record Date; and, in lieu thereof, such Defaulted Interest shall be paid to the persons in whose names the Series DD-2016 Bonds are registered at the close of business on a date (the "Special Record Date") for the payment of such Defaulted Interest, which shall be fixed in the following manner: KUB shall notify the Registration Agent in writing of the amount of Defaulted Interest proposed to be paid on each Series DD-2016 Bond and the date of the proposed payment, and at the same time KUB shall deposit with the Registration Agent an amount of money equal to the aggregate amount proposed to be paid in respect of such Defaulted Interest or shall make arrangements satisfactory to the Registration Agent for such deposit prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the persons entitled to such Defaulted Interest as in this Section 4 provided. Thereupon, not less than ten (10) days after the receipt by the Registration Agent of the notice of the proposed payment, the Registration Agent shall fix a Special Record Date for the payment of such Defaulted Interest which Date shall be not more than fifteen (15) nor less than ten (10) days prior to the date of the proposed payment to the registered owners. The Registration Agent shall promptly notify KUB of such Special Record Date and, in the name and at the expense of KUB, not less than ten (10) days prior to such Special Record Date, shall cause notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor to be mailed, first class postage prepaid, to each registered owner at the address thereof as it appears in the Bond registration records maintained by the Registration Agent as of the date of such notice. Nothing contained in this Section 4 or in the Series DD-2016 Bonds shall impair any statutory or other rights in law or in equity of

any registered owner arising as a result of the failure of KUB to punctually pay or duly provide for the payment of principal of, premium, if any, and interest on the Series DD-2016 Bonds when due.

(i) The Series DD-2016 Bonds are transferable only by presentation to the Registration Agent by the registered owner, or his legal representative duly authorized in writing, of the registered Series DD-2016 Bond(s) to be transferred with the form of assignment on the reverse side thereof completed in full and signed with the name of the registered owner as it appears upon the face of the Series DD-2016 Bond(s) accompanied by appropriate documentation necessary to prove the legal capacity of any legal representative of the registered owner. Upon receipt of the Series DD-2016 Bond(s) in such form and with such documentation, if any, the Registration Agent shall issue a new Series DD-2016 Bond or Series DD-2016 Bonds to the assignee(s) in \$5,000 denominations, or integral multiples thereof, as requested by the registered owner requesting transfer. The Registration Agent shall not be required to transfer or exchange any Series DD-2016 Bond during the period commencing on a Regular or Special Record Date and ending on the corresponding interest payment date of such Series DD-2016 Bond, nor to transfer or exchange any Series DD-2016 Bond after notice calling such Series DD-2016 Bond for redemption has been made, nor to transfer or exchange any Series DD-2016 Bond during the period following the receipt of instructions from KUB to call such Series DD-2016 Bond for redemption; provided, the Registration Agent, at its option, may make transfers after any of said dates. No charge shall be made to any registered owner for the privilege of transferring any Series DD-2016 Bond, provided that any transfer tax relating to such transaction shall be paid by the registered owner requesting transfer. The person in whose name any Series DD-2016 Bond shall be registered shall be deemed and regarded as the absolute owner thereof for all purposes and neither KUB nor the Registration Agent shall be affected by any notice to the contrary whether or not any payments due on the Series DD-2016 Bonds shall be overdue. Series DD-2016 Bonds, upon surrender to the Registration Agent, may, at the option of the registered owner, be exchanged for an equal aggregate principal amount of Series DD-2016 Bonds of the same maturity in any authorized denomination or denominations. This subsection shall be applicable only if the Series DD-2016 Bonds are no longer held by a Depository, and as long as the Series DD-2016 Bonds are held by a Depository, transfers of ownership interests in the Bonds shall be governed by the rules of the Depository.

(j) Except as otherwise authorized herein, the Series DD-2016 Bonds shall be registered in the name of Cede & Co., as nominee of DTC, which will act as the Depository for the Series DD-2016 Bonds except as otherwise provided herein. References in this Section 7 to a Series DD-2016 Bond or the Series DD-2016 Bonds shall be construed to mean the Series DD-2016 Bond or the Series DD-2016 Bonds that are held under the Book-Entry System. One Series DD-2016 Bond for each maturity of the Series DD-2016 Bonds shall be issued to DTC and immobilized in its custody or a custodian of DTC. The Bond Registrar is a custodian and agent for DTC, and the Series DD-2016 Bond will be immobilized in its custody. A Book-Entry System shall be employed, evidencing ownership of the Series DD-2016 Bonds in authorized denominations, with transfers of beneficial ownership effected on the records of DTC and the DTC Participants pursuant to rules and procedures established by DTC.

Each DTC Participant shall be credited in the records of DTC with the amount of such DTC Participant's interest in the Series DD-2016 Bonds. Beneficial ownership interests in the Series DD-2016 Bonds may be purchased by or through DTC Participants. The holders of these beneficial ownership interests are hereinafter referred to as the "Beneficial Owners." The Beneficial Owners shall not receive the Series DD-2016 Bonds representing their beneficial ownership interests. The ownership interests of each Beneficial Owner shall be recorded through the records of the DTC Participant from which such Beneficial Owner purchased its Series DD-2016 Bonds. Transfers of ownership interests in the Series DD-2016 Bonds shall be accomplished by book entries made by DTC and, in turn, by DTC Participants acting on behalf of Beneficial Owners. SO LONG AS CEDE & CO., AS NOMINEE FOR DTC, IS THE REGISTERED OWNER OF THE SERIES DD-2016 BONDS, THE REGISTRATION AGENT SHALL

TREAT CEDE & CO., AS THE ONLY HOLDER OF THE SERIES DD-2016 BONDS FOR ALL PURPOSES UNDER THIS RESOLUTION, INCLUDING RECEIPT OF ALL PRINCIPAL OF, PREMIUM, IF ANY, AND INTEREST ON THE SERIES DD-2016 BONDS, RECEIPT OF NOTICES, VOTING AND TAKING OR NOT TAKING, OR CONSENTING TO, CERTAIN ACTIONS UNDER THIS RESOLUTION.

Payments of principal, interest, and redemption premium, if any, with respect to the Series DD-2016 Bonds, so long as DTC is the only owner of the Series DD-2016 Bonds, shall be paid by the Registration Agent directly to DTC or its nominee, Cede & Co. as provided in the Letter of Representation relating to the Series DD-2016 Bonds from the City, acting by and through KUB, and the Registration Agent to DTC (the "Letter of Representation"). DTC shall remit such payments to DTC Participants, and such payments thereafter shall be paid by DTC Participants to the Beneficial Owners. Neither the City, KUB nor the Registration Agent shall be responsible or liable for payment by DTC or DTC Participants, for sending transaction statements or for maintaining, supervising or reviewing records maintained by DTC or DTC Participants.

In the event that (1) DTC determines not to continue to act as Depository for the Series DD-2016 Bonds or (2) to the extent permitted by the rules of DTC, the Board determines to discontinue the Book-Entry System, the Book-Entry System with DTC shall be discontinued. If the Board fails to identify another qualified securities depository to replace DTC, the Board shall cause the Registration Agent to authenticate and deliver replacement Series DD-2016 Bonds in the form of fully registered Series DD-2016 Bonds to each Beneficial Owner.

NEITHER THE CITY, KUB NOR THE REGISTRATION AGENT SHALL HAVE ANY RESPONSIBILITY OR OBLIGATIONS TO ANY DTC PARTICIPANT OR ANY BENEFICIAL OWNER WITH RESPECT TO (i) THE SERIES DD-2016 BONDS; (ii) THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC OR ANY DTC PARTICIPANT; (iii) THE PAYMENT BY DTC OR ANY DTC PARTICIPANT OF ANY AMOUNT DUE TO ANY BENEFICIAL OWNER IN RESPECT OF THE PRINCIPAL OF AND INTEREST ON THE SERIES DD-2016 BONDS; (iv) THE DELIVERY OR TIMELINESS OF DELIVERY BY DTC OR ANY DTC PARTICIPANT OF ANY NOTICE DUE TO ANY BENEFICIAL OWNER THAT IS REQUIRED OR PERMITTED UNDER THE TERMS OF THIS RESOLUTION TO BE GIVEN TO BENEFICIAL OWNERS, (v) THE SELECTION OF BENEFICIAL OWNERS TO RECEIVE PAYMENTS IN THE EVENT OF ANY PARTIAL REDEMPTION OF THE SERIES DD-2016 BONDS; OR (vi) ANY CONSENT GIVEN OR OTHER ACTION TAKEN BY DTC, OR ITS NOMINEE, CEDE & CO., AS OWNER.

If the purchaser or Underwriter certifies that it intends to hold the Series DD-2016 Bonds for its own account, then the City may issue, acting by and through KUB, certificated Bonds without the utilization of DTC and the Book-Entry System.

(k) In case any Series DD-2016 Bond shall become mutilated, or be lost, stolen, or destroyed, the City, acting by and through KUB, in its discretion, shall issue, and the Registration Agent, upon written direction from KUB, shall authenticate and deliver, a new Series DD-2016 Bond of like tenor, amount, maturity and date, in exchange and substitution for, and upon the cancellation of, the mutilated Series DD-2016 Bond, or in lieu of and in substitution for such lost, stolen or destroyed Series DD-2016 Bond, or if any such Series DD-2016 Bond shall have matured or shall be about to mature, instead of issuing a substituted Series DD-2016 Bond KUB may pay or authorize payment of such Series DD-2016 Bond without surrender thereof. In every case the applicant shall furnish evidence satisfactory to KUB and the Registration Agent of the destruction, theft or loss of such Series DD-2016 Bond, and indemnity satisfactory to KUB and the Registration Agent; and KUB may charge the applicant for the issue of such

new Series DD-2016 Bond an amount sufficient to reimburse KUB for the expense incurred by it in the issue thereof.

(l) The Registration Agent is hereby authorized to authenticate and deliver the Series DD-2016 Bonds to DTC, on behalf of the initial purchaser thereof, or an agent of DTC, upon receipt by KUB of the proceeds of the sale thereof, subject to the rules of the Depository, and to authenticate and deliver Series DD-2016 Bonds in exchange for Series DD-2016 Bonds of the same principal amount delivered for transfer upon receipt of the Series DD-2016 Bond(s) to be transferred in proper form with proper documentation as hereinabove described. The Series DD-2016 Bonds shall not be valid for any purpose unless authenticated by the Registration Agent by the manual signature of an authorized representative thereof on the certificate set forth herein on the Series DD-2016 Bond form.

(m) The Registration Agent is hereby authorized to take such action as may be necessary from time to time to qualify and maintain the Series DD-2016 Bonds for deposit with DTC, including but not limited to, wire transfers of interest and principal payments with respect to the Series DD-2016 Bonds, utilization of electronic book entry data received from DTC in place of actual delivery of Series DD-2016 Bonds and provision of notices with respect to Series DD-2016 Bonds registered by DTC (or any of its designees identified to the Registration Agent) by overnight delivery, courier service, telegram, telecopy or other similar means of communication. No such arrangements with DTC may adversely affect the interest of any of the Beneficial Owners of the Series DD-2016 Bonds, provided, however, that the Registration Agent shall not be liable with respect to any such arrangements it may make pursuant to this Section 4.

Section 5. Source of Payment. The Series DD-2016 Bonds shall be payable solely from and be secured by a pledge of the Net Revenues of the System as hereinafter provided and as provided in the 1954 Resolution on a parity and equality of lien with the Outstanding Bonds. The punctual payment of principal of and interest on the Series DD-2016 Bonds, the Outstanding Bonds and any Parity Bonds shall be secured equally and ratably by the Net Revenues of the System without priority by reason of series, number or time of sale and delivery. The owners of the Series DD-2016 Bonds shall have no recourse to the power of taxation of the City.

Section 6. Form of Series DD-2016 Bonds. The Series DD-2016 Bonds shall be in substantially the following form, the omissions to be appropriately completed when the Series DD-2016 Bonds are prepared and delivered:

(Form of Series DD-2016 Bond)

REGISTERED
Number _____

REGISTERED
\$ _____

UNITED STATES OF AMERICA
STATE OF TENNESSEE
COUNTY OF KNOX
CITY OF KNOXVILLE
WATER SYSTEM REVENUE BOND, SERIES DD-2016

Interest Rate: Maturity Date: Date of Bond: CUSIP No.:

Registered Owner:
Principal Amount:

KNOW ALL PERSONS BY THESE PRESENTS: That the City of Knoxville, a municipal corporation lawfully organized and existing in Knox County, Tennessee (the "City"), acting by and through the Knoxville Utilities Board ("KUB"), for value received hereby promises to pay to the registered owner hereof, hereinabove named, or registered assigns, in the manner hereinafter provided, the principal amount hereinabove set forth on the maturity date hereinabove set forth, or upon earlier redemption, as set forth herein, and to pay interest (computed on the basis of a 360-day year of twelve 30-day months) on said principal amount at the annual rate of interest hereinabove set forth from the date hereof until said maturity date or redemption date, said interest being payable on September 1, 2016, and semi-annually thereafter on the first day of March and September in each year until this Bond matures or is redeemed. Both principal hereof and interest hereon are payable in lawful money of the United States of America by check or draft at the designated corporate trust office of _____, _____, Tennessee, as registration agent and paying agent (the "Registration Agent"). The Registration Agent shall make all interest payments with respect to this Bond by check or draft on each interest payment date directly to the registered owner hereof shown on the bond registration records maintained by the Registration Agent as of the close of business on the day which is the fifteenth (15th) day of the month next preceding the interest payment date (the "Regular Record Date") by depositing said payment in the United States mail, postage prepaid, addressed to such owner at such owner's address shown on said bond registration records, without, except for final payment, the presentation or surrender of this Bond, and all such payments shall discharge the obligations of the City and KUB to the extent of the payments so made. Any such interest not so punctually paid or duly provided for on any interest payment date shall forthwith cease to be payable to the registered owner on the relevant Regular Record Date; and, in lieu thereof, such defaulted interest shall be payable to the person in whose name this Bond is registered at the close of business on the date (the "Special Record Date") for payment of such defaulted interest to be fixed by the Registration Agent, notice of which shall be given to the owners of the Bonds of the issue of which this Bond is one not less than ten (10) days prior to such Special Record Date. Payment of principal of and premium, if any, on the Bonds shall be made when due upon presentation and surrender of this Bond to the Registration Agent.

Except as otherwise provided herein or in the Resolution, as hereinafter defined, this Bond shall be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"), which will act as securities depository for the Bonds of the series of which this Bond is one. One Bond for each maturity of the Bonds shall be issued to DTC and immobilized in its custody or a custodian of DTC. The Bond Registrar is a custodian and agent for DTC, and the Bond will be immobilized in its custody. A book-entry system (the "Book-Entry System") shall be employed, evidencing ownership of the Bonds in \$5,000 denominations, or multiples thereof, with transfers of beneficial ownership effected on the records of DTC and the DTC Participants, as defined in the Resolution, pursuant to rules and procedures established by DTC. So long as Cede & Co., as nominee for DTC, is the registered owner of the Bonds, the City, KUB and the Registration Agent shall treat Cede & Co., as the only owner of the Bonds for all purposes under the Resolution, including receipt of all principal of, premium, if any, and interest on the Bonds, receipt of notices, voting and requesting or taking or not taking, or consenting to, certain actions hereunder. Payments of principal, maturity amounts, interest, and redemption premium, if any, with respect to the Bonds, so long as DTC is the only owner of the Bonds, shall be paid directly to DTC or its nominee, Cede & Co. DTC shall remit such payments to DTC Participants, and such payments thereafter shall be paid by DTC Participants to the Beneficial Owners, as defined in the Resolution. Neither the City, KUB, nor the Registration Agent shall be responsible or liable for payment by DTC or DTC Participants, for sending transaction statements or for maintaining, supervising or reviewing records maintained by DTC or DTC Participants. In the event that (1) DTC determines not to continue to act as securities depository for the Bonds or (2) to the extent permitted by the rules of DTC, the Board determines to discontinue the Book-Entry System, the Book-Entry System with DTC shall be discontinued. If the Board of Commissioners of KUB (the "Board")

fails to identify another qualified securities depository to replace DTC, the Board shall cause the Registration Agent to authenticate and deliver replacement Bonds in the form of fully registered Bonds to each Beneficial Owner. Neither the City, KUB nor the Registration Agent shall have any responsibility or obligations to any DTC Participant or any Beneficial Owner with respect to (i) the Bonds; (ii) the accuracy of any records maintained by DTC or any DTC Participant; (iii) the payment by DTC or any DTC Participant of any amount due to any Beneficial Owner in respect of the principal or maturity amounts of and interest on the Bonds; (iv) the delivery or timeliness of delivery by DTC or any DTC Participant of any notice due to any Beneficial Owner that is required or permitted under the terms of the Resolution to be given to Beneficial Owners, (v) the selection of Beneficial Owners to receive payments in the event of any partial redemption of the Bonds; or (vi) any consent given or other action taken by DTC, or its nominee, Cede & Co., as owner.

The Bonds of the issue of which this Bond is one maturing on or before March 1, 2025 shall mature without option of prior redemption. The Bonds maturing on March 1, 2026 and thereafter shall be subject to redemption prior to maturity at the option of the City, acting through the Board, on or after March 1, 2025, as a whole or in part at any time at a redemption price equal to the principal amount plus interest accrued to the redemption date.

[If less than all the Bonds shall be called for redemption, the maturities to be redeemed shall be selected by the Board in its discretion. If less than all of the Bonds within a single maturity shall be called for redemption, the interests within the maturity to be redeemed shall be selected as follows:

- (i) if the Bonds are being held under a Book-Entry System by DTC, or a successor Depository, the amount of the interest of each DTC Participant in the Bonds to be redeemed shall be determined by DTC, or such successor Depository, by lot or such other manner as DTC, or such successor Depository, shall determine; or
- (ii) if the Series Bonds are not being held under a Book-Entry System by DTC, or a successor Depository, the Bonds within the maturity to be redeemed shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall determine.]

[Subject to the credit hereinafter provided, the City, acting by and through KUB, shall redeem Bonds maturing on the redemption dates set forth below opposite such maturity date, in aggregate principal amounts equal to the respective dollar amounts set forth below opposite the redemption dates at a price of par plus accrued interest thereon to the date of redemption. DTC, as securities depository for the series of Bonds of which this Bond is one, or any successor Depository for the Bonds, shall determine the interest of each Participant in the Bonds to be redeemed using its procedures generally in use at that time. If DTC, or another securities depository is no longer serving as securities depository for the Bonds, the Bonds to be redeemed within a maturity shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall select. The dates of redemption and amount of Bonds to be redeemed on said dates are as follows:

<u>Maturity</u>	<u>Redemption Date</u>	<u>Principal Amount of Bonds to be Redeemed</u>
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*final maturity

At its option, to be exercised on or before the forty-fifth (45th) day next preceding any such redemption date, the City, acting through KUB, may (i) deliver to the Registration Agent for cancellation Bonds to be redeemed, in any aggregate principal amount desired, and/or (ii) receive credit in respect of its redemption obligation under the mandatory redemption provision for any Bonds to be redeemed which prior to said date have been purchased or redeemed (otherwise than by mandatory redemption) and canceled by the Registration Agent and not theretofore applied as a credit against any redemption obligation under the mandatory redemption provision. Each Bond so delivered or previously purchased or redeemed shall be credited by the Registration Agent at 100% of the principal amount thereof on the obligation of KUB on such payment date and any excess shall be credited on future redemption obligations in chronological order, and the principal amount of the Bonds to be redeemed by operation of the mandatory redemption provision shall be accordingly reduced. KUB shall on or before the forty-fifth (45th) day next preceding each payment date furnish the Registration Agent with its certificate indicating whether or not and to what extent the provisions of clauses (i) and (ii) of this paragraph are to be availed of with respect to such payment and confirm that funds for the balance of the next succeeding prescribed payment will be paid on or before the next succeeding payment date.]

Notice of call for redemption, whether optional or mandatory, shall be given by the Registration Agent on behalf of the City, but only upon direction of the Board, not fewer than twenty (20) nor more than sixty (60) days prior to the date fixed for redemption by sending an appropriate notice to the registered owners of the Bonds to be redeemed by first-class mail, postage prepaid, at the addresses shown on the Bond registration records of the Registration Agent as of the date of the notice; but neither failure to mail such notice nor any defect in any such notice so mailed shall affect the sufficiency of the proceedings for the redemption of any of the Bonds for which proper notice was given. The notice may state that it is conditioned upon the deposit of moneys in an amount equal to the amount necessary to affect the redemption with the Registration Agent no later than the redemption date ("Conditional Redemption"). From and after any redemption date, all Bonds called for redemption shall cease to bear interest if funds are available at the office of the Registration Agent for the payment thereof and if notice has been duly given as set forth in the Resolution, as hereafter defined. In the case of a Conditional Redemption, the failure of the City or KUB to make funds available in part or in whole on or before the redemption date shall not constitute an event of default, and the Registration Agent shall give immediate notice to the Depository or the affected Bondholders that the redemption did not occur and that the Bonds called for redemption and not so paid remain outstanding.]

The Bonds of the issue of which this Bond is one are issuable only as fully registered Bonds, without coupons, in the denomination of Five Thousand Dollars (\$5,000) or any authorized integral multiple thereof. At the designated corporate trust office of the Registration Agent, in the manner and subject to the limitations, conditions and charges provided in the Resolution, fully registered Bonds may be exchanged for an equal aggregate principal amount of fully registered Bonds of the same maturity, of authorized denominations, and bearing interest at the same rate. The Bonds shall be numbered consecutively from one upwards and will be made eligible for the Book-Entry System of DTC. Except as otherwise provided in this paragraph and the Resolution, as hereinafter defined, the Bonds shall be registered in the name of Cede & Co. as nominee of DTC. The Board may discontinue use of DTC for Bonds at any time upon determination by the Board that the use of DTC is no longer in the best interest of the beneficial owners of the Bonds. Upon such determination, registered ownership of the Bonds may be transferred on the registration books maintained by the Registration Agent, and the Bonds may be delivered in physical form to the following:

i. any successor of DTC or its nominee;

ii. any substitute depository to which the Registration Agent does not unreasonably object, upon (a) the resignation of DTC or its successor (or any substitute depository or its

successor) from its functions as depository, or (b) a determination by the Board that DTC or its successor (or any substitute depository or its successor) is no longer able to carry out its functions as depository; or

iii. any person, upon (a) the resignation of DTC or its successor (or substitute depository or its successor) from its functions as depository, or (b) termination by the Board of the use of DTC (or substitute depository or its successor).

In the event that this Bond is no longer held in a Book-Entry System by DTC, this Bond shall be transferable by the registered owner hereof in person or by such owner's attorney duly authorized in writing at the principal corporate trust office of the Registration Agent set forth on the front side hereof, but only in the manner, subject to limitations and upon payment of the charges provided in the Resolution and upon surrender and cancellation of this Bond. Upon such transfer a new Bond or Bonds of authorized denomination or denominations of the same maturity and interest rate for the same aggregate principal amount will be issued to the transferee in exchange therefor. The person in whose name this Bond is registered shall be deemed and regarded as the absolute owner thereof for all purposes and neither the City, KUB nor the Registration Agent shall be affected by any notice to the contrary whether or not any payments due on the Bond shall be overdue. Bonds, upon surrender to the Registration Agent, may, at the option of the registered owner thereof, be exchanged for an equal aggregate principal amount of the Bonds of the same maturity in authorized denomination or denominations, upon the terms set forth in the Resolution. The Registration Agent shall not be required to transfer or exchange any Bond during the period commencing on a Regular Record Date or Special Record Date and ending on the corresponding interest payment date of such Bond, nor to transfer or exchange any Bond after the notice calling such Bond for redemption has been made, nor during a period following the receipt of instructions from the Board to call such Bond for redemption.

This Bond is one of a total authorized issue aggregating \$25,000,000 and issued by the City for the purpose of providing funds to finance the construction of extensions and improvements to the City's water distribution system (the "System"), including the payment of legal, fiscal and administrative costs incident thereto and costs incident to the issuance of the Bonds, under and in full compliance with the Constitution and statutes of the State of Tennessee, including Sections 7-34-101 et seq. and Sections 9-21-101 et seq., Tennessee Code Annotated, and pursuant to Resolution No. 2075 duly adopted by the City Council of the City on April 20, 1954, as amended and supplemented by Resolution No. 3633 duly adopted by the City on March 19, 1968, Resolution No. R-26-88 duly adopted by the City on February 9, 1988, Resolution No. R-318-90 duly adopted by the City on October 30, 1990, Resolution No. R-470-92 duly adopted by the City on October 13, 1992, Resolution No. R-474-93 duly adopted by the City on October 26, 1993, Resolution No. R-8-98 duly adopted by the City on January 27, 1998, Resolution No. R-65-01 duly adopted by the City on February 20, 2001, Resolution No. R-151-01 duly adopted by the City on March 20, 2001, Resolution No. R-482-01 duly adopted by the City on October 30, 2001, Resolution No. R-57-04 duly adopted by the City on March 2, 2004, Resolution No. R-263-05 duly adopted by the City on July 5, 2005, Resolution No. R-346-07 duly adopted by the City on August 28, 2007, Resolution No. R-211-09 duly adopted by the City on June 30, 2009, Resolution No. R-133-210 duly adopted by the City on May 4, 2010, Resolution No. R-285-2011 duly adopted by the City on October 4, 2011, Resolution No. R-337-2011 duly adopted by the City on December 13, 2011, Resolution No. R-323-2012 duly adopted by the City on November 13, 2012, Resolution No. R-243-2013 duly adopted by the City on July 23, 2013 and Resolution No. R-214-2014 duly adopted by the City on June 24, 2014, Resolution No. R-83-2015 duly adopted by the City on March 3, 2015, Resolution No. R-127-2015 duly adopted by the City on March 31, 2015, and Resolution No. R-____-2016 duly adopted by the City on _____, 2016 (as supplemented and amended, the "Resolution").

This Bond, and interest hereon, are payable solely from and secured by a pledge of the income and revenues to be derived from the operation of the System, subject only to the payment of the reasonable and necessary costs of operating, maintaining, repairing, and insuring the System. The Bonds of the series of which this Bond is one shall enjoy complete parity and equality of lien with the City's outstanding Water System Revenue Refunding Bonds, Series S-2005, dated August 10, 2005, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Bonds, Series T-2007, dated November 1, 2007, maturing March 1, 2017, the City's outstanding Water System Revenue Bonds, Series U-2009, dated November 12, 2009, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Bonds, Series W-2011, dated December 1, 2011, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Refunding Bonds, Series X-2012, dated April 20, 2012, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Refunding Bonds, Series Y-2013, dated March 15, 2013, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Bonds, Series Z-2013, dated October 1, 2013, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Bonds, Series AA-2014, dated September 18, 2014, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Refunding Bonds, Series BB-2015, dated May 1, 2015, maturing March 1, 2017 and thereafter and the City's outstanding Water System Revenue Bonds, Series CC-2015, dated May 20, 2015, maturing March 1, 2017 and thereafter (collectively the "Outstanding Bonds"). As provided in the Resolution, the punctual payment of principal of, premium, if any, and interest on the series of Bonds of which this Bond is one, the Outstanding Bonds and any other bonds issued on a parity therewith pursuant to the terms of the Resolution shall be secured equally and ratably by said revenues without priority by reason of series, number or time of sale or delivery. The owner of this Bond shall have no recourse to the power of taxation of the City. The Board has covenanted that it will fix and impose such rates and charges for the services rendered by the System and will collect and account for sufficient revenues to pay promptly the principal of and interest on this Bond and the issue of which it is a part, as each payment becomes due. For a more complete statement of the revenues from which and conditions under which this Bond is payable, a statement of the conditions on which obligations may hereafter be issued on a parity with this Bond, the general covenants and provisions pursuant to which this Bond is issued and the terms upon which the Resolution may be modified, reference is hereby made to the Resolution.

Under existing law, this Bond and the income therefrom are exempt from all present state, county and municipal taxation in Tennessee except (a) inheritance, transfer and estate taxes, (b) Tennessee excise taxes on all or a portion of the interest on this Bond during the period such Bond is held or beneficially owned by any organization or entity, other than a sole proprietorship or general partnership, doing business in the State of Tennessee, and (c) Tennessee franchise taxes by reason of the inclusion of the book value of this Bond in the Tennessee franchise tax base or any organization or entity, other than a sole proprietorship or general partnership, doing business in the State of Tennessee.

It is hereby certified, recited, and declared that all acts, conditions and things required to exist, happen and be performed precedent to and in the issuance of this Bond exist, have happened and have been performed in due time, form and manner as required by law, and that the amount of this Bond, together with all other indebtedness of either the City or KUB, does not exceed any limitation prescribed by the constitution and statutes of the State of Tennessee.

IN WITNESS WHEREOF, the City acting by and through the Board has caused this Bond to be signed by the Chair of the Board by her manual or facsimile signature and attested by the Secretary of the Board by his manual or facsimile signature, all as of the date hereinabove set forth.

CITY OF KNOXVILLE
by and through the
KNOXVILLE UTILITIES BOARD

By: _____
Chair

ATTESTED:

Secretary

Transferable and payable at the
designated corporate trust office of: _____, Tennessee

Date of Registration: _____

This Bond is one of the issue of Bonds issued pursuant to the Resolution hereinabove described.

Registration Agent

By: _____
Authorized Representative

FORM OF ASSIGNMENT

FOR VALUE RECEIVED, the undersigned sells, assigns, and transfers unto
_____, [Please insert Federal Tax Identification Number or Social Security
Number of Assignee _____] whose address is

_____, the within bond of the City of Knoxville, Tennessee,
and does hereby irrevocably constitute and appoint _____, _____,
Tennessee, attorney, to transfer the said bond on the records kept for registration thereof with full power
of substitution in the premises.

Dated: _____

NOTICE: The signature to this
assignment must correspond with
the name of the registered owner
as it appears on the face of the
within Bond in every particular,
without alteration or enlargement
or any change whatsoever.

Signature guaranteed:

NOTICE: Signature(s) must be
guaranteed by a member firm of
a Medallion Program acceptable
to the Registration Agent.

Section 7. Equality of Lien; Pledge of Net Revenues. The punctual payment of principal of, premium, if any, and interest on the Series DD-2016 Bonds, the Outstanding Bonds and any Parity Bonds shall be secured equally and ratably by the Net Revenues of the System without priority by reason of series, number or time of sale or execution or delivery, and the Net Revenues of the System are hereby irrevocably pledged to the punctual payment of such principal, premium and interest as the same become due.

Section 8. Applicability of the 1954 Resolution. The Series DD-2016 Bonds are issued in compliance with the 1954 Resolution so as to be on a parity with the Outstanding Bonds, and, when duly delivered, the Series DD-2016 Bonds shall constitute a series of bonds issued under the authority of the 1954 Resolution. All recitals, provisions, covenants and agreements contained in the 1954 Resolution, as supplemented and amended herein (except insofar as any of said recitals, provisions, covenants and agreements necessarily relate exclusively to any series of the Outstanding Bonds) are hereby ratified and confirmed and incorporated herein by reference and, for so long as any of the Series DD-2016 Bonds shall be outstanding and unpaid either as to principal or interest, or until discharge and satisfaction of the Series DD-2016 Bonds as provided in Section 12 hereof, shall be applicable to the Series DD-2016 Bonds, shall inure to the benefit of owners of the Series DD-2016 Bonds as if set out in full herein, and shall be fully enforceable by the owner of any Series DD-2016 Bond.

All references to "holder" or "holders" in the 1954 Resolution shall be deemed to include owners of the Series DD-2016 Bonds, and all references to "Bonds" in the 1954 Resolution shall be deemed to include the Series DD-2016 Bonds.

Section 9. Sale of Series DD-2016 Bonds.

(a) The Series DD-2016 Bonds or any emission thereof may be sold at negotiated sale to the Underwriter or at public sale as determined by the President and Chief Executive Officer of KUB at a price of not less than 98.00% of par, exclusive of original issue discount, plus accrued interest, if any, provided, however, that no emission of Series DD-2016 Bonds may be sold at negotiated sale unless the Audit and Finance Committee of the Board has previously approved the sale of such emission at negotiated sale. The sale of any emission of the Series DD-2016 Bonds to the Underwriter or by public sale shall be binding on the City and KUB, and no further action of the Board with respect thereto shall be required.

(b) The President and Chief Executive Officer of KUB, as the designee of the Board, is further authorized with respect to each emission of Series DD-2016 Bonds to:

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

(2) specify or change the series designation of the Series DD-2016 Bonds to a designation other than "Water System Revenue Bonds, Series DD-2016";

(3) change the first interest payment date to a date other than September 1, 2016, provided that such date is not later than twelve months from the dated date of such emission of Series DD-2016 Bonds;

(4) establish and adjust the principal and interest payment dates and determine maturity or mandatory redemption amounts of the Series DD-2016 Bonds or any emission thereof, provided that (A) the total principal amount of all emissions of the Series DD-2016 Bonds does not exceed the total amount of Series DD-2016 Bonds authorized herein, (B) the final

maturity date of each emission shall be not later than March 1, 2046 and (C) the debt service payable in each fiscal year after the completion of the Project shall be approximately level;

(5) modify or remove the optional redemption provisions contained herein, provided that the premium amount to be paid in connection with any redemption provision shall not exceed two percent (2%) of the principal amount thereof;

(6) sell the Series DD-2016 Bonds, or any emission thereof, or any maturities thereof as term bonds with mandatory redemption requirements as determined by the Board, as it shall deem most advantageous to KUB; and

(7) cause all or a portion of the Series DD-2016 Bonds to be insured by a bond insurance policy issued by a nationally recognized bond insurance company to achieve the purposes set forth herein and to serve the best interests of KUB and to enter into agreements with such insurance company to the extent not inconsistent with this resolution.

(c) If any emission of Series DD-2016 Bonds is sold at negotiated sale, the President and Chief Executive Officer of KUB is authorized to execute a Bond Purchase Agreement with respect to such emission of Series DD-2016 Bonds, providing for the purchase and sale of the Series DD-2016 Bonds, or any emission thereof. Each Bond Purchase Agreement shall be in substantially the form attached hereto as Exhibit A, with such changes as the President and Chief Executive Officer deems necessary or advisable in connection with the sale of such Series DD-2016 Bonds, provided any such changes are not inconsistent with the terms of this Section 9. If the Underwriter does not intend to reoffer the Series DD-2016 Bonds to the public, then the Bond Purchase Agreement shall be conformed to reflect such intention. The form of the Series DD-2016 Bond set forth in Section 6 hereof shall be conformed to reflect any changes made pursuant to this Section 9.

(d) The President and Chief Executive Officer and the Chief Financial Officer of KUB, or either of them, are authorized to cause the Series DD-2016 Bonds, in book-entry form (except as otherwise authorized herein), to be authenticated and delivered by the Registration Agent to the purchaser(s), and to execute, publish, and deliver all certificates and documents, including an official statement, the Bond Purchase Agreement and closing certificates, as they shall deem necessary in connection with the sale and delivery of each emission of the Series DD-2016 Bonds.

(e) If the Series DD-2016 Bonds are sold at public sale, the Series DD-2016 Bonds shall be awarded by the President and Chief Executive Officer of KUB to the bidder that offers to purchase the Bonds for the lowest true interest cost to KUB.

Section 10. Disposition of Series DD-2016 Bond Proceeds. The proceeds of the sale of the Series DD-2016 Bonds shall be paid to KUB and used and applied by KUB as follows:

(a) All accrued interest, if any, shall be deposited to the Debt Service Fund created under the 1954 Resolution and used to pay interest on the Series DD-2016 Bonds on the first interest payment date following delivery of the Series DD-2016 Bonds; and

(b) The remainder of the proceeds of the sale of the Series DD-2016 Bonds shall be deposited with a financial institution regulated by the Federal Deposit Insurance Corporation or similar federal agency, in the "Water System Construction Fund" (the "Construction Fund") to be kept separate and apart from all other funds of KUB. The funds in the Construction Fund shall be disbursed solely to pay the costs of constructing the Project and costs related to the issuance and sale of the Series DD-2016 Bonds, including necessary legal, accounting, engineering and fiscal expenses, printing, engraving,

advertising and similar expenses, administrative and clerical costs, rating agency fees, Registration Agent fees and other necessary miscellaneous expenses incurred in connection with the Project and the issuance and sale of the Series DD-2016 Bonds. Money in the Construction Fund shall be secured in the manner prescribed by applicable statutes relative to the securing of public or trust funds, if any, or, in the absence of such statute, by a pledge of readily marketable securities having at all times a market value of not less than the amount in said Construction Fund. Money in the Construction Fund shall be expended only for the purposes authorized by this resolution. Any funds remaining in the Construction Fund after completion of the Project and payment of authorized expenses shall be deposited to the Bond Fund and used to retire Series DD-2016 Bonds on the earliest date possible. Moneys in the Construction Fund shall be invested as directed by the Chief Financial Officer of KUB in such investments as shall be permitted by applicable law. All income derived from such investments shall be deposited to the Construction Fund.

Section 11. Discharge and Satisfaction of Series DD-2016 Bonds. If KUB, on behalf of the City, shall pay and discharge the indebtedness evidenced by any of the Series DD-2016 Bonds or Parity Bonds (referred to hereinafter, collectively, in this Section 11 as the "Bonds") in any one or more of the following ways:

(a) By paying or causing to be paid, by deposit of sufficient funds as and when required with the Registration Agent, the principal of and interest on such Bonds as and when the same become due and payable;

(b) By depositing or causing to be deposited with any financial institution which has trust powers and which is regulated by and the deposits of which are insured by the Federal Deposit Insurance Corporation or similar federal agency ("an Agent"; which Agent may be the Registration Agent), in trust or escrow, on or before the date of maturity or redemption, sufficient money or Defeasance Obligations, the principal of and interest on which, when due and payable, will provide sufficient moneys to pay or redeem such Bonds and to pay premium, if any, and interest thereon when due until the maturity or redemption date (provided, if such Bonds are to be redeemed prior to maturity thereof, proper notice of such redemption shall have been given or adequate provision shall have been made for the giving of such notice); or

(c) By delivering such Bonds to the Registration Agent, for cancellation by it;

and if KUB, on behalf of the City, shall also pay or cause to be paid all other sums payable hereunder by KUB, on behalf of the City with respect to such Bonds or make adequate provision therefor, and by resolution of the Board instruct any such Agent to pay amounts when and as required to the Registration Agent for the payment of principal of and interest and redemption premiums, if any, on such Bonds when due, then and in that case the indebtedness evidenced by such Bonds shall be discharged and satisfied and all covenants, liens, pledges, agreements and obligations entered into, created, or imposed hereunder, including the pledge of and lien on the Net Revenues of the System set forth herein, shall be fully discharged and satisfied with respect to such Bonds and the owners thereof and shall thereupon cease, terminate and become void.

If KUB, on behalf of the City, shall pay and discharge or cause to be paid and discharged the indebtedness evidenced by any of the Bonds in the manner provided in either clause (a) or clause (b) above, then the registered owners thereof shall thereafter be entitled only to payment out of the money or Defeasance Obligations deposited as aforesaid.

Except as otherwise provided in this Section 11, neither Defeasance Obligations nor moneys deposited with the Agent pursuant to this Section 11 nor principal or interest payments on any such

Defeasance Obligations shall be withdrawn or used for any purpose other than, and shall be held in trust for, the payment of the principal of and premium, if any, and interest on said Bonds; provided that any cash received from such principal or interest payments on such Defeasance Obligations deposited with the Agent, (A) to the extent such cash will not be required at any time for such purpose, shall be paid over to KUB as received by the Agent and (B) to the extent such cash will be required for such purpose at a later date, shall, to the extent practicable, be reinvested in Defeasance Obligations maturing at times and in amounts sufficient to pay when due the principal and premium, if any, and interest to become due on said Bonds on or prior to such redemption date or maturity date thereof, as the case may be, and interest earned from such reinvestments, to the extent not needed for the payment of such principal, premium and interest, shall be paid over to KUB, as received by the Agent. For the purposes of this Section 11, Defeasance Obligations shall mean direct obligations of, or obligations, the principal of and interest on which are guaranteed by, the United States of America, or any agency thereof, obligations of any agency or instrumentality of the United States or any other obligations at the time of the purchase thereof are permitted investments under Tennessee Law for the purposes described in this Section 11, which bonds or other obligations shall not be subject to redemption prior to their maturity other than at the option of the registered owner thereof.

No redemption privilege shall be exercised with respect to the Series DD-2016 Bonds or any Parity Bonds except at the option and election of the Board. The right of redemption set forth herein shall not be exercised by any Registration Agent or Agent unless expressly so directed in writing by an authorized representative of the Board.

Section 12. Federal Tax Matters. The City and KUB recognize that the purchasers and owners of the Series DD-2016 Bonds will have accepted them on, and paid therefor a price that reflects, the understanding that interest thereon will not be included in gross income for purposes of federal income taxation under laws in force on the date of delivery of the Series DD-2016 Bonds. In this connection, KUB, on behalf of the City, agrees that it shall take no action which may render the interest on any of the Series DD-2016 Bonds includable in gross income for purposes of federal income taxation. It is the reasonable expectation of the City and KUB that the proceeds of the Series DD-2016 Bonds will not be used in a manner which will cause the Series DD-2016 Bonds to be "arbitrage bonds" within the meaning of Section 148 of the Code, and to this end the said proceeds of the Series DD-2016 Bonds and other related funds established for the purposes herein set out, shall be used and spent expeditiously for the purposes described herein. In the event Section 148(f) of the Code shall require the payment of any investment proceeds of the Series DD-2016 Bonds to the United States government, KUB will make such payments as and when required by said Section 148(f) and will take such other actions as shall be necessary or permitted to prevent the interest on the Series DD-2016 Bonds from becoming taxable. The Chair of the Board, the Secretary of the Board, the President and Chief Executive Officer of KUB and Chief Financial Officer of KUB, or any of them, are authorized and directed to make such certifications in this regard in connection with the sale of the Bonds as any or all shall deem appropriate, and such certifications shall constitute a representation and certification of the City and KUB.

Section 13. Official Statement. The President and Chief Executive Officer of KUB, or her designee, is hereby authorized and directed to provide for the preparation and distribution of a Preliminary Official Statement describing the Series DD-2016 Bonds. After the Series DD-2016 Bonds have been awarded, the President and Chief Executive Officer of KUB, or her designee, shall make such completions, omissions, insertions and changes in the Preliminary Official Statement not inconsistent with this resolution as are necessary or desirable to complete it as a final Official Statement for purposes of Rule 15c2-12(e)(3) of the Securities and Exchange Commission. The President and Chief Executive Officer of KUB, or her designee, shall arrange for the delivery to the purchaser of the Series DD-2016 Bonds of a reasonable number of copies of the Official Statement within seven business days after the Series DD-2016 Bonds have been awarded for subsequent delivery by the purchaser, to each potential

investor requesting a copy of the Official Statement and to each person to whom such purchaser and members of his group initially sell the Series DD-2016 Bonds.

The President and Chief Executive Officer of KUB, or her designee, is authorized, on behalf of the Board, to deem the Preliminary Official Statement and the Official Statement in final form, each to be final as of its date within the meaning of Rule 15c2-12(b)(1), except for the omission in the Preliminary Official Statement of certain pricing and other information allowed to be omitted pursuant to such Rule 15c2-12(b)(1). The distribution of the Preliminary Official Statement and the Official Statement in final form shall be conclusive evidence that each has been deemed in final form as of its date by the Board except for the omission in the Preliminary Official Statement of such pricing and other information.

Section 14. Continuing Disclosure. The City hereby covenants and agrees that KUB will provide annual financial information and material event notices for the Series DD-2016 Bonds as required by Rule 15c2-12 of the Securities and Exchange Commission. The Chief Financial Officer of KUB is authorized to execute at the closing of the sale of the Series DD-2016 Bonds, an agreement for the benefit of and enforceable by the owners of the Series DD-2016 Bonds specifying the details of the financial information and material event notices to be provided and its obligations relating thereto. Failure of KUB to comply with the undertaking herein described and to be detailed in said closing agreement, shall not be a default hereunder, but any such failure shall entitle the owner or owners of any of the Bonds to take such actions and to initiate such proceedings as shall be necessary and appropriate to cause KUB to comply with its undertaking as set forth herein and in said agreement, including the remedies of mandamus and specific performance.

Section 15. Separability. If any section, paragraph or provision of this resolution shall be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph or provision shall not affect any of the remaining provisions of this resolution.

Section 16. Repeal of Conflicting Resolutions and Effective Date. All other resolutions and orders, or parts thereof, in conflict with the provisions of this resolution, are, to the extent of such conflict, hereby repealed and this resolution shall be in immediate effect from and after its adoption.

Adopted and approved this ____ day of _____, 2016.

Mayor

ATTEST:

City Recorder

STATE OF TENNESSEE)
)
COUNTY OF KNOX)

I, Will Johnson, hereby certify that I am the duly qualified and acting City Recorder of the City of Knoxville, Tennessee, and as such official I further certify that attached hereto is a copy of excerpts from the minutes of a regular meeting of the governing body of the City Council held on Tuesday, - _____, 2016; that these minutes were promptly and fully recorded and are open to public inspection; that I have compared said copy with the original minute record of said meeting in my official custody; and that said copy is a true, correct and complete transcript from said original minute record insofar as said original records relate to an amount not to exceed \$25,000,000 Water System Revenue Bonds, Series DD-2016.

WITNESS my official signature and seal of the City of Knoxville, Tennessee, this ____ day of _____, 2016.

(seal)

City Recorder

EXHIBIT A

**\$25,000,000
CITY OF KNOXVILLE, TENNESSEE
ACTING ON BEHALF OF KNOXVILLE UTILITIES BOARD
WATER SYSTEM REVENUE BONDS, SERIES DD-2016**

BOND PURCHASE AGREEMENT

_____, 2016

Knoxville Utilities Board
445 South Gay Street
Knoxville, Tennessee 37902

Ladies and Gentlemen:

The undersigned (the "Underwriter") offers to enter into this agreement with Knoxville Utilities Board ("KUB") which, upon your acceptance of this offer, will be binding upon you and upon us.

This offer is made subject to your acceptance of this agreement on or before 5:00 p.m., Eastern Standard Time, on _____, 2016.

1. Purchase Price.

Upon the terms and conditions and upon the basis of the respective representations, warranties and covenants set forth herein, the Underwriter hereby agrees to purchase from KUB, and KUB hereby agrees to sell to the Underwriter, all (but not less than all) of \$25,000,000 aggregate principal amount of KUB's Water System Revenue Bonds, Series DD-2016 (the "Bonds"). The purchase price is \$_____ plus accrued interest and shall be paid in accordance with paragraph 6 hereof. The purchase price is equal to the par amount of the Bonds less \$_____ original issue discount, less \$_____ underwriter's discount and plus accrued interest. The Bonds are to be issued under and pursuant to, and are to be secured by the Resolution (the "Bond Resolution") adopted on _____, 2016, by the City Council of the City of Knoxville (the "City") at the request of KUB. The Bonds shall mature on the dates and shall bear interest at the rates all as described in the Official Statement referred to in Section 3 hereof. The maturities, rates and discount at which the Bonds are being sold are more fully described on **Schedule I** attached hereto.

The Bonds are being issued to provide funds to finance the cost of extensions and improvements to the water distribution system operated by KUB on behalf of the City (the "System"), including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the Bonds.

2. Public Offering.

The Underwriter intends to make an initial bona fide public offering of all of the Bonds at not in excess of the public offering prices set forth on the cover of the Official Statement and may subsequently change such offering price without any requirement of prior notice. The Underwriter may offer and sell Bonds to certain dealers (including dealers depositing bonds into investment trusts) and others at prices lower than the public offering prices stated on the cover of the Official Statement. The Underwriter reserves the right (i) to over-allot or effect transactions that stabilize or maintain the market prices of the Bonds at levels above those which might otherwise prevail in the open market; and (ii) to discontinue such stabilizing, if commenced at any time without prior notice.

3. Official Statement.

(a) KUB has provided the Underwriter with information that constitutes a "deemed final" official statement for purposes of Rule 15c2-12 under the Securities Exchange Act of 1934 ("Rule 15c2-12"). Concurrently with KUB's acceptance of this Bond Purchase Agreement, KUB shall deliver or cause to be delivered to the Underwriter two copies of the Official Statement (as hereinafter defined) relating to the Bonds dated the date hereof substantially in the same form as the Preliminary Official Statement with only such changes as shall have been accepted by the Underwriter.

(b) Within seven (7) business days from the date hereof and within sufficient time to accompany any confirmation requesting payment from any customers of the Underwriter, KUB shall deliver to the Underwriter copies of the Official Statement of KUB, dated the date hereof, relating to the Bonds, in sufficient quantity as may reasonably be requested by the Underwriter in order to comply with Rule 15c2-12 and any applicable rules of the Municipal Securities Rulemaking Board, in substantially the form approved by KUB (which, together with the cover page, and all exhibits, appendices, and statements included therein or attached thereto and any amendments and supplements that may be authorized for use with respect to the Bonds is herein called the "Official Statement"), executed on behalf of KUB by a duly authorized officer of KUB. You hereby authorize and approve the Official Statement and other pertinent documents referred to in Section 7 hereof to be lawfully used in connection with the offering and sale of the Bonds. You also acknowledge and ratify the use by the Underwriter, prior to the date hereof, of the Preliminary Official Statement in connection with a public offering of the Bonds.

(c) If, prior to the Closing (as defined in Section 5 below) or within twenty-five (25) days subsequent to the end of the underwriting period as such term is used for purposes of Rule 15c2-12, any event shall occur with respect to KUB or KUB shall receive notice of the occurrence of any other event that might or would cause the information contained in the Official Statement to contain any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading, KUB shall so notify the Underwriter. KUB agrees to amend or supplement the Official Statement whenever requested by the Underwriter when in the reasonable judgment of the Underwriter such amendment or supplementation is required and to furnish the Underwriter with sufficient quantities of such amendment or supplement in order to permit the Underwriter to comply with Rule 15c2-12.

4. Representations and Warranties.

KUB hereby represents and warrants to the Underwriter that:

(a) KUB is duly existing pursuant to the Charter of the City and is authorized by such Charter to operate and manage the System. KUB has duly authorized all necessary action to be taken by it for: (i) the issuance and sale of the Bonds upon the terms set forth herein and in the Official Statement; (ii) the approval of the Official Statement and the signing of the Official Statement by a duly authorized officer; (iii) the execution, delivery and receipt of this Bond Purchase Agreement, the Bonds and any and all such other agreements and documents as may be required to be executed, delivered and received by KUB in order to carry out, give effect to, and consummate the transactions contemplated hereby, by the Bonds, the Official Statement and the Bond Resolution;

(b) When executed by the respective parties thereto, this Bond Purchase Agreement will constitute legal, valid and binding obligation of KUB enforceable in accordance with its terms;

(c) The information and statements contained in the Preliminary Official Statement, as of its date and as of the date hereof, did not and do not contain any untrue statement of a material fact or omit to state any material fact which was necessary in order to make such information and statements, in the light of the circumstances under which they were made, not misleading;

(d) The information and statements contained in the Official Statement, as of its date and as of the Closing, are and will be correct and complete in all material respects and do not and will not contain any untrue statement of a material fact or omit to state any material fact which is necessary in order to make such information and statements, in the light of the circumstances under which they were made, not misleading;

(e) KUB has complied, and will at the Closing be in compliance, in all respects with the obligations on its part contained in the Bond Resolution and the laws of the State of Tennessee (the "State"), including the Act;

(f) The City has duly adopted the Bond Resolution, and the City and KUB have (a) duly authorized and approved the distribution of the Preliminary Official Statement, (b) duly authorized and approved the execution and delivery of the Official Statement, (c) duly authorized and approved the execution and delivery of, and the performance by KUB of the obligations on its part contained in, the Bonds, the Bond Resolution and this Bond Purchase Agreement, and (d) duly authorized and approved the consummation by it of all other transactions contemplated by this Bond Purchase Agreement and the Official Statement;

(g) KUB is not in breach of or default under any applicable law or administrative regulation of the State or the United States in any manner related to or affecting the transactions contemplated hereby or in breach of or default under any applicable judgment or decree or any loan agreement, note, resolution, ordinance, agreement or other instrument to which KUB is a party or to which it or any of its property is otherwise subject; and the execution and delivery of this Bond Purchase Agreement, the Bonds and the adoption of the Bond Resolution, and compliance with the provisions of each thereof, will not conflict with or constitute a breach of or default under any law, administrative regulation, judgment, decree, loan agreement, note, resolution, ordinance, agreement or other instrument to which KUB is a party or to which it or any of its property is otherwise subject;

(h) Except as may be required under the securities or "blue sky" laws of any state, all approvals, consents, authorizations and orders of, filings with or certifications by any governmental authority, board, agency or commission having jurisdiction, which would constitute a condition precedent to the performance by KUB of its obligations hereunder and under the Bond Resolution and the Bonds, have been obtained;

(i) There is no action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, public board or body, pending or, to the knowledge of KUB, threatened against KUB or others (a) affecting KUB or the corporate existence of KUB or the titles of its officers to their respective offices, (b) seeking to prohibit, restrain or enjoin the sale, issuance or delivery of the Bonds or the collection of Net Revenues pledged to pay the principal of and interest on the Bonds, or the pledge thereof, (c) in any way contesting or affecting the transactions contemplated hereby or by the Official Statement or by the validity or enforceability of the Bonds, the Bond Resolution or this Bond Purchase Agreement, (d) contesting in any way the completeness or accuracy of the Preliminary Official Statement or the Official Statement, or (e) contesting the powers or authority of KUB for the issuance of the Bonds, the adoption of the Bond Resolution or the execution and delivery of this Bond Purchase Agreement;

(j) KUB will not take or omit to take any action that will in any way cause the proceeds from the sale of the Bonds and other moneys of KUB to be transferred on the date of issuance of the Bonds to be applied or result in such proceeds and other moneys being applied in a manner other than as provided in or permitted by the Bond Resolution and consistent with the utilization described in the Official Statement;

(k) KUB agrees reasonably to cooperate with the Underwriter and its counsel in any endeavor to qualify the Bonds for offering and sale under the securities or "blue sky" laws of such jurisdictions of the United States as the Underwriter may request. KUB hereby consents to the use of the Official Statement and the Bond Resolution by the Underwriter in obtaining any qualification required;

(l) If at any time from the date of this Bond Purchase Agreement through 25 days following the "end of the underwriting period" (as defined in Rule 15c2-12 described below) any event shall occur that might or would cause the Official Statement to contain any untrue statement of a material fact or to omit to state any material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, KUB shall notify the Underwriter and if, in the opinion of the Underwriter, such event requires the preparation and publication of a supplement or amendment to the Official Statement, KUB will supplement or amend the Official Statement in a form and in a manner approved by the Underwriter. If the Official Statement is so supplemented or amended prior to the Closing, such approval by the Underwriter of a supplement or amendment to the Official Statement shall not preclude the Underwriter from thereafter terminating this Bond Purchase Agreement, and if the Official Statement is so amended or supplemented subsequent to the date hereof and prior to the Closing, the Underwriter may terminate this Bond Purchase Agreement by notification to KUB at any time prior to the Closing if, in the judgment of the Underwriter, such amendment or supplement has or will have a material adverse effect on the marketability of the Bonds;

(m) KUB has duly authorized and approved the execution and delivery of this Bond Purchase Agreement and the performance by KUB of the obligations on its part contained herein;

(n) KUB is not, nor has it at any time, been in default in the payment of principal of or interest on any obligation issued or guaranteed by KUB;

(o) Any certificate signed by an authorized officer of KUB and delivered to the Underwriter at or prior to the Closing shall be deemed a representation and warranty by KUB in connection with this Bond Purchase Agreement to the Underwriter as to the statements made therein upon which the Underwriter shall be entitled to rely. KUB covenants that between the date hereof and the Closing, it will not take any action that will cause the representations and warranties made herein to be untrue as of the Closing;

(p) The Bonds, when issued, authenticated and delivered in accordance with the Bond Resolution and sold to the Underwriter as provided herein, will be validly issued and outstanding special obligations of KUB entitled to the benefits of the Bond Resolution;

(q) KUB has lawful authority to operate the System, to consummate the transactions contemplated by the Official Statement and collect revenues, fees and other charges in connection with the System and through its Board of Commissioners, to fix the rates, fees and other charges with respect to the System; and

(r) KUB hereby covenants and agrees to enter into a written agreement or contract, constituting an undertaking (the "Undertaking") to provide ongoing disclosure about KUB, for the benefit of the beneficial owners of the Bonds on or before the date of delivery of the Bonds as required under paragraph (b)(5) of Rule 15c2-12. The Undertaking shall be as described in the Preliminary Official Statement, with such changes as may be agreed in writing by the Underwriter. KUB represents that it has complied in all respects with its obligations to provide continuing disclosure of certain information as described in that certain Continuing Disclosure Certificate entered into in connection with the issuance of the Bonds.

5. Delivery of, and Payment for, the Bonds.

At 10:00 a.m. on or about _____, 2016, or at such other time or date as shall have been mutually agreed upon by KUB and the Underwriter, KUB will deliver, or cause to be delivered, to the Underwriter the other documents hereinafter mentioned and, subject to the conditions contained herein, the Underwriter will accept such delivery and pay the purchase price of the Bonds plus accrued interest payable to the order of KUB, in federal funds or other immediately available funds by delivering to KUB such funds by wire transfer to KUB or its designated agent except that physical delivery of the Bonds shall be made through the facilities of the Depository Trust Company.

Payment for the Bonds shall be confirmed and delivery of the documents as aforesaid shall be made at the offices of KUB, or such other place as may be agreed upon by the Underwriter and KUB. Such payment and delivery is herein called the "Closing." The Bonds will be delivered as fully registered bonds in such names and in such denominations as shall be designated in writing by the Underwriter to KUB at Closing.

6. Certain Conditions to Underwriter's Obligations.

The obligations of the Underwriter hereunder shall be subject to (i) the performance by KUB of its obligations to be performed hereunder, (ii) the accuracy in all material respects of the representations and warranties of KUB herein as of the date hereof and as of the date of the Closing, and (iii) to the following conditions:

(a) At the time of Closing, (i) the Bond Resolution shall be in full force and effect and shall not have been amended, modified or supplemented except as may have been agreed to in writing by the Underwriter, (ii) the proceeds of the sale of the Bonds shall be applied as described in the Official Statement, and (iii) KUB shall have duly adopted and there shall be in full force and effect such other resolutions as, in the opinion of Bass Berry & Sims PLC, Knoxville, Tennessee ("Bond Counsel"), shall be necessary in connection with the transactions contemplated hereby;

(b) At or prior to the Closing, the Underwriter shall have received an executed copy of each of the following documents:

(1) the approving opinion dated the date of the Closing, of Bond Counsel addressed to KUB and the Underwriter, relating to, among other things, the validity of the Bonds [and the exclusion from gross income of the interest on the Bonds for federal and State of Tennessee income tax purposes,] in substantially the form set forth as Appendix _ to the Official Statement;

(2) a supplemental opinion, dated the date of the Closing, of Bond Counsel addressed to the Underwriter in substantially the form of Exhibit A hereto;

(3) an opinion, dated the date of the Closing, of Hodges, Doughty & Carson, Knoxville, Tennessee, counsel to KUB, addressed to KUB, Bond Counsel and the Underwriter in substantially the form of Exhibit B hereto;

(4) a certificate of KUB, dated the date of the Closing and signed by a duly authorized officer of KUB and in form and substance reasonably satisfactory to the Underwriter, to the effect that (i) since the execution of the Bond Purchase Agreement no material and adverse change has occurred in the financial position of the System or results of operations of the System; (ii) KUB has not incurred any material liabilities secured by the Net Revenues of the System other than in the ordinary course of business or as set forth in or contemplated by the Official Statement; and (iii) no event affecting KUB has occurred since the date of the Official Statement which should be disclosed in the Official Statement for the purpose for which it is to be used or which is necessary to be disclosed therein in order to make the statements and information therein not misleading as of the date of Closing;

(5) the Official Statement executed on behalf of KUB by a duly authorized officer thereof;

(6) the Bond Resolution and the Bonds;

(7) a certificate of a duly authorized officer of KUB, satisfactory to the Underwriter, dated the date of Closing, stating that such officer is charged, either alone or with others, with the responsibility for issuing the Bonds; setting forth, in the manner permitted by Section 148 of the Internal Revenue Code of 1986, as amended (the "Code"), the reasonable expectations of KUB as of such date as to the use of proceeds of the Bonds and of any other funds of KUB expected to be used to pay principal or interest on the Bonds and the facts and estimates on which such expectations are based; and stating that, to the best of the knowledge and belief of the certifying officer, KUB's expectations are reasonable;

(8) evidence indicating a rating on the Bonds of "___" by [rating agency];

(9) other certificates of KUB listed on a Closing Memorandum to be approved by counsel to KUB, Bond Counsel and counsel to the Underwriter, including any certificates or representations required in order for Bond Counsel to deliver the opinion referred to in Paragraph 7(b) (1) of this Bond Purchase Agreement; and such additional legal opinions, certificates, proceedings, instruments and other documents as the counsel to the Underwriter or Bond Counsel may reasonably request to evidence compliance by KUB with legal requirements, the truth and accuracy, as of the time of Closing, of the representations of KUB contained herein and the due performance or satisfaction by KUB at or prior to such time of all agreements then to be performed and all conditions then to be satisfied by KUB.

All such opinions, certificates, letters, agreements and documents will be in compliance with the provisions hereof only if they are satisfactory in form and substance to the Underwriter and

counsel to the Underwriter. KUB will furnish the Underwriter with such conformed copies or photocopies of such opinions, certificates, letters, agreements and documents as the Underwriter may reasonably request.

(c) The Underwriter shall have received within seven (7) business days from the date hereof and within sufficient time to accompany any confirmation requesting payment from any customers of the Underwriter, the Official Statement in sufficient quantity as may be reasonably requested by the Underwriter in order to comply with Rule 15(c) 2-12.

7. Termination.

The Underwriter shall have the right to cancel its obligation to purchase the Bonds if (i) between the date hereof and the Closing, legislation shall be enacted or recommended to the Congress or otherwise endorsed for passage (by press release, other form of notice or otherwise) by the President of the United States, the Treasury Department of the United States, the Internal Revenue Service or the Chairman or ranking minority member of the Committee on Finance of the United States Senate or the Committee on Ways and Means of the United States House of Representatives or favorably reported for passage to either House of the Congress by any committee of such House to which such legislation has been referred for consideration, or a bill to amend the Internal Revenue Code (which, if enacted, would take effect in whole or in part prior to the Closing) shall be filed in either house, or recommended for passage by the Congress by any joint or conference committee thereof, or a decision by a court of the United States or the United States Tax Court shall be rendered, or a ruling, regulation or statement by or on behalf of the Treasury Department of the United States, the Internal Revenue Service or other governmental agency shall be made or proposed to be made, with respect to the federal taxation upon interest on obligations of the general character of the Bonds, or other action or events shall have transpired which may have the purpose or effect, directly or indirectly of changing the federal income tax consequences of any of the transactions contemplated in connection herewith, including the tax-exempt status of KUB and, in the opinion of the Underwriter, materially adversely affects the market price of the Bonds, or the market price generally of obligations of the general character of the Bonds, or (ii) there shall exist any event which in the Underwriter's judgment either (a) makes untrue or incorrect in any material respect any statement or information contained in the Official Statement or (b) is not reflected in the Official Statement but should be reflected therein in order to make the statements and information contained therein not misleading in any material respect, or (iii) there shall have occurred any outbreak of hostilities or any national or international calamity or crisis including financial crisis, or a financial crisis or a default with respect to the debt obligations of, or the institution of proceedings under the federal or the state bankruptcy laws by or against the State of Tennessee or any subdivision, agency or instrumentality of such State, the effect of which on the financial markets of the United States being such as, in the reasonable judgment of the Underwriter, would make it impracticable for the Underwriter to market the Bonds or to enforce contracts for the sale of the Bonds, or (iv) there shall be in force a general suspension of trading on the New York Stock Exchange, or (v) a general banking moratorium shall have been declared by either federal, Tennessee or New York authorities, or (vi) there shall have occurred since the date of this Bond Purchase Agreement any material adverse change in the financial position of the System, except for changes which the Official Statement discloses have occurred or may occur, or (vii) legislation shall be enacted or any action shall be taken by the Securities and Exchange Commission which, in the opinion of counsel for the Underwriter, has the effect of requiring the contemplated distribution of the Bonds to be registered under the Securities Act of 1933, as amended, or the Bond Resolution or any other document executed in connection with the transactions contemplated hereof to be qualified under the Trust Indenture Act of 1939, as amended, or (viii) a stop order, ruling, regulation or official statement by or on behalf of the Securities and Exchange Commission shall be issued or made to the effect that the issuance, offering or sale of the Bonds, or of obligations of the general character of the Bonds as contemplated hereby, or the offering of any other obligation which may be represented by the

Bonds is in violation of any provision of the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, or the Trust Indenture Act of 1939, as amended, or (ix) any state blue sky or securities commission shall have withheld registration, exemption or clearance of the offering, and in the reasonable judgment of the Underwriter the market for the Bonds is materially affected thereby.

If KUB shall be unable to satisfy any of the conditions to the obligations of the Underwriter contained in this Bond Purchase Agreement and such condition is not waived by the Underwriter, or if the obligations of the Underwriter to purchase and accept delivery of the Bonds shall be terminated or canceled for any reason permitted by this Bond Purchase Agreement, this Bond Purchase Agreement shall terminate and neither the Underwriter nor KUB shall be under further obligation hereunder; except that the respective obligations to pay expenses, as provided in Section 10 hereof, shall continue in full force and effect.

8. Particular Covenants.

KUB covenants and agrees with the Underwriter as follows:

(a) KUB shall use its best efforts to furnish or cause to be furnished to the Underwriter, without charge, as many copies of the Official Statement as the Underwriter may reasonably request;

(b) Before revising, amending or supplementing the Official Statement, KUB shall furnish a copy of the revised Official Statement or such amendment or supplement to the Underwriter. If in the opinion of KUB and the Underwriter a supplement or amendment to the Official Statement is required, KUB will supplement or amend the Official Statement in a form and in a manner approved by the Underwriter and its counsel.

9. Survival of Representations.

All representations, warranties and agreements of KUB hereunder shall remain operative and in full force and effect, regardless of any investigation made by or on behalf of the Underwriter and shall survive the delivery of the Bonds.

10. Payment of Expenses.

Whether or not the Bonds are sold to the Underwriter by KUB, KUB shall pay, but only out of the proceeds of the sale of the Bonds or other funds made available by KUB, any expenses incident to the performance of its obligations hereunder, including but not limited to: (i) the cost of the preparation and printing of the Official Statement and any supplements thereto, together with a number of copies which the Underwriter deems reasonable; (ii) the cost of the preparation and printing of the definitive Bonds; (iii) the rating agency fees; and (iv) the fees and disbursements of Counsel to KUB and Bond Counsel and any other experts or consultants retained by KUB.

Whether or not the Bonds are sold to the Underwriter, the Underwriter shall pay (i) all advertising expenses in connection with the public offering of the Bonds; (ii) the cost of preparing and printing the blue sky memorandum, if any, and filing fees in connection with the aforesaid blue sky memorandum other than the costs of preparation of the Preliminary Official Statement and the Official Statement; and (iii) all other expenses incurred by the Underwriter in connection with its public offering and distribution of the Bonds, including the fees and expenses of the Underwriter's counsel.

11. No Advisory or Fiduciary Role.

KUB acknowledges and agrees that (i) the purchase and sale of the Bonds pursuant to this Bond Purchase Agreement is an arm's-length commercial transaction between KUB and the Underwriter, (ii) in connection therewith and with the discussions, undertakings and procedures leading up to the consummation of such transaction, the Underwriter is and has been acting solely as principal and are not acting as the agent, advisor or fiduciary of KUB, (iii) the Underwriter has not assumed an advisory or fiduciary responsibility in favor of KUB with respect to the offering contemplated hereby or the discussions, undertakings and procedures leading thereto (irrespective of whether the Underwriter, or any affiliates of the Underwriter, has provided other services or are currently providing other services to KUB on other matters) and the Underwriter has no obligation to KUB with respect to the offering contemplated hereby except the obligations expressly set forth in this Bond Purchase Agreement, (iv) the Underwriter has financial and other interests that differ from those of KUB and (v) KUB has consulted its own legal, financial and other advisors to the extent it has deemed appropriate.

KUB and the Underwriter represent and warrant that no finder or other agent has been employed by either KUB or the Underwriter in connection with this transaction.

12. Notices.

Any notice or other communication to be given to KUB under this Bond Purchase Agreement may be given by delivering the same in writing at its address set forth above, and any notice or other communication to be given to the Underwriter under this Bond Purchase Agreement may be given by delivering the same in writing to _____, _____,
_____, _____.

13. Parties.

This Bond Purchase Agreement is made solely for the benefit of KUB and the Underwriter (including the successors or assigns of the Underwriter) and no other person shall acquire or have any right hereunder or by virtue hereof.

14. Governing Law.

This Bond Purchase Agreement shall be governed by and construed in accordance with the laws of the State of Tennessee.

15. General.

This Bond Purchase Agreement may be executed in several counterparts, each of which shall be regarded as an original and all of which will constitute one and the same instrument. The section headings of this Bond Purchase Agreement are for convenience of reference only and shall not affect its interpretation. This Bond Purchase Agreement shall become effective upon your acceptance hereof.

Very truly yours,

By: _____
Its: _____

Accepted and agreed to as of
the date first above written:

KNOXVILLE UTILITIES BOARD

By: _____
President and Chief Executive Officer

EXHIBIT A TO BOND PURCHASE AGREEMENT

[LETTERHEAD OF BASS BERRY & SIMS PLC]

[Closing Date]

Ladies and Gentlemen:

This opinion is being rendered to you pursuant to Paragraph 7(b)(2) of the Bond Purchase Agreement, dated _____, 2016 (the "Bond Purchase Agreement"), between _____ (the "Underwriter"), and Knoxville Utilities Board ("KUB"), relating to the sale by KUB of its Water System Revenue Bonds, Series DD-2016, in the aggregate principal amount of \$25,000,000 (the "Bonds"). Terms which are used herein and not otherwise defined shall have the meanings assigned to them in the Bond Purchase Agreement.

Of even date herewith, we have delivered our approving opinion in connection with the issuance of the Bonds. In our capacity as Bond Counsel, we have reviewed a record of proceedings in connection with the issuance of the Bonds and we have participated in conferences from time to time with counsel to KUB, representatives of the Underwriter and counsel to the Underwriter, relative to the Official Statement, dated _____, 2016, relating to the Bonds, and the related documents described below. We have also examined such other agreements, documents and certificates, and have made such investigations of law, as we have deemed necessary or appropriate in rendering the opinions set forth below.

Based on the foregoing, we are of the opinion that, as of the date hereof:

1. The offer and sale of the Bonds to the public do not require any registration under the Securities Act of 1933, as amended, and, in connection therewith, the Bond Resolution does not need to be qualified under the Trust Indenture Act of 1939, as amended.

2. The statements contained in the Official Statement under the captions "Introduction" to the extent the narrative thereunder purports to describe the terms of the Bonds and the legal authority by which they are issued, "The Bonds," and in Appendix A to the Official Statement, insofar as such statements purport to summarize certain provisions of the Bonds and the Bond Resolution, fairly summarize such provisions. The statements contained in the Official Statement under the caption "Opinion of Bond Counsel" are correct as to matters of law.

This opinion may be relied upon only by the Underwriter and by other persons to whom written permission to rely hereon is granted by us.

Very truly yours,

EXHIBIT B TO BOND PURCHASE AGREEMENT

_____, 2016

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

**Re: City of Knoxville, Tennessee acting on behalf of the Knoxville Utilities Board
\$25,000,000 Water System Revenue Bonds, Series DD-2016**

Ladies and Gentlemen:

You have requested that the undersigned, General Counsel to the Knoxville Utilities Board of the City of Knoxville, Tennessee ("KUB"), render this opinion in connection with the execution, delivery and sale of the captioned bonds (the "Bonds"), the proceeds of which will be used to finance extensions and improvements to the water system described herein.

It is our opinion that KUB is duly established and validly existing pursuant to the Charter of the City of Knoxville, Tennessee (the "Municipality"), and, pursuant to said Charter and the water system of the Municipality (the "System") is under the jurisdiction, control and management of KUB.

The undersigned does hereby certify that no litigation of any nature is now pending or, to our knowledge, threatened

- (1) seeking to restrain or enjoin the issuance, sale, execution or delivery of the Bonds;
- (2) seeking to restrain or enjoin the charging of sufficient rates to pay the cost of operating, maintaining, repairing and insuring the System and to pay principal of and interest on the Bonds and all outstanding obligations payable from the revenues of the System;
- (3) in any manner questioning the proceedings or authority pursuant to which the Bonds are authorized or issued or such rates are charged;
- (4) in any manner questioning or relating to the validity of the Bonds;
- (5) contesting in any way the completeness or accuracy of the Official Statement prepared and distributed in connection with the sale of the Bonds;
- (6) in any way contesting the corporate existence or boundaries of the Municipality, except for various pending actions challenging past or present annexation efforts of the Municipality, which will have no material adverse effect on the revenues of the System;
- (7) contesting the title of the present officers of KUB to their respective offices; or

(8) contesting the powers of KUB or the authority of KUB with respect to the Bonds, or proceedings authorizing the Bonds, or any act to be done or document or certificate to be executed or delivered in connection with the issuance and delivery of the Bonds.

Neither the voters of the Municipality nor its governing body nor the Board of Commissioners of KUB have approved any special, local or private act or legislation passed by the General Assembly of the State of Tennessee at its most recent session or any amendments to the Charter of the Municipality affecting the power of the Municipality to issue the Bonds or pay the principal of, premium, if any, and interest on the Bonds when due or affecting the power of the Board of Commissioners of KUB to manage and control the System.

I hereby certify that _____ and _____ are the duly qualified, appointed and acting Chair and Secretary, respectively, of the Board of Commissioners of KUB with full power to act as such officers on behalf of KUB in connection with the execution and delivery of the Bonds.

Yours truly,

A RESOLUTION SUPPLEMENTING RESOLUTION NO. 2075
ADOPTED BY THE CITY COUNCIL OF THE CITY OF
KNOXVILLE, TENNESSEE ON APRIL 20, 1954 ENTITLED "A
RESOLUTION PROVIDING FOR THE ISSUANCE OF WATER
REVENUE BONDS" SO AS TO PROVIDE FOR THE ISSUANCE OF
NOT TO EXCEED TWENTY-TWO MILLION AND NO/100
DOLLARS (\$22,000,000) OF WATER SYSTEM REVENUE
REFUNDING BONDS, SERIES EE-2016.

RESOLUTION NO: _____

REQUESTED BY: _____

PREPARED BY: _____

APPROVED AS TO FORM

CORRECTNESS: _____

Law Director

FINANCIAL IMPACT STATEMENT:

Director of Finance

APPROVED: _____

APPROVED AS AN
EMERGENCY MEASURE: _____

MINUTE BOOK ____ PAGE ____

WHEREAS, the City of Knoxville (the "City"), pursuant to a resolution entitled "A Resolution Providing for the Issuance of Water Revenue Bonds," being Resolution No. 2075 of the City Council adopted April 20, 1954 (which resolution as heretofore amended is hereinafter sometimes referred to as "Resolution No. 2075"), authorized an issue of Water Revenue Bonds; and

WHEREAS, pursuant to Resolution No. 2075, and for the purpose of financing the cost of the improvement, betterment and extension of the City's water distribution system (the "System") and the refinancing of indebtedness issued for that purpose, the City issued Water Revenue Bonds, the series of which, the amount issued, and the amount outstanding as of June 1, 2016 are as follows:

<u>Series</u>	<u>Amount Issued</u>	<u>Amount Outstanding</u>
S-2005	\$ 8,865,000	\$ 6,295,000
T-2007	\$25,000,000	\$ 750,000
U-2009	\$25,000,000	\$22,625,000
W-2011	\$25,000,000	\$22,800,000
X-2012	\$10,050,000	\$ 8,665,000
Y-2013	\$ 9,285,000	\$ 8,970,000
Z-2013	\$25,000,000	\$23,675,000
AA-2014	\$ 8,000,000	\$ 7,725,000
BB-2015	\$23,005,000	\$22,835,000
CC-2015	\$20,000,000	\$19,650,000

WHEREAS, the City has also authorized the issuance of its Water System Revenue Bonds, Series DD-2016 (the "Series DD-2016 Bonds") that are expected to be issued prior to or simultaneously with the issuance of the Series EE-2016 Bonds; and

WHEREAS, it is desirable that an additional series of bonds be issued to refinance the outstanding principal amount of the City's outstanding Water System Revenue Bonds, Series U-2009, dated November 12, 2009, maturing March 1, 2020 and thereafter (the "Refunded Bonds"), including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the bonds, pursuant to the authority of Resolution No. 2075 and pursuant to the authority of this resolution; and

WHEREAS, the Board of Commissioners (the "Board") of the Knoxville Utilities Board ("KUB") has duly adopted a resolution requesting the City Council of the City to adopt this resolution authorizing the issuance of bonds for the purposes and in the manner hereinafter more fully stated; and

WHEREAS, the plan of refunding for the Refunded Bonds has been submitted to the State Director of State and Local Finance (the "State Director") as required by Section 9-21-903, Tennessee Code Annotated, as amended, and she has acknowledged receipt thereof to the City and KUB and submitted her report thereon to the City and KUB, and such report has been provided to members of the City Council of the City; and

WHEREAS, it is the intention of the City Council of the City to adopt this resolution for the purpose of authorizing not to exceed \$22,000,000 in aggregate principal amount of water revenue refunding bonds for the purposes described above, establishing the terms of such bonds, providing for the issuance, sale and payment of the bonds and disposition of proceeds therefrom, and collection of revenues from the System and the application thereof to the payment of principal of, premium, if any, and interest on said bonds.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Knoxville, Tennessee, as follows:

Section 1. Authority. The bonds authorized by this resolution are issued pursuant to Sections 7-34-101 et seq. and 9-21-101 et seq., Tennessee Code Annotated, and other applicable provisions of law.

Section 2. Definitions. Capitalized terms used herein and not defined in this Section 2 shall have the meanings ascribed to them in the 1954 Resolution (as hereinbelow defined). The following terms shall have the following meanings in this resolution unless the text expressly or by necessary implication requires otherwise.

- (a) "Board" shall mean the Board of Commissioners of the Knoxville Utilities Board;
- (b) "Bond Purchase Agreement" means a Bond Purchase Agreement, dated as of the sale of the Series EE-2016 Bonds, entered into by and between KUB and the Underwriter, in substantially the form of the document attached hereto as Exhibit A, subject to such changes as permitted by Section 10 hereof, as approved by the President and Chief Executive Officer of KUB, consistent with the terms of this resolution;
- (c) "Book-Entry Form" or "Book-Entry System" means a form or system, as applicable, under which physical Bond certificates in fully registered form are issued to a Depository, or to its nominee as Registered Owner, with the certificated Bonds being held by and "immobilized" in the custody of such Depository, and under which records maintained by persons, other than the City, KUB or the Registration Agent, constitute the written record that identifies, and records the transfer of, the beneficial "book-entry" interests in those Bonds;
- (d) "City" shall mean the City of Knoxville, Tennessee;
- (e) "Code" shall mean the Internal Revenue Code of 1986, as amended, and any lawful regulations promulgated or proposed thereunder;
- (f) "Depository" means any securities depository that is a clearing agency under federal laws operating and maintaining, with its participants or otherwise, a Book-Entry System, including, but not limited to, DTC;
- (g) "DTC" means the Depository Trust Company, a limited purpose company organized under the laws of the State of New York, and its successors and assigns;
- (h) "DTC Participant(s)" means securities brokers and dealers, banks, trust companies and clearing corporations that have access to the DTC system;
- (i) "Governing Body" shall mean the City Council of the City;
- (j) "KUB" shall mean the Knoxville Utilities Board;
- (k) "1954 Resolution" shall mean Resolution No. 2075 of the Governing Body, adopted April 20, 1954, as amended and supplemented by Resolution No. 3633 of the Governing Body adopted March 19, 1968; Resolution No. R-26-88, adopted February 9, 1988; Resolution No. R-318-90, adopted October 30, 1990; Resolution No. R-470-92, adopted October 13, 1992; Resolution No. R-474-93, adopted October 26, 1993; Resolution No. R-8-98, adopted January 27, 1998; Resolution No. R-65-01 adopted February 20, 2001; Resolution No. R-151-01, adopted March 20, 2001; Resolution No. R-482-01, adopted October 30, 2001; Resolution No. R-57-04, adopted March 2, 2004, Resolution No. R-263-05, adopted July 5, 2005, Resolution No. R-346-07, adopted August 28, 2007, Resolution No. R-211-09,

adopted June 30, 2009, Resolution No. R-133-10 adopted May 4, 2010, Resolution No. R-285-2011 adopted October 4, 2011, Resolution No. R-337-2011 adopted December 13, 2011, Resolution No. R-323-2012 adopted November 13, 2012, Resolution No. R-243-2013 adopted July 23, 2013, Resolution No. R-214-2014 adopted June 24, 2014, Resolution No. R-83-2015 adopted March 3, 2015, Resolution No. R-127-2015 adopted March 31, 2015 and Resolution No. R-_____2016 adopted _____, 2016 authorizing the issuance from time-to-time of series of revenue bonds of the City payable from revenues of the System on a parity with any bonds issued pursuant to its provisions;

(l) "Outstanding Bonds" shall mean the City's outstanding Water System Revenue Refunding Bonds, Series S-2005, dated August 10, 2005, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Bonds, Series T-2007, dated November 1, 2007, maturing March 1, 2017, the City's outstanding Water System Revenue Bonds, Series U-2009, dated November 12, 2009, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Bonds, Series W-2011, dated December 1, 2011, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Refunding Bonds, Series X-2012, dated April 20, 2012, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Refunding Bonds, Series Y-2013, dated March 15, 2013, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Bonds, Series Z-2013, dated October 1, 2013, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Bonds, Series AA-2014, dated September 18, 2014, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Refunding Bonds, Series BB-2015, dated May 1, 2015, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Bonds, Series CC-2015, dated May 20, 2015, maturing March 1, 2017 and thereafter and, if issued prior to the issuance of the Series EE-2016 Bonds, the City's Series DD-2016 Bonds;

(m) "Parity Bonds" shall mean any bonds issued on a parity with the Series EE-2016 Bonds and the Outstanding Bonds pursuant to the 1954 Resolution;

(n) "Refunded Bonds" shall mean those portions of the City's outstanding Water System Revenue Bonds, Series U-2009, dated November 12, 2009, maturing March 1, 2020 and thereafter that are selected for refunding pursuant to Section 10 hereof;

(o) "Refunding Escrow Agent" shall mean the refunding escrow agent under the Refunding Escrow Agreement as shall be designated by the President and Chief Executive Officer of KUB, or any successor thereunder pursuant to the terms thereof;

(p) "Refunding Escrow Agreement" shall mean the Refunding Escrow Agreement, dated as of the date of the Series EE-2016 Bonds to be entered into by and between KUB and the Refunding Escrow Agent in substantially the form attached hereto as Exhibit B, subject to such changes therein as shall be permitted by Section 13 hereof;

(q) "Registration Agent" shall mean the registration and paying agent for the Series EE-2016 Bonds designated by the President and Chief Executive Officer of KUB, or any successor as designated by the Board;

(r) "Series EE-2016 Bonds" shall mean the City's Water System Revenue Refunding Bonds, Series EE-2016, dated the date of their issuance, or such other date as shall be determined by the Board pursuant to Section 10 hereof, authorized to be issued by the 1954 Resolution and this resolution in an aggregate principal amount not to exceed \$22,000,000;

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

(t) "Underwriter" shall mean an investment banking firm qualified to underwrite bonds such as the Series EE-2016 Bonds in the State of Tennessee selected by the President and Chief Executive Officer of KUB.

Section 3. Declarations. It is hereby determined that all requirements of the 1954 Resolution have been or will have been met upon the issuance of the Series EE-2016 Bonds so that the Series EE-2016 Bonds will be issued as Parity Bonds.

Section 4. Findings of the Governing Body. It is hereby found and determined by the Governing Body as follows:

(a) The refunding of the Refunded Bonds as set forth herein through the issuance of the Series EE-2016 Bonds will result in a reduction in debt service payable by the City and KUB over the term of the Refunded Bonds, thereby effecting a cost savings to the System; and

(b) It is advantageous to the City and KUB to deposit a portion of the proceeds from the sale of the Series EE-2016 Bonds and other funds of KUB, if any, with the Refunding Escrow Agent pursuant to the Refunding Escrow Agreement which, together with investment income thereon, will be sufficient to pay principal of, premium, if any, and interest on the Refunded Bonds, provided, that KUB may dispense with the use of a Refunding Escrow Agreement to the extent permitted by Section 13 hereof.

Section 5. Authorization and Terms of the Series EE-2016 Bonds. (a) For the purpose of providing funds for the payment of principal of and premium and interest on the Refunded Bonds to the earliest practicable optional redemption date thereof, including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the Series EE-2016 Bonds as more fully set out in Section 10 hereof, there are hereby authorized to be issued revenue bonds of the City in the aggregate principal amount of not to exceed \$22,000,000. The Series EE-2016 Bonds shall be issued in fully registered form, without coupons, shall be known as "Water System Revenue Refunding Bonds, Series EE-2016" and shall be dated the date of their issuance or such other date as shall be determined by the Board or the President and Chief Executive Officer of KUB as its designee pursuant to Section 10 hereof. The Series EE-2016 Bonds shall bear interest at a rate or rates not to exceed five percent (5.00%) per annum, payable semi-annually on March 1 and September 1 in each year, commencing September 1, 2016 or such later date as is permitted pursuant to Section 10 hereof. The Series EE-2016 Bonds shall be initially issued in \$5,000 denominations or integral multiples thereof as shall be requested by the purchaser thereof. The Series EE-2016 Bonds shall mature and be payable either serially or through mandatory redemption on each March 1 in such years as is established by the Board or the President and Chief Executive Officer of KUB as its designee pursuant to Section 10, provided that the final maturity date shall not be later than March 1, 2033, and the Series EE-2016 Bonds shall not have an average weighted maturity in excess of the average weighted maturity of the Refunded Bonds. The final maturity schedule shall be established by the award resolution or certificate awarding the Series EE-2016 Bonds to the successful purchaser thereof or in the Bond Purchase Agreement provided for in Section 10 if the Series EE-2016 Bonds are sold by negotiated sale.

(b) Subject to adjustment pursuant to Section 10 hereof, the Series EE-2016 Bonds maturing on or before March 1, 2025 shall mature without option of prior redemption. Series EE-2016 Bonds maturing on March 1, 2026 and thereafter shall be subject to redemption prior to maturity at the option of the City, acting through the Board, on or after March 1, 2025, as a whole or in part at any time at a redemption price equal to the principal amount plus interest accrued to the redemption date.

If less than all the Series EE-2016 Bonds shall be called for redemption, the maturities to be redeemed shall be selected by the Board in its discretion. If less than all the Series EE-2016 Bonds within a single maturity shall be called for redemption, the interests within the maturity to be redeemed shall be selected as follows:

(i) if the Series EE-2016 Bonds are being held under a Book-Entry System by DTC, or a successor Depository, the amount of the interest of each DTC Participant in the Series EE-2016 Bonds to be redeemed shall be determined by DTC, or such successor Depository, by lot or such other manner as DTC, or such successor Depository, shall determine; or

(ii) if the Series EE-2016 Bonds are not being held under a Book-Entry System by DTC, or a successor Depository, the Series EE-2016 Bonds within the maturity to be redeemed shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall determine.

(c) Pursuant to Section 10 hereof, KUB is authorized to sell the Series EE-2016 Bonds, or any maturities thereof, as term bonds with mandatory redemption requirements corresponding to the maturities set forth herein or as determined by KUB. In the event any or all the Series EE-2016 Bonds are sold as term bonds, KUB shall redeem term bonds on redemption dates corresponding to the maturity dates set forth in the award resolution or certificate awarding the Series EE-2016 Bonds, in amounts so as to achieve an amortization of the indebtedness approved by the Board or the President and Chief Executive Officer of KUB as its designee. DTC, as Depository for the Series EE-2016 Bonds, or any successor Depository for the Series EE-2016 Bonds, shall determine the interest of each Participant in the Series EE-2016 Bonds to be redeemed using its procedures generally in use at that time. If DTC, or another securities depository is no longer serving as Depository for the Series EE-2016 Bonds, the Series EE-2016 Bonds to be redeemed within a maturity shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall select.

At its option, to be exercised on or before the forty-fifth (45th) day next preceding any such redemption date, KUB may (i) deliver to the Registration Agent for cancellation Series EE-2016 Bonds to be redeemed, in any aggregate principal amount desired, and/or (ii) receive a credit in respect of its redemption obligation under this mandatory redemption provision for any Series EE-2016 Bonds of the maturity to be redeemed which prior to said date have been purchased or redeemed (otherwise than through the operation of this mandatory sinking fund redemption provision) and canceled by the Registration Agent and not theretofore applied as a credit against any redemption obligation under this mandatory sinking fund provision. Each Series EE-2016 Bond so delivered or previously purchased or redeemed shall be credited by the Registration Agent at 100% of the principal amount thereof on the obligation of KUB on such payment date and any excess shall be credited on future redemption obligations in chronological order, and the principal amount of Series EE-2016 Bonds to be redeemed by operation of this mandatory sinking fund provision shall be accordingly reduced. KUB shall on or before the forty-fifth (45th) day next preceding each payment date furnish the Registration Agent with its certificate indicating whether or not and to what extent the provisions of clauses (i) and (ii) of this subsection are to be availed of with respect to such payment and confirm that funds for the balance of the next succeeding prescribed payment will be paid on or before the next succeeding payment date.

(d) Notice of call for redemption, whether optional or mandatory, shall be given by the Registration Agent not less than twenty (20) nor more than sixty (60) days prior to the date fixed for redemption by sending an appropriate notice to the registered owners of the Series EE-2016 Bonds to be redeemed by first-class mail, postage prepaid, at the addresses shown on the bond registration records of the Registration Agent as of the date of the notice; but neither failure to mail such notice nor any defect in any such notice so mailed shall affect the sufficiency of the proceedings for redemption of any of the Series EE-2016 Bonds for which proper notice was given. The notice may state that it is conditioned upon the deposit of moneys in an amount equal to the amount necessary to affect the redemption with the Registration Agent no later than the redemption date ("Conditional Redemption"). As long as DTC, or a successor Depository, is the registered owner of the Series EE-2016 Bonds, all redemption notices shall be mailed by the Registration Agent to DTC, or such successor Depository, as the registered owner of the Series EE-2016 Bonds, as and when above provided, and neither KUB, the City, nor the Registration

Agent shall be responsible for mailing notices of redemption to DTC Participants or Beneficial Owners. Failure of DTC, or any successor Depository, to provide notice to any DTC Participant or Beneficial Owner will not affect the validity of such redemption. The Registration Agent shall mail said notices, in the case of term bonds with mandatory redemption requirements as and when provided herein and in the Series EE-2016 Bonds and, in the case of optional redemption, as and when directed by the Board pursuant to written instructions from an authorized representative of the Board given at least forty-five (45) days prior to the redemption date (unless a shorter notice period shall be satisfactory to the Registration Agent). From and after the redemption date, all Series EE-2016 Bonds called for redemption shall cease to bear interest if funds are available at the office of the Registration Agent for the payment thereof and if notice has been duly provided as set forth herein. In the case of a Conditional Redemption, the failure of the City or KUB to make funds available in part or in whole on or before the redemption date shall not constitute an event of default, and the Registration Agent shall give immediate notice to the Depository or the affected Bondholders that the redemption did not occur and that the Bonds called for redemption and not so paid remain outstanding.

(e) The Series EE-2016 Bonds shall be executed in such manner as may be prescribed by applicable law, in the name, and on behalf, of the City with the manual or facsimile signature of the Chair of the Board and attested by the manual or facsimile signature of the Secretary of the Board.

(f) The City hereby authorizes and directs the Board to appoint a Registration Agent and paying agent for the Series EE-2016 Bonds, and the Registration Agent so appointed is authorized and directed to maintain Bond registration records with respect to the Series EE-2016 Bonds, to authenticate and deliver the Series EE-2016 Bonds as provided herein, either at original issuance, upon transfer, or as otherwise directed by the Board, to effect transfers of the Series EE-2016 Bonds, to give all notices of redemption as required herein, to make all payments of principal and interest with respect to the Series EE-2016 Bonds as provided herein, to cancel and destroy the Series EE-2016 Bonds which have been paid at maturity or upon earlier redemption or submitted for exchange or transfer, to furnish KUB at least annually a certificate of destruction with respect to Series EE-2016 Bonds canceled and destroyed, and to furnish KUB at least annually an audit confirmation of Bonds paid, Bonds outstanding and payments made with respect to interest on the Series EE-2016 Bonds. The payment of all reasonable fees and expenses of the Registration Agent for the discharge of its duties and obligations hereunder or under any such agreement is hereby authorized and directed. The Board hereby delegates to the President and Chief Executive Officer of KUB the authority to select and appoint the Registration Agent and any paying agents for the Series EE-2016 Bonds and to select and appoint the Refunding Escrow Agent (as well as any successors to any of the foregoing). The Chair of the Board is hereby authorized to execute and the Secretary of the Board is hereby authorized to attest such written agreement between KUB and the Registration Agent as they shall deem necessary or proper with respect to the obligations, duties and rights of the Registration Agent.

(g) The Series EE-2016 Bonds shall be payable, principal and interest, in lawful money of the United States of America at the principal corporate trust office of the Registration Agent. The Registration Agent shall make all interest payments with respect to the Bonds on each interest payment date directly to the registered owners as shown on the Bond registration records maintained by the Registration Agent as of the close of business on the fifteenth day of the month next preceding the interest payment date (the "Regular Record Date") by check or draft mailed to such owners at their addresses shown on said Bond registration records, without, except for final payment, the presentation or surrender of such registered Series EE-2016 Bonds, and all such payments shall discharge the obligations of KUB in respect of such Series EE-2016 Bonds to the extent of the payments so made. Payment of principal of the Series EE-2016 Bonds shall be made upon presentation and surrender of such Series EE-2016 Bonds to the Registration Agent as the same shall become due and payable. All rates of interest specified herein shall be computed on the basis of a three hundred sixty (360) day year composed of twelve (12) months of thirty (30) days each. In the event the Series EE-2016 Bonds are no longer registered in the name of DTC, or a successor Depository, if requested by the Owner of at least \$1,000,000 in aggregate principal

amount of the Series EE-2016 Bonds, payment of interest on such Series EE-2016 Bonds shall be paid by wire transfer to a bank within the continental United States or deposited to a designated account if such account is maintained with the Registration Agent and written notice of any such election and designated account is given to the Registration Agent prior to the record date.

(h) Any interest on any Series EE-2016 Bond which is payable but is not punctually paid or duly provided for on any interest payment date (hereinafter "Defaulted Interest") shall forthwith cease to be payable to the registered owner on the relevant Regular Record Date; and, in lieu thereof, such Defaulted Interest shall be paid to the persons in whose names the Series EE-2016 Bonds are registered at the close of business on a date (the "Special Record Date") for the payment of such Defaulted Interest, which shall be fixed in the following manner: KUB shall notify the Registration Agent in writing of the amount of Defaulted Interest proposed to be paid on each Series EE-2016 Bond and the date of the proposed payment, and at the same time KUB shall deposit with the Registration Agent an amount of money equal to the aggregate amount proposed to be paid in respect of such Defaulted Interest or shall make arrangements satisfactory to the Registration Agent for such deposit prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the persons entitled to such Defaulted Interest as in this Section 5 provided. Thereupon, not less than ten (10) days after the receipt by the Registration Agent of the notice of the proposed payment, the Registration Agent shall fix a Special Record Date for the payment of such Defaulted Interest which Date shall be not more than fifteen (15) nor less than ten (10) days prior to the date of the proposed payment to the registered owners. The Registration Agent shall promptly notify KUB of such Special Record Date and, in the name and at the expense of KUB, not less than ten (10) days prior to such Special Record Date, shall cause notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor to be mailed, first class postage prepaid, to each registered owner at the address thereof as it appears in the Bond registration records maintained by the Registration Agent as of the date of such notice. Nothing contained in this Section 5 or in the Series EE-2016 Bonds shall impair any statutory or other rights in law or in equity of any registered owner arising as a result of the failure of KUB to punctually pay or duly provide for the payment of principal of, premium, if any, and interest on the Series EE-2016 Bonds when due.

(i) The Series EE-2016 Bonds are transferable only by presentation to the Registration Agent by the registered owner, or his legal representative duly authorized in writing, of the registered Series EE-2016 Bond(s) to be transferred with the form of assignment on the reverse side thereof completed in full and signed with the name of the registered owner as it appears upon the face of the Series EE-2016 Bond(s) accompanied by appropriate documentation necessary to prove the legal capacity of any legal representative of the registered owner. Upon receipt of the Series EE-2016 Bond(s) in such form and with such documentation, if any, the Registration Agent shall issue a new Series EE-2016 Bond or Series EE-2016 Bonds to the assignee(s) in \$5,000 denominations, or integral multiples thereof, as requested by the registered owner requesting transfer. The Registration Agent shall not be required to transfer or exchange any Series EE-2016 Bond during the period commencing on a Regular or Special Record Date and ending on the corresponding interest payment date of such Series EE-2016 Bond, nor to transfer or exchange any Series EE-2016 Bond after notice calling such Series EE-2016 Bond for redemption has been made, nor to transfer or exchange any Series EE-2016 Bond during the period following the receipt of instructions from KUB to call such Series EE-2016 Bond for redemption; provided, the Registration Agent, at its option, may make transfers after any of said dates. No charge shall be made to any registered owner for the privilege of transferring any Series EE-2016 Bond, provided that any transfer tax relating to such transaction shall be paid by the registered owner requesting transfer. The person in whose name any Series EE-2016 Bond shall be registered shall be deemed and regarded as the absolute owner thereof for all purposes and neither KUB nor the Registration Agent shall be affected by any notice to the contrary whether or not any payments due on the Series EE-2016 Bonds shall be overdue. Series EE-2016 Bonds, upon surrender to the Registration Agent, may, at the option of the registered owner, be exchanged for an equal aggregate principal amount of Series EE-2016 Bonds of the same maturity in any authorized denomination or denominations. This subsection shall be applicable only if the Series EE-2016 Bonds are no longer held by a Depository, and as long as the Series EE-2016

Bonds are held by a Depository, transfers of ownership interests in the Series EE-2016 Bonds shall be governed by the rules of the Depository.

(j) Except as otherwise authorized herein, the Series EE-2016 Bonds shall be registered in the name of Cede & Co., as nominee of DTC, which will act as the Depository for the Series EE-2016 Bonds except as otherwise provided herein. References in this Section 5 to a Series EE-2016 Bond or the Series EE-2016 Bonds shall be construed to mean the Series EE-2016 Bond or the Series EE-2016 Bonds that are held under the Book-Entry System. One Bond for each maturity of the Series EE-2016 Bonds shall be issued to DTC and immobilized in its custody or a custodian of DTC. The Bond Registrar is a custodian and agent for DTC, and the Bond will be immobilized in its custody. A Book-Entry System shall be employed, evidencing ownership of the Series EE-2016 Bonds in authorized denominations, with transfers of beneficial ownership effected on the records of DTC and the DTC Participants pursuant to rules and procedures established by DTC.

Each DTC Participant shall be credited in the records of DTC with the amount of such DTC Participant's interest in the Series EE-2016 Bonds. Beneficial ownership interests in the Series EE-2016 Bonds may be purchased by or through DTC Participants. The holders of these beneficial ownership interests are hereinafter referred to as the "Beneficial Owners." The Beneficial Owners shall not receive the Series EE-2016 Bonds representing their beneficial ownership interests. The ownership interests of each Beneficial Owner shall be recorded through the records of the DTC Participant from which such Beneficial Owner purchased its Series EE-2016 Bonds. Transfers of ownership interests in the Series EE-2016 Bonds shall be accomplished by book entries made by DTC and, in turn, by DTC Participants acting on behalf of Beneficial Owners. SO LONG AS CEDE & CO., AS NOMINEE FOR DTC, IS THE REGISTERED OWNER OF THE SERIES EE-2016 BONDS, THE REGISTRATION AGENT SHALL TREAT CEDE & CO., AS THE ONLY HOLDER OF THE SERIES EE-2016 BONDS FOR ALL PURPOSES UNDER THIS RESOLUTION, INCLUDING RECEIPT OF ALL PRINCIPAL OF, PREMIUM, IF ANY, AND INTEREST ON THE SERIES EE-2016 BONDS, RECEIPT OF NOTICES, VOTING AND TAKING OR NOT TAKING, OR CONSENTING TO, CERTAIN ACTIONS UNDER THIS RESOLUTION.

Payments of principal, interest, and redemption premium, if any, with respect to the Series EE-2016 Bonds, so long as DTC is the only owner of the Series EE-2016 Bonds, shall be paid by the Registration Agent directly to DTC or its nominee, Cede & Co. as provided in the Letter of Representation relating to the Series EE-2016 Bonds from the City, acting by and through KUB, and the Registration Agent to DTC (the "Letter of Representation"). DTC shall remit such payments to DTC Participants, and such payments thereafter shall be paid by DTC Participants to the Beneficial Owners. Neither the City, KUB nor the Registration Agent shall be responsible or liable for payment by DTC or DTC Participants, for sending transaction statements or for maintaining, supervising or reviewing records maintained by DTC or DTC Participants.

In the event that (1) DTC determines not to continue to act as Depository for the Series EE-2016 Bonds or (2) to the extent permitted by the rules of DTC, the Board determines to discontinue the Book-Entry System, the Book-Entry System with DTC shall be discontinued. If the Board fails to identify another qualified securities depository to replace DTC, the Board shall cause the Registration Agent to authenticate and deliver replacement Series EE-2016 Bonds in the form of fully registered Series EE-2016 Bonds to each Beneficial Owner.

NEITHER THE CITY, KUB NOR THE REGISTRATION AGENT SHALL HAVE ANY RESPONSIBILITY OR OBLIGATIONS TO ANY DTC PARTICIPANT OR ANY BENEFICIAL OWNER WITH RESPECT TO (i) THE SERIES EE-2016 BONDS; (ii) THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC OR ANY DTC PARTICIPANT; (iii) THE PAYMENT BY DTC OR ANY DTC PARTICIPANT OF ANY AMOUNT DUE TO ANY BENEFICIAL OWNER IN RESPECT OF THE PRINCIPAL OF AND INTEREST ON THE SERIES EE-2016 BONDS; (iv) THE

DELIVERY OR TIMELINESS OF DELIVERY BY DTC OR ANY DTC PARTICIPANT OF ANY NOTICE DUE TO ANY BENEFICIAL OWNER THAT IS REQUIRED OR PERMITTED UNDER THE TERMS OF THIS RESOLUTION TO BE GIVEN TO BENEFICIAL OWNERS, (v) THE SELECTION OF BENEFICIAL OWNERS TO RECEIVE PAYMENTS IN THE EVENT OF ANY PARTIAL REDEMPTION OF THE SERIES EE-2016 BONDS; OR (vi) ANY CONSENT GIVEN OR OTHER ACTION TAKEN BY DTC, OR ITS NOMINEE, CEDE & CO., AS OWNER.

If the purchaser or Underwriter certifies that it intends to hold the Series EE-2016 Bonds for its own account, then the City may issue, acting by and through KUB, certificated Bonds without the utilization of DTC and the Book-Entry System.

(k) In case any Series EE-2016 Bond shall become mutilated, or be lost, stolen, or destroyed, the City, acting by and through KUB, in its discretion, shall issue, and the Registration Agent, upon written direction from KUB, shall authenticate and deliver, a new Series EE-2016 Bond of like tenor, amount, maturity and date, in exchange and substitution for, and upon the cancellation of, the mutilated Series EE-2016 Bond, or in lieu of and in substitution for such lost, stolen or destroyed Series EE-2016 Bond, or if any such Series EE-2016 Bond shall have matured or shall be about to mature, instead of issuing a substituted Series EE-2016 Bond KUB may pay or authorize payment of such Series EE-2016 Bond without surrender thereof. In every case the applicant shall furnish evidence satisfactory to KUB and the Registration Agent of the destruction, theft or loss of such Series EE-2016 Bond, and indemnity satisfactory to KUB and the Registration Agent; and KUB may charge the applicant for the issue of such new Series EE-2016 Bond an amount sufficient to reimburse KUB for the expense incurred by it in the issue thereof.

(l) The Registration Agent is hereby authorized to authenticate and deliver the Series EE-2016 Bonds to DTC, on behalf of the initial purchaser thereof, or an agent of DTC, upon receipt by KUB of the proceeds of the sale thereof and, subject to the rules of the Depository, and to authenticate and deliver Series EE-2016 Bonds in exchange for Series EE-2016 Bonds of the same principal amount delivered for transfer upon receipt of the Series EE-2016 Bond(s) to be transferred in proper form with proper documentation as hereinabove described. The Series EE-2016 Bonds shall not be valid for any purpose unless authenticated by the Registration Agent by the manual signature of an authorized representative thereof on the certificate set forth herein on the Series EE-2016 Bond form.

(m) The Registration Agent is hereby authorized to take such action as may be necessary from time to time to qualify and maintain the Series EE-2016 Bonds for deposit with DTC, including but not limited to, wire transfers of interest and principal payments with respect to the Series EE-2016 Bonds, utilization of electronic book entry data received from DTC in place of actual delivery of Series EE-2016 Bonds and provision of notices with respect to Series EE-2016 Bonds registered by DTC (or any of its designees identified to the Registration Agent) by overnight delivery, courier service, telegram, telecopy or other similar means of communication. No such arrangements with DTC may adversely affect the interest of any of the Beneficial Owners of the Series EE-2016 Bonds, provided, however, that the Registration Agent shall not be liable with respect to any such arrangements it may make pursuant to this Section 5.

Section 6. Source of Payment. The Series EE-2016 Bonds shall be payable solely from and be secured by a pledge of the Net Revenues of the System as hereinafter provided and as provided in the 1954 Resolution on a parity and equality of lien with the Outstanding Bonds. The punctual payment of principal of and interest on the Series EE-2016 Bonds, the Outstanding Bonds and any Parity Bonds shall be secured equally and ratably by the Net Revenues of the System without priority by reason of series, number or time of sale and delivery. The owners of the Series EE-2016 Bonds shall have no recourse to the power of taxation of the City.

Section 7. Form of Series EE-2016 Bonds. The Series EE-2016 Bonds shall be in substantially the following form, the omissions to be appropriately completed when the Series EE-2016 Bonds are prepared and delivered:

(Form of Series EE-2016 Bond)

REGISTERED
Number _____

REGISTERED
\$ _____

UNITED STATES OF AMERICA
STATE OF TENNESSEE
COUNTY OF KNOX
CITY OF KNOXVILLE
WATER SYSTEM REVENUE REFUNDING BOND, SERIES EE-2016

Interest Rate: Maturity Date: Date of Bond: CUSIP No.:

Registered Owner:

Principal Amount:

KNOW ALL PERSONS BY THESE PRESENTS: That the City of Knoxville, a municipal corporation lawfully organized and existing in Knox County, Tennessee (the "City"), acting by and through the Knoxville Utilities Board ("KUB"), for value received hereby promises to pay to the registered owner hereof, hereinabove named, or registered assigns, in the manner hereinafter provided, the principal amount hereinabove set forth on the maturity date hereinabove set forth, or upon earlier redemption, as set forth herein, and to pay interest (computed on the basis of a 360-day year of twelve 30-day months) on said principal amount at the annual rate of interest hereinabove set forth from the date hereof until said maturity date or redemption date, said interest being payable on September 1, 2016, and semi-annually thereafter on the first day of March and September in each year until this Bond matures or is redeemed. Both principal hereof and interest hereon are payable in lawful money of the United States of America by check or draft at the designated corporate trust office of _____, _____, Tennessee, as registration agent and paying agent (the "Registration Agent"). The Registration Agent shall make all interest payments with respect to this Bond by check or draft on each interest payment date directly to the registered owner hereof shown on the bond registration records maintained by the Registration Agent as of the close of business on the day which is the fifteenth (15th) day of the month next preceding the interest payment date (the "Regular Record Date") by depositing said payment in the United States mail, postage prepaid, addressed to such owner at such owner's address shown on said bond registration records, without, except for final payment, the presentation or surrender of this Bond, and all such payments shall discharge the obligations of the City and KUB to the extent of the payments so made. Any such interest not so punctually paid or duly provided for on any interest payment date shall forthwith cease to be payable to the registered owner on the relevant Regular Record Date; and, in lieu thereof, such defaulted interest shall be payable to the person in whose name this Bond is registered at the close of business on the date (the "Special Record Date") for payment of such defaulted interest to be fixed by the Registration Agent, notice of which shall be given to the owners of the Bonds of the issue of which this Bond is one not less than ten (10) days prior to such Special Record Date. Payment of principal of and premium, if any, on the Bonds shall be made when due upon presentation and surrender of this Bond to the Registration Agent.

Except as otherwise provided herein or in the Resolution, as hereinafter defined, this Bond shall be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"), which will act as securities depository for the Bonds of the series of which this Bond is one. One Bond for each maturity of the Bonds shall be issued to DTC and immobilized in its custody or a

custodian of DTC. The Bond Registrar is a custodian and agent for DTC, and the Bond will be immobilized in its custody. A book-entry system (the "Book-Entry System") shall be employed, evidencing ownership of the Bonds in \$5,000 denominations, or multiples thereof, with transfers of beneficial ownership effected on the records of DTC and the DTC Participants, as defined in the Resolution, pursuant to rules and procedures established by DTC. So long as Cede & Co., as nominee for DTC, is the registered owner of the Bonds, the City, KUB and the Registration Agent shall treat Cede & Co., as the only owner of the Bonds for all purposes under the Resolution, including receipt of all principal of, premium, if any, and interest on the Bonds, receipt of notices, voting and requesting or taking or not taking, or consenting to, certain actions hereunder. Payments of principal, maturity amounts, interest, and redemption premium, if any, with respect to the Bonds, so long as DTC is the only owner of the Bonds, shall be paid directly to DTC or its nominee, Cede & Co. DTC shall remit such payments to DTC Participants, and such payments thereafter shall be paid by DTC Participants to the Beneficial Owners, as defined in the Resolution. Neither the City, KUB, nor the Registration Agent shall be responsible or liable for payment by DTC or DTC Participants, for sending transaction statements or for maintaining, supervising or reviewing records maintained by DTC or DTC Participants. In the event that (1) DTC determines not to continue to act as securities depository for the Bonds or (2) to the extent permitted by the rules of DTC, the Board determines to discontinue the Book-Entry System, the Book-Entry System with DTC shall be discontinued. If the Board fails to identify another qualified securities depository to replace DTC, the Board shall cause the Registration Agent to authenticate and deliver replacement Bonds in the form of fully registered Bonds to each Beneficial Owner. Neither the City, KUB nor the Registration Agent shall have any responsibility or obligations to any DTC Participant or any Beneficial Owner with respect to (i) the Bonds; (ii) the accuracy of any records maintained by DTC or any DTC Participant; (iii) the payment by DTC or any DTC Participant of any amount due to any Beneficial Owner in respect of the principal or maturity amounts of and interest on the Bonds; (iv) the delivery or timeliness of delivery by DTC or any DTC Participant of any notice due to any Beneficial Owner that is required or permitted under the terms of the Resolution to be given to Beneficial Owners, (v) the selection of Beneficial Owners to receive payments in the event of any partial redemption of the Bonds; or (vi) any consent given or other action taken by DTC, or its nominee, Cede & Co., as owner.

The Bonds of the issue of which this Bond is one maturing on or before March 1, 2025 shall mature without option of prior redemption. The Bonds maturing on March 1, 2026 and thereafter shall be subject to redemption prior to maturity at the option of the City, acting through the Board, on or after March 1, 2025, as a whole or in part at any time at a redemption price equal to the principal amount plus interest accrued to the redemption date.

[If less than all the Bonds shall be called for redemption, the maturities to be redeemed shall be selected by the Board in its discretion. If less than all of the Bonds within a single maturity shall be called for redemption, the interests within the maturity to be redeemed shall be selected as follows:

(i) if the Bonds are being held under a Book-Entry System by DTC, or a successor Depository, the amount of the interest of each DTC Participant in the Bonds to be redeemed shall be determined by DTC, or such successor Depository, by lot or such other manner as DTC, or such successor Depository, shall determine; or

(ii) if the Series Bonds are not being held under a Book-Entry System by DTC, or a successor Depository, the Bonds within the maturity to be redeemed shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall determine.]

[Subject to the credit hereinafter provided, the City acting by and through KUB, shall redeem Bonds maturing on the redemption dates set forth below opposite such maturity date, in aggregate principal amounts equal to the respective dollar amounts set forth below opposite the redemption dates at a price of par plus accrued interest thereon to the date of redemption. DTC, as securities depository for

the series of Bonds of which this Bond is one, or any successor Depository for the Bonds, shall determine the interest of each Participant in the Bonds to be redeemed using its procedures generally in use at that time. If DTC, or another securities depository is no longer serving as securities depository for the Bonds, the Bonds to be redeemed within a maturity shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall select. The dates of redemption and amount of Bonds to be redeemed on said dates are as follows:

<u>Maturity</u>	<u>Redemption Date</u>	<u>Principal Amount of Bonds to be Redeemed</u>
-----------------	------------------------	---

*final maturity

At its option, to be exercised on or before the forty-fifth (45th) day next preceding any such redemption date, the City, acting through KUB, may (i) deliver to the Registration Agent for cancellation Bonds to be redeemed, in any aggregate principal amount desired, and/or (ii) receive credit in respect of its redemption obligation under the mandatory redemption provision for any Bonds to be redeemed which prior to said date have been purchased or redeemed (otherwise than by mandatory redemption) and canceled by the Registration Agent and not theretofore applied as a credit against any redemption obligation under the mandatory redemption provision. Each Bond so delivered or previously purchased or redeemed shall be credited by the Registration Agent at 100% of the principal amount thereof on the obligation of KUB on such payment date and any excess shall be credited on future redemption obligations in chronological order, and the principal amount of the Bonds to be redeemed by operation of the mandatory redemption provision shall be accordingly reduced. KUB shall on or before the forty-fifth (45th) day next preceding each payment date furnish the Registration Agent with its certificate indicating whether or not and to what extent the provisions of clauses (i) and (ii) of this paragraph are to be availed of with respect to such payment and confirm that funds for the balance of the next succeeding prescribed payment will be paid on or before the next succeeding payment date.

Notice of call for redemption, whether optional or mandatory, shall be given by the Registration Agent on behalf of the City, but only upon direction of the Board, not fewer than twenty (20) nor more than sixty (60) days prior to the date fixed for redemption by sending an appropriate notice to the registered owners of the Bonds to be redeemed by first-class mail, postage prepaid, at the addresses shown on the Bond registration records of the Registration Agent as of the date of the notice; but neither failure to mail such notice nor any defect in any such notice so mailed shall affect the sufficiency of the proceedings for the redemption of any of the Bonds for which proper notice was given. The notice may state that it is conditioned upon the deposit of moneys in an amount equal to the amount necessary to affect the redemption with the Registration Agent no later than the redemption date ("Conditional Redemption"). From and after any redemption date, all Bonds called for redemption shall cease to bear interest if funds are available at the office of the Registration Agent for the payment thereof and if notice has been duly given as set forth in the Resolution, as hereafter defined. In the case of a Conditional Redemption, the failure of the City or KUB to make funds available in part or in whole on or before the redemption date shall not constitute an event of default, and the Registration Agent shall give immediate notice to the Depository or the affected Bondholders that the redemption did not occur and that the Bonds called for redemption and not so paid remain outstanding.]

The Bonds of the issue of which this Bond is one are issuable only as fully registered Bonds, without coupons, in the denomination of Five Thousand Dollars (\$5,000) or any authorized integral multiple thereof. At the designated corporate trust office of the Registration Agent, in the manner and subject to the limitations, conditions and charges provided in the Resolution, fully registered Bonds may be exchanged for an equal aggregate principal amount of fully registered Bonds of the same maturity, of

authorized denominations, and bearing interest at the same rate. The Bonds shall be numbered consecutively from one upwards and will be made eligible for the Book-Entry System of DTC. Except as otherwise provided in this paragraph and the Resolution, as hereinafter defined, the Bonds shall be registered in the name of Cede & Co. as nominee of DTC. The Board may discontinue use of DTC for Bonds at any time upon determination by the Board that the use of DTC is no longer in the best interest of the beneficial owners of the Bonds. Upon such determination, registered ownership of the Bonds may be transferred on the registration books maintained by the Registration Agent, and the Bonds may be delivered in physical form to the following:

- i. any successor of DTC or its nominee;
- ii. any substitute depository to which the Registration Agent does not unreasonably object, upon (a) the resignation of DTC or its successor (or any substitute depository or its successor) from its functions as depository, or (b) a determination by the Board that DTC or its successor (or any substitute depository or its successor) is no longer able to carry out its functions as depository; or
- iii. any person, upon (a) the resignation of DTC or its successor (or substitute depository or its successor) from its functions as depository, or (b) termination by the Board of the use of DTC (or substitute depository or its successor).

In the event that this Bond is no longer held in a Book-Entry System by DTC, this Bond shall be transferable by the registered owner hereof in person or by such owner's attorney duly authorized in writing at the principal corporate trust office of the Registration Agent set forth on the front side hereof, but only in the manner, subject to limitations and upon payment of the charges provided in the Resolution and upon surrender and cancellation of this Bond. Upon such transfer a new Bond or Bonds of authorized denomination or denominations of the same maturity and interest rate for the same aggregate principal amount will be issued to the transferee in exchange therefor. The person in whose name this Bond is registered shall be deemed and regarded as the absolute owner thereof for all purposes and neither the City, KUB nor the Registration Agent shall be affected by any notice to the contrary whether or not any payments due on the Bond shall be overdue. Bonds, upon surrender to the Registration Agent, may, at the option of the registered owner thereof, be exchanged for an equal aggregate principal amount of the Bonds of the same maturity in authorized denomination or denominations, upon the terms set forth in the Resolution. The Registration Agent shall not be required to transfer or exchange any Bond during the period commencing on a Regular Record Date or Special Record Date and ending on the corresponding interest payment date of such Bond, nor to transfer or exchange any Bond after the notice calling such Bond for redemption has been made, nor during a period following the receipt of instructions from the Board to call such Bond for redemption.

This Bond is one of a total authorized issue aggregating \$22,000,000 and issued by the City for the purpose of providing funds to refinance the outstanding principal amount of the City's outstanding Water System Revenue Bonds, Series T-2007, dated November 1, 2007, maturing March 1, 2020 through March 1, 2033 (the "Refunded Bonds"), including the payment of legal, fiscal and administrative costs incident thereto and costs incident to the issuance of the Bonds, under and in full compliance with the Constitution and statutes of the State of Tennessee, including Sections 7-34-101 *et seq.* and Sections 9-21-101 *et seq.*, Tennessee Code Annotated, and pursuant to Resolution No. 2075 duly adopted by the City Council of the City on April 20, 1954, as amended and supplemented by Resolution No. 3633 duly adopted by the City on March 19, 1968, Resolution No. R-26-88 duly adopted by the City on February 9, 1988, Resolution No. R-318-90 duly adopted by the City on October 30, 1990, Resolution No. R-470-92 duly adopted by the City on October 13, 1992, Resolution No. R-474-93 duly adopted by the City on October 26, 1993, Resolution No. R-8-98 duly adopted by the City on January 27, 1998, Resolution No. R-65-01 duly adopted by the City on February 20, 2001, Resolution No. R-151-01 duly adopted by the City on March 20, 2001, Resolution No. R-482-01 duly adopted by the City on October 30, 2001,

Resolution No. R-57-04 duly adopted by the City on March 2, 2004, Resolution No. R-263-05 duly adopted by the City on July 5, 2005, Resolution No. R-346-07 duly adopted by the City on August 28, 2007, Resolution No. R-211-09 duly adopted by the City on June 30, 2009, Resolution No. R-133-210, duly adopted by the City Council of the City on May 4, 2010, Resolution No. R-285-2011, duly adopted by the City Council of the City on October 4, 2011, Resolution No. R-337-2011, duly adopted by the City Council of the City on December 13, 2011, Resolution No. R-323-2012 duly adopted by the City on November 13, 2012, Resolution No. R-243-2013 duly adopted by the City on July 23, 2013, Resolution No. R-214-2014 duly adopted by the City on June 24, 2014, Resolution No. R-83-2015 duly adopted by the City on March 3, 2015, Resolution No. R-127-2015 duly adopted by the City on March 31, 2015, Resolution No. R-____-2016 duly adopted by the City on _____, 2016 and Resolution No. R-____-2016 duly adopted by the City on _____, 2016 (as supplemented and amended, the "Resolution").

This Bond, and interest hereon, are payable solely from and secured by a pledge of the income and revenues to be derived from the operation of the water distribution system of the City (the "System"), subject only to the payment of the reasonable and necessary costs of operating, maintaining, repairing, and insuring the System. The Bonds of the series of which this Bond is one shall enjoy complete parity and equality of lien with the City's outstanding Water System Revenue Refunding Bonds, Series S-2005, dated August 10, 2005, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Bonds, Series T-2007, dated November 1, 2007, maturing March 1, 2017, the City's outstanding Water System Revenue Bonds, Series U-2009, dated November 12, 2009, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Bonds, Series W-2011, dated December 1, 2011, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Refunding Bonds, Series X-2012, dated April 20, 2012, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Refunding Bonds, Series Y-2013, dated March 15, 2013, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Bonds, Series Z-2013, dated October 1, 2013, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Bonds, Series AA-2014, dated September 18, 2014, maturing March 1, 2017 and thereafter, and the City's outstanding Water System Revenue Refunding Bonds, Series BB-2015, dated May 1, 2015, maturing March 1, 2017 and thereafter, the City's outstanding Water System Revenue Bonds, Series CC-2015, dated May 20, 2015, maturing March 1, 2017 and thereafter [and the City's outstanding Water System Revenue Bonds, Series DD-2016, dated _____, 2016, maturing March 1, 20____ and thereafter] (collectively the "Outstanding Bonds"). As provided in the Resolution, the punctual payment of principal of, premium, if any, and interest on the series of Bonds of which this Bond is one, the Outstanding Bonds and any other bonds issued on a parity therewith pursuant to the terms of the Resolution shall be secured equally and ratably by said revenues without priority by reason of series, number or time of sale or delivery. The owner of this Bond shall have no recourse to the power of taxation of the City. The Board has covenanted that it will fix and impose such rates and charges for the services rendered by the System and will collect and account for sufficient revenues to pay promptly the principal of and interest on this Bond and the issue of which it is a part, as each payment becomes due. For a more complete statement of the revenues from which and conditions under which this Bond is payable, a statement of the conditions on which obligations may hereafter be issued on a parity with this Bond, the general covenants and provisions pursuant to which this Bond is issued and the terms upon which the Resolution may be modified, reference is hereby made to the Resolution.

Under existing law, this Bond and the income therefrom are exempt from all present state, county and municipal taxation in Tennessee except (a) inheritance, transfer and estate taxes, (b) Tennessee excise taxes on all or a portion of the interest on this Bond during the period such Bond is held or beneficially owned by any organization or entity, other than a sole proprietorship or general partnership, doing business in the State of Tennessee, and (c) Tennessee franchise taxes by reason of the inclusion of the book value of this Bond in the Tennessee franchise tax base or any organization or entity, other than a sole proprietorship or general partnership, doing business in the State of Tennessee.

It is hereby certified, recited, and declared that all acts, conditions and things required to exist, happen and be performed precedent to and in the issuance of this Bond exist, have happened and have been performed in due time, form and manner as required by law, and that the amount of this Bond, together with all other indebtedness of either the City or KUB, does not exceed any limitation prescribed by the constitution and statutes of the State of Tennessee.

IN WITNESS WHEREOF, the City acting by and through the Board has caused this Bond to be signed by the Chair of the Board by her manual or facsimile signature and attested by the Secretary of the Board by his manual or facsimile signature, all as of the date hereinabove set forth.

CITY OF KNOXVILLE
by and through the
KNOXVILLE UTILITIES BOARD

By: _____
Chair

ATTESTED:

Secretary

Transferable and payable at the
designated corporate trust office of: _____
_____, Tennessee

Date of Registration: _____

This Bond is one of the issue of Bonds issued pursuant to the Resolution hereinabove described.

Registration Agent

By: _____
Authorized Representative

FORM OF ASSIGNMENT

FOR VALUE RECEIVED, the undersigned sells, assigns, and transfers unto _____, [Please insert Federal Tax Identification Number or Social Security Number] whose address is _____, the within bond of the City of Knoxville, Tennessee, and does hereby irrevocably constitute and appoint _____, _____, Tennessee, attorney, to transfer the said bond on the records kept for registration thereof with full power of substitution in the premises.

Dated: _____

NOTICE: The signature to this
assignment must correspond with
the name of the registered owner

as it appears on the face of the
within Bond in every particular,
without alteration or enlargement
or any change whatsoever.

Signature guaranteed:

NOTICE: Signature(s) must be
guaranteed by a member firm of
a Medallion Program acceptable
to the Registration Agent.

Section 8. Equality of Lien; Pledge of Net Revenues. The punctual payment of principal of, premium, if any, and interest on the Series EE-2016 Bonds, the Outstanding Bonds and any Parity Bonds shall be secured equally and ratably by the Net Revenues of the System without priority by reason of series, number or time of sale or execution or delivery, and the Net Revenues of the System are hereby irrevocably pledged to the punctual payment of such principal, premium and interest as the same become due.

Section 9. Applicability of the 1954 Resolution. The Series EE-2016 Bonds are issued in compliance with the 1954 Resolution so as to be on a parity with the Outstanding Bonds, and, when duly delivered, the Series EE-2016 Bonds shall constitute a series of bonds issued under the authority of the 1954 Resolution. All recitals, provisions, covenants and agreements contained in the 1954 Resolution, as supplemented and amended herein (except insofar as any of said recitals, provisions, covenants and agreements necessarily relate exclusively to any series of the Outstanding Bonds) are hereby ratified and confirmed and incorporated herein by reference and, for so long as any of the Series EE-2016 Bonds shall be outstanding and unpaid either as to principal or interest, or until discharge and satisfaction of the Series EE-2016 Bonds as provided in Section 12 hereof, shall be applicable to the Series EE-2016 Bonds, shall inure to the benefit of owners of the Series EE-2016 Bonds as if set out in full herein, and shall be fully enforceable by the owner of any Series EE-2016 Bond.

All references to "holder" or "holders" in the 1954 Resolution shall be deemed to include owners of the Series EE-2016 Bonds, and all references to "Bonds" in the 1954 Resolution shall be deemed to include the Series EE-2016 Bonds.

Section 10. Sale of Series EE-2016 Bonds.

(a) The Series EE-2016 Bonds or any emission thereof may be sold at negotiated sale to the Underwriter or at public sale as determined by the President and Chief Executive Officer of KUB at a price of not less than 98.00% of par, exclusive of original issue discount, plus accrued interest, if any, provided, however, that no emission of Series EE-2016 Bonds may be sold at negotiated sale unless the Audit and Finance Committee of the Board has previously approved the sale of such emission at negotiated sale. The sale of any emission of the Series EE-2016 Bonds to the Underwriter or by public sale shall be binding on the City and KUB, and no further action of the Board with respect thereto shall be required.

(b) The President and Chief Executive Officer of KUB, as the designee of the Board, is further authorized with respect to each emission of Series EE-2016 Bonds to:

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

(2) specify the series designation or change the designation of the Series EE-2016 Bonds other than "Water System Revenue Refunding Bonds, Series EE-2016";

(3) change the first interest payment date to a date other than September 1, 2016, provided that such date is not later than twelve months from the dated date of such emission of Series EE-2016 Bonds;

(4) adjust the principal and interest payment dates and determine maturity or mandatory redemption amounts of the Series EE-2016 Bonds or any emission thereof, provided that (A) the total principal amount of all emissions of the Series EE-2016 Bonds does not exceed the total amount of Series EE-2016 Bonds authorized herein; (B) the final maturity date of each emission shall be not later than March 1, 2033; and (C) the debt service schedule is substantially the same as what was presented to the State Director in connection with requesting a report on the refunding;

(5) modify or remove the optional redemption provisions contained herein, provided that the premium amount to be paid in connection with any redemption provision shall not exceed two percent (2%) of the principal amount thereof;

(6) sell the Series EE-2016 Bonds, or any emission thereof, or any maturities thereof as term bonds with mandatory redemption requirements as determined by the Board, as it shall deem most advantageous to KUB; and

(7) cause all or a portion of the Series EE-2016 Bonds to be insured by a bond insurance policy issued by a nationally recognized bond insurance company to achieve the purposes set forth herein and to serve the best interests of KUB and to enter into agreements with such insurance company to the extent not inconsistent with this resolution.

(c) If any emission of Series EE-2016 Bonds is sold at negotiated sale, the President and Chief Executive Officer of KUB is authorized to execute a Bond Purchase Agreement with respect to such emission of Series EE-2016 Bonds, providing for the purchase and sale of the Series EE-2016 Bonds, or any emission thereof. Each Bond Purchase Agreement shall be in substantially the form attached hereto as Exhibit A, with such changes as the President and Chief Executive Officer deems necessary or advisable in connection with the sale of such Series EE-2016 Bonds, provided any such changes are not inconsistent with the terms of this Section 10. If the Underwriter does not intend to reoffer the Series EE-2016 Bonds to the public, then the Bond Purchase Agreement shall be conformed to reflect such intention. The form of the Series EE-2016 Bond set forth in Section 7 hereof shall be conformed to reflect any changes made pursuant to this Section 10.

(d) The President and Chief Executive Officer and the Chief Financial Officer of KUB, or either of them, are authorized to cause the Series EE-2016 Bonds, in book-entry form (except as otherwise authorized herein), to be authenticated and delivered by the Registration Agent to the purchaser(s), and to execute, publish, and deliver all certificates and documents, including an official statement, the Bond Purchase Agreement and closing certificates, as they shall deem necessary in connection with the sale and delivery of each emission of the Bonds.

(e) If the Series EE-2016 Bonds are sold at public sale, the Series EE-2016 Bonds shall be awarded by the President and Chief Executive Officer of KUB to the bidder that offers to purchase the Bonds for the lowest true interest cost to KUB.

Section 11. Disposition of Series EE-2016 Bond Proceeds. The proceeds of the sale of the Series EE-2016 Bonds shall be paid to KUB and used and applied by KUB as follows:

(a) All accrued interest, if any, shall be deposited to the Debt Service Fund created under the 1954 Resolution and used to pay interest on the Series EE-2016 Bonds on the first interest payment date following delivery of the Series EE-2016 Bonds;

(b) An amount, which together with investment earnings thereon and legally available funds of KUB, if any, will be sufficient to pay principal of, premium, if any, and interest on the Refunded Bonds (subject to adjustments permitted by Section 10 above), shall be transferred to the Refunding Escrow Agent under the Refunding Escrow Agreement to be deposited to the Escrow Fund established thereunder to be held and applied as provided therein; and

(c) The remainder shall be applied to the payment of costs of issuance relating to the Series EE-2016 Bonds. If there are any remaining proceeds of the Series EE-2016 Bonds after application as provided above, such remaining proceeds shall be used to pay principal and/or interest on the Series EE-2016 Bonds.

Section 12. Discharge and Satisfaction of Series EE-2016 Bonds. If KUB, on behalf of the City, shall pay and discharge the indebtedness evidenced by any of the Series EE-2016 Bonds or Parity Bonds (referred to hereinafter, collectively, in this Section 12 as the "Bonds") in any one or more of the following ways:

(a) By paying or causing to be paid, by deposit of sufficient funds as and when required with the Registration Agent, the principal of and interest on such Bonds as and when the same become due and payable;

(b) By depositing or causing to be deposited with any financial institution which has trust powers and which is regulated by and the deposits of which are insured by the Federal Deposit Insurance Corporation or similar federal agency ("an Agent"; which Agent may be the Registration Agent), in trust or escrow, on or before the date of maturity or redemption, sufficient money or Defeasance Obligations, the principal of and interest on which, when due and payable, will provide sufficient moneys to pay or redeem such Bonds and to pay premium, if any, and interest thereon when due until the maturity or redemption date (provided, if such Bonds are to be redeemed prior to maturity thereof, proper notice of such redemption shall have been given or adequate provision shall have been made for the giving of such notice); or

(c) By delivering such Bonds to the Registration Agent, for cancellation by it;

and if KUB, on behalf of the City, shall also pay or cause to be paid all other sums payable hereunder by KUB or the City with respect to such Bonds or make adequate provision therefor, and by resolution of the Board instruct any such Agent to pay amounts when and as required to the Registration Agent for the payment of principal of and interest and redemption premiums, if any, on such Bonds when due, then and in that case the indebtedness evidenced by such Bonds shall be discharged and satisfied and all covenants, liens, pledges, agreements and obligations entered into, created, or imposed hereunder, including the pledge of and lien on the Net Revenues of the System set forth herein, shall be fully discharged and satisfied with respect to such Bonds and the owners thereof and shall thereupon cease, terminate and become void.

If KUB, on behalf of the City, shall pay and discharge or cause to be paid and discharged the indebtedness evidenced by any of the Bonds in the manner provided in either clause (a) or clause (b) above, then the registered owners thereof shall thereafter be entitled only to payment out of the money or Defeasance Obligations deposited as aforesaid.

Except as otherwise provided in this Section 12, neither Defeasance Obligations nor moneys deposited with the Agent pursuant to this Section 12 nor principal or interest payments on any such Defeasance Obligations shall be withdrawn or used for any purpose other than, and shall be held in trust for, the payment of the principal of and premium, if any, and interest on said Bonds; provided that any cash received from such principal or interest payments on such Defeasance Obligations deposited with the

Agent, (A) to the extent such cash will not be required at any time for such purpose, shall be paid over to KUB as received by the Agent and (B) to the extent such cash will be required for such purpose at a later date, shall, to the extent practicable, be reinvested in Defeasance Obligations maturing at times and in amounts sufficient to pay when due the principal and premium, if any, and interest to become due on said Bonds on or prior to such redemption date or maturity date thereof, as the case may be, and interest earned from such reinvestments, to the extent not needed for the payment of such principal, premium and interest, shall be paid over to KUB, as received by the Agent. For the purposes of this Section 12, Defeasance Obligations shall mean direct obligations of, or obligations, the principal of and interest on which are guaranteed by, the United States of America, or any agency thereof, obligations of any agency or instrumentality of the United States or any other obligations at the time of the purchase thereof are permitted investments under Tennessee Law for the purposes described in this Section 12, which bonds or other obligations shall not be subject to redemption prior to their maturity other than at the option of the registered owner thereof.

No redemption privilege shall be exercised with respect to the Series EE-2016 Bonds or any Parity Bonds except at the option and election of the Board. The right of redemption set forth herein shall not be exercised by any Registration Agent or Agent unless expressly so directed in writing by an authorized representative of the Board.

Section 13. Refunding Escrow Agreement. For the purpose of providing for the payment of the principal of, premium, if any, and interest on the Refunded Bonds, the President and Chief Executive Officer of KUB is hereby authorized and directed to execute and the Secretary of the Board to attest on behalf of KUB a Refunding Escrow Agreement with the Refunding Escrow Agent and to deposit with the Refunding Escrow Agent the amounts to be used by the Refunding Escrow Agent to purchase Defeasance Obligations as provided therein; provided, however, that the yield on such investments shall be determined in such manner that none of the Series EE-2016 Bonds will be an "arbitrage bond" within the meaning of Section 148 (a) of the Code. The President and Chief Executive Officer of KUB and the Secretary of the Board are hereby authorized and directed to execute and deliver the Refunding Escrow Agreement on behalf of KUB in such form as is approved by the President and Chief Executive Officer of KUB and the Secretary of the Board, their execution thereof to constitute conclusive evidence of their approval of such form of the Refunding Escrow Agreement. The Refunding Escrow Agent is hereby authorized and directed to hold and administer all funds deposited in trust for the payment when due of principal of and interest on the Refunded Bonds and to exercise such duties as set forth in the Refunding Escrow Agreement.

Section 14. Notice of Refunding. Prior to the issuance of the Series EE-2016 Bonds, notice of the City's intention to refund the Refunded Bonds, to the extent required by applicable law, shall be given by the registration agent for the Refunded Bonds to be mailed by first-class mail, postage prepaid, to the registered holders thereof, as of the date of the notice, as shown on the bond registration records maintained by such registration agent of said Refunded Bonds. The President and Chief Executive Officer of KUB and the Secretary of the Board, or either of them, is hereby authorized and directed to authorize the registration agent of said Refunded Bonds to give such notice on behalf of the City in accordance with this Section 14.

Section 15. Federal Tax Matters. The City and KUB recognize that the purchasers and owners of the Series EE-2016 Bonds will have accepted them on, and paid therefor a price that reflects the understanding that interest thereon will not be included in gross income for purposes of federal income taxation under laws in force on the date of delivery of the Series EE-2016 Bonds. In this connection, KUB, on behalf of the City, agrees that it shall take no action which may render the interest on any of the Series EE-2016 Bonds includable in gross income for purposes of federal income taxation. It is the reasonable expectation of the City and KUB that the proceeds of the Series EE-2016 Bonds will not be used in a manner which will cause the Series EE-2016 Bonds to be "arbitrage bonds" within the meaning of Section 148 of the Code, and to this end the said proceeds of the Series EE-2016 Bonds and other

related funds established for the purposes herein set out, shall be used and spent expeditiously for the purposes described herein. In the event Section 148(f) of the Code shall require the payment of any investment proceeds of the Series EE-2016 Bonds to the United States government, KUB will make such payments as and when required by said Section 148(f) and will take such other actions as shall be necessary or permitted to prevent the interest on the Series EE-2016 Bonds from becoming taxable. The Chair of the Board, the Secretary of the Board, the President and Chief Executive Officer of KUB and Chief Financial Officer of KUB, or any of them, are authorized and directed to make such certifications in this regard in connection with the sale of the Bonds as any or all shall deem appropriate, and such certifications shall constitute a representation and certification of the City and KUB.

Section 16. Official Statement. The President and Chief Executive Officer of KUB, or her designee, is hereby authorized and directed to provide for the preparation and distribution of a Preliminary Official Statement describing the Series EE-2016 Bonds. After the Series EE-2016 Bonds have been awarded, the President and Chief Executive Officer of KUB, or her designee, shall make such completions, omissions, insertions and changes in the Preliminary Official Statement not inconsistent with this resolution as are necessary or desirable to complete it as a final Official Statement for purposes of Rule 15c2-12(e)(3) of the Securities and Exchange Commission. The President and Chief Executive Officer of KUB, or her designee, shall arrange for the delivery to the purchaser of the Series EE-2016 Bonds of a reasonable number of copies of the Official Statement within seven business days after the Series EE-2016 Bonds have been awarded for subsequent delivery by the purchaser, to each potential investor requesting a copy of the Official Statement and to each person to whom such purchaser and members of his group initially sell the Series EE-2016 Bonds.

The President and Chief Executive Officer of KUB, or her designee, is authorized, on behalf of the Board, to deem the Preliminary Official Statement and the Official Statement in final form, each to be final as of its date within the meaning of Rule 15c2-12(b)(1), except for the omission in the Preliminary Official Statement of certain pricing and other information allowed to be omitted pursuant to such Rule 15c2-12(b)(1). The distribution of the Preliminary Official Statement and the Official Statement in final form shall be conclusive evidence that each has been deemed in final form as of its date by the Board except for the omission in the Preliminary Official Statement of such pricing and other information.

Section 17. Continuing Disclosure. The City hereby covenants and agrees that KUB will provide annual financial information and material event notices for the Series EE-2016 Bonds as required by Rule 15c2-12 of the Securities and Exchange Commission. The Chief Financial Officer of KUB is authorized to execute at the closing of the sale of the Series EE-2016 Bonds, an agreement for the benefit of and enforceable by the owners of the Series EE-2016 Bonds specifying the details of the financial information and material event notices to be provided and its obligations relating thereto. Failure of KUB to comply with the undertaking herein described and to be detailed in said closing agreement, shall not be a default hereunder, but any such failure shall entitle the owner or owners of any of the Bonds to take such actions and to initiate such proceedings as shall be necessary and appropriate to cause KUB to comply with its undertaking as set forth herein and in said agreement, including the remedies of mandamus and specific performance.

Section 18. Separability. If any section, paragraph or provision of this resolution shall be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph or provision shall not affect any of the remaining provisions of this resolution.

Section 19. Repeal of Conflicting Resolutions and Effective Date. All other resolutions and orders, or parts thereof, in conflict with the provisions of this resolution, are, to the extent of such conflict, hereby repealed and this resolution shall be in immediate effect from and after its adoption.

Adopted and approved this ____ day of _____, 2016.

Mayor

ATTEST:

City Recorder

STATE OF TENNESSEE)
)
COUNTY OF KNOX)

I, Will Johnson, hereby certify that I am the duly qualified and acting City Recorder of the City of Knoxville, Tennessee, and as such official I further certify that attached hereto is a copy of excerpts from the minutes of a regular meeting of the governing body of the City Council held on Tuesday, - _____, 2016; that these minutes were promptly and fully recorded and are open to public inspection; that I have compared said copy with the original minute record of said meeting in my official custody; and that said copy is a true, correct and complete transcript from said original minute record insofar as said original records relate to an amount not to exceed \$22,000,000 Water System Revenue Refunding Bonds, Series EE-2016.

WITNESS my official signature and seal of the City of Knoxville, Tennessee, this ____ day of _____, 2016.

(seal)

City Recorder

EXHIBIT A

**\$22,000,000
CITY OF KNOXVILLE, TENNESSEE
ACTING ON BEHALF OF KNOXVILLE UTILITIES BOARD
WATER SYSTEM REVENUE REFUNDING BONDS, SERIES EE-2016**

BOND PURCHASE AGREEMENT

_____, 2016

Knoxville Utilities Board
445 South Gay Street
Knoxville, Tennessee 37902

Ladies and Gentlemen:

The undersigned (the "Underwriter") offers to enter into this agreement with Knoxville Utilities Board ("KUB") which, upon your acceptance of this offer, will be binding upon you and upon us.

This offer is made subject to your acceptance of this agreement on or before 5:00 p.m., Eastern Standard Time, on _____, 2016.

1. Purchase Price.

Upon the terms and conditions and upon the basis of the respective representations, warranties and covenants set forth herein, the Underwriter hereby agrees to purchase from KUB, and KUB hereby agrees to sell to the Underwriter, all (but not less than all) of \$22,000,000 aggregate principal amount of KUB's Water System Revenue Refunding Bonds, Series EE-2016 (the "Bonds"). The purchase price is \$_____ plus accrued interest and shall be paid in accordance with paragraph 6 hereof. The purchase price is equal to the par amount of the Bonds less \$_____ original issue discount, less \$_____ underwriter's discount and plus accrued interest. The Bonds are to be issued under and pursuant to, and are to be secured by the Resolution (the "Bond Resolution") adopted on _____, 2016, by the City Council of the City of Knoxville (the "City") at the request of KUB. The Bonds shall mature on the dates and shall bear interest at the rates all as described in the Official Statement referred to in Section 3 hereof. The maturities, rates and discount at which the Bonds are being sold are more fully described on **Schedule I** attached hereto.

The Bonds are being issued to provide funds to refinance the outstanding principal amount of the City's outstanding Water System Revenue Bonds, Series U-2009, dated November 12, 2009, maturing March 1, 2020 and thereafter (the "Refunded Bonds"), including the payment of legal, fiscal and administrative costs incident thereto and incident to the issuance and sale of the Bonds.

2. Public Offering.

The Underwriter intends to make an initial bona fide public offering of all of the Bonds at not in excess of the public offering prices set forth on the cover of the Official Statement and may subsequently change such offering price without any requirement of prior notice. The Underwriter may

offer and sell Bonds to certain dealers (including dealers depositing bonds into investment trusts) and others at prices lower than the public offering prices stated on the cover of the Official Statement. The Underwriter reserves the right (i) to over-allot or effect transactions that stabilize or maintain the market prices of the Bonds at levels above those which might otherwise prevail in the open market; and (ii) to discontinue such stabilizing, if commenced at any time without prior notice.

3. Official Statement.

(a) KUB has provided the Underwriter with information that constitutes a "deemed final" official statement for purposes of Rule 15c2-12 under the Securities Exchange Act of 1934 ("Rule 15c2-12"). Concurrently with KUB's acceptance of this Bond Purchase Agreement, KUB shall deliver or cause to be delivered to the Underwriter two copies of the Official Statement (as hereinafter defined) relating to the Bonds dated the date hereof substantially in the same form as the Preliminary Official Statement with only such changes as shall have been accepted by the Underwriter.

(b) Within seven (7) business days from the date hereof and within sufficient time to accompany any confirmation requesting payment from any customers of the Underwriter, KUB shall deliver to the Underwriter copies of the Official Statement of KUB, dated the date hereof, relating to the Bonds, in sufficient quantity as may reasonably be requested by the Underwriter in order to comply with Rule 15c2-12 and any applicable rules of the Municipal Securities Rulemaking Board, in substantially the form approved by KUB (which, together with the cover page, and all exhibits, appendices, and statements included therein or attached thereto and any amendments and supplements that may be authorized for use with respect to the Bonds is herein called the "Official Statement"), executed on behalf of KUB by a duly authorized officer of KUB. You hereby authorize and approve the Official Statement and other pertinent documents referred to in Section 6 hereof to be lawfully used in connection with the offering and sale of the Bonds. You also acknowledge and ratify the use by the Underwriter, prior to the date hereof, of the Preliminary Official Statement in connection with a public offering of the Bonds.

(c) If, prior to the Closing (as defined in Section 5 below) or within twenty-five (25) days subsequent to the end of the underwriting period as such term is used for purposes of Rule 15c2-12, any event shall occur with respect to KUB or KUB shall receive notice of the occurrence of any other event that might or would cause the information contained in the Official Statement to contain any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading, KUB shall so notify the Underwriter. KUB agrees to amend or supplement the Official Statement whenever requested by the Underwriter when in the reasonable judgment of the Underwriter such amendment or supplementation is required and to furnish the Underwriter with sufficient quantities of such amendment or supplement in order to permit the Underwriter to comply with Rule 15c2-12.

4. Representations and Warranties.

KUB hereby represents and warrants to the Underwriter that:

(a) KUB is duly existing pursuant to the Charter of the City and is authorized by such Charter to operate and manage the System. KUB has duly authorized all necessary action to be taken by it for: (i) the issuance and sale of the Bonds upon the terms set forth herein and in the Official Statement; (ii) the approval of the Official Statement and the signing of the Official Statement by a duly authorized officer; (iii) the execution, delivery and receipt of this Bond Purchase Agreement, the Bonds and any and all such other agreements and documents as may be required to be executed, delivered and received by KUB in order to carry out, give effect to, and consummate the transactions contemplated hereby, by the Bonds, the Official Statement and the Bond Resolution;

(b) When executed by the respective parties thereto, this Bond Purchase Agreement will constitute legal, valid and binding obligation of KUB enforceable in accordance with its terms;

(c) The information and statements contained in the Preliminary Official Statement, as of its date and as of the date hereof, did not and do not contain any untrue statement of a material fact or omit to state any material fact which was necessary in order to make such information and statements, in the light of the circumstances under which they were made, not misleading;

(d) The information and statements contained in the Official Statement, as of its date and as of the Closing, are and will be correct and complete in all material respects and do not and will not contain any untrue statement of a material fact or omit to state any material fact which is necessary in order to make such information and statements, in the light of the circumstances under which they were made, not misleading;

(e) KUB has complied, and will at the Closing be in compliance, in all respects with the obligations on its part contained in the Bond Resolution and the laws of the State of Tennessee (the "State"), including the Act;

(f) The City has duly adopted the Bond Resolution, and the City and KUB have (a) duly authorized and approved the distribution of the Preliminary Official Statement, (b) duly authorized and approved the execution and delivery of the Official Statement, (c) duly authorized and approved the execution and delivery of, and the performance by KUB of the obligations on its part contained in, the Bonds, the Bond Resolution and this Bond Purchase Agreement, and (d) duly authorized and approved the consummation by it of all other transactions contemplated by this Bond Purchase Agreement and the Official Statement;

(g) KUB is not in breach of or default under any applicable law or administrative regulation of the State or the United States in any manner related to or affecting the transactions contemplated hereby or in breach of or default under any applicable judgment or decree or any loan agreement, note, resolution, ordinance, agreement or other instrument to which KUB is a party or to which it or any of its property is otherwise subject; and the execution and delivery of this Bond Purchase Agreement, the Bonds and the adoption of the Bond Resolution, and compliance with the provisions of each thereof, will not conflict with or constitute a breach of or default under any law, administrative regulation, judgment, decree, loan agreement, note, resolution, ordinance, agreement or other instrument to which KUB is a party or to which it or any of its property is otherwise subject;

(h) Except as may be required under the securities or "blue sky" laws of any state, all approvals, consents, authorizations and orders of, filings with or certifications by any governmental authority, board, agency or commission having jurisdiction, which would constitute a condition precedent to the performance by KUB of its obligations hereunder and under the Bond Resolution and the Bonds, have been obtained;

(i) There is no action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, public board or body, pending or, to the knowledge of KUB, threatened against KUB or others (a) affecting KUB or the corporate existence of KUB or the titles of its officers to their respective offices, (b) seeking to prohibit, restrain or enjoin the sale, issuance or delivery of the Bonds or the collection of Net Revenues pledged to pay the principal of and interest on the Bonds, or the pledge thereof, (c) in any way contesting or affecting the transactions contemplated hereby or by the Official Statement or by the validity or enforceability of the Bonds, the Bond Resolution or this Bond Purchase Agreement, (d) contesting in any way the completeness or accuracy of the Preliminary Official Statement or the Official Statement, or (e) contesting the powers or authority of KUB for the issuance of the Bonds, the adoption of the Bond Resolution or the execution and delivery of this Bond Purchase Agreement;

(j) KUB will not take or omit to take any action that will in any way cause the proceeds from the sale of the Bonds and other moneys of KUB to be transferred on the date of issuance of the Bonds to be applied or result in such proceeds and other moneys being applied in a manner other than as provided in or permitted by the Bond Resolution and consistent with the utilization described in the Official Statement;

(k) KUB agrees reasonably to cooperate with the Underwriter and its counsel in any endeavor to qualify the Bonds for offering and sale under the securities or "blue sky" laws of such jurisdictions of the United States as the Underwriter may request. KUB hereby consents to the use of the Official Statement and the Bond Resolution by the Underwriter in obtaining any qualification required;

(l) If at any time from the date of this Bond Purchase Agreement through 25 days following the "end of the underwriting period" (as defined in Rule 15c2-12 described below) any event shall occur that might or would cause the Official Statement to contain any untrue statement of a material fact or to omit to state any material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, KUB shall notify the Underwriter and if, in the opinion of the Underwriter, such event requires the preparation and publication of a supplement or amendment to the Official Statement, KUB will supplement or amend the Official Statement in a form and in a manner approved by the Underwriter. If the Official Statement is so supplemented or amended prior to the Closing, such approval by the Underwriter of a supplement or amendment to the Official Statement shall not preclude the Underwriter from thereafter terminating this Bond Purchase Agreement, and if the Official Statement is so amended or supplemented subsequent to the date hereof and prior to the Closing, the Underwriter may terminate this Bond Purchase Agreement by notification to KUB at any time prior to the Closing if, in the judgment of the Underwriter, such amendment or supplement has or will have a material adverse effect on the marketability of the Bonds;

(m) KUB has duly authorized and approved the execution and delivery of this Bond Purchase Agreement and the performance by KUB of the obligations on its part contained herein;

(n) KUB is not, nor has it at any time, been in default in the payment of principal of or interest on any obligation issued or guaranteed by KUB;

(o) Any certificate signed by an authorized officer of KUB and delivered to the Underwriter at or prior to the Closing shall be deemed a representation and warranty by KUB in connection with this Bond Purchase Agreement to the Underwriter as to the statements made therein upon which the Underwriter shall be entitled to rely. KUB covenants that between the date hereof and the Closing, it will not take any action that will cause the representations and warranties made herein to be untrue as of the Closing;

(p) The Bonds, when issued, authenticated and delivered in accordance with the Bond Resolution and sold to the Underwriter as provided herein, will be validly issued and outstanding special obligations of KUB entitled to the benefits of the Bond Resolution;

(q) KUB has lawful authority to operate the System, to consummate the transactions contemplated by the Official Statement and collect revenues, fees and other charges in connection with the System and through its Board of Commissioners, to fix the rates, fees and other charges with respect to the System; and

(r) KUB hereby covenants and agrees to enter into a written agreement or contract, constituting an undertaking (the "Undertaking") to provide ongoing disclosure about KUB, for the benefit of the beneficial owners of the Bonds on or before the date of delivery of the Bonds as required under paragraph (b)(5) of Rule 15c2-12. The Undertaking shall be as described in the Preliminary Official Statement, with such changes as may be agreed in writing by the Underwriter. KUB represents that it has

complied in all respects with its obligations to provide continuing disclosure of certain information as described in that certain Continuing Disclosure Certificate entered into in connection with the issuance of the Bonds.

5. Delivery of, and Payment for, the Bonds.

At 10:00 a.m. on or about _____, 2016, or at such other time or date as shall have been mutually agreed upon by KUB and the Underwriter, KUB will deliver, or cause to be delivered, to the Underwriter the other documents hereinafter mentioned and, subject to the conditions contained herein, the Underwriter will accept such delivery and pay the purchase price of the Bonds plus accrued interest payable to the order of KUB, in federal funds or other immediately available funds by delivering to KUB such funds by wire transfer to KUB or its designated agent except that physical delivery of the Bonds shall be made through the facilities of the Depository Trust Company.

Payment for the Bonds shall be confirmed and delivery of the documents as aforesaid shall be made at the offices of KUB, or such other place as may be agreed upon by the Underwriter and KUB. Such payment and delivery is herein called the "Closing." The Bonds will be delivered as fully registered bonds in such names and in such denominations as shall be designated in writing by the Underwriter to KUB at Closing.

6. Certain Conditions to Underwriter's Obligations.

The obligations of the Underwriter hereunder shall be subject to (i) the performance by KUB of its obligations to be performed hereunder, (ii) the accuracy in all material respects of the representations and warranties of KUB herein as of the date hereof and as of the date of the Closing, and (iii) to the following conditions:

(a) At the time of Closing, (i) the Bond Resolution shall be in full force and effect and shall not have been amended, modified or supplemented except as may have been agreed to in writing by the Underwriter, (ii) the proceeds of the sale of the Bonds shall be applied as described in the Official Statement, and (iii) KUB shall have duly adopted and there shall be in full force and effect such other resolutions as, in the opinion of Bass Berry & Sims PLC, Knoxville, Tennessee ("Bond Counsel"), shall be necessary in connection with the transactions contemplated hereby;

(b) At or prior to the Closing, the Underwriter shall have received an executed copy of each of the following documents:

(1) the approving opinion, dated the date of the Closing, of Bond Counsel addressed to KUB and the Underwriter, relating to, among other things, the validity of the Bonds [and the exclusion from gross income of the interest on the Bonds for federal and State of Tennessee income tax purposes,] in substantially the form set forth as Appendix _ to the Official Statement;

(2) a supplemental opinion, dated the date of the Closing, of Bond Counsel addressed to the Underwriter in substantially the form of Exhibit A hereto;

(3) an opinion, dated the date of the Closing, of Hodges, Doughty & Carson, Knoxville, Tennessee, counsel to KUB, addressed to KUB, Bond Counsel and the Underwriter in substantially the form of Exhibit B hereto;

(4) a certificate of KUB, dated the date of the Closing and signed by a duly authorized officer of KUB and in form and substance reasonably satisfactory to the Underwriter, to the effect that (i) since the execution of the Bond Purchase Agreement no material and adverse change has occurred in the financial position of the System or results of operations of the System;

(ii) KUB has not incurred any material liabilities secured by the Net Revenues of the System other than in the ordinary course of business or as set forth in or contemplated by the Official Statement; and (iii) no event affecting KUB has occurred since the date of the Official Statement which should be disclosed in the Official Statement for the purpose for which it is to be used or which is necessary to be disclosed therein in order to make the statements and information therein not misleading as of the date of Closing;

(5) the Official Statement executed on behalf of KUB by a duly authorized officer thereof;

(6) the Bond Resolution and the Bonds;

(7) a certificate of a duly authorized officer of KUB, satisfactory to the Underwriter, dated the date of Closing, stating that such officer is charged, either alone or with others, with the responsibility for issuing the Bonds; setting forth, in the manner permitted by Section 148 of the Internal Revenue Code of 1986, as amended (the "Code"), the reasonable expectations of KUB as of such date as to the use of proceeds of the Bonds and of any other funds of KUB expected to be used to pay principal or interest on the Bonds and the facts and estimates on which such expectations are based; and stating that, to the best of the knowledge and belief of the certifying officer, KUB's expectations are reasonable;

(8) evidence indicating a rating on the Bonds of "___" by [rating agency];

(9) other certificates of KUB listed on a Closing Memorandum to be approved by counsel to KUB, Bond Counsel and counsel to the Underwriter, including any certificates or representations required in order for Bond Counsel to deliver the opinion referred to in Paragraph 7(b) (1) of this Bond Purchase Agreement; and such additional legal opinions, certificates, proceedings, instruments and other documents as the counsel to the Underwriter or Bond Counsel may reasonably request to evidence compliance by KUB with legal requirements, the truth and accuracy, as of the time of Closing, of the representations of KUB contained herein and the due performance or satisfaction by KUB at or prior to such time of all agreements then to be performed and all conditions then to be satisfied by KUB.

All such opinions, certificates, letters, agreements and documents will be in compliance with the provisions hereof only if they are satisfactory in form and substance to the Underwriter and counsel to the Underwriter. KUB will furnish the Underwriter with such conformed copies or photocopies of such opinions, certificates, letters, agreements and documents as the Underwriter may reasonably request.

(c) The Underwriter shall have received within seven (7) business days from the date hereof and within sufficient time to accompany any confirmation requesting payment from any customers of the Underwriter, the Official Statement in sufficient quantity as may be reasonably requested by the Underwriter in order to comply with Rule 15(c) 2-12.

7. Termination.

The Underwriter shall have the right to cancel its obligation to purchase the Bonds if (i) between the date hereof and the Closing, legislation shall be enacted or recommended to the Congress or otherwise endorsed for passage (by press release, other form of notice or otherwise) by the President of the United States, the Treasury Department of the United States, the Internal Revenue Service or the Chairman or ranking minority member of the Committee on Finance of the United States Senate or the Committee on Ways and Means of the United States House of Representatives or favorably reported for passage to either House of the Congress by any committee of such House to which such legislation has

been referred for consideration, or a bill to amend the Internal Revenue Code (which, if enacted, would take effect in whole or in part prior to the Closing) shall be filed in either house, or recommended for passage by the Congress by any joint or conference committee thereof, or a decision by a court of the United States or the United States Tax Court shall be rendered, or a ruling, regulation or statement by or on behalf of the Treasury Department of the United States, the Internal Revenue Service or other governmental agency shall be made or proposed to be made, with respect to the federal taxation upon interest on obligations of the general character of the Bonds, or other action or events shall have transpired which may have the purpose or effect, directly or indirectly of changing the federal income tax consequences of any of the transactions contemplated in connection herewith, including the tax-exempt status of KUB and, in the opinion of the Underwriter, materially adversely affects the market price of the Bonds, or the market price generally of obligations of the general character of the Bonds, or (ii) there shall exist any event which in the Underwriter's judgment either (a) makes untrue or incorrect in any material respect any statement or information contained in the Official Statement or (b) is not reflected in the Official Statement but should be reflected therein in order to make the statements and information contained therein not misleading in any material respect, or (iii) there shall have occurred any outbreak of hostilities or any national or international calamity or crisis including financial crisis, or a financial crisis or a default with respect to the debt obligations of, or the institution of proceedings under the federal or the state bankruptcy laws by or against the State of Tennessee or any subdivision, agency or instrumentality of such State, the effect of which on the financial markets of the United States being such as, in the reasonable judgment of the Underwriter, would make it impracticable for the Underwriter to market the Bonds or to enforce contracts for the sale of the Bonds, or (iv) there shall be in force a general suspension of trading on the New York Stock Exchange, or (v) a general banking moratorium shall have been declared by either federal, Tennessee or New York authorities, or (vi) there shall have occurred since the date of this Bond Purchase Agreement any material adverse change in the financial position of the System, except for changes which the Official Statement discloses have occurred or may occur, or (vii) legislation shall be enacted or any action shall be taken by the Securities and Exchange Commission which, in the opinion of counsel for the Underwriter, has the effect of requiring the contemplated distribution of the Bonds to be registered under the Securities Act of 1933, as amended, or the Bond Resolution or any other document executed in connection with the transactions contemplated hereof to be qualified under the Trust Indenture Act of 1939, as amended, or (viii) a stop order, ruling, regulation or official statement by or on behalf of the Securities and Exchange Commission shall be issued or made to the effect that the issuance, offering or sale of the Bonds, or of obligations of the general character of the Bonds as contemplated hereby, or the offering of any other obligation which may be represented by the Bonds is in violation of any provision of the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, or the Trust Indenture Act of 1939, as amended, or (ix) any state blue sky or securities commission shall have withheld registration, exemption or clearance of the offering, and in the reasonable judgment of the Underwriter the market for the Bonds is materially affected thereby.

If KUB shall be unable to satisfy any of the conditions to the obligations of the Underwriter contained in this Bond Purchase Agreement and such condition is not waived by the Underwriter, or if the obligations of the Underwriter to purchase and accept delivery of the Bonds shall be terminated or canceled for any reason permitted by this Bond Purchase Agreement, this Bond Purchase Agreement shall terminate and neither the Underwriter nor KUB shall be under further obligation hereunder; except that the respective obligations to pay expenses, as provided in Section 11 hereof, shall continue in full force and effect.

8. Particular Covenants.

KUB covenants and agrees with the Underwriter as follows:

(a) KUB shall use its best efforts to furnish or cause to be furnished to the Underwriter, without charge, as many copies of the Official Statement as the Underwriter may reasonably request;

(b) Before revising, amending or supplementing the Official Statement, KUB shall furnish a copy of the revised Official Statement or such amendment or supplement to the Underwriter. If in the opinion of KUB and the Underwriter a supplement or amendment to the Official Statement is required, KUB will supplement or amend the Official Statement in a form and in a manner approved by the Underwriter and its counsel.

9. Survival of Representations.

All representations, warranties and agreements of KUB hereunder shall remain operative and in full force and effect, regardless of any investigation made by or on behalf of the Underwriter and shall survive the delivery of the Bonds.

10. Payment of Expenses.

Whether or not the Bonds are sold to the Underwriter by KUB, KUB shall pay, but only out of the proceeds of the sale of the Bonds or other funds made available by KUB, any expenses incident to the performance of its obligations hereunder, including but not limited to: (i) the cost of the preparation and printing of the Official Statement and any supplements thereto, together with a number of copies which the Underwriter deems reasonable; (ii) the cost of the preparation and printing of the definitive Bonds; (iii) the rating agency fees; and (iv) the fees and disbursements of Counsel to KUB and Bond Counsel and any other experts or consultants retained by KUB.

Whether or not the Bonds are sold to the Underwriter, the Underwriter shall pay (i) all advertising expenses in connection with the public offering of the Bonds; (ii) the cost of preparing and printing the blue sky memorandum, if any, and filing fees in connection with the aforesaid blue sky memorandum other than the costs of preparation of the Preliminary Official Statement and the Official Statement; and (iii) all other expenses incurred by the Underwriter in connection with its public offering and distribution of the Bonds, including the fees and expenses of the Underwriter's counsel.

11. No Advisory or Fiduciary Role.

KUB acknowledges and agrees that (i) the purchase and sale of the Bonds pursuant to this Bond Purchase Agreement is an arm's-length commercial transaction between KUB and the Underwriter, (ii) in connection therewith and with the discussions, undertakings and procedures leading up to the consummation of such transaction, the Underwriter is and has been acting solely as principal and are not acting as the agent, advisor or fiduciary of KUB, (iii) the Underwriter has not assumed an advisory or fiduciary responsibility in favor of KUB with respect to the offering contemplated hereby or the discussions, undertakings and procedures leading thereto (irrespective of whether the Underwriter, or any affiliates of the Underwriter, has provided other services or are currently providing other services to KUB on other matters) and the Underwriter has no obligation to KUB with respect to the offering contemplated hereby except the obligations expressly set forth in this Bond Purchase Agreement, (iv) the Underwriter has financial and other interests that differ from those of KUB and (v) KUB has consulted its own legal, financial and other advisors to the extent it has deemed appropriate.

KUB and the Underwriter represent and warrant that no finder or other agent has been employed by either KUB or the Underwriter in connection with this transaction.

12. Notices.

Any notice or other communication to be given to KUB under this Bond Purchase Agreement may be given by delivering the same in writing at its address set forth above, and any notice or other communication to be given to the Underwriter under this Bond Purchase Agreement may be

given by delivering the same in writing to _____, _____,
_____, _____.

13. Parties.

This Bond Purchase Agreement is made solely for the benefit of KUB and the Underwriter (including the successors or assigns of the Underwriter) and no other person shall acquire or have any right hereunder or by virtue hereof.

14. Governing Law.

This Bond Purchase Agreement shall be governed by and construed in accordance with the laws of the State of Tennessee.

15. General.

This Bond Purchase Agreement may be executed in several counterparts, each of which shall be regarded as an original and all of which will constitute one and the same instrument. The section headings of this Bond Purchase Agreement are for convenience of reference only and shall not affect its interpretation. This Bond Purchase Agreement shall become effective upon your acceptance hereof.

Very truly yours,

By: _____
Its: _____

Accepted and agreed to as of
the date first above written:

KNOXVILLE UTILITIES BOARD

By: _____
President and Chief Executive Officer

EXHIBIT A TO BOND PURCHASE AGREEMENT

[LETTERHEAD OF BASS BERRY & SIMS PLC]

[Closing Date]

Ladies and Gentlemen:

This opinion is being rendered to you pursuant to Paragraph 6(b)(2) of the Bond Purchase Agreement, dated _____, 2016 (the "Bond Purchase Agreement"), between _____ (the "Underwriter"), and Knoxville Utilities Board ("KUB"), relating to the sale by KUB of its Water System Revenue Refunding Bonds, Series EE-2016, in the aggregate principal amount of \$22,000,000 (the "Bonds"). Terms which are used herein and not otherwise defined shall have the meanings assigned to them in the Bond Purchase Agreement.

Of even date herewith, we have delivered our approving opinion in connection with the issuance of the Bonds. In our capacity as Bond Counsel, we have reviewed a record of proceedings in connection with the issuance of the Bonds and we have participated in conferences from time to time with counsel to KUB, representatives of the Underwriter and counsel to the Underwriter, relative to the Official Statement, dated _____, 2016, relating to the Bonds, and the related documents described below. We have also examined such other agreements, documents and certificates, and have made such investigations of law, as we have deemed necessary or appropriate in rendering the opinions set forth below.

Based on the foregoing, we are of the opinion that, as of the date hereof:

1. The offer and sale of the Bonds to the public do not require any registration under the Securities Act of 1933, as amended, and, in connection therewith, the Bond Resolution does not need to be qualified under the Trust Indenture Act of 1939, as amended.

2. The statements contained in the Official Statement under the captions "Introduction" to the extent the narrative thereunder purports to describe the terms of the Bonds and the legal authority by which they are issued, "The Bonds," and in Appendix A to the Official Statement, insofar as such statements purport to summarize certain provisions of the Bonds and the Bond Resolution, fairly summarize such provisions. The statements contained in the Official Statement under the caption "Opinion of Bond Counsel" are correct as to matters of law.

This opinion may be relied upon only by the Underwriter and by other persons to whom written permission to rely hereon is granted by us.

Very truly yours,

EXHIBIT B TO BOND PURCHASE AGREEMENT

_____, 2016

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

**Re: City of Knoxville, Tennessee acting on behalf of the Knoxville Utilities
Board \$22,000,000 Water System Revenue Refunding Bonds,
Series EE-2016**

Ladies and Gentlemen:

You have requested that the undersigned, General Counsel to the Knoxville Utilities Board of the City of Knoxville, Tennessee ("KUB"), render this opinion in connection with the execution, delivery and sale of the captioned bonds (the "Bonds"), the proceeds of which will be used to refinance a portion of the City's outstanding Water System Revenue Bonds, Series U-2009, dated November 12, 2009.

It is our opinion that KUB is duly established and validly existing pursuant to the Charter of the City of Knoxville, Tennessee (the "Municipality"), and, pursuant to said Charter and the water system of the Municipality (the "System") is under the jurisdiction, control and management of KUB.

The undersigned does hereby certify that no litigation of any nature is now pending or, to our knowledge, threatened

- (1) seeking to restrain or enjoin the issuance, sale, execution or delivery of the Bonds;
- (2) seeking to restrain or enjoin the charging of sufficient rates to pay the cost of operating, maintaining, repairing and insuring the System and to pay principal of and interest on the Bonds and all outstanding obligations payable from the revenues of the System;
- (3) in any manner questioning the proceedings or authority pursuant to which the Bonds are authorized or issued or such rates are charged;
- (4) in any manner questioning or relating to the validity of the Bonds;
- (5) contesting in any way the completeness or accuracy of the Official Statement prepared and distributed in connection with the sale of the Bonds;
- (6) in any way contesting the corporate existence or boundaries of the Municipality, except for various pending actions challenging past or present annexation efforts of the Municipality, which will have no material adverse effect on the revenues of the System;
- (7) contesting the title of the present officers of KUB to their respective offices; or

(8) contesting the powers of KUB or the authority of KUB with respect to the Bonds, or proceedings authorizing the Bonds, or any act to be done or document or certificate to be executed or delivered in connection with the issuance and delivery of the Bonds.

Neither the voters of the Municipality nor its governing body nor the Board of Commissioners of KUB have approved any special, local or private act or legislation passed by the General Assembly of the State of Tennessee at its most recent session or any amendments to the Charter of the Municipality affecting the power of the Municipality to issue the Bonds or pay the principal of, premium, if any, and interest on the Bonds when due or affecting the power of the Board of Commissioners of KUB to manage and control the System.

I hereby certify that _____ and _____ are the duly qualified, appointed and acting Chair and Secretary, respectively, of the Board of Commissioners of KUB with full power to act as such officers on behalf of KUB in connection with the execution and delivery of the Bonds.

Yours truly,

EXHIBIT B

FORM OF REFUNDING ESCROW AGREEMENT

**CITY OF KNOXVILLE, TENNESSEE
ACTING ON BEHALF OF KNOXVILLE UTILITIES BOARD
\$22,000,000 WATER SYSTEM REVENUE REFUNDING BONDS, SERIES EE-2016**

REFUNDING ESCROW AGREEMENT

This Refunding Escrow Agreement is made and entered into as of the _____ day of _____, 2016, by and between Knoxville Utilities Board ("KUB") acting on behalf of the City of Knoxville, Tennessee (the "City") and _____, _____, Tennessee (the "Agent").

W I T N E S S E T H:

WHEREAS, the Board of Commissioners (the "Board") of KUB has determined to provide for payment of the City's outstanding Water System Revenue Bonds, Series U-2009, dated November 12, 2009, maturing March 1, 2020 and thereafter (the "Refunded Bonds") by depositing in escrow with the Agent funds that, with the investment income therefrom, will be sufficient to pay the principal of and interest on the portion of the Refunded Bonds set forth on Exhibit A hereto; and

WHEREAS, in order to obtain the funds needed to refund the Refunded Bonds, the City has authorized and issued its Water System Revenue Refunding Bonds, Series EE-2016, dated _____, 2016 (the "Refunding Bonds"); and

WHEREAS, a portion of the proceeds derived from the sale of the Refunding Bonds and certain funds of KUB, if any, will be deposited in escrow with the Agent hereunder and applied to the purchase of certain securities described herein, the principal amount thereof together with interest thereon to mature at such times and in such amounts as shall be sufficient to pay when due all of the principal of, premium, if any, and interest on the Refunded Bonds identified on Exhibit A; and

WHEREAS, in order to create the escrow hereinabove described, provide for the deposit of the proceeds of the Refunding Bonds and the application thereof, and provide for the payment of the Refunded Bonds, the parties hereto do hereby enter into this Agreement;

NOW, THEREFORE, KUB, in consideration of the foregoing and the mutual covenants herein set forth and in order to secure the payment of the Refunded Bonds according to their tenor and effect, does by these presents hereby grant, warrant, demise, release, convey, assign, transfer, alien, pledge, set over and confirm, to the Agent, and to its successors hereunder, and to it and its assigns forever, in escrow, all and singular the property hereinafter described to wit:

DIVISION I

All right, title and interest of KUB and the City in and to \$_____ derived from the proceeds of the sale of the Refunding Bonds and \$_____ derived from other funds of KUB.

DIVISION II

All right, title and interest of KUB and the City in and to the Government Securities purchased with the funds described in Division I hereof and to all income, earnings and increment derived from or accruing to the Government Securities.

DIVISION III

Any and all other cash or eligible investments from time to time hereafter, by delivery or by writing of any kind, conveyed, pledged, assigned or transferred in escrow hereunder by KUB or by anyone in its behalf to the Agent, which is hereby authorized to receive the same at any time to be held in escrow hereunder.

DIVISION IV

Any other cash or eligible investments that is by the express provisions of this Agreement required to be subject to the pledge hereof and any additional property that may, from time to time hereafter, by delivery or by writing of any kind, be subject to the pledge hereof, by KUB or by anyone in its behalf, and the Agent is hereby authorized to receive the same at any time to be held in escrow hereunder.

TO HAVE AND TO HOLD, all and singular, the escrowed property, including all additional property which by the terms hereof has or may become subject to this Agreement, unto the Agent, and its successors and assigns, forever.

The escrowed property shall be held in escrow for the benefit and security of the owners from time to time of the portion of the Refunded Bonds identified on Exhibit A; but if the principal of and interest on the portion of the Refunded Bonds identified on Exhibit A shall be fully and promptly paid when due in accordance with the terms hereof, then this Agreement shall be and become void and of no further force and effect, otherwise the same shall remain in full force and effect, subject to the covenants and conditions hereinafter set forth.

ARTICLE I DEFINITIONS AND CONSTRUCTION

SECTION 1.1 Definitions. In addition to words and terms elsewhere defined in this Agreement, the following words and terms as used in this Agreement shall have the following meanings, unless some other meaning is plainly intended:

"Agent" means _____, Tennessee, its successors and assigns;

"Agreement" means this Refunding Escrow Agreement;

"Board" means the Board of Commissioners of KUB;

"City" means the City of Knoxville, Tennessee;

"Code" means the Internal Revenue Code of 1986, as amended, and any lawful regulations promulgated thereunder;

"Escrow Fund" shall have the meaning ascribed to it in Section 2.1 hereof;

"Escrow Property," "escrow property" or "escrowed property" means the property, rights and interest of KUB that are described in Divisions I through IV of this Agreement and hereinabove conveyed in escrow to the Agent;

"Government Securities" means obligations and securities described in Section 9-21-1012, Tennessee Code Annotated that are purchased pursuant to the terms of the Escrow Reinvestment Agreement on this Agreement;

"KUB" means Knoxville Utilities Board, Knoxville, Tennessee;

"Refunded Bonds" means the City's Water System Revenue Bonds, Series U-2009, dated November 12, 2009, maturing March 1, 2020 and thereafter;

"Refunding Bonds" means the City's Water System Revenue Refunding Bonds, Series EE-2016, dated _____, 2016;

"Written Request" means a request in writing signed by the President and Chief Executive Officer of KUB, the Chief Financial Officer of KUB or by any other officer or official of KUB duly authorized by KUB to act in their place.

SECTION 1.2 Construction. Words of the masculine gender shall be deemed and construed to include correlative words of the feminine and neuter genders. Words importing the singular number shall include the plural number and vice versa unless the context shall otherwise indicate. The word "person" shall include corporations, associations, natural persons and public bodies unless the context shall otherwise indicate. Reference to a person other than a natural person shall include its successors.

ARTICLE II ESTABLISHMENT AND ADMINISTRATION OF FUNDS

SECTION 2.1 Creation of Escrow; Deposit of Funds. KUB hereby creates and establishes with the Agent a special and irrevocable escrow composed of the Escrowed Property and hereby deposits with the Agent and the Agent hereby acknowledges receipt of \$_____ as described in Division I hereof. The monies so deposited, together with investment income therefrom, is herein referred to as the "Escrow Fund" and shall constitute a fund to be held by the Agent as a part of the Escrowed Property created, established, and governed by this Agreement.

SECTION 2.2 Investment of Funds. The monies described in Section 2.1 hereof shall be held or invested as follows:

(a) the amount of \$_____ shall be used to purchase the Government Securities described on Exhibit B attached hereto; and

(b) the amount of \$_____ shall be held as cash in a non-interest-bearing account.

Except as provided in Sections 2.4 and 2.6 hereof, the investment income from the Government Securities in the Escrow Fund shall be credited to the Escrow Fund and shall not be reinvested. The Agent shall have no power or duty to invest any monies held hereunder or to make substitutions of

Government Securities held hereunder or to sell, transfer, or otherwise dispose of the Government Securities acquired hereunder except as provided herein.

Section 2.3. Disposition of Escrow Funds. The Agent shall without further authorization or direction from KUB collect the principal and interest on the Government Securities promptly as the same shall fall due. From the Escrow Fund, to the extent that monies therein are sufficient for such purpose, the Agent shall make timely payments to the paying agent or its successor, for the Refunded Bonds of monies sufficient for the payment of the principal of and interest on the Refunded Bonds as the same shall become due and payable. Amounts and dates of principal and interest payments and the name and address of the paying agent with respect to the Refunded Bonds are set forth on Exhibit A. Payment on the dates and to the paying agent in accordance with Exhibit A shall constitute full performance by the Agent of its duties hereunder with respect to each respective payment. KUB represents and warrants that the Escrow Fund, if held, invested and disposed of by the Agent in accordance with the provisions of this Agreement, will be sufficient to make the foregoing payments. No paying agent fees, fees and expenses of the Agent, or any other costs and expenses associated with the Refunding Bonds or the Refunded Bonds shall be paid from the Escrow Fund, and KUB agrees to pay all such fees, expenses, and costs from its legally available funds as such payments become due. When the Agent has made all required payments of principal and interest on the Refunded Bonds to the paying agent as hereinabove provided, the Agent shall transfer any monies or Government Securities then held hereunder to KUB and this Agreement shall terminate.

Section 2.4. Excess Funds. Amounts held by the Agent, representing interest on the Government Securities in excess of the amount necessary to make the corresponding payment of principal and/or interest on the Refunded Bonds, shall be held by the Agent and invested pursuant to the Escrow Reinvestment Agreement without interest and shall be applied before any other Escrow Fund monies to the payment of the next ensuing principal and/or interest payment on the Refunded Bonds. Upon retirement of all the Refunded Bonds, the Agent shall pay any excess amounts remaining in the Escrow Fund to KUB.

Section 2.5. Reports. The Escrow Agent shall deliver to KUB a monthly report summarizing all transactions relating to the Escrow Fund; and on or before the first day of August of each year shall deliver to the Chief Financial Officer of KUB a report current as of June 30 of that year, which shall summarize all transactions relating to the Escrow Fund effected during the immediately preceding fiscal year of KUB and which also shall set forth all assets in the Escrow Fund as of June 30 and set forth opening and closing balances thereof for that fiscal year.

Section 2.6 Investment of Moneys Remaining in Escrow Fund. The Agent may invest and reinvest any monies remaining from time to time in the Escrow Fund until such time as they are needed. Such monies shall be invested in Government Securities, maturing no later than the next interest payment date of the Refunded Bonds, or for such periods or at such interest rates as the Agent shall be directed by Written Request, provided, however, that KUB shall furnish the Agent, as a condition precedent to such investment, with an opinion from nationally recognized bond counsel stating that such reinvestment of such monies will not, under the statutes, rules and regulations then in force and applicable to obligations issued on the date of issuance of the Refunding Bonds, cause the interest on the Refunding Bonds or the Refunded Bonds not to be excluded from gross income for federal income tax purposes and that such investment is not inconsistent with the statutes and regulations applicable to the Refunding Bonds and Refunded Bonds. Any interest income resulting from reinvestment of monies pursuant to this Section 2.6 shall be applied first to the payment of principal of and interest on the Refunded Bonds to the extent the Escrow is or will be insufficient to retire the Refunded Bonds as set forth on Exhibit A and any excess shall be paid to KUB to be applied to the payment of the Refunding Bonds or the expenses of issuance thereof.

Section 2.7. Irrevocable Escrow Created. The deposit of monies, Government Securities, matured principal amounts thereof, and investment proceeds therefrom in the Escrow Fund shall constitute an irrevocable deposit of said monies and Government Securities for the benefit of the holders of the Refunded Bonds, except as provided herein with respect to amendments permitted under Section 4.1 hereof. All the funds and accounts created and established pursuant to this Agreement shall be and constitute escrow funds for the purposes provided in this Agreement and shall be kept separate and distinct from all other funds of KUB and the Agent and used only for the purposes and in the manner provided in this Agreement.

Section 2.8. Redemption of Refunded Bonds. The Refunded Bonds shall be redeemed as stated on Exhibit C attached hereto.

ARTICLE III CONCERNING THE AGENT

SECTION 3.1 Appointment of Agent. KUB hereby appoints the Agent as escrow agent under this Agreement.

SECTION 3.2 Acceptance by Agent. By execution of this Agreement, the Agent accepts the duties and obligations as Agent hereunder. The Agent further represents that it has all requisite power, and has taken all corporate actions necessary to execute the escrow hereby created.

SECTION 3.3 Liability of Agent. The Agent shall be under no obligation to inquire into or be in any way responsible for the performance or nonperformance by KUB or any paying agent of its obligations, or to protect any of KUB's rights under any bond proceedings or any of KUB's other contracts with or franchises or privileges from any state, county, municipality or other governmental agency or with any person. The Agent shall not be liable for any act done or step taken or omitted to be taken by it, or for any mistake of fact or law, or anything which it may do or refrain from doing, except for its own gross negligence or willful misconduct in the performance or nonperformance of any obligation imposed upon it hereunder. The Agent shall not be responsible in any manner whatsoever for the recitals or statements contained herein or in the Refunded Bonds or in the Refunding Bonds or in any proceedings taken in connection therewith, but they are made solely by KUB. The Agent shall have no lien whatsoever upon any of the monies or investments in the Escrow Fund for the payment of fees and expenses for services rendered by the Agent under this Agreement.

The Agent shall not be liable for the accuracy of the calculations as to the sufficiency of Escrow Fund monies and Government Securities and the earnings thereon to pay the Refunded Bonds. So long as the Agent applies any monies, the Government Securities and the interest earnings therefrom to pay the Refunded Bonds as provided herein, and complies fully with the terms of this Agreement, the Agent shall not be liable for any deficiencies in the amounts necessary to pay the Refunded Bonds caused by such calculations. The Agent shall not be liable or responsible for any loss resulting from any investment made pursuant to this Agreement and in full compliance with the provisions hereof.

In the event of the Agent's failure to account for any of the Government Securities or monies received by it, said Government Securities or monies shall be and remain the property of KUB in escrow for the benefit of the holders of the Refunded Bonds, as herein provided, and if for any improper reason such Government Securities or monies are applied to purposes not provided for herein or misappropriated by the Agent, the assets of the Agent shall be impressed with a trust for the amount thereof until the required application of such funds shall be made or such funds shall be restored to the Escrow Fund.

SECTION 3.4 Permitted Acts. The Agent and its affiliates may become the owner of or may deal in the Refunding Bonds or Refunded Bonds as fully and with the same rights as if it were not the Agent.

SECTION 3.5 Exculpation of Funds of Agent. Except as set forth in Section 3.3, none of the provisions contained in this Agreement shall require the Agent to use or advance its own funds or otherwise incur personal financial liability in the performance of any of its duties or the exercise of any of its rights or powers hereunder. The Agent shall be under no liability for interest on any funds or other property received by it hereunder, except as herein expressly provided.

SECTION 3.6 No Redemption or Acceleration of Maturity. The Agent will not pay any of the principal of or interest on the Refunded Bonds, except as provided in Exhibit A attached hereto and will not redeem or accelerate the maturity of any of the Refunded Bonds except as provided in Section 2.9 hereof.

SECTION 3.7 Qualifications of Agent. There shall at all times be an Agent hereunder that shall be a corporation or banking association organized and doing business under the laws of the United States or any state, located in the State of Tennessee, authorized under the laws of its incorporation to exercise the powers herein granted, having a combined capital, surplus, and undivided profits of at least \$75,000,000 and subject to supervision or examination by federal or state authority. If such corporation or association publishes reports of condition at least annually, pursuant to law or to the requirements of any supervising or examining authority above referred to, then for the purposes of this paragraph the combined capital, surplus, and undivided profits of such corporation or association shall be deemed to be its combined capital, surplus, and undivided profits as set forth in its most recent report of condition as published. In case at any time the Agent shall cease to be eligible in accordance with the provisions of this Section 3.7, the Agent shall resign immediately in the manner and with the effect specified herein.

SECTION 3.8 Resignation of Agent. The Agent may at any time resign by giving direct written notice to KUB and by giving the holders of the Refunded Bonds notice by first-class mail of such resignation. Upon receiving such notice of resignation, KUB shall promptly appoint a successor escrow agent in the manner provided in the resolution authorizing the Refunding Bonds. If no successor escrow agent shall have been appointed and have accepted appointment within thirty (30) days after the publication of such notice of resignation, the resigning Agent may petition any court of competent jurisdiction located in Knox County, Tennessee, for the appointment of a successor, or any holder of the Refunded Bonds may, on behalf of himself and others similarly situated, petition any such court for the appointment of a successor. Such court may thereupon, after such notice, if any, as it may deem proper, appoint a successor meeting the qualifications set forth in Section 3.7. The Agent shall serve as escrow agent hereunder until its successor shall have been appointed and such successor shall have accepted the appointment.

SECTION 3.9 Removal of Agent. In case at any time the Agent shall cease to be eligible in accordance with the provisions of Section 3.8 hereof and shall fail to resign after written request therefor by KUB or by any holder of the Refunded Bonds, or the Agent shall become incapable of acting, shall be adjudged a bankrupt or insolvent or a receiver of the Agent or any of its property shall be appointed, or any public officer shall take charge or control of the Agent or its property or affairs for the purpose of rehabilitation, conservation, or liquidation, then in any such case, the Board may remove the Agent and appoint a successor in the manner provided in the resolution authorizing the Refunding Bonds or any such bondholder may, on behalf of himself and all others similarly situated, petition any court of competent jurisdiction situated in Knox County, Tennessee for the removal of the Agent and the appointment of a successor. Such court may thereupon, after such notice, if any, as it may deem proper, remove the Agent and appoint a successor who shall meet the qualifications set forth in Section 3.8. Unless incapable of

serving, the Agent shall serve as escrow agent hereunder until its successor shall have been appointed and such successor shall have accepted the appointment.

The holders of a majority in aggregate principal amount of all the Refunded Bonds at any time outstanding may at any time remove the Agent and appoint a successor by an instrument or concurrent instruments in writing signed by such bondholders and presented, together with the successor's acceptance of appointment, to KUB and the Agent.

Any resignation or removal of the Agent and appointment of a successor pursuant to any of the provisions of this Agreement shall become effective upon acceptance of appointment by the successor as provided in Section 3.10 hereof.

SECTION 3.10 Acceptance by Successor. Any successor escrow agent appointed as provided in this Agreement shall execute, acknowledge and deliver to KUB and to its predecessor an instrument accepting such appointment hereunder and agreeing to be bound by the terms hereof, and thereupon the resignation or removal of the predecessor shall become effective and such successor, without any further act, deed or conveyance, shall become vested with all the rights, powers, duties and obligations of its predecessor, with like effect as if originally named as Agent herein; but, nevertheless, on Written Request of KUB or the request of the successor, the predecessor shall execute and deliver an instrument transferring to such successor all rights, powers and escrow property of the predecessor. Upon request of any such successor, KUB shall execute any and all instruments in writing for more fully and certainly vesting in and confirming to such successor all such rights, powers and duties. No successor shall accept appointment as provided herein unless at the time of such acceptance such successor shall be eligible under the provisions of Section 3.7 hereof.

Any corporation into which the Agent may be merged or with which it may be consolidated, or any corporation resulting from any merger or consolidation to which the Agent shall be a party, or any corporation succeeding to the business of the Agent, shall be the successor of the Agent hereunder without the execution or filing of any paper or any further act on the part of any of the parties hereto, anything herein to the contrary notwithstanding, provided that such successor shall be eligible under the provisions of Section 3.8 hereof.

SECTION 3.11 Payment to Agent. KUB agrees to pay the Agent, as reasonable and proper compensation under this Agreement, a one-time fee of \$_____. The Agent shall be entitled to reimbursement of all advances, counsel fees and expenses, and other costs made or incurred by the Agent in connection with its services and/or its capacity as Agent or resulting therefrom. In addition, KUB agrees to pay to the Agent all out-of-pocket expenses and costs of the Agent incurred by the Agent in the performance of its duties hereunder, including all publication, mailing and other expenses associated with the redemption of the Refunded Bonds; provided, however, that KUB agrees, to the extent permitted by law, to indemnify the Agent and hold it harmless against any liability (unless such liability is due to the gross negligence or willful misconduct of the Agent) which it may incur while acting in good faith in its capacity as Agent under this Agreement, including, but not limited to, any court costs and attorneys' fees, and such indemnification shall be paid from available funds of KUB and shall not give rise to any claim against the Escrow Fund.

ARTICLE IV MISCELLANEOUS

SECTION 4.1 Amendments to this Agreement. This Agreement is made for the benefit of KUB, the holders from time to time for the Refunded Bonds, and it shall not be repealed, revoked, altered or amended without the written consent of all such holders, the Agent and KUB; provided, however, that

KUB and the Agent may, without the consent of, or notice to, such holders, enter into such agreements supplemental to this Agreement as shall not adversely affect the rights of such holders and as shall not be inconsistent with the terms and provisions of this Agreement, for any one or more of the following purposes:

- (a) to cure any ambiguity or formal defect or omission in this Agreement;
- (b) to grant to, or confer upon, the Agent for the benefit of the holders of the Refunded Bonds, any additional rights, remedies, powers or authority that may lawfully be granted to, or conferred upon, such holders or the Agent; and
- (c) to subject to this Agreement additional funds, securities or properties.

The Agent shall be entitled to rely exclusively upon an unqualified opinion of nationally recognized bond counsel with respect to compliance with this Section 4.1, including the extent, if any, to which any change, modification, addition or elimination affects the rights of the holders of the Refunded Bonds, or that any instrument executed hereunder complies with the conditions and provisions of this Section 4.1.

Notwithstanding the foregoing or any other provision of this Agreement, upon Written Request and upon compliance with the conditions hereinafter stated, but only with the consent of the Provider, the Agent shall have the power to and shall, in simultaneous transactions, sell, transfer, otherwise dispose of or request the redemption of all or any portion of the Government Securities held hereunder and to substitute therefor direct obligations of, or obligations the principal of and interest on which are fully guaranteed by the United States of America, subject to the condition that such monies or securities held by the Agent shall be sufficient to pay principal of and interest on the Refunded Bonds. KUB hereby covenants and agrees that it will not request the Agent to exercise any of the powers described in the preceding sentence in any manner which will cause the Refunding Bonds to be arbitrage bonds within the meaning of Section 148 of the Code in effect on the date of such request and applicable to obligations issued on the issue date of the Refunding Bonds. The Agent shall purchase such substituted securities with the proceeds derived from the maturity, sale, transfer, disposition or redemption of the Government Securities held hereunder or from other monies available. The transactions may be effected only if there shall have been submitted to the Agent: (1) an independent verification by a nationally recognized independent certified public accounting firm concerning the adequacy of such substituted securities with respect to principal and the interest thereon and any other monies or securities held for such purpose to pay when due the principal of and interest on the Refunded Bonds in the manner required by the proceedings which authorized their issuance; and (2) an opinion from nationally recognized bond counsel to the effect that the disposition and substitution or purchase of such securities will not, under the statutes, rules and regulations then in force and applicable to obligations issued on the date of issuance of the Refunding Bonds, cause the interest on the Refunding Bonds not to be exempt from Federal income taxation. Any surplus monies resulting from the sale, transfer, other disposition or redemption of the Government Securities held hereunder and the substitutions therefor of direct obligations of or obligations the principal of and interest on which is fully guaranteed by the United States of America shall be released from the Escrow Fund and shall be transferred to KUB.

SECTION 4.2 Severability. If any provision of this Agreement shall be held or deemed to be invalid or shall, in fact, be illegal, inoperative or unenforceable, the same shall not affect any other provision or provisions herein contained or render the same invalid, inoperative or unenforceable to any extent whatever.

SECTION 4.3 Governing Law. This Agreement shall be governed and construed in accordance with the laws of the State of Tennessee.

SECTION 4.4 Notices. Any notice, request, communication or other paper shall be sufficiently given and shall be deemed given when delivered or mailed by Registered or Certified Mail, postage prepaid, or sent by telegram as follows:

To KUB:

Chief Financial Officer
Knoxville Utilities Board
445 Gay Street
Knoxville, Tennessee 37902

To the Agent:

KUB and the Agent may designate in writing any further or different addresses to which subsequent notices, requests, communications or other papers shall be sent.

SECTION 4.5 Agreement Binding. All the covenants, promises and agreements in this Agreement contained by or on behalf of the parties shall bind and inure to the benefit of their respective successors and assigns, whether so expressed or not.

SECTION 4.6 Termination. This Agreement shall terminate when all transfers and payments required to be made by the Agent under the provisions hereof shall have been made.

SECTION 4.7 Execution by Counterparts. This Agreement may be executed in several counterparts, all or any of which shall be regarded for all purposes as one original and shall constitute and be but one and the same instrument.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, KUB has caused this Agreement to be signed in its name by its President and Chief Executive Officer and attested by the Secretary of its Board of Commissioners, and the Agent has caused this Agreement to be signed in its corporate name by its duly authorized officers, all as of the day and date first above written.

CITY OF KNOXVILLE, TENNESSEE
by and through the
KNOXVILLE UTILITIES BOARD

By: _____
President and Chief Executive Officer

Secretary

Escrow Agent
By: _____
Title: _____

ATTEST:

Title: _____

EXHIBIT A TO REFUNDING ESCROW AGREEMENT

Debt Service Schedule of the refunded Water System Revenue Bonds, Series U-2009, dated November 12, 2009, maturing March 1, 2020 and thereafter to the Redemption Date with name and address of the Paying Agent and Date and Amount of Redemption

<u>Payment Date</u>	<u>Principal Payable</u>	<u>Principal Redeemed</u>	<u>Interest Payable</u>	<u>Redemption Premium</u>	<u>Total Debt Service</u>
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Totals:

Paying Agent: Regions Bank
Nashville, Tennessee

EXHIBIT B TO REFUNDING ESCROW AGREEMENT

Government Securities

<u>Par Amount</u>	<u>Interest Rate</u>	<u>Maturity Date</u>
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Cost of Securities: \$_____

Cash: \$_____

EXHIBIT C TO REFUNDING ESCROW AGREEMENT

The outstanding Water System Revenue Bonds, Series U-2009, dated November 12, 2009, maturing March 1, 2017 and thereafter (the "Refunded Bonds") of the City of Knoxville, Tennessee shall be redeemed as provided in this Exhibit C. The Agent is hereby authorized and directed to give the paying agent for the Refunded Bonds notice on or before _____ to give notice of a _____ redemption to the holders of said Refunded Bonds in accordance with the resolution authorizing the issuance of said Refunded Bonds.

NOTICE OF REDEMPTION

THE CITY OF KNOXVILLE, TENNESSEE
BY AND THROUGH THE
KNOXVILLE UTILITIES BOARD

NOTICE IS HEREBY GIVEN that the City of Knoxville, Tennessee (the "City"), by and through the Knoxville Utilities Board, has elected to and does exercise its option to call and redeem on March 1, 2019, all of the City's outstanding bonds as follows:

Water System Revenue Bonds, Series U-2009, dated November 12, 2009,
maturing March 1, 2020 and thereafter

The owners of the above-described Bonds are hereby notified to present the same to the principal office of Regions Bank, Nashville, Tennessee, where redemption shall be made at the price of par plus interest accrued to the redemption date. The redemption price will become due and payable on _____ upon each such Bond herein called for redemption and such Bonds shall not bear interest beyond _____.

Important Notice: Withholding of 28% of gross redemption proceeds of any payment made within the United States may be required by the Economic Growth and Tax Relief Reconciliation Act of 2003 (the "Act"), unless the Paying Agent has the correct taxpayer identification number (social security or employer identification number) or exemption certificate of the payee. Please furnish a properly completed W-9 or exemption certificate or equivalent when presenting your securities.

REGIONS BANK
as Registration and Paying Agent

RESOLUTION NO. 1343

A Resolution Authorizing the Issuance of Not to Exceed Ten Million Dollars (\$10,000,000) in Aggregate Principal Amount of Gas System Revenue Anticipation Notes (Nonrevolving Line of Credit) of the Knoxville Utilities Board in Anticipation of the Collection of Revenues of the Natural Gas Distribution System of the City of Knoxville for the Purpose of Paying the Cost of Natural Gas Purchases and Storage and Pipeline Capacity

Whereas, the Knoxville Utilities Board ("KUB") controls, manages, and has jurisdiction over the natural gas distribution system (the "System") of the City of Knoxville, Tennessee (the "City"); and

Whereas, KUB is engaged in an on-going program of purchasing natural gas for distribution to its customers, purchasing storage for purchased gas and paying pipeline capacity costs; and

Whereas, pursuant to Section 7-34-111(d), Tennessee Code Annotated, KUB is authorized to borrow money for the purpose of financing gas purchases, including the payment of storage and pipeline capacity costs, by the issuance of notes in anticipation of the collection of revenues of the System; and

Whereas, it is in the best interest of KUB to finance said gas purchases and capacity costs through the issuance of revenue anticipation notes and the establishment of a Nonrevolving Line of Credit with one or more local banks; and

Whereas, it is the intention of the Board of Commissioners of KUB (the "Board") to adopt this resolution for the purpose of authorizing such notes, establishing the terms thereof, and providing for the collection of revenues for the payment of principal thereof and interest thereon.

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

Section 1. Authority. The notes authorized by this resolution are issued pursuant to Section 7-34-111(d), Tennessee Code Annotated, and other applicable provisions of law.

Section 2. Definitions. The following terms shall have the following meanings in this resolution unless the text expressly or by necessary implication requires otherwise:

(a) "Board" shall mean the Board of Commissioners of the Knoxville Utilities Board;

(b) "Chief Financial Officer" shall mean the Chief Financial Officer of KUB;

- (c) "City" shall mean the City of Knoxville, Tennessee;
- (d) "Code" shall mean the Internal Revenue Code of 1986, as amended;
- (e) "KUB" shall mean the Knoxville Utilities Board;
- (f) "Notes" shall mean the not to exceed \$10,000,000 Gas System Revenue Anticipation Notes (Nonrevolving Line of Credit), of KUB, authorized to be issued by this resolution, to be dated the respective dates of delivery thereof or various dates certain, as shall be determined by the Chief Financial Officer;
- (g) "1988 Resolution" shall mean Resolution No. R-25-88 of the City Council of the City, adopted February 9, 1988, as supplemented and amended by Resolution No. R-59-88 adopted March 22, 1988, Resolution No. R-227-91 of the City Council of the City adopted June 25, 1991, Resolution No. R-471-92 of the City Council of the City adopted October 13, 1992 (as amended by Resolution No. R-5-93 of the City Council of the City adopted January 5, 1993 Resolution No. R-475-93 of the City Council of the City adopted October 26, 1993, Resolution No. R-22-97 of the City Council of the City adopted January 14, 1997, Resolution No. R-421-98 of the City Council of the City adopted October 20, 1998, Resolution No. R-66-01 of the City Council of the City adopted February 20, 2001, Resolution No. R-150-01 of the City Council of the City adopted March 20, 2001, Resolution No. R-479-01 of the City Council of the City adopted October 30, 2001, Resolution No. R-58-04 of the City Council of the City adopted March 2, 2004, Resolution R-262-05 of the City Council of the City adopted July 5, 2005, Resolution R-79-06 of the City Council of the City adopted February 28, 2006, Resolution No. R-345-07 of the City Council adopted August 28, 2007, Resolution No. R-132-10 of the City Council adopted May 4, 2010, Resolution No. R-333-2010, adopted November 2, 2010, Resolution No. R-336-2011 of the City Council adopted December 13, 2011, Resolution No. R-290-2012 of the City Council adopted October 16, 2012, Resolution No. R-322-2012 of the City Council adopted November 13, 2012, Resolution No. R-242-2013 of the City Council adopted July 23, 2013 and Resolution No. R-82-2015 of the City Council adopted March 3, 2015, and any other resolutions hereinafter adopted amending or supplementing any of the foregoing resolutions and authorizing the issuance of revenue obligations of the City or KUB payable from revenues of the System on a parity with any bonds issued pursuant to such resolutions;
- (h) "Outstanding Bonds" shall mean the City's outstanding Gas System Revenue Bonds, Series L-2005, dated August 10, 2005, maturing March 1, 2017 and thereafter, the City's outstanding Gas System Revenue Bonds, Series N-2007, dated November 1, 2007, maturing March 1, 2017, the City's outstanding Gas System Revenue Refunding Bonds, Series O-2010, dated June 23, 2010, maturing March 1, 2017 and thereafter, the City's outstanding Gas System Revenue Bonds, Series P-2010 (Federally Taxable Build America Bonds), dated December 8, 2010, maturing March 1, 2017 and thereafter, the City's outstanding Gas System Revenue Refunding Bonds, Series Q-2012, dated April 20, 2012, maturing March 1, 2017 and thereafter, the City's outstanding Gas System Revenue Bonds, Series R-2012, dated December 18, 2012,

maturing March 1, 2017 and thereafter, the City's outstanding Gas System Revenue Refunding Bonds, Series S-2013, dated March 15, 2013, maturing March 1, 2017 and thereafter, the City's outstanding Gas System Revenue Bonds, Series T-2013, dated October 1, 2013, maturing March 1, 2017 and thereafter and the City's outstanding Gas System Revenue Refunding Bonds, Series U-2015, dated May 1, 2015, maturing March 1, 2017 and thereafter; and

(i) "System" shall mean the complete natural gas distribution system of KUB located within and without the corporate limits of the City, together with all additions, extensions and improvements hereafter made thereto.

Section 3. Authorization and Terms of the Notes. For the purpose of providing funds to finance the cost of the purchase of natural gas for distribution to the customers of the System and to purchase storage and pipeline capacity in connection therewith, and, in the Chief Financial Officer's discretion, to pay legal, fiscal and administrative costs incident thereto and incident to the issuance of the Notes, there is hereby authorized to be issued interest bearing revenue anticipation notes of KUB in an aggregate principal amount of not to exceed \$10,000,000. The Notes shall be payable to the order of the owner thereof or issued in registered or bearer form as shall be determined by the Chief Financial Officer and shall be known as "Gas System Revenue Anticipation Notes (Nonrevolving Line of Credit)". The Notes shall be dated the respective dates of delivery thereof, or various dates certain as shall be determined by the Chief Financial Officer, shall mature not later than one (1) year from the date of delivery of the first Note delivered hereunder, and shall be issued in \$100,000 denominations or any dollar amount in excess thereof, as shall be determined by the Chief Financial Officer. The Notes shall bear interest at a rate or rates not to exceed the maximum interest rate permitted by law, which may be adjusted from time to time in accordance with an established prime rate, or the equivalent thereof, or any other established index, as determined by the Chief Financial Officer, payable semi-annually, or at such other intervals, and on such dates as shall be determined by the Chief Financial Officer.

No transfer of the Notes shall be permitted without prior written notice to the Chief Financial Officer.

The Notes shall be subject to prepayment prior to maturity at any time at a price of par plus accrued interest to the date of prepayment.

The Notes shall be signed by the Chair of the Board and shall be attested by the Secretary of the Board by their manual or facsimile signatures.

Section 4. Security and Source of Payment for the Notes. The Notes shall be payable solely from and secured by a pledge of and lien on the Net Revenues of the System, as defined in the 1988 Resolution and subject to a prior pledge of such revenues in favor of the Outstanding Bonds and any bonds hereafter issued on a parity therewith, provided that the Chief Financial Officer and the President and Chief

Executive Officer are authorized to take such actions as are necessary, in their discretion, for the Notes to be issued on a parity of lien with the Outstanding Bonds and in such case the form of the Note shall be adjusted accordingly. The punctual payment of principal of and interest on the Notes shall be secured equally and ratably by said revenues as above provided without priority by reason of series, number or time of sale and delivery. The owners of the Notes shall have no recourse to the power of taxation of the City.

Section 5. Form of Notes. The Notes shall be in substantially the following form, the omissions to be appropriately completed when the Notes are prepared and delivered, subject to such changes and modifications as shall be requested by the purchaser thereof and agreed to by the Chief Financial Officer:

(Form of Note)

REGISTERED

Number

UNITED STATES OF AMERICA
STATE OF TENNESSEE
COUNTY OF KNOX
KNOXVILLE UTILITIES BOARD
GAS SYSTEM REVENUE ANTICIPATION NOTE
(NONREVOLVING LINE OF CREDIT)

KNOW ALL PERSONS BY THESE PRESENTS: That Knoxville Utilities Board ("KUB"), for value received, hereby promises to pay to the order of _____, in the manner hereinafter provided, on _____, the principal amount of _____, or so much thereof as shall be advanced hereunder, with interest on said principal amount at a rate of interest equal to _____ percent (%) of _____, provided that at no time shall the rate of interest payable on the indebtedness evidenced hereby exceed the maximum interest rate permitted by law. Interest shall be calculated on the basis of a [360-day year of twelve 30-day months] [365-day year over the actual number of days elapsed] on said principal amount at the annual rate of interest hereinabove set forth from the date hereof until the payment in full of the principal amount hereof, said interest being payable on the _____ day of _____ and _____, of each year during the term hereof, commencing the _____ day of _____, 20____, and at maturity or earlier prepayment. This Note, both principal and interest, shall be payable to the holder hereof at _____ or such other location as shall be directed by said holder.

This Note shall be subject to prepayment without notice prior to maturity at any time at the option of KUB at a price of par plus accrued interest to the date of prepayment.

This Note is one of a total authorized issue aggregating \$10,000,000 issued by KUB to finance the cost of the purchase of natural gas for distribution to the customers of the natural gas distribution system (the "System") of the City of Knoxville, Tennessee (the "City"), and to purchase storage and pipeline capacity in connection therewith, and to pay legal, fiscal and administrative costs incident thereto and incident to the issuance of the Notes, under and in full compliance with the constitution and statutes of the State of Tennessee, including Sections 7-34-111(d), Tennessee Code Annotated, and pursuant to a resolution duly adopted by the Board on the 19th day of May, 2016 (the "Resolution").

This Note is payable solely from and is secured by a pledge of the Net Revenues of the System as provided in the Resolution, subject to a prior pledge of said Net Revenues in favor of the City's outstanding Gas System Revenue Bonds, Series L-2005, dated August 10, 2005, maturing March 1, 2017 and thereafter, the City's outstanding Gas System Revenue Bonds, Series N-2007, dated November 1, 2007, maturing March 1, 2017, the City's outstanding Gas System Revenue Refunding Bonds, Series O-2010, dated June 23, 2010, maturing March 1, 2017 and thereafter, the City's outstanding Gas System Revenue Bonds, Series P-2010 (Federally Taxable Build America Bonds), dated December 8, 2010, maturing March 1, 2017 and thereafter, the City's Gas System Revenue Refunding Bonds, Series Q-2012, dated April 20, 2012, maturing March 1, 2017 and thereafter, the City's Outstanding Gas System Revenue Bonds, Series R-2012, dated December 18, 2012, maturing March 1, 2017 and thereafter, the City's outstanding Gas System Revenue Refunding Bonds, Series S-2013, dated March 15, 2013, maturing March 1, 2017 and thereafter, the City's outstanding Gas System Revenue Bonds, Series T-2013, dated October 1, 2013, maturing March 1, 2017 and thereafter and the City's outstanding Gas System Revenue Refunding Bonds, Series U-2015, dated May 1, 2015, maturing March 1, 2017 and thereafter (collectively, the "Outstanding Bonds"). The punctual payment of principal of and interest on the Notes of the series of which this Note is one shall be secured equally and ratably by the Net Revenues of the System without priority by reason of series, number or time of sale and delivery. The owners of the Notes shall have no recourse to the power of taxation of the City.

[In the event the Board chooses to comply with the requirements of the resolution authorizing the Outstanding Bonds for issuance of the Notes on a parity and equality of lien with the Outstanding Bonds, the preceding paragraph shall read as follows: This Note is payable solely from and is secured by a pledge of the Net Revenues of the System as provided in the Resolution, on a complete parity and equality of lien with the City's outstanding Gas System Revenue Bonds, Series L-2005, dated August 10, 2005, maturing March 1, 2017 and thereafter, the City's outstanding Gas System Revenue Refunding Bonds, Series O-2010, dated June 23, 2010, maturing March 1, 2017 and thereafter, the City's outstanding Gas System Revenue Bonds, Series P-2010

(Federally Taxable Build America Bonds), dated December 8, 2010, maturing March 1, 2017 and thereafter, the City's outstanding Gas System Revenue Refunding Bonds, Series Q-2012, dated April 20, 2012, maturing March 1, 2017 and thereafter, the City's Outstanding Gas System Revenue Bonds, Series R-2012, dated December 18, 2012, maturing March 1, 2017 and thereafter, the City's outstanding Gas System Revenue Refunding Bonds, Series S-2013, dated March 15, 2013, maturing March 1, 2017 and thereafter, the City's outstanding Gas System Revenue Bonds, Series T-2013, dated October 1, 2013, maturing March 1, 2017 and thereafter and the City's outstanding Gas System Revenue Refunding Bonds, Series U-2015, dated May 1, 2015, maturing March 1, 2017 and thereafter (collectively, the "Outstanding Bonds"). The punctual payment of principal of and interest on the Notes of the series of which this Note is one shall be secured equally and ratably by the Net Revenues of the System without priority by reason of series, number or time of sale and delivery. The owners of the Notes shall have no recourse to the power of taxation of the City.]

Under existing law, this Note and the income therefrom are exempt from all present state, county and municipal taxation in Tennessee except (a) inheritance, transfer and estate taxes, (b) Tennessee excise taxes on all or a portion of the interest on this Note during the period such Note is held or beneficially owned by any organization or entity, other than a sole proprietorship or general partnership, doing business in the State of Tennessee, and (c) Tennessee franchise taxes by reason of the inclusion of the book value of this Note in the Tennessee franchise tax base or any organization or entity, other than a sole proprietorship or general partnership, doing business in the State of Tennessee.

This Note shall be deemed to be a registered obligation for purposes of Section 149 of the Internal Revenue Code of 1986. KUB shall cause to be kept records relating to the holder and owner of the Note by and through its Chief Financial Officer, who shall be deemed to be the registration agent hereunder. This Note shall be transferable only upon notice to the Chief Financial Officer and notation on the records of the Chief Financial Officer of the name and address of the transferee of the Note.

It is hereby certified, recited, and declared that all acts, conditions and things required to exist, happen and be performed precedent to and in the issuance of this Note exist, have happened and have been performed in due time, form and manner as required by law, and that the amount of this Note, together with all other indebtedness of the City, does not exceed any limitation prescribed by the constitution and statutes of the State of Tennessee.

IN WITNESS WHEREOF, the Board has caused this Note to be signed by its Chair and attested by its Secretary, all as of the _____ day of _____, 2016.

KNOXVILLE UTILITIES BOARD

By: _____
Chair

ATTEST:

Secretary

Section 6. Applicability of the 1988 Resolution. In the event the Notes are issued on a parity with the Outstanding Bonds, all recitals, provisions, covenants and agreements contained in the 1988 Resolution are hereby ratified and confirmed and incorporated herein by reference and, for so long as any of the Notes shall be outstanding and unpaid either as principal or interest, shall be applicable to the Notes, shall inure to the benefit of the owners of the Notes as if set out in full herein, and shall be fully enforceable by the owner of any of the Notes.

Section 7. Certain Covenants Regarding the Notes. So long as any of the Notes are outstanding and unpaid the Board will comply with all covenants set forth in the 1988 Resolution, including the covenant to charge rates for the services of the System and collect therefrom revenues sufficient to pay principal of and interest on all obligations of the City and KUB payable from the revenues of the System, which obligations shall include the Notes.

Section 8. Issuance of Notes. The Chief Financial Officer is hereby authorized to sell the Notes by negotiated sale to one or more banks, and in connection with such negotiated sale, the Chief Financial Officer is authorized, but not required, to request proposals from prospective purchasers of the Notes. In connection with such sale of the Notes, the Chief Financial Officer is authorized to negotiate with the purchaser(s) of the Notes as he shall deem appropriate the terms of the Notes and in connection therewith is further authorized to agree to such terms, covenants and documents with the purchasers of the Notes as the Chief Financial Officer deems necessary in connection with the sale of the Notes in order to achieve the most favorable financing terms for KUB. The terms as so negotiated shall be ratified, confirmed and approved by the President and Chief Executive Officer. The issuance of any Notes under this resolution shall be contingent upon KUB receiving written approval from the Office of the Comptroller of the State of Tennessee to issue the Notes pursuant to Section 7-34-111(d) Tennessee Code Annotated. The Notes may be issued in one or more series at one or more times with one or more banks, but shall mature not later than one (1) year from the dated date of the initial series of Notes. The Chief Financial Officer at his discretion may renew or remarket all or any of the Notes at any time following the initial delivery of the Notes but prior to one (1) year thereafter, pursuant to the terms hereof

and upon such rates and terms as shall be acceptable to the Chief Financial Officer, so long as the final maturity date of the Notes so renewed or remarketed is not later than one (1) year after the date of delivery of the initial series of Notes, the aggregate principal balance of all the Notes at any time issued does not exceed \$10,000,000, and any such renewal and remarketing are subject to Board approval. Upon the initial sale or upon any renewal or remarketing of the Notes, the Chair and Secretary of the Board are authorized to cause the Notes to be executed and delivered to the purchaser(s) thereof, and the Chair and Secretary of the Board, the Chief Financial Officer and the President and Chief Executive Officer of KUB, or any of them, are authorized to execute, publish, and deliver all certificates and documents as they shall deem necessary in connection with Notes and line or lines of credit.

Section 9. Disposition of Note Proceeds. The proceeds of the Notes may either be drawn as needed for the purposes described herein and, in the Chief Financial Officer's discretion, to pay the costs of issuance of the Notes, or, at the discretion of the Chief Financial Officer, drawn in their entirety and deposited with a bank or trust company regulated by the Federal Deposit Insurance Corporation in a special fund known as the "Gas Purchase Fund" to be kept separate and apart from all other funds of the City and KUB. The funds in the Gas Purchase Fund shall be disbursed solely for the purposes set forth herein and, in the Chief Financial Officer's discretion, to pay the costs of issuance of the Notes, including necessary legal, accounting and fiscal expenses, printing, advertising and similar expenses, administrative and clerical costs and other necessary miscellaneous expenses incurred in connection with the issuance and sale of the Notes. Money in the Gas Purchase Fund shall be secured in the manner prescribed by applicable statutes relative to the securing of public or trust funds, if any, or, in the absence of such a statute, by a pledge of readily marketable securities having at all times a market value of not less than the amount in said Gas Purchase Fund. Monies in the Gas Purchase Fund shall be expended only for the purposes authorized by this resolution. Moneys in the Gas Purchase Fund shall be invested as directed by the Chief Financial Officer in such investments as shall be permitted by applicable law.

Section 10. Federal Tax Matters. KUB recognizes that the purchasers and owners of the Notes will have accepted them on, and paid therefor a price that reflects, the understanding that interest thereon will not be included in gross income for purposes of federal income taxation under laws in force on the date of delivery of the Notes. In this connection, KUB agrees that it shall take no action which may render the interest on any of the Notes includable in gross income for purposes of federal income taxation. It is the reasonable expectation of KUB that the proceeds of the Notes will not be used in a manner which will cause the Notes to be "arbitrage bonds" within the meaning of Section 148 of the Code, and to this end the said proceeds of the Notes and other related funds established for the purposes herein set out, shall be used and spent expeditiously for the purposes described herein. In the event Section 148(f) of the Code shall require the payment of any investment proceeds of the Notes to the United States government, KUB will make such payments as and when required by said Section 148(f) and will take such other actions as shall be necessary or permitted to prevent the interest on the Notes from becoming taxable. The Chair and Secretary of the Board, the

President and Chief Executive Officer and Chief Financial Officer of KUB, or any of them, are authorized and directed to make such certifications in this regard in connection with the sale of the Notes as either or both shall deem appropriate, and such certifications shall constitute a representation and certification of KUB.

Section 11. Resolution a Contract. The provisions of this resolution shall constitute a contract between KUB and the registered owners of the Notes, and after the issuance of the Notes, no change, variation or alteration of any kind in the provisions of this resolution shall be made in any manner until such time as the Notes and interest due thereon shall have been paid in full.

Section 12. Separability. If any section, paragraph or provision of this resolution shall be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph or provision shall not affect any of the remaining provisions of this resolution.

Section 13. Repeal of Conflicting Resolutions and Effective Date. All other resolutions and orders, or parts thereof, in conflict with the provisions of this resolution, are, to the extent of such conflict, hereby repealed and this resolution shall be in immediate effect from and after its adoption.

Section 14. This resolution shall take effect from and after its passage.

Nikitia Thompson/s
Nikitia Thompson, Chair

Mark Walker/s
Mark Walker, Board Secretary

APPROVED ON 1st
& FINAL READING: 5-19-16
EFFECTIVE DATE: 5-19-16
MINUTE BOOK 36 PAGE 7492-7500

RESOLUTION NO. 1344

A Resolution Making and Fixing the Annual Budget Appropriations of the Knoxville Utilities Board From the Funds of the Electric Division, the Natural Gas Division, the Water Division, and the Wastewater Division for the Fiscal Year Beginning July 1, 2016, Providing for Expenditures Paid for the Period Beginning July 1, 2016, and Ending June 30, 2017

Whereas, Section 1109 of the Charter of the City of Knoxville provides that “No money shall be drawn from the treasury of the system nor shall any obligation for the expenditure of money be incurred except in pursuance of appropriations made by the board”; and

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

Whereas, the Chief Financial Officer (CFO) of the Knoxville Utilities Board (“KUB”) has certified the availability of funds to support the proposed budget appropriations pursuant to the Board’s By-Laws; and

Whereas, KUB staff formally presented the proposed budget appropriations for the fiscal year beginning July 1, 2016, to the Board at the Board’s financial workshop on April 21, 2016, and the Board has found their adoption to be in the best interest of KUB and its customers.

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

Section 1. That budget appropriations for the fiscal year beginning July 1, 2016, and ending June 30, 2017, providing for expenditures paid for said fiscal year, be and the same are hereby made from the funds of the Electric Division, for the purposes and in the amount as follows:

Appropriations of the Electric Division (including appropriations for operation, maintenance, construction, administrative expenses, interest, bond retirements, bond funds, and payments in lieu of taxes), of which amount funds for construction may be taken from the proceeds from the sale of any electric system revenue bonds or notes, in the amount of **\$596,188,000.**

Section 2. That budget appropriations for the fiscal year beginning July 1, 2016, and ending June 30, 2017, providing for expenditures paid for said fiscal year, be and the same are hereby made from the funds of the Natural Gas Division, for the purposes and in the amount as follows:

Appropriations of the Natural Gas Division (including appropriations for operation, maintenance, construction, administrative expenses, interest, bond retirements, bond funds, and payments in lieu of taxes), of which amount funds for construction may be taken from the proceeds from the sale of any gas system revenue bonds or notes, in the amount of **\$109,229,000.**

Section 3. That budget appropriations for the fiscal year beginning July 1, 2016, and ending June 30, 2017, providing for expenditures paid for said fiscal year, be and the same are hereby made from the funds of the Water Division, for the purposes and in the amount as follows:

Appropriations of the Water Division (including appropriations for operation, maintenance, construction, administrative expenses, interest, bond retirements, bond funds, and payments in lieu of taxes), of which amount funds for construction may be taken from the proceeds from the sale of any water system revenue bonds or notes, in the amount of **\$73,123,000.**

Section 4. That appropriations for the fiscal year beginning July 1, 2016, and ending June 30, 2017, be and the same are hereby made from the funds of the Wastewater Division, for the purposes and in the amount as follows:

Appropriations of the Wastewater Division (including appropriations for operation, maintenance, construction, administrative expenses, interest, bond retirements, bond funds, and payments in lieu of taxes), of which amount funds for construction may be taken from the proceeds from the sale of any wastewater system revenue bonds or notes, in the amount of **\$115,267,000.**

Section 5. That expenditures for the sole benefit of the electric system shall be charged to the foregoing appropriations and from the funds of the Electric Division. Expenditures for the sole benefit of the natural gas system shall be charged to the foregoing appropriations and from the funds of the Natural Gas Division. Expenditures for the sole benefit of the water system shall be charged to the foregoing appropriations and from the funds of the Water Division. Expenditures for the sole benefit of the wastewater system shall be charged to the foregoing appropriations and from the funds of the Wastewater Division. All expenditures for the joint benefit of the electric system, natural gas system, water system, and/or wastewater system shall be charged to the foregoing appropriations and from the funds of such divisions in accordance with the applicable division cost allocations in effect at the time of said expenditure.

Section 6. That in addition to the foregoing appropriations, whenever any sums are due and payable under customers' deposit agreements, under agreements providing for refundable advances to a system in connection with the construction of additions to a system, or for refunds associated with overpayments by customers, the President and CEO of KUB, or her designee, is authorized to refund any or all such sums that are or become due and payable; and all sums necessary to make such refunds shall be and the same are hereby appropriated from the funds of the divisions properly chargeable therewith.

Section 7. That in addition to the foregoing appropriations, whenever any sums are due and payable during the fiscal year beginning July 1, 2016, and ending June 30, 2017, for the entire principal amount of any debt issued during the fiscal year beginning July 1, 2016, and ending June 30, 2017, the President and CEO of KUB, or her designee, is authorized to pay any or all such sums that are or become due and payable, and all sums necessary to make such payments shall be and the same are hereby appropriated from the funds of the divisions properly chargeable therewith.

Section 8. That in addition to the foregoing appropriations, whenever any sums are received by a division on behalf of an external entity, including but not limited to the collection of sales tax, such sums shall be and the same are hereby appropriated from the funds of said division, for the purpose of paying the cost of the functions in connection with which such sums are received.

Section 9. That in addition to the foregoing appropriations, whenever any sums are received by a division on behalf of another division, or through the misapplication of division cost allocations, such sums shall be and the same are hereby appropriated from the funds of said division, for the purpose of paying such sums received to the appropriate division.

Section 10. That the KUB organizational structure, as determined by the President and CEO, which supports the electric, natural gas, water, and wastewater systems that will benefit from expenditures charged to the foregoing appropriations, is hereby approved and ratified by the Board.

Section 11. That all appropriations made herein shall terminate effective July 1, 2017, and any unexpended balances of such appropriations shall revert to the general funds of the division from which originally appropriated.

Section 12. That funds will be available for each division to fund the expenditures to be paid for the fiscal year beginning July 1, 2016, as noted in Sections 1, 2, 3, and 4 of this resolution. The availability of funds has been certified by letter from the Senior Vice President and Chief Financial Officer, whereby said letter is attached to and incorporated by reference as part of this resolution.

Section 13. Be it Further Resolved, that this resolution shall take effect from and after its passage.

Nikitia Thompson/s
Nikitia Thompson, Chair

Mark Walker/s
Mark Walker, Board Secretary

APPROVED ON 1st
& FINAL READING: 5-19-16
EFFECTIVE DATE: 5-19-16
MINUTE BOOK 36 PAGE 7501-7506



May 19, 2016

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

Commissioners,

I hereby certify that within the meaning of Section 1109 of the City of Knoxville Charter and Article IX.B.2.c. of the Board's By-Laws there are sufficient funds adequate to fund the proposed budget appropriations for the fiscal year beginning July 1, 2016, as provided for in Resolution 1344, as follows:

<u>Division</u>	<u>Amount</u>
Electric	\$ 596,188,000
Natural Gas	\$ 109,229,000
Water	\$ 73,123,000
Wastewater	\$ 115,267,000

The availability of funds for budget appropriations is based on general fund cash and all available cash reserves of the respective divisions as of July 1, 2016, and all monies anticipated to come into the general fund of each division on or before June 30, 2017 from utility sales at rates approved by the KUB Board; from other fees, charges, sales proceeds, accounts and notes receivable, or other credits in the process of collection; and from proceeds of authorized debt issues.

Please see the attached worksheet which demonstrates the availability of funds to support the proposed budget appropriations.

Respectfully submitted,

A handwritten signature in blue ink that reads "Mark Walker".

Mark A. Walker
Senior Vice President and CFO

Enclosure

May 2016: Certification of Available Funds - FY 2017 Budget Appropriations

Electric Division: Certification of Available Funds

	FY 2017
Beginning General Fund Cash (as of July 1, 2016)	\$31,065,000
Sales Revenues	\$529,184,000
Other Revenues	\$16,753,000
Bond Proceeds	\$40,000,000
Cash Reserves	\$30,722,000
Total	\$647,724,000
FY 2017 Budget Appropriations (Res. 1344)	\$596,188,000
Available Funds (as of June 30, 2017)	\$51,536,000

If positive, there are available funds to fund appropriations.

Natural Gas Division: Certification of Available Funds

	FY 2017
Beginning General Fund Cash (as of July 1, 2016)	\$8,329,000
Sales Revenues	\$95,721,000
Other Revenues	\$4,602,000
Bond Proceeds	\$12,000,000
Cash Reserves	\$15,327,000
Total	\$135,979,000
FY 2017 Budget Appropriations (Res. 1344)	\$109,229,000
Available Funds (as of June 30, 2017)	\$26,750,000

If positive, there are available funds to fund appropriations.

Water Division: Certification of Available Funds

	FY 2017
Beginning General Fund Cash (as of July 1, 2016)	\$8,493,000
Sales Revenues	\$47,357,000
Other Revenues	\$2,719,000
Bond Proceeds	\$25,000,000
Cash Reserves	\$11,889,000
Total	\$95,458,000
FY 2017 Budget Appropriations (Res. 1344)	\$73,123,000
Available Funds (as of June 30, 2017)	\$22,335,000

If positive, there are available funds to fund appropriations.

Wastewater Division: Certification of Available Funds

	FY 2017
Beginning General Fund Cash (as of July 1, 2016)	\$23,382,000
Sales Revenues	\$84,051,000
Other Revenues	\$6,646,000
Bond Proceeds	\$20,000,000
Cash Reserves	\$32,408,000
Total	\$166,487,000
FY 2017 Budget Appropriations (Res. 1344)	\$115,267,000
Available Funds (as of June 30, 2017)	\$51,220,000

If positive, there are available funds to fund appropriations.

RESOLUTION NO. 1345

A Resolution Approving Commitment Appropriations For the Fiscal Year Beginning July 1, 2016, Thereby Authorizing the Commitment of Expenditures to be Paid Subsequent to June 30, 2017, for Contractual Commitments Executed and Other Obligations Incurred on or Before June 30, 2017

Whereas, Section 1109 of the Charter of the City of Knoxville provides that "No money shall be drawn from the treasury of the system nor shall any obligation for the expenditure of money be incurred except in pursuance of appropriations made by the board"; and

Whereas, as of July 1, 2016, the Knoxville Utilities Board ("KUB") will have previously entered into contractual commitments and other obligations for goods and services to be received after June 30, 2017, resulting in the commitment of expenditures to be paid subsequent to June 30, 2017, for which said commitments were charged against a prior appropriation made by the KUB Board of Commissioners (the "Board"); and

Whereas, the amount of the prior appropriation for such commitments shall terminate as of July 1, 2016; and

Whereas, KUB staff anticipates KUB will enter into additional contracts and obligations during the period beginning July 1, 2016, and ending June 30, 2017, for goods and services to be received subsequent to June 30, 2017, resulting in the commitment of expenditures to be paid subsequent to June 30, 2017; and

Whereas, the appropriations provided for in this resolution shall provide for the commitment of expenditures from KUB subsequent to June 30, 2017, for goods and services to be received by KUB subsequent to June 30, 2017, resulting from contractual commitments executed and other obligations incurred by KUB on or before June 30, 2017; and

Whereas, the Chief Financial Officer (CFO) has certified the availability of funds to support the proposed commitment appropriations; and

Whereas, the Board has found the adoption of the proposed commitment appropriations to be in the best interest of KUB and its customers.

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

Section 1. That commitment appropriations for the fiscal year beginning July 1, 2016, and ending June 30, 2017, providing for the commitment of expenditures to be paid subsequent to June 30, 2017, for goods and services to be received subsequent to June 30, 2017, resulting from contractual commitments and other obligations incurred on or before June 30, 2017, be and the same are hereby made from the funds of the Electric Division, in the amount of **\$11,500,000**.

Section 2. That commitment appropriations for the fiscal year beginning July 1, 2016, and ending June 30, 2017, providing for the commitment of expenditures to be paid subsequent to June 30, 2017, for goods and services to be received subsequent to June 30, 2017, resulting from contractual commitments and other obligations incurred on or before June 30, 2017, be and the same are hereby made from the funds of the Natural Gas Division, in the amount of **\$3,800,000**.

Section 3. That commitment appropriations for the fiscal year beginning July 1, 2016, and ending June 30, 2017, providing for the commitment of expenditures to be paid subsequent to June 30, 2017, for goods and services to be received subsequent to June 30, 2017, resulting from contractual commitments and other obligations incurred on or before June 30, 2017, be and the same are hereby made from the funds of the Water Division, in the amount of **\$9,500,000**.

Section 4. That commitment appropriations for the fiscal year beginning July 1, 2016, and ending June 30, 2017, providing for the commitment of expenditures to be paid subsequent to June 30, 2017, for goods and services to be received subsequent to June 30, 2017, resulting from contractual commitments and other obligations incurred on or before June 30, 2017, be and the same are hereby made from the funds of the Wastewater Division, in the amount of **\$30,000,000**.

Section 5. That funds will be available for each division to fund the expenditures to be paid subsequent to June 30, 2017, for contractual commitments executed and other obligations incurred on or before June 30, 2017, as noted in Sections 1, 2, 3, and 4 of this resolution. The availability of funds has been certified by letter from the Senior Vice President and Chief Financial Officer, whereby said letter is attached to and incorporated by reference as part of this resolution.

Section 6. That all appropriations made herein shall terminate effective July 1, 2017.

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

Nikitia Thompson/s

Nikitia Thompson, Chair

Mark Walker/s
Mark Walker, Board Secretary

APPROVED ON 1st
& FINAL READING: 5-19-16
EFFECTIVE DATE: 5-19-16
MINUTE BOOK 36 PAGE 7507-7512



May 19, 2016

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

Commissioners,

I hereby certify that within the meaning of Section 1109 of the City of Knoxville Charter and Article IX.B.2.c. of the Board's By-Laws there are sufficient funds adequate to fund the proposed commitment appropriations for the fiscal year beginning July 1, 2016, as provided for in Resolution 1345 as follows:

<u>Division</u>	<u>Amount</u>
Electric	\$ 11,500,000
Natural Gas	\$ 3,800,000
Water	\$ 9,500,000
Wastewater	\$ 30,000,000

The availability of funds for commitment appropriations is based on general fund cash and all available cash reserves of the respective divisions as of July 1, 2017, and all monies anticipated to come into the general fund of each division prior to the maturity of the contractual commitments and other obligations from utility sales at rates approved by the KUB Board; from other fees, charges, sales proceeds, accounts and notes receivable, or other credits in the process of collection; and from proceeds of authorized debt issues.

Please see the attached worksheet which demonstrates the availability of funds to support the proposed commitment appropriations.

Respectfully submitted,

A handwritten signature in blue ink that reads "Mark A. Walker".

Mark A. Walker
Senior Vice President and CFO

Enclosure

May 2016: Certification of Available Funds - FY 2017 Commitment Appropriations

Electric Division: Certification of Available Funds

	FY 2018
Available Funds (as of July 1, 2017)	\$51,536,000
Sales Revenues	\$538,048,000
Other Revenues	\$17,042,000
Total	<u>\$606,626,000</u>
FY 2017 Commitment Appropriations (Res. 1345)	\$11,500,000
Available Funds (as of June 30, 2018)	\$595,126,000

If positive, there are available funds to fund appropriations.

Natural Gas Division: Certification of Available Funds

	FY 2018
Available Funds (as of July 1, 2017)	\$26,750,000
Sales Revenues	\$97,883,000
Other Revenues	\$3,934,000
Total	<u>\$128,567,000</u>
FY 2017 Commitment Appropriations (Res. 1345)	\$3,800,000
Available Funds (as of June 30, 2018)	\$124,767,000

If positive, there are available funds to fund appropriations.

Water Division: Certification of Available Funds

	FY 2018
Available Funds (as of July 1, 2017)	\$22,335,000
Sales Revenues	\$50,816,000
Other Revenues	\$2,983,000
Total	<u>\$76,134,000</u>
FY 2017 Commitment Appropriations (Res. 1345)	\$9,500,000
Available Funds (as of June 30, 2018)	\$66,634,000

If positive, there are available funds to fund appropriations.

Wastewater Division: Certification of Available Funds

	FY 2018
Available Funds (as of July 1, 2017)	\$51,220,000
Sales Revenues	\$88,236,000
Other Revenues	\$4,317,000
Total	<u>\$143,773,000</u>
FY 2017 Commitment Appropriations (Res. 1345)	\$30,000,000
Available Funds (as of June 30, 2018)	\$113,773,000

If positive, there are available funds to fund appropriations.

May 2016 - Commitments for Future Year Expenditures

Electric Division	FY 2018	FY 2019
69kV Line work	\$ 7,800,000	
Substation improvements	\$ 3,000,000	
Street lighting	\$ 350,000	
Other (Allocated)	\$ 350,000	
	\$ 11,500,000	\$ -

Natural Gas Division	FY 2018	FY 2019
Utility relocations for highway projects	\$ 2,400,000	
South Loop Phase 5	\$ 1,300,000	
Other (Allocated)	\$ 100,000	
	\$ 3,800,000	\$ -

Water Division	FY 2018	FY 2019
Redundant high service main	\$ 3,300,000	
Cast iron replacement projects	\$ 2,500,000	
Galvanized replacement projects	\$ 2,000,000	
Plant electrical improvements	\$ 1,100,000	
Utility relocations for highway projects	\$ 500,000	\$ 100,000
	\$ 9,400,000	\$ 100,000

Wastewater Division	FY 2018	FY 2019
Main rehabilitation & replacement	\$ 10,100,000	
Combined Heat and Power (CHP) construction	\$ 4,500,000	
Composite Correction Plan (CCP) projects	\$ 4,200,000	
Kuwahee new sludge heater	\$ 3,600,000	\$ 2,000,000
Kuwahee sludge pumps	\$ 1,900,000	
Pump station projects	\$ 1,700,000	
Utility relocations for highway projects	\$ 1,600,000	\$ 400,000
	\$ 27,600,000	\$ 2,400,000