

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2021

Or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File number 1-6659

ESSENTIAL UTILITIES, INC.

(Exact name of registrant as specified in its charter)

Pennsylvania
(State or other jurisdiction of incorporation or organization)

23-1702594
(I.R.S. Employer Identification No.)

762 W Lancaster Avenue, Bryn Mawr, Pennsylvania
(Address of principal executive offices)

19010-3489
(Zip Code)

(610) 527-8000

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, par value \$0.50 per share 6.00% Tangible Equity Units	WTRG WTRU	New York Stock Exchange New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "small reporting company," and "emerging growth company" in Rule 12(b)-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Small reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant as of June 30, 2021: \$11,211,937,094

The number of shares outstanding of the registrant's common stock as of February 15, 2022: 252,875,079

DOCUMENTS INCORPORATED BY REFERENCE

(1) Portions of the definitive Proxy Statement, relating to the 2022 annual meeting of shareholders of registrant, to be filed within 120 days after the end of the fiscal year covered by this Form 10-K, have been incorporated by reference into Part III of this Form 10-K

TABLE OF CONTENTS

Part I

	<u>Page</u>
Item 1. Business	2
Item 1A. Risk Factors	18
Item 1B. Unresolved Staff Comments	37
Item 2. Properties	37
Item 3. Legal Proceedings	37
Item 4. Mine Safety Disclosures	38

Part II

Item 5. Market for the Registrant's Common Stock, Related Stockholder Matters and Issuer Purchases of Equity Securities	38
Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations	40
Item 7A. Quantitative and Qualitative Disclosures About Market Risk	63
Item 8. Financial Statements and Supplementary Data	64
Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	114
Item 9A. Controls and Procedures	114
Item 9B. Other Information	114
Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections	114

Part III

Item 10. Directors, Executive Officers and Corporate Governance	114
Item 11. Executive Compensation	114
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	114
Item 13. Certain Relationships and Related Transactions, and Director Independence	114
Item 14. Principal Accountant Fees and Services	114

Part IV

Item 15. Exhibits and Financial Statement Schedules	114
Item 16. Form 10-K Summary	114
Exhibit Index	114
Signatures	114
Schedule 1 – Condensed Parent Company Financial Statements	114

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements in this Annual Report on Form 10-K, or this Annual Report are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 that are made based upon, among other things, our current assumptions, expectations, plans, and beliefs concerning future events and their potential effect on us. These forward-looking statements involve risks, uncertainties and other factors, many of which are outside our control that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. In some cases you can identify forward-looking statements where statements are preceded by, followed by or include the words “believes,” “expects,” “estimates,” “anticipates,” “plans,” “future,” “potential,” “probably,” “predictions,” “intends,” “will,” “continue,” “in the event” or the negative of such terms or similar expressions. Please refer to the Summary in Item 1A – Risk Factors in this Annual Report for a description of the types of Forward-looking statements in this Annual Report. These factors are not necessarily all of the important factors that could cause actual results to differ materially from those expressed in any of our forward-looking statements. Other unknown or unpredictable factors could also have material adverse effects on future results.

Given these risks and uncertainties, you should not place undue reliance on any forward-looking statements. You should read this Annual Report completely and with the understanding that our actual future results, performance and achievements may be materially different from what we expect. These forward-looking statements represent assumptions, expectations, plans, and beliefs only as of the date of this Annual Report. Except for our ongoing obligations to disclose certain information under the federal securities laws, we are not obligated, and assume no obligation, to update these forward-looking statements, even though our situation may change in the future. For further information or other factors which could affect our financial results and such forward-looking statements, see Item 1A – Risk Factors. We qualify all of our forward-looking statements by these cautionary statements.

PART I

Item 1. Business

The Company

Essential Utilities, Inc. (referred to as Essential Utilities, Essential, the Company, we, us, or our), a Pennsylvania corporation, is the holding company for regulated utilities providing water, wastewater, or natural gas services to an estimated five million people in Pennsylvania, Ohio, Texas, Illinois, North Carolina, New Jersey, Indiana, Virginia, West Virginia, and Kentucky under the Aqua and Peoples brands. One of our largest operating subsidiaries, Aqua Pennsylvania, Inc., (Aqua Pennsylvania) accounted for approximately 55% of operating revenues and approximately 68% of income for our Regulated Water segment in 2021. As of December 31, 2021, Aqua Pennsylvania provided water or wastewater services to approximately one-half of the total number of water and wastewater customers we serve. Aqua Pennsylvania’s service territory is located in the suburban areas in counties north and west of the City of Philadelphia and in 27 other counties in Pennsylvania. Our other regulated water or wastewater utility subsidiaries provide similar services in seven additional states. Additionally, pursuant to the Company’s growth strategy, commencing on March 16, 2020 with the completion of the Peoples Gas Acquisition, the Company began to provide natural gas distribution services to customers in western Pennsylvania, Kentucky, and West Virginia. Approximately 93% of the total number of natural gas utility customers we serve are in western Pennsylvania. Lastly, the Company’s market-based activities are conducted through Aqua Infrastructure, LLC and Aqua Resources Inc., and certain other non-regulated subsidiaries of Peoples. Prior to our October 30, 2020 sale of our investment in a joint venture, Aqua Infrastructure provided non-utility raw water supply services for firms in the natural gas drilling industry. Following the October 30, 2020 closing, Aqua Infrastructure does not provide any services to the natural gas drilling industry. Aqua Resources offers, through a third-party, water and sewer line protection solutions and repair services to households. Other non-regulated subsidiaries of Peoples provide utility service line protection services to households and operate gas marketing and production businesses.

Essential Utilities, which prior to its name change on February 3, 2020 was known as Aqua America, Inc., was formed in 1968 as a holding company for its primary subsidiary, Aqua Pennsylvania, formerly known as Philadelphia Suburban Water Company. In the early 1990s, we embarked on a growth through acquisition strategy. Our most significant transactions to date have been the merger with Consumers Water Company in 1999, the acquisition of the regulated water and wastewater operations of AquaSource, Inc. in 2003, the acquisition of Heater Utilities, Inc. in 2004, the acquisition of American Water Works Company, Inc.'s regulated water and wastewater operations in Ohio in 2012, and the Peoples Gas Acquisition in 2020. For many years, starting in the early 1990s, our business strategy was primarily directed toward the regulated water and wastewater utility industry, where we have more than quadrupled the number of regulated customers we serve, and have extended our regulated operations from southeastern Pennsylvania to include our current regulated utility operations throughout Pennsylvania and in seven additional states. On March 16, 2020, we completed our acquisition of a natural gas distribution company consisting of Peoples Natural Gas Company LLC, Peoples Gas Company LLC, Peoples Gas WV LLC, Peoples Gas KY LLC, PNG Gathering LLC, and Delta Natural Gas Company Inc., expanding the Company's regulated utility business to include natural gas distribution. This acquisition is referred to as the "Peoples Gas Acquisition," and collectively these businesses are referred to as "Peoples." Peoples serves approximately 750,000 gas utility customers in western Pennsylvania, West Virginia, and Kentucky. During 2010 through 2013, we sold our utility operations in six states, pursuant to a portfolio rationalization strategy, to focus our operations in areas where we have critical mass and economic growth potential. Currently, the Company seeks to acquire businesses in the U.S. regulated sector, which includes water and wastewater utilities and other regulated utilities, and to pursue growth ventures in market-based activities, such as infrastructure opportunities that are supplementary and complementary to our regulated utility businesses.

The descriptions of our business and operations, financial results, and operational data included in this Annual Report do not include historical results for Peoples prior to the acquisition date of March 16, 2020.

The following table reports our operating revenues, by principal state, for our Regulated Water segment, which includes both water and wastewater utility services, and Regulated Natural Gas segment, and Other and eliminations for the year ended December 31, 2021:

	Operating Revenues (000's)	Operating Revenues (%)
Pennsylvania	\$ 537,402	28.6%
Ohio	114,221	6.1%
Texas	77,427	4.1%
Illinois	84,378	4.5%
North Carolina	64,370	3.4%
Other states (1)	102,405	5.5%
Regulated Water segment total	980,203	52.2%
Pennsylvania	803,897	42.8%
Other states (2)	56,005	3.0%
Regulated Natural Gas segment total	859,902	45.8%
Other and eliminations	38,039	2.0%
Consolidated	\$ 1,878,144	100.0%

(1) Includes our water operating subsidiaries in the following states: New Jersey, Indiana, and Virginia.

(2) Includes our natural gas operating subsidiaries in West Virginia and Kentucky.

The Company has identified twelve operating segments and has two reportable segments, the Regulated Water segment and the Regulated Natural Gas segment. The Regulated Water segment is comprised of eight operating segments for our water and wastewater regulated utility companies, aligned with the states where we provide these services. These operating segments are aggregated into one reportable segment since each of the Company's operating segments has the following similarities: economic characteristics, nature of services, production processes, customers, water distribution or wastewater collection methods, and the nature of the regulatory environment. The Regulated Natural Gas segment is comprised of one operating segment representing natural gas utility companies, acquired in the Peoples Gas Acquisition, for which the Company provides natural gas distribution services. In addition to the Company's two reportable segments, the Company includes three of its operating segments in "Other". These businesses represent our non-regulated natural gas operations, Aqua Resources, and Aqua Infrastructure, which are not quantitatively significant to be reportable and therefore are included as a component of "Other". The non-regulated natural gas operations include People's subsidiaries that provide utility service line protection services to households and operate gas marketing and production businesses. In addition, "Other" and eliminations include corporate costs that have not been allocated to the Regulated Water and Regulated Natural Gas segments, because they would not be recoverable as a cost of utility service, and intersegment eliminations. Information concerning revenues, net income, identifiable assets and related financial information for the Regulated Water and Regulated Natural Gas segments and Other and eliminations for 2021, 2020, and 2019, is set forth in *Management's Discussion and Analysis of Financial Condition and Results of Operations* and in Note 18 – *Segment Information* in the Notes to Consolidated Financial Statements which is contained in Item 8 of this Annual Report.

The following table summarizes our operating revenues, by utility customer class, for the Regulated Water and Regulated Natural Gas segments and Other and eliminations for the year ended December 31, 2021:

	Operating Revenues (000's)	Operating Revenues (%)
Residential water	\$ 561,996	29.9%
Commercial water	151,071	8.0%
Fire protection	35,984	1.9%
Industrial water	30,230	1.6%
Other water	53,488	2.8%
Total water	832,769	44.2%
Wastewater	132,580	7.1%
Customer rate credits	-	0.0%
Other utility	14,854	0.8%
Regulated Water segment total	980,203	52.1%
Residential gas	530,338	28.3%
Commercial gas	99,596	5.3%
Industrial gas	3,427	0.2%
Gas transportation	198,195	10.6%
Customer rate credits	(5,000)	-0.3%
Other utility	33,346	1.8%
Regulated Natural Gas segment total	859,902	45.9%
Other and eliminations	38,039	2.0%
Consolidated	\$ 1,878,144	100.0%

Customers

Our water utility customer base is diversified among residential water, commercial water, fire protection, industrial water, other water, wastewater customers, and other utility customers (consisting of contracted services that are associated with the utility operations). Residential water and wastewater customers make up the largest component of our water utility customer base, with these customers representing approximately 69%, 71%, and 69%, of our water and wastewater revenues for 2021, 2020, and 2019, respectively. Substantially all of our water utility customers are metered, which allows us to measure and bill for our customers' water consumption. Water consumption per customer is affected by local weather conditions during the year, especially during late spring, summer, and early fall. In general, during these seasons, an extended period of dry weather increases consumption, while above-average rainfall decreases consumption. Also, an increase in the average temperature generally causes an increase in water consumption. On occasion, abnormally dry weather in our service areas can result in governmental authorities declaring drought warnings and imposing water use restrictions in the affected areas, which could reduce water consumption. See "Business – *Water Utility Supplies, and Facilities and Wastewater Utility Facilities*" for a discussion of water use restrictions that may impact water consumption during abnormally dry weather. The geographic diversity of our water utility customer base reduces the effect of our exposure to extreme or unusual weather conditions in any one area of our service territories. Water usage is also affected by changing consumption patterns by our customers, resulting from such causes as increased water conservation and the installation of water saving devices and appliances that can result in decreased water usage. It is estimated that, in the event we experience a 0.50% decrease in residential water consumption, it would result in a decrease in annual residential water revenue of approximately \$2,800,000, which would likely be partially offset by a reduction in incremental water production expenses such as chemicals and power.

Our natural gas utility customer base is diversified among residential gas, commercial gas, industrial gas, gas transportation, and other utility. Substantially all of our natural gas utility customers are metered, which allows us to measure and bill for our customers' natural gas usage. Natural gas usage per customer is affected by local weather conditions during the year, especially during the fall, winter, and early spring. These patterns reflect the higher demand for natural gas for heating purposes during the colder months.

The Company's growth in revenues over the past five years is primarily a result of the 2020 Peoples Gas Acquisition, increases in water and wastewater rates, and customer growth. See *Economic Regulation* for a discussion of water, wastewater, and natural gas rates. The increase in our utility customer base has been due to customers added through acquisitions, partnerships with developers, and organic growth (excluding dispositions) as shown below:

Year	Utility Customer Growth Rate
2021	1.2%
2020	42.9%
2019	2.1%
2018	2.3%
2017	1.1%

In 2021, 2020, and 2019, our customer count increased by 21,246, 772,099, and 21,108 customers, respectively, primarily due to the water and wastewater utility systems that we acquired, organic growth, and in 2020, due to the Peoples Gas Acquisition that resulted to the addition of approximately 750,000 natural gas utility customers. Overall, for the five year period of 2017 through 2021, our utility customer base, adjusted to exclude customers associated with utility system dispositions, increased at an annual compound rate of 13.4%. During the five year period ended December 31, 2021, our utility customer base including customers associated with utility system acquisitions and dispositions increased from 972,265 at January 1, 2017 to 1,820,049 at December 31, 2021.

Acquisitions and Other Growth Ventures

We believe that acquisitions will continue to be an important source of customer growth for us. We intend to continue to pursue acquisitions of government-owned and regulated water and wastewater systems that provide services in areas near our existing service territories or in new service areas. We engage in continuing activities with respect to potential acquisitions, including calling on prospective sellers, performing analyses of and due diligence on acquisition candidates, making preliminary acquisition proposals, and negotiating the terms of potential acquisitions. Further, we are also seeking other potential business opportunities, including but not limited to, partnering with public and regulated utilities to invest in infrastructure projects, growing our market-based activities by acquiring businesses that provide water and wastewater or other utility-related services, and investing in infrastructure projects.

Based on the 2019 U.S. Census American Housing Survey, approximately 89% of the U.S. population obtains its water from public or private water utility systems, and 11% of the U.S. population obtains its water from individual wells. With approximately 50,000 public or private water systems in the U.S. (81% of which serve less than 3,300 customers), the water industry is the most fragmented of the major utility industries (telephone, natural gas, electric, water and wastewater). The majority of these community water systems are government-owned. The nation's water systems range in size from large government-owned systems, such as the New York City water system, which serves approximately 8.8 million people, to small systems, where a few customers share a common well. In the states where we operate regulated water utilities, we believe there are approximately 14,000 public or private water utility systems of widely-varying size, with the majority of the population being served by government-owned water systems.

Although not as fragmented as the water industry, the wastewater industry in the U.S. also presents opportunities for consolidation. Based on the 2019 U.S. Census American Housing Survey, approximately 84% of the U.S. population relies on public or private sewer systems, and 16% of the U.S. population relies on septic tank, cesspool or other sewer options. A majority of wastewater facilities are government-owned rather than regulated utilities. In the states where we operate regulated water utilities, we believe there are approximately 4,000 wastewater facilities in operation, with the majority of the population being served by government-owned wastewater systems.

Because of the fragmented nature of the water and wastewater utility industries, we believe there are many potential water and wastewater system acquisition candidates throughout the U.S. We believe the factors driving consolidation of these systems are:

- the benefits of economies of scale;
- the increasing cost and complexity of environmental regulations;
- the need for substantial capital investment;
- the need for technical and managerial expertise;
- the desire to improve water quality and service;
- limited access to cost-effective financing;
- the monetizing of public assets to support, in some cases, the declining financial condition of municipalities; and
- the use of system sale proceeds by a municipality to accomplish other public purposes.

We are actively exploring opportunities to expand our utility operations through acquisitions or other growth ventures. During the five-year period ended December 31, 2021, we expanded our utility operations by completing 29 acquisitions of water or wastewater utilities or other similar assets. Additionally, in March 2020, we completed our acquisition of Peoples, which expanded the Company's regulated utility business to include natural gas distribution.

Supply and Facilities

Water Utility Supplies and Facilities and Wastewater Utility Facilities - Our water utility operations obtain their water supplies from surface water sources, underground aquifers, and water purchased from other water suppliers. Our water supplies are primarily self-supplied and processed at twenty-three surface water treatment plants located in five states, and numerous well stations located in the states in which we conduct business. Approximately 5.6% of our water supplies are provided through water purchased from other water suppliers. It is our policy to obtain and maintain the permits necessary to obtain and treat the water we distribute.

In September 2021, Hurricane Ida made landfall in Pennsylvania, and the Company had to temporarily shut down two of its water treatment plants, in Chester County, Pennsylvania, which had been damaged due to heavy rainfall, flooding and loss of power. These plants serve a significant portion of Aqua Pennsylvania's service territory in southeastern Pennsylvania. The Company was able to maintain supply to most of its customers by ramping up production at some of its other treatment plants. However, due to low water pressure in some locations, Aqua Pennsylvania asked customers to adopt voluntary water conservation measures during a two-week period. The damage to the facilities occurred despite our prior efforts to shore up the facilities to prevent such floodwater occurrences.

We believe that the capacities of our sources of supply, and our water treatment, pumping and distribution facilities, are generally sufficient to meet the present requirements of our customers under normal conditions. We plan system improvements and additions to capacity in response to normal replacement and renewal needs, changing regulatory standards, changing patterns of consumption, and increased demand from customer growth. The various state utility commissions have generally recognized the operating and capital costs associated with these improvements in setting water and wastewater rates.

On occasion, drought warnings and water use restrictions are issued by governmental authorities for portions of our service territories in response to extended periods of dry weather conditions. The timing and duration of the warnings and restrictions can have an impact on our water revenues and net income. In general, water consumption in the summer months is more affected by drought warnings and restrictions because discretionary and recreational use of water is at its highest during the summer months. At other times of the year, warnings and restrictions generally have less of an effect on water consumption. Portions of our northern and central Texas service areas have conservation-based water restrictions. Drought warnings and watches result in the public being asked to voluntarily reduce water consumption.

We believe that our wastewater treatment facilities are generally adequate to meet the present requirements of our customers under normal conditions. Additionally, we own several wastewater collection systems that convey the wastewater to municipally-owned facilities for treatment. Changes in regulatory requirements can be reflected in revised permit limits and conditions when permits are renewed, typically on a five year cycle, or when treatment capacity is expanded. Capital improvements are planned and budgeted to meet normal replacement and renewal needs, anticipated changes in regulations, needs for increased capacity related to projected growth, and to reduce inflow and infiltration to collection systems. The various state utility commissions have generally recognized the operating and capital costs associated with these improvements in setting wastewater rates for current and new customers. It is our policy to obtain and maintain the permits necessary for the treatment of the wastewater that we return to the environment.

Natural Gas Supply and Transportation Facilities - Our natural gas supply strategy is to ensure a dependable gas supply that is economically priced and which is available for delivery when needed. We purchase natural gas from intrastate, interstate and local sources, and transport natural gas supplies through various intrastate and interstate pipelines under contracts with remaining terms, including extensions, varying from one month to fifteen years. We anticipate that these gas supply and transportation contracts will be renewed or replaced prior to their expiration.

The regulations of the states in which we operate natural gas utilities allow us to pass through changes in the cost of natural gas to our customers under purchased gas adjustment provisions in our tariffs. Depending upon the jurisdiction, the purchased gas adjustment factors are updated periodically, ranging from quarterly to annually. The changes in the cost of gas billed to customers are subject to review by the applicable regulatory bodies.

We use various third-party storage services or owned natural gas storage facilities to meet peak-day requirements and to manage the daily changes in demand due to changes in weather.

We own and operate underground natural gas storage facilities with capacity of 10.3 billion cubic feet (Bcf). Total working capacity is 5.0 Bcf for use during the heating season with a maximum daily withdrawal rate of 109.5 million cubic feet (MMcf). Additionally, we have contracted for off-system storage from interstate pipelines. The total amount of off-system storage under contract is 35.64 Bcf with a maximum daily withdrawal rate of 589.3 MMcf.

On an ongoing basis, we enter into contracts to provide sufficient supplies and pipeline capacity to meet our customers' natural gas requirements. However, it is possible for limited service disruptions to occur from time to time due to weather conditions, transportation constraints, and other events. As a result of these factors, supplies of natural gas may become unavailable from time to time, or prices may increase rapidly in response to temporary supply constraints or other factors. We enter into firm agreements with suppliers, including major producers and marketers, intended to provide flexibility to meet the temperature-sensitive needs of its customers. In Pennsylvania, our distribution system is connected to six interstate pipelines, where we maintain capacity we believe is sufficient to meet our customers' gas requirements. In Kentucky, our distribution system is connected to four interstate pipelines, where we maintain capacity we believe is sufficient to meet our customers' gas requirements. In West Virginia, our distribution system is connected to one interstate pipeline, as well as local production, where we maintain capacity we believe is sufficient to meet our customers' gas requirements.

Natural Gas Gathering - Our Pennsylvania Regulated Natural Gas service territory is situated in the Marcellus Shale production region. Approximately 31% of the natural gas supply on the system is from locally produced gas, which we gather and transport into our distribution system. Our gathering system is regulated by the Pennsylvania Public Utility Commission which includes various safety, environmental and, in some circumstances, anti-discrimination requirements, and in some instances complaint-based rate regulation. Our gathering operations may be subject to ratable take and common purchaser statutes in the states in which we operate.

Our Regulated Natural Gas gathering operations could be adversely affected should they be subject in the future to the application of state or federal regulation of rates and services. Our gathering operations could also be subject to additional safety and operational regulations relating to the design, construction, testing, operation, replacement, and maintenance of gathering facilities. We cannot predict what effect, if any, such changes might have on our operations, but our Regulated Natural Gas segment could be required to incur additional capital expenditures and increased costs depending on future legislative and regulatory changes.

Economic Regulation

Most of our utility operations are subject to regulation by their respective state utility commissions, which have broad administrative power and authority to regulate billing rates, determine franchise areas and conditions of service, approve acquisitions, and authorize the issuance of securities. The utility commissions also establish uniform systems of accounts and approve the terms of contracts with affiliates and customers, business combinations with other utility systems, and loans and other financings. The policies of the utility commissions often differ from state to state, and may change over time. A small number of our water and wastewater utility operations are subject to rate regulation by county or city governments. The profitability of our utility operations is influenced to a great extent by the timeliness and adequacy of rate allowances we are granted by the respective utility commissions or authorities in the various states in which we operate.

Rate Case Management Capability – We maintain a rate case management capability, the objective of which is to provide that the tariffs of our utility operations reflect, to the extent practicable, the timely recovery of increases in costs of operations, capital expenditures, interest expense, taxes, energy, materials, and compliance with environmental regulations as well as a return on equity. We file rate increase requests to recover and earn a fair return on the infrastructure investments that we make in improving or replacing our facilities and to recover expense increases. In the states in which we operate, we are primarily subject to economic regulation by the following state utility commissions:

<u>State</u>	<u>Utility Commission</u>
Pennsylvania	Pennsylvania Public Utility Commission
Ohio	Public Utilities Commission of Ohio
North Carolina	North Carolina Utilities Commission
Texas	Public Utility Commission of Texas
Illinois	Illinois Commerce Commission
New Jersey	New Jersey Board of Public Utilities
Kentucky	Public Service Commission of Kentucky
Virginia	Virginia State Corporation Commission
Indiana	Indiana Utility Regulatory Commission
West Virginia	Public Service Commission of West Virginia

Our water and wastewater operations are comprised of 45 rate divisions, and our natural gas operations are comprised of four rate divisions. Each of our utility rate divisions require a separate rate filing for the evaluation of the cost of service, including the recovery of investments, in connection with the establishment of rates for that rate division. When feasible and beneficial to our utility customers, we will seek approval from the applicable state regulatory commission to consolidate rate divisions to achieve a more even distribution of costs over a larger customer base. All of the states in which we operate permit us to file a revenue requirement for some form of consolidated rates for all, or some, of the rate divisions in that state.

In Virginia, North Carolina, and Kentucky, we may bill our utility customers, in certain circumstances, in accordance with a rate filing that is pending before the respective regulatory commission, which would allow for interim rates. As of December 31, 2021, we have no billings under interim rate arrangements for rate case filings in progress. Furthermore, some utility commissions authorize the use of expense deferrals and amortization in order to provide for an impact on our operating income by an amount that approximates the requested amount in a rate request. In these states, the additional revenue billed and collected prior to the final regulatory commission ruling is subject to refund to customers based on the outcome of the ruling. The revenue recognized and the expenses deferred by us reflect an estimate as to the final outcome of the ruling. If the request is denied completely or in part, we could be required to refund to customers some or all of the revenue billed to date and write-off some or all of the deferred expenses.

Revenue Surcharges – Eight states in which we operate water and wastewater utilities, and two states, Pennsylvania and Kentucky, in which we operate natural gas utilities permit us to add an infrastructure rehabilitation surcharge to their respective bills to offset the additional depreciation and capital costs associated with capital expenditures related to replacing and rehabilitating infrastructure systems. Without this surcharge, a utility absorbs all of the depreciation and capital costs of these projects between base rate increases. The gap between the time that a capital project is completed and the recovery of its costs in rates is known as regulatory lag. This surcharge is intended to substantially reduce regulatory lag, which could act as a disincentive for utilities to rehabilitate their infrastructure. In addition, our subsidiaries in some states use a surcharge or credit on their bills to reflect changes in costs, such as changes in state tax rates, other taxes and purchased water costs, until such time as the new cost levels are incorporated into base rates.

The infrastructure rehabilitation surcharge typically adjusts periodically based on additional qualified capital expenditures completed or anticipated in a future period, and is capped at a percentage of base rates, generally at 5% to 12.75%, and is reset to zero when new base rates that reflect the costs of those additions become effective or when a utility's earnings exceed a regulatory benchmark. These surcharges provided revenues of \$33,771,486 in 2021, \$13,038,555 in 2020, and \$16,006,579 in 2019.

In the majority of our natural gas service territories, the public utility commissions have authorized bare steel and cast-iron replacement programs. In Pennsylvania, we filed a Long-Term Infrastructure Replacement program with the Pennsylvania Public Utility Commission where we have committed to the replacement of bare steel and cast-iron pipe. On February 14, 2012, the Governor of Pennsylvania signed into law Act 11 of 2012, which provided a Distribution System Improvement Charge (DSIC) mechanism for certain utilities to recover costs related to repair, replacement or improvement of eligible distribution property that has not previously been reflected in rates or rate base. Through this Pennsylvania DSIC, subject to an earnings test, a utility may recover the fixed costs of eligible infrastructure incurred during the three months ended one month prior to the effective date of the charge, thereby reducing the historical regulatory lag associated with cost recovery through the traditional rate-making process. In Kentucky, we have a pipe replacement program tariff, which allows adjustment of regulated rates annually to earn a return on capital expenditures incurred subsequent to our last rate case which were associated with the replacement of bare steel and vintage plastic pipe.

Gas costs incurred to serve our natural gas customers represent a significant operating expense. Our regulated natural gas rates, in all jurisdictions, contain a Purchased Gas Adjustment (PGA), which is reflected in our tariffs. The PGA allows us to timely charge for changes in the cost of purchased gas, inclusive of unaccounted for gas expense based on actual experience. PGA procedures involve periodic filings and hearings before the state regulatory commissions to establish price adjustments for a designated future period. The procedures also provide for inclusion in later periods of any variances between actual recoveries representing the estimated costs and actual costs incurred. The PGA is subject to periodic review and audit by the state regulatory commissions who also have the authority to disallow previously incurred costs.

In Pennsylvania, the gas cost component of uncollectible accounts expense, gas procurement costs, and certain costs to maintain a supplier choice program, where customers can elect their natural gas supplier, are recovered by mechanisms outside of typical base rate recovery. Additionally, in Pennsylvania, we recover the costs related to universal service programs, whereby customers who meet certain income guidelines receive assistance toward paying their monthly bill, weatherization services, and other programs. In Kentucky, the gas cost component of uncollectible accounts expense is recovered by a recovery mechanism outside of base rate recovery.

Income Tax Accounting Change – In 2012, Aqua Pennsylvania adopted an income tax accounting method change, implemented on Essential Utilities' 2012 federal income tax return. This accounting method change allows a tax deduction for qualifying utility asset improvements that were formerly capitalized for tax purposes, and was implemented in response to a June 2012 rate order issued by the Pennsylvania Public Utility Commission. The Pennsylvania rate order requires use of the flow-through method of income tax benefits which results in a reduction in current income tax expense through the recognition of income tax benefits resulting from the accounting method change. In the first rate order since 2012, Aqua Pennsylvania received a 2019 rate case order that provided for \$158,864,688 of income tax deductions, for its water customers, annually, from the flow-through recognition of the Aqua Pennsylvania income tax accounting change, subject to a collar of \$3,000,000 above or below; with the cumulative differences either refunded or recovered in the subsequent rate case. In August 2021, Aqua Pennsylvania filed an application for a base rate increase with a similar level of deduction, tax benefit and collar-mechanism.

On March 16, 2020, the Company completed the Peoples Gas Acquisition. On March 31, 2020, the Company changed the method of tax accounting for certain qualifying infrastructure investments at its Peoples Natural Gas subsidiary, its largest natural gas subsidiary in Pennsylvania. This change allows a tax deduction for qualifying utility asset improvement costs that were formerly capitalized for tax purposes. Consistent with the Company's accounting for differences between book and tax expenditures for its Aqua Pennsylvania subsidiary, the Company is utilizing the flow-through method to account for this timing difference. In addition, the Company calculated the income tax benefits for qualifying capital expenditures made prior to March 16, 2020 (catch-up adjustment) and has recorded a regulatory liability for \$160,655,000 for these income tax benefits. In May 2021, the Pennsylvania Public Utility Commission approved a settlement petition that allows Peoples Natural Gas to continue to use flow-through accounting for the current tax repair benefit and allows for the catch-up adjustment be given to its customers. These benefits are being provided back to customers over a five-year period through a credit on customer bills which commenced in August 2021. In addition, the settlement petition required the contribution of \$500,000 to a customer-bill payment assistance program, completed in July 2021, and \$5,000,000 in relief to past-due accounts for natural gas customers impacted by the COVID-19 pandemic, completed in December 2021.

Fair Market Value Legislation – In April 2016, Pennsylvania enacted legislation allowing the public utility commission to utilize fair market value to set ratemaking rate base instead of the depreciated original cost of water or wastewater assets for certain qualifying municipal acquisitions. The legislation includes a process for engaging two independent utility valuation experts to perform appraisals that are filed with the public utility commission and then averaged and compared to the purchase price. The ratemaking rate base is the lower of the average of the appraisals or the purchase price and is subject to regulatory approval. Illinois, Indiana, New Jersey, North Carolina, Ohio, Virginia, and Texas also have legislation that allows the use of fair market value under varying rules and circumstances. We believe that this legislation encourages consolidation in the water and wastewater industry, providing municipalities with an option for exiting the business if they are dealing with challenges associated with their aging, deteriorating water and wastewater assets, do not have the expertise or technical capabilities to continue to comply with ever-increasing environmental regulations, or simply want to focus on other community priorities.

Revenue Stability Mechanisms – Revenue stability mechanisms separate the volume of water sold from our ability to meet our cost of service and infrastructure costs. These mechanisms allows us to recognize revenue based on a target amount established in the last rate case, and then record either a regulatory asset or liability based on the cumulative difference over time, which results in either a refund due to customers or a payment from customers. In Illinois, our operating subsidiary utilizes a revenue stability mechanism. Additionally, a weather-normalization adjustment (WNA) mechanism is in place for our natural gas customers served in Kentucky. The WNA serves to minimize the effects of weather on the Company’s results for its residential and small commercial natural gas customers. This regulatory mechanism adjusts revenues earned for the variance between actual and normal weather and can have either positive (warmer than normal) or negative (colder than normal) effects on revenues. Customer bills are adjusted in the December through April billing months, with rates adjusted for the difference between actual revenues and revenues calculated under this mechanism billed to the customers.

Competition

In general, we believe that Essential Utilities and its water, wastewater, and natural gas subsidiaries have valid authority, free from unduly burdensome restrictions, to enable us to carry on our business as presently conducted in the franchised or contracted areas we now serve. The rights to provide water, wastewater, or natural gas service to customers in a particular franchised service territory are generally non-exclusive, although the applicable utility commissions usually allow only one regulated utility to provide service to customers in a given area. In some instances, another water utility provides service to a separate area within the same political subdivision served by one of our subsidiaries. Additionally, our larger natural gas customers may bypass gas distribution services by gaining distribution directly from interstate pipelines, other gas distributors, or other energy sources. As a regulated utility, we believe there is little competition for the daily water, wastewater, and natural gas service we provide to our customers.

Although our natural gas subsidiaries are not currently in significant direct competition with any other distributors of natural gas in its service areas, we do compete with suppliers of other forms of energy such as fuel oil, electricity, propane, coal, wind, and solar. Competition can be intense among the energy sources with price being the primary consideration. This is particularly true for industrial customers who have the ability to switch to alternative fuels. Competition from renewable energy sources such as solar and wind is likely to increase as the political environment currently favors these energy sources through incentives or by placing restrictions on emissions from the burning of fossil fuels.

Water and wastewater utilities may compete for the acquisition of other water and wastewater utilities or for acquiring new customers in new service territories. Competition for these acquisitions generally comes from nearby utilities, either other regulated utilities or municipal-owned utilities, and sometimes from strategic or financial purchasers seeking to enter or expand in the water and wastewater industry. We compete for new service territories and the acquisition of other utilities on the following bases:

- economic value;
- economies of scale;
- our ability to provide quality water, wastewater, and natural gas service;
- our existing infrastructure network;
- our ability to perform infrastructure improvements;

- our ability to comply with environmental, health, and safety regulations;
- our technical, regulatory, and operational expertise;
- our ability to access capital markets; and
- our cost of capital.

The addition of new service territories and the acquisition of other utilities by regulated utilities such as the Company are generally subject to review and approval by the applicable state utility commissions.

In a very small number of instances in one of our southern states, where there are municipally-owned water or wastewater systems near our operating divisions, the municipally-owned system may either have water distribution or wastewater collection mains that are located adjacent to our division's mains or may construct new mains that parallel our mains. In these rare circumstances, the municipally-owned system may attempt to voluntarily offer service to customers who are connected to our mains, resulting in our mains becoming surplus or underutilized without compensation.

In the states where our water subsidiaries operate, it is possible that portions of our subsidiaries' operations could be acquired by municipal governments by one or more of the following methods:

- eminent domain;
- the right of purchase given or reserved by a municipality or political subdivision when the original franchise was granted; and
- the right of purchase given or reserved under the law of the state in which the subsidiary was incorporated or from which it received its permit.

The price to be paid upon such an acquisition by the municipal government is usually determined in accordance with applicable law under eminent domain. In other instances, the price may be negotiated, fixed by appraisers selected by the parties, or computed in accordance with a formula prescribed in the law of the state or in the particular franchise or charter. We believe that our operating subsidiaries would be entitled to fair market value for any assets that are condemned, and we believe the fair market value would be in excess of the book value for such assets.

Despite maintaining a program to monitor condemnation interests and activities that may affect us over time, one of our primary strategies continues to be to acquire additional water and wastewater systems, to maintain our existing systems where there is a business or a strategic benefit, and to actively oppose unilateral efforts by municipal governments to acquire any of our operations, particularly for less than the fair market value of our operations or where the municipal government seeks to acquire more than it is entitled to under the applicable law or agreement. On occasion, we may voluntarily agree to sell systems or portions of systems in order to help focus our efforts in areas where we have more critical mass and economies of scale or for other strategic reasons.

Environmental, Health and Safety Regulation and Compliance

The Company's mission is "to sustain life and improve economic prosperity by safely and reliably delivering Earth's most essential resources to customers and communities". We are committed to protecting the environment and the health and safety of our employees, customers, and the public and continue to adhere to applicable regulatory standards. We integrate environmental, health, and safety requirements into planning, decision-making, construction, operating, and maintenance activities that we perform.

Provision of water and wastewater services is subject to regulation under the federal Safe Drinking Water Act, the Clean Water Act, and related state laws, and under federal and state regulations issued under these laws. These laws and regulations establish criteria and standards for drinking water and for wastewater discharges. In addition, we are subject to federal and state laws and other regulations relating to solid waste disposal, dam safety, and other aspects of our operations. Capital expenditures and operating costs required as a result of water quality standards and environmental requirements have been traditionally recognized by state utility commissions as appropriate for inclusion in establishing rates.

From time to time, Essential Utilities has acquired, and may acquire, systems that have environmental compliance issues. Environmental compliance issues also arise in the course of normal operations or as a result of regulatory changes. Essential Utilities attempts to align capital budgeting and expenditures to address these issues in due course. We believe that the capital expenditures required to address outstanding environmental compliance issues have been budgeted in our capital program and represent approximately \$107,244,000, or approximately 4.1% of our expected total water and wastewater capital expenditures over the next five years. We are parties to agreements with regulatory agencies in Pennsylvania, Texas, Virginia, and Illinois under which we have committed to make improvements for environmental compliance. These agreements are intended to provide the regulators with assurance that problems covered by these agreements will be addressed, and the agreements generally provide protection from fines, penalties, and other actions while corrective measures are being implemented. We are working with state environmental officials in Pennsylvania, Texas, Virginia, and Illinois to implement or amend regulatory agreements as necessary.

Our Regulated Natural Gas utility operations are subject to stringent and complex laws and regulations pertaining to the environment. As an owner or operator of natural gas pipelines, distribution systems and storage, and the facilities that support these systems, we must comply with these laws and regulations at the federal, state, and local levels. Failure to comply with these laws and regulations may trigger a variety of administrative, civil, and criminal enforcement measures, including the assessment of monetary penalties, the imposition of remedial actions, and the issuance of orders enjoining future operations. Certain environmental statutes impose strict, joint and several liability for costs required to assess, clean up, and restore sites where hazardous substances have been stored, disposed or released.

Safe Drinking Water Act - The Safe Drinking Water Act establishes criteria and procedures for the U.S. Environmental Protection Agency (EPA) to develop national quality standards for drinking water. Regulations issued pursuant to the Safe Drinking Water Act set standards regarding the amount of microbial and chemical contaminants and radionuclides in drinking water. Current requirements under the Safe Drinking Water Act are not expected to have a material impact on our business, financial condition, or results of operations as we have made and are making investments to meet existing water quality standards. We may, in the future, be required to change our method of treating drinking water at some sources of supply and make additional capital investments if additional regulations become effective.

Clean Water Act - The Clean Water Act regulates discharges from drinking water and wastewater treatment facilities into lakes, rivers, streams, and groundwater. It is our policy to obtain and maintain all required permits and approvals for the discharges from our water and wastewater facilities, and to comply with all conditions of those permits and other regulatory requirements. A program is in place to monitor facilities for compliance with permitting, monitoring and reporting for wastewater discharges. From time to time, discharge violations may occur which may result in fines. These fines and penalties, if any, are not expected to have a material impact on our business, financial condition, or results of operations. We are also parties to agreements with regulatory agencies in several states where we operate while improvements are being made to address wastewater discharge issues.

Solid Waste Disposal - The handling and disposal of waste generated from water and wastewater treatment facilities is governed by federal and state laws and regulations. A program is in place to monitor our facilities for compliance with regulatory requirements, and we are not aware of any significant environmental remediation costs necessary from our handling and disposal of waste material from our water and wastewater operations.

Dam Safety - Our subsidiaries own 30 dams, of which 14 are classified as high hazard dams that are subject to the requirements of the federal and state regulations related to dam safety, which undergo regular inspections and an annual engineering inspection. After a thorough review and inspection of our dams by professional outside engineering firms, we believe that all 14 dams are structurally sound and well-maintained, except as described below. These inspections provide recommendations for ongoing rehabilitation which we include in our capital improvement program. The Company has approximately \$42,000,000 in capital improvements budgeted between 2022 and 2028 for dam improvements.

We performed studies of our dams that identified five high hazard dams in Pennsylvania and two high hazard dams in Ohio requiring capital improvements. These capital improvements result from the adoption by state regulatory agencies of revised formulas for calculating the magnitude of a possible maximum flood event. The most significant capital improvement remaining to be performed in our dam improvement program is on one dam in Pennsylvania at a total estimated cost of \$17,100,000. Design for this dam commenced in 2013 and construction is expected to be completed in 2027.

A previously-owned Ohio dam requiring capital improvements was no longer used for water supply and was sold to a third party in December 2020. In connection with the sale, we contractually agreed to complete certain dam capital improvements after the sale for an estimated cost of \$2,100,000 and expect to complete the repairs in 2022.

Lead and Copper Rule – The events in Flint, Michigan, which commenced in 2014, and other communities have brought attention to the issue of lead in drinking water from home plumbing. Lead in drinking water can come from lead that leaches from service lines, home plumbing solder, and fixtures or faucets. Since the Lead and Copper Rule in 1992, we have been working to prevent lead leaching from home plumbing sources by reducing water corrosivity and adding chemicals that can prevent leaching of lead in pipes and homes. We have a program to evaluate all changes in water sources and/or treatment prior to initiating a change in water supply. We also focus on identifying and removing lead service lines and encouraging customers to replace the customer-owned portion of the service line if it is lead as they are identified during our main replacement program or during other maintenance activities. We support the recommendations of The Lead Service Line Replacement Collaborative, a collaborative of leading water industry, housing, and health organizations that has recommended full replacement of lead service lines as a “best practice” to reduce lead in drinking water, but we generally only have control over the company-owned portion of each service line. In cases where we are replacing a company-owned lead service line, our standard approach is to replace the company-owned portion and advise and encourage the customer to replace the customer-owned portion of the service line, all the way to the customer’s home. In Pennsylvania, we have the legal and regulatory authority to replace the customer-owned portion of the service line and will attempt to obtain customer permission to do so. We also advise customers of the potential health impacts of lead in drinking water, and conduct lead testing at homes following replacement of a lead service line.

On January 15, 2021 the EPA published the Lead and Copper Rule Revisions (LCRR) that included deadlines for lead service line inventories and replacement plans, and then signed a final rule on June 10, 2021 to extend the effective date of the LCRR to December 16, 2021. This action extends the LCRR requirement to submit a lead service line inventory and a lead service line replacement plan to the respective states or agencies by October 16, 2024. We are continuing to enhance our lead service line inventory and refine our lead service line replacement plans which we expect to complete by the deadline. Additionally, EPA is developing a new regulation, the Lead and Copper Rule Improvements (LCRI), to better protect communities from exposure to lead in drinking water. The LCRI is expected to delay the due dates for lead service line replacement plans and result in modifications to other parts of the LCRR. We are still reviewing the overall impact of the LCRR and anticipated LCRI. Capital expenditures and operating costs associated with compliance with any of these rule revisions cannot be presently determined until our review of the LCRR and anticipated LCRI is completed.

Partnership for Safe Water Program – Essential Utilities is a proud participant in the American Water Works Association’s (AWWA) Partnership for Safe Water Program. This voluntary program is a commitment to excellence within the drinking water community above and beyond EPA’s stringent treatment goals. All of our active surface water treatment plants (within Pennsylvania, Ohio, Illinois, and Virginia) maintain good standing in the program which includes many awards of achievement. The honors include the “Director’s Award” (achieved at seven systems) which recognizes plants that have: 1) completed a comprehensive self-assessment report, 2) created an action plan for continuous improvement, and 3) provided several evaluations of performance demonstrating operational excellence. Several of our systems have met these criteria annually and have received 5, 10, 15, and 20 year subscriber awards. Furthermore, our Roaring Creek Pennsylvania treatment plant has received the Phase IV Excellence Award, the highest honor achieved in the Partnership Program.

Safety Standards - Our facilities and operations may be subject to inspections by representatives of the Occupational Safety and Health Administration from time to time. We maintain safety policies and procedures to comply with the Occupational Safety and Health Administration’s rules and regulations, but violations may occur from time to time, which may result in fines and penalties, which are not expected to have a material impact on our business, financial condition, or results of operations. We endeavor to correct such violations promptly when they come to our attention.

Pipeline Safety Improvement Act- In December 2006, Congress enacted the Pipeline, Inspection, Protection, Enforcement and Safety Act of 2006 (2006 Act), which reauthorized the programs adopted under the Pipeline Safety Improvement Act of 2002 (2002 Act). These programs included several requirements related to ensuring pipeline safety, and a requirement to assess the integrity of pipeline transmission facilities in areas of high population concentration.

Pursuant to the 2006 Act, the Pipeline and Hazardous Materials Safety Administration (PHMSA), an agency of the US Department of Transportation (DOT), issued regulations, effective February 12, 2010, requiring operators of gas distribution pipelines to develop and implement integrity management programs similar to those required for gas transmission pipelines, but tailored to reflect the differences in distribution pipelines. Operators of natural gas distribution systems were required to write and implement integrity management programs by August 2, 2011. Peoples' natural gas distribution systems met this deadline.

Pursuant to the 2002 Act and the 2006 Act, PHMSA has adopted a number of rules concerning, among other things, distinguishing between gathering lines and transmission facilities, requiring certain design and construction features in new and replaced lines to reduce corrosion, and requiring pipeline operators to amend existing written operations and maintenance procedures and operator qualification programs. PHMSA also updated its reporting requirements for natural gas pipelines effective January 1, 2011.

In December 2011, Congress passed the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 (2011 Act). This act increased the maximum civil penalties for pipeline safety administrative enforcement actions; required the DOT to study and report on the expansion of integrity management requirements and the sufficiency of existing gathering line regulations to ensure safety; required pipeline operators to verify their records on maximum allowable operating pressure; and imposed new emergency response and incident notification requirements. In 2016, the Protecting our Infrastructure of Pipelines and Enhancing Safety Act of 2016 (2016 Act) reauthorized PHMSA's pipeline safety programs through 2019 and provided limited new authority, including the ability to issue emergency orders, to set inspection requirements for certain underwater pipelines and to promulgate minimum safety standards for natural gas storage facilities, as well as to provide increased transparency into the status of as-yet-incomplete PHMSA actions required by the 2011 Act.

In June 2021, PHMSA issued an advisory bulletin to address a self-executing mandate as part of the 2016 Act. This Leak Detection and Reduction (LDAR) bulletin requires operators to update standard operating procedures to address leaks and gas releases which may be hazardous to public safety and the environment.

In November 2021, PHMSA published the final gathering line rule, with a tentative effective date of May 2022. This rule will require preventative and mitigative measures on gathering lines of certain diameters and operating pressures.

Compliance with PHMSA's regulations, performance of the remediation activities by our natural gas distribution companies and intrastate pipelines and verification of records on maximum allowable operating pressure will continue to require increases in both capital expenditures and operating costs. The level of expenditures will depend upon several factors, including age, location and operating pressures of the facilities. In particular, the cost of compliance with the DOT's integrity management rules will depend on integrity testing and the repairs found to be necessary by such testing. Changes to the amount of pipe subject to integrity management, whether by expansion of the definition of the type of areas subject to integrity management procedures or of the applicability of such procedures outside of those defined areas, may also affect incurred costs. Implementation of the 2011 and 2016 Acts by PHMSA may result in other regulations or the reinterpretation of existing regulations that could impact compliance costs. In addition, we may be subject to the DOT's enforcement actions and penalties if it fails to comply with pipeline regulations.

Security

We maintain security measures at our facilities, and collaborate with federal, state and local authorities and industry trade associations regarding information on possible threats and security measures for water, wastewater, and natural gas utility operations. The costs incurred are expected to be recoverable in customer rates and are not expected to have a material impact on our business, financial condition, or results of operations.

We also maintain cyber security protection measures with respect to our information technology, including our customer data, and, in some cases, the monitoring and operation of our treatment, storage, pumping, and pipeline infrastructure. We rely on our information technology systems in connection with the operation of our business, especially with respect to customer service and billing, accounting and, in some cases, the monitoring and operation of our treatment, storage, pumping, and pipeline infrastructure. In addition, we rely on our systems to track our utility assets and to manage maintenance and construction projects, materials and supplies, and our human resource functions.

Climate Risk

We understand the urgency of the Paris Agreement and the United Nations Intergovernmental Panel on Climate Change's science-based target of limiting the global temperature increase to well below 2 degrees Celsius. Of our Scope 1 and 2 GHG emissions, 79% are driven by our gas distribution business. Early in 2021, we announced that by 2035 we will reduce our Scope 1 and 2 GHG emissions by 60% from our 2019 baseline. This is consistent with the rate of reduction necessary through 2035 to keep on track with the Paris Agreement. This will be achieved by extensive gas pipeline replacement, renewable energy purchasing, accelerated methane leak detection and repair, and various other currently planned initiatives that are highly feasible with proven technology.

Human Capital Management

The Company values its workforce as one of its most important assets. The Company is dedicated to creating a sustainable working atmosphere for its employees to attract and retain the best employees. Human capital measures and objectives that the Company focuses on in managing its business include the health and safety of its employees, succession planning, voluntary attrition rate, and diversity, equity and inclusion initiatives.

As of December 31, 2021, we employed a total of 3,211 full-time employees. Our subsidiaries are parties to 19 labor agreements with labor unions covering 1,540 employees. The labor agreements expire at various times up until 2026.

Health and Safety - Safety is the foundation of our business and guides all our employees' actions. The Company continues to invest in safety improvements, implement policies and procedures, develop technical training and guidelines for our employees, and leverage new tools and technology to improve our maps, records and infrastructure performance. The Company is focused on identifying and mitigating risk and safeguarding our plants and distribution lines. Our teams make safety a top priority on the job, in meetings, and within our surrounding work environments to ensure the safety of our employees and customers. To encourage managers to promote a safe environment, related metrics are incorporated in management's incentive compensation plans.

Ahead of the closing of the Peoples Gas Acquisition in March 2020, we also created a combined Environmental Health and Safety management position to provide oversight to the gas, water, and wastewater businesses. This included the appointment of a National Safety Director charged with developing and implementing a combined health and safety program that will continue to incorporate our best practices across the Company to keep our workers safe.

The Company continues to monitor the COVID-19 pandemic and has taken actions aligned with the Centers for Disease Control and Prevention and Federal, State and local health authorities to protect its workforce so they can more safely and effectively perform their work. The Company sought to be as transparent as possible and frequently communicated with employees via email, dedicated COVID-19 intranet resources, routine huddles, and CEO town halls. In the second quarter of 2021, we started a rotational return to the office. All employees returned to their normal work locations as of June 14, 2021, and the Company has initiated a work location flexibility program for selected work groups and individuals. The Company is also in the process of establishing policies and procedures for compliance with the recently promulgated OSHA Emergency Temporary Standard for COVID-19.

The Company provides access to a variety of innovative, flexible, and convenient employee health and wellness programs. We proactively conduct communications outreach to our employees and their family members on relevant health topics. With the focus on mental health becoming more of a central part of an employee's well-being, we have added additional resources and counseling access for employees and their families to utilize to ensure they take care of themselves.

Employee Development and Training - The Company continues to invest in training and development programs for employees so that they may evolve and enhance their skills in their areas of expertise. We also offer tuition reimbursement to all regular, full-time employees. At Essential, we believe in an integrated talent development approach. We utilize the “70/20/10 model” for development, which holds that 70% of learning happens on the job through stretch goals and critical assignments, 20% of learning occurs through mentoring and coaching and involvement in professional and industry related activities, and 10% of learning occurs within a virtual or live learning environment. We align our development model to support our vision, mission, and competencies, with a balanced approach to developing our workforce that leads us to the development of a confident, committed, and high-performance culture.

Succession Planning - Under the Company’s Corporate Governance Guidelines, the Board of Directors is responsible for the development and periodic review of a management succession plan for the Chief Executive Officer and other executives. Annually, the Board of Directors reviews the Company’s succession planning process for the Chief Executive Officer and the named executive officers. During this review, the directors review succession candidates on an immediate basis and more developmental candidates to ensure that the Company is well-prepared for the future.

Voluntary Attrition and Turnover - The Company measures turnover rates of its employees in assessing the Company’s overall human capital. The Company’s voluntary attrition rate (not including retirements) for 2021 was 2% at the executive and senior management level, 4% at the mid-level manager level, 10% at the professional level, and 6% across all other employees. These voluntary attrition rates increased from 2020. We believe issues related to the COVID-19 pandemic and the large national increase in employee retirements and attrition impacted us as well as other companies. We are working to develop programs focused on retaining our workforce.

Diversity, Equity and Inclusion - Diversity of backgrounds, ideas, thoughts, and experiences is essential to our culture and the way we do business. Creating an environment where our differences are valued and where every person feels a sense of belonging and engagement supports a thriving organization that cares about our customers. In 2020 and 2021, the Company conducted education and unconscious bias workshops to foster better understanding of points of view and how pre-conceived notions impact relationships at work. Diversifying the workforce continues to be a focus at all levels of the Company. Our focus on attracting and retaining diverse talent has resulted in growth in the number of our diverse employees from 14% in 2020 to 15% in 2021. Diversity at the management level has also grown, with 10% of the management team comprised of minorities and 22% of the management team comprised of women by the end of 2021.

We recognize an opportunity to strengthen the diversity in our company. Based on local customer demographic data, we are focused on increasing the diversity of our employee demographics to reflect the diversity in the communities that we serve. We have a range of diverse recruitment tactics and believe we can achieve our multiyear plan of reaching 17% employees of color.

Supplier Diversity

We acknowledge that supplier diversity is critical for our communities as well as for our business. We are committed to increasing our work with qualified and certified diverse suppliers from the communities and neighborhoods where we live, work, and operate each day and suppliers that use reasonable efforts to minimize pollution and improve environmental protection and sustainability. As such, we announced a multi-year plan to increase diverse supplier spend to 15% of controllable spend, which excludes spend where there is no opportunity to include diverse suppliers or spend that cannot be sourced from a diverse supplier due to a policy or law (items like power, purchased water and some one-time payments). Beginning in 2021, we added a supplier diversity component (5% weighting) to our short-term incentive plan. We also have a Supplier Code of Conduct that defines the basic requirements for suppliers of goods and services and their responsibilities to the environment and their stakeholders. We also expect our suppliers to subscribe to the principles of nondiscrimination, follow high standards of business ethics and professional conduct and adhere to our Human Rights Policy.

Management and Board Oversight

Our Board of Directors has various committees including an audit committee, an executive compensation committee, a corporate governance committee, and a risk mitigation and investment policy committee. Each of these committees has a formal charter. We also have Corporate Governance Guidelines and a Code of Ethical Business Conduct. Copies of these charters, guidelines, and codes can be obtained free of charge from our *Investor Relations* page on our web site, www.essential.co. In the event we amend or waive any portion of the Code of Ethical Business Conduct that applies to any of our directors, executive officers, or senior financial officers, we will post that information on our web site.

Available Information

We file annual, quarterly, current reports, proxy statements, and other information with the Securities and Exchange Commission (SEC). You may obtain our SEC filings from the SEC's web site at www.sec.gov.

Our internet web site address is www.essential.co. We make available free of charge through our web site's *Investor Relations* page all of our filings with the SEC, including our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and other information. These reports and information are available as soon as reasonably practicable after such material is electronically filed with the SEC.

In addition, you may request a copy of the foregoing filings, at no cost by writing or telephoning us at the following address or telephone number:

Investor Relations Department
Essential Utilities, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010-3489
Telephone: 610-527-8000

The references to our web site and the SEC's web site are intended to be inactive textual references only, and the contents of those web sites are not incorporated by reference herein and should not be considered part of this or any other report that we file with or furnish to the SEC.

Item 1A. Risk Factors

In addition to the other information included in this Annual Report, the following factors should be considered in evaluating our business and future prospects. Any of the following risks, either alone or taken together, could materially harm our business, financial condition, and results of operations. If one or more of these or other risks or uncertainties materialize, or if our underlying assumptions prove to be incorrect, our business, financial condition, and results of operations could be materially harmed.

Risk Factor Summary

Our business is subject to many risks and uncertainties. The following are the types of forward-looking statements we make throughout this Annual Report, including in these Risk Factors, and a summary of the types of risks that could impact us and cause actual results to differ from those described in such forward-looking statements:

- the impact of the COVID-19 pandemic or the measures implemented by the Company as a result of the COVID-19 pandemic.
- opportunities for future acquisitions, both within and outside the water, wastewater, and natural gas industries, the success of pending acquisitions and the impact of future acquisitions;

- acquisition-related costs and synergies;
- the sale of water and wastewater divisions;
- the impact of conservation awareness of customers and more efficient fixtures and appliances on water and natural gas usage per customer;

- the impact of our business on the environment, and our ability to meet our climate change goals;
- our authority to carry on our business without unduly burdensome restrictions;
- our capability to pursue timely rate increase requests;
- the capacity of our water supplies, water facilities, wastewater facilities, and natural gas supplies and storage facilities;
- the impact of decisions of governmental and regulatory bodies, including decisions to raise or lower rates and decisions regarding potential acquisitions;
- developments, trends and consolidation in the water, wastewater, and natural gas utility and infrastructure industries;
- the impact of changes in and compliance with governmental laws, regulations and policies, including those dealing with the environment, health and water quality, taxation, and public utility regulation;
- the development of new services and technologies by us or our competitors;
- the ongoing integration of the Peoples Gas Acquisition;
- the availability of qualified personnel;
- the condition of our assets;
- recovery of capital expenditures and expenses in rates;
- projected capital expenditures and related funding requirements;
- the availability and cost of capital financing;
- dividend payment projections;
- the impact of geographic diversity on our exposure to unusual weather;
- the continuation of investments in strategic ventures;
- our ability to obtain fair market value for condemned assets;
- the impact of fines and penalties;
- the impact of legal proceedings;
- general economic conditions, including inflation;
- the impact of federal and/or state tax policies and the regulatory treatment of the effects of those policies; and
- the amount of income tax deductions for qualifying utility asset improvements and the Internal Revenue Service's ultimate acceptance of the deduction methodology.

Because forward-looking statements involve risks and uncertainties, there are important factors that could cause actual results to differ materially from those expressed or implied by these forward-looking statements, including but not limited to:

- impacts from the global outbreak of COVID-19, including on consumption, usage and collections.
- the success in the closing of, and the profitability of future acquisitions;
- changes in general economic, business, credit and financial market conditions;
- our ability to manage the expansion of our business, including our ability to manage our expanded operations resulting from the Peoples Gas Acquisition;
- changes in environmental conditions, including the effects of climate change;
- our ability to integrate and otherwise realize all of the anticipated benefits of businesses, technologies or services which we may acquire;
- the decisions of governmental and regulatory bodies, including decisions on regulatory filings, including rate increase requests and decisions regarding potential acquisitions;
- our ability to file rate cases on a timely basis to minimize regulatory lag;
- the impact of inflation on our business and on our customers;
- abnormal weather conditions, including those that result in water use restrictions;

- the seasonality of our business;
- our ability to treat and supply water or collect and treat wastewater;
- our ability to source sufficient natural gas to meet customer demand in a timely manner;
- the continuous and reliable operation of our information technology systems, including the impact of cyber security attacks or other cyber-related events;
- changes in governmental laws, regulations and policies, including those dealing with taxation, the environment, health and water quality, and public utility regulation;
- the extent to which we are able to develop and market new and improved services;
- the effect of the loss of major customers;
- our ability to retain the services of key personnel and to hire qualified personnel as we expand;
- labor disputes;
- increasing difficulties in obtaining insurance and increased cost of insurance;
- cost overruns relating to improvements to, or the expansion of, our operations;
- inflation in the costs of goods and services;
- the effect of natural gas price volatility;
- civil disturbance or terroristic threats or acts;
- changes to the rules or our assumptions underlying our determination of what qualifies for an income tax deduction for qualifying utility asset improvements;
- changes in, or unanticipated, capital requirements;
- changes in our credit rating or the market price of our common stock;
- changes in valuation of strategic ventures;
- changes in accounting pronouncements;
- litigation and claims; and
- restrictions on our subsidiaries' ability to make dividends and other distributions.

Risk Related to COVID-19 Pandemic

Global or regional health pandemics, epidemics or similar public health threats, including COVID-19, could negatively impact our business, outlook, financial condition, results of operations and liquidity.

The COVID-19 pandemic, resurgences and variants of the virus that causes COVID-19, and the measures implemented to contain its spread, such as travel bans and restrictions, quarantines and vaccination mandates, continue to have widespread impacts on the global economy, our employees, customers, and third-party business partners. The severity, magnitude and duration of COVID-19 is uncertain, rapidly changing and hard to predict. It could, in the future, materially impact our business in numerous ways, including, but not limited to, those outlined below:

- reduced demand from our commercial customers and shifts in demand for our regulated utility services;
- delay the timeliness of our service to customers because of shutdowns and/or illness and travel restrictions among our employees or employees of other companies on whom we rely;
- negatively impact the financial condition of our customers and their ability to pay for our products and services, and our ability to disconnect service for non-payment may be limited, and state regulators may impose bill deferral programs;
- may limit or curtail significantly or entirely the ability of public utility commissions to approve or authorize applications and other requests we may make with respect to our regulated water and natural gas businesses; and
- delays in our supply chain and our ability to complete maintenance, repairs, and capital programs, which could result in disruptions and increased costs.

These and other impacts of COVID-19 or other global or regional health pandemics, epidemics or similar public health threats could also have the effect of heightening many of the other risks described in “Risk Factors” in this Annual Report and the other reports we file from time to time with the SEC. We might not be able to predict or respond to all impacts on a timely basis to prevent near- or long-term adverse impacts to our results of operations, financial condition and liquidity. The ultimate impact of COVID-19 on our business depends on factors beyond our knowledge or control, including the duration and severity of the outbreak as well as third-party actions taken to contain its spread and mitigate its public health effects. Any of these factors could have a negative impact on our business, outlook, financial condition, and results of operations, which impact could be material.

General economic conditions, as impacted by COVID-19 pandemic, may affect our financial condition and results of operations.

A general economic downturn may lead to a number of impacts on our business and may affect our financial condition and results of operations. Such impacts may include:

- a reduction in discretionary and recreational water use by our residential water customers, particularly during the summer months when such discretionary usage is normally at its highest;
- a reduction in natural gas use by our residential customers, particularly during the winter months when such usage is normally at its highest;
- a decline in usage by industrial and commercial customers as a result of decreased business activity;
- an increased incidence of customers’ inability to pay or delays in paying their utility bills, or an increase in customer bankruptcies, which may lead to higher bad debt expense and reduced cash flow;
- a lower natural customer growth rate due to a decline in new housing starts; and
- a decline in the number of active customers due to housing vacancies.

General economic turmoil may also lead to an investment market downturn, which may result in our pension and other post-retirement plans’ asset market values suffering a decline and significant volatility. A decline in our plans’ asset market values could increase our required cash contributions to the plans and expense in subsequent years. Inflation levels in excess of historical levels could also lead to regulatory lag and thus impact our earned returns and financial results.

Moreover, inflation has recently become an area of increasing economic concern. Changes in the cost of providing our products and services, including price increases in operating and capital costs, as well as increases in labor costs, may negatively impact our financial condition and results of operations. We review the adequacy of our rates as approved by public utility commissions in relation to the increasing cost of providing services and the inherent regulatory lag in adjusting those rates. Rate increases are not retroactive and often lag increases in costs caused by inflation. On occasion, our regulated utility companies may enter into rate settlement agreements, which require us to wait for a period of time to file the next base rate increase request. These agreements may result in regulatory lag whereby inflationary increases in expenses may not be reflected in rates, and may not yet be requested, or a gap may exist between when a capital project is completed and the start of its recovery in rates. Even during periods of moderate inflation, the effects of inflation can have a negative impact on our operating results. The ability to control operating expenses is an important factor that will influence future results.

Risks Related to Acquisitions

One of the important elements of our growth strategy is the acquisition of regulated utility systems. Any acquisition we decide to undertake may involve risks. Further, competition for acquisition opportunities from other regulated utilities, governmental entities, and strategic and financial buyers may hinder our ability to grow our business. Lastly, competition and industry trends could impact our ability to retain existing natural gas customers or acquire new customers, which could have an adverse impact on our business, results of operations and financial condition.

One important element of our growth strategy is the acquisition and integration of regulated utility systems in order to broaden our service areas. In addition, the acquisition of Peoples is an opportunity to broaden our services to include natural gas distribution and additional states of operation. We will not be able to acquire other businesses if we cannot identify suitable acquisition opportunities or reach mutually agreeable terms with acquisition candidates. It is our intent, when practical, to integrate any businesses we acquire with our existing operations. Investing in and integrating acquisitions could require us to incur significant costs and cause diversion of our management's time and resources, and we may be unable to successfully integrate our business with acquired businesses or to realize anticipated benefits of acquisitions. Acquisitions by us could also result in:

- dilutive issuances of our equity securities;
- incurrence of debt, contingent liabilities, and environmental liabilities;
- unanticipated capital expenditures;
- failure to maintain effective internal control over financial reporting;
- recording goodwill and other intangible assets for which we may never realize their full value and may result in an asset impairment that may negatively affect our results of operations;
- fluctuations in quarterly results;
- other acquisition related expenses; and
- exposure to unknown or unexpected risks and liabilities.

Some or all of these items could harm our business, financial condition, results of operations, and cash flows, and our ability to finance our business and to comply with regulatory requirements. The businesses we acquire, including Peoples, may not achieve sales and profitability that would justify our investment, and any difficulties we encounter in the integration process, including in the integration of processes necessary for internal control and financial reporting, could interfere with our operations, reduce our operating margins and harm our internal controls.

Some states in which we operate allow the respective public utility commissions to use fair market value to set ratemaking rate base instead of the traditional depreciated original cost of water or wastewater assets for certain qualifying municipal acquisitions. Depending on the state, there are varying rules and circumstances in which fair value is determined. A number of states' regulations allow ratemaking rate base to equal the lower of the average of the appraisals or the purchase price, subject to regulatory approval. There may be situations where we may pay more than the ultimate fair value of the utility assets as set by the regulatory commission, despite the fair value legislation suggesting its full recovery. In these situations, goodwill may be recognized to the extent there is an excess purchase price over the fair value of net tangible and identifiable intangible assets acquired through a business acquisition. Goodwill is not amortized but is reviewed annually or more frequently for impairment. As of December 31, 2021, People's goodwill comprised approximately 15.5% of our total assets. Our financial condition and results of operations could be harmed by an inability to earn a return on, and recover our purchase price as a component of rate base. Regulatory actions or changes in significant assumptions, including discount and growth rates, utility sector market performance and comparable transaction multiples, projected operating and capital cash flows, and fair value of debt, could also potentially result in future impairments which could be material.

We compete with governmental entities, other regulated utilities, and strategic and financial buyers, for acquisition opportunities. As consolidation becomes more prevalent in the utility industry and competition for acquisitions increases, the prices for suitable acquisition candidates may increase to unacceptable levels and limit our ability to grow through acquisitions. In addition, our competitors may impede our growth by purchasing utilities near our existing operations, thereby preventing us from acquiring them. Governmental entities or environmental / social activist groups have challenged, and may in the future challenge our efforts to acquire new service territories, particularly from municipalities or municipal authorities. Additionally, on occasion we have entered into agreements to acquire water or wastewater utility systems that have been challenged by municipalities or other parties, or where referenda are required, which may impact our ability to complete the acquisition. Higher purchase prices and resulting rates may limit our ability to invest additional capital for system maintenance and upgrades in an optimal manner. Our growth could be hindered if we are not able to compete effectively for new companies and/or service territories with other companies or strategic and financial buyers that have lower costs of operations or capital, or that submit more attractive bids. Any of these risks may harm our business, financial condition, and results of operations.

We face the risk that large natural gas customers may bypass gas distribution services by gaining distribution directly from interstate pipelines, other gas distributors, or other energy sources. Increased competition or other changes in legislation, regulation, or policies could have a material adverse effect on our business, financial condition, or results of operations. Moreover, changes in wholesale natural gas prices compared with prices for electricity, fuel oil, coal, propane, or other energy sources may affect the retention of natural gas customers and may adversely impact our future financial condition and results of operations.

The integration of acquisitions can be a multi-year activity depending upon the complexity and significance of the acquisition.

One element of our strategic plans is our growth through acquisition strategy. Acquisitions in the utility industry are time consuming and complex, with the number of regulatory approvals needed. A significant acquisition can require significant time and resources, including devotion of management time, to integrate the acquired business. We are continuing to integrate the Peoples Gas Acquisition, and unexpected issues may adversely impact our future financial condition and results of operations.

Risks Related to Health and Safety and Environmental Concerns

Some scientific experts are predicting a worsening of weather volatility in the future, possibly created by climate change due to greenhouse gases. Changing severe weather patterns could require additional expenditures to reduce the risk associated with any increasing storm, flood, and drought occurrences.

The issue of climate change is receiving ever increasing attention worldwide. Many climate change predictions, if true, present several potential challenges to utilities, such as: increased frequency and duration of droughts, increased precipitation and flooding, potential degradation of water quality, and changes in demand for services. We maintain an ongoing facility planning process, and this planning or the enactment of new standards may result in the need for additional capital expenditures or raise our operating costs. Because of the uncertainty of weather volatility related to climate change, we cannot predict its potential impact on our business, financial condition, or results of operations. Although any potential expenditures and operating costs may be recovered in the form of higher rates, there can be no assurance that the various state utility commissions that govern our business would approve rate increases to enable us to recover such expenditures and costs. Without adequate rate recovery, our costs of complying with climate change weather related measures may negatively impact our business, financial condition, or results of operations.

In September 2021, Hurricane Ida made landfall in Pennsylvania and the Company had to temporarily shut down two of its water treatment plants, in Chester County, Pennsylvania, which had been damaged due to heavy rainfall, flooding and loss of power. These plants serve a significant portion of Aqua Pennsylvania's service territory in southeastern Pennsylvania. The Company was able to maintain supply to most of its customers by ramping up production at some of its other treatment plants. However, due to low water pressure in some locations, Aqua Pennsylvania asked customers to adopt voluntary water conservation measures during a two-week period. The damage to the facilities occurred despite our prior efforts to shore up the facilities to prevent such floodwater occurrences. We cannot assure you that we will be able to prevent similar damage from future storms, and the costs associated with such damage could have a material impact on our business, financial conditions and results of operations.

Climate change laws and regulations have been passed and are being proposed that require compliance with greenhouse gas emissions standards, as well as other climate change initiatives, which could impact our business, financial condition or results of operations.

Climate change is receiving ever increasing attention worldwide. Many scientists, legislators, and others attribute global warming to increased levels of greenhouse gases (GHG), including carbon dioxide. Climate change laws and regulations enacted and proposed limit GHG emissions from covered entities and require additional monitoring/reporting. We produce an environmental, social, and governance report, which provides an overview of our energy usage and GHG emissions. At this time, the existing GHG laws and regulations are not expected to materially harm the Company's operations or capital expenditures; however, the uncertainty of future climate change regulatory requirements still remains. We cannot predict the potential impact of future laws and regulations on our business, financial condition, or results of operations. Although these future expenditures and costs for regulatory compliance may be recovered in the form of higher rates, there can be no assurance that the various state utility commissions that govern our business would approve rate increases to enable us to recover such expenditures and costs. Another potential risk related to climate change could be more frequent and more severe weather events, which could increase our costs to repair damaged facilities and restore service to our customers. If we are unable to provide utility services to our customers, our financial results would be impacted by lost revenues, and we would have to seek regulatory approval to recover restoration costs.

Climate change and other environmental, social, and governance matters are increasingly important to many investors, and we may fail to provide information desired by all investors.

Climate change and other environmental, social, and governance, or ESG, matters are increasingly important to many investors, including our current investors. We have focused attention on ESG matters and the communication of our ESG activities to investors. We may fail to provide the level of information desired by all investors, including those considering an investment in our stock.

Our water supply, including water provided to our customers, is subject to various potential contaminants which may result in disruption in our services, additional costs, loss of revenue, fines, laws and/or regulations, and litigation which could harm our business, reputation, financial condition, and results of operations.

Our water supplies, including water provided to our customers, are subject to possible contaminants, including those from:

- naturally occurring compounds or man-made substances;
- chemicals and other hazardous materials;
- lead and other materials;
- pharmaceuticals and personal care products; and
- possible deliberate or terrorist attacks.

Depending on the nature of the water contamination, we may have to interrupt the use of that water supply until we are able to substitute, where feasible, the flow of water from an uncontaminated water source, including if practicable, the purchase of water from other suppliers, or continue the water supply under restrictions on use for drinking or broader restrictions against all use except for basic sanitation and essential fire protection. We may experience a loss of revenue and incur significant costs, including, but not limited to, costs for water quality testing and monitoring, “do not consume” expenses, treatment of the contaminated source through modification of our current treatment facilities or development of new treatment methods, the purchase of alternative water supplies, or litigation related matters, including governmental enforcement actions. In addition, the costs we could incur to decontaminate a water source or our water distribution system and dispose of waste could also be significant. The costs resulting from the contamination may not be recoverable in rates we charge our customer, or may not be recoverable in a timely manner. Further, we may incur a loss of revenue in the event we elect to waive customers’ water and wastewater charges. If we are unable to adequately treat the contaminated water supply or substitute a water supply from an uncontaminated water source in a timely or cost-effective manner, there may be an adverse effect on our business, reputation, financial condition, and results of operations. We could also be subject to:

- claims for consequences arising out of human exposure to contamination and/or hazardous substances in our water supplies, including toxic torts;
- claims for other environmental damage;
- claims for customers’ business interruption as a result of an interruption in water service;
- claims for breach of contract;
- criminal enforcement actions;
- regulatory fines; or
- other claims.

We incur substantial costs on an ongoing basis to comply with all laws and regulations. New or stricter laws and/or regulations could increase our costs. Although we may seek to recover these costs through an increase in customer rates, there is no guarantee that the various state regulators would approve such an increase.

The events in Flint, Michigan, which commenced in 2014, and other communities have brought attention to the issue of lead in drinking water from home plumbing. We have been working to prevent lead leaching from home plumbing sources by reducing water corrosivity and adding chemicals that can prevent leaching of lead in pipes and homes. We have a program to evaluate all changes in water sources prior to initiating a change in water supply. We also focus on identifying and removing lead service lines and encouraging customers to replace the customer-owned portion of the service line if it is lead as they are identified during our main replacement program or during other maintenance activities. In 2019, we initiated a “do not consume” advisory for some of our customers served by our Illinois subsidiary, which resulted in a loss of revenues and increased operating costs and for which we anticipate an additional recovery of other costs and losses. We filed a claim with our insurance carrier for costs and losses incurred in 2019 related to the do not consume advisory, for which we recovered a portion of the costs and losses and for which we anticipate an additional recovery of other costs and losses.

We are devoting our attention to various emerging contaminants, including the Per- and Polyfluoroalkyl Substances (PFAS) family of chemicals and other chemicals and substances that do not have any regulatory standard in drinking water. We comply with governmental agency guidance that recommends the standard of protection from these contaminants, and we monitor proposed standards and other governmental agency guidance regarding these contaminants. Additionally, commencing in 2020, we initiated a company-wide program to address these contaminants uniformly across our regulated water utilities by selecting standards adopted or proposed by New Jersey, which are the most stringent standards adopted in any state in which we do business. As a result, we are planning a capital program in the range of tens of millions of dollars over several years to install mitigation technology at our water treatment facilities where the source water is found to exceed the standard we have determined to follow. There is no guarantee that the various state regulators would approve the costs associated with our treatment of the emerging contaminants without the establishment of treatment standards by the appropriate governmental entities, or for standards set by other governmental entities. Accordingly, we have commenced legal action, and anticipate filing additional legal actions, aimed at recovering the costs associated with the treatment in our systems of emerging contaminants from polluting entities.

We may incur costs to defend our position and/or incur reputational damage even if we are not liable for consequences arising out of human exposure to contamination and/or hazardous substances in our water supplies, other environmental damage, or our customer's business interruption. Our insurance policies may not be sufficient to cover the costs of our defense or, in the event we are liable, these claims, and losses incurred may make it difficult for us to secure insurance in the future at acceptable rates. Such claims or actions could harm our business, reputation, financial condition, and results of operations.

Transporting, distributing and storing natural gas involves numerous risks that may result in accidents and other operating risks and costs.

Natural gas transportation, distribution and storage activities inherently involve a variety of hazards and operational risks, such as leaks, accidental explosions, damage caused by third parties and mechanical problems, which could cause substantial financial losses. These risks could result in serious personal injury, loss of human life, significant damage to property, environmental pollution, impairment of operations, and substantial losses. The location of pipelines and storage facilities near populated areas, including residential areas, commercial business centers and industrial sites, could increase the level of damages resulting from these risks. These activities may also subject the Company to litigation or administrative proceedings. Such litigation or proceedings could result in substantial monetary judgments, fines or penalties against the Company or otherwise be resolved on unfavorable terms.

We are subject to federal and state laws and regulations requiring the Company to maintain certain safety and system integrity measures by identifying and managing storage and pipeline risks. In addition, companies that supply and transport gas to Peoples are also subject to similar regulations and other restrictions related to their activities. Compliance with these laws and regulations, or future changes in these laws and regulations, may, directly or indirectly, result in increased capital, operating, and other costs which may not be recoverable in a timely manner or at all from customers in rates. In accordance with customary industry practices, we maintain insurance against a significant portion, but not all, of these risks and losses. To the extent any of these events occur or regulations change, it could adversely affect our business, reputation, financial condition, and results of operations.

Risks Related to the Operation and Regulation of our Business

The rates we charge our customers are subject to regulation. If we are unable to obtain government approval of our requests for rate increases or if approved rate increases are untimely or inadequate to recover and earn a return on our capital investments, to recover expenses or taxes, or to take into account changes in water, wastewater, or natural gas usage, our profitability may suffer.

The rates we charge our customers are subject to approval by utility commissions in the states in which we operate. We file rate increase requests, from time to time, to recover our investments in utility plant and expenses. Our ability to maintain and meet our financial objectives is dependent upon the recovery of, and return on, our capital investments and expenses through the rates we charge our customers. Once a rate increase petition is filed with a utility commission, the ensuing administrative and hearing process may be lengthy and costly, and our costs may not always be fully recoverable. The timing of our rate increase requests are therefore partially dependent upon the estimated cost of the administrative process in relation to the investments and expenses that we expect to recover through the rate increase. In addition, the amount or frequency of rate increases may be decreased or lengthened as a result of many factors including changes in regulatory oversight in the states in which we operate utilities and income tax laws, including regulations regarding tax-basis depreciation as it applies to our capital expenditures or qualifying utility asset improvements. We can provide no assurances that any future rate increase request will be approved by the appropriate utility commission; and, if approved, we cannot guarantee that these rate increases will be granted in a timely or sufficient manner.

In Virginia, North Carolina and Kentucky, we may bill our water utility customers, in certain circumstances, in accordance with a rate filing that is pending before the respective regulatory commission, which would allow for interim rates. Furthermore, some utility commissions authorize the use of expense deferrals and amortization in order to provide for an impact on our operating income by an amount that approximates the requested amount in a rate request. The additional revenue billed and collected prior to the final ruling is subject to refund to customers based on the outcome of the ruling. The revenue recognized and the expenses deferred by us reflect an estimate as to the final outcome of the ruling. If the request is denied completely or in part, we could be required to refund to customers some or all of the revenue billed to date, and write-off some or all of the deferred expenses.

Changes in our earnings may differ from changes in our rate base.

Our business is capital intensive and requires significant capital investments for additions to or replacement of property, plant and equipment. These capital investments create assets that are used and useful in providing regulated utility service, and as a result, increase our rate base, on which we generate earnings through the regulatory process. Changes in our reported earnings, however, may differ from changes in our rate base in a given period due to several factors, including rate case timing and the terms of such rate cases; over- or under-earnings in a given period due to changes in operating costs; the effects of tax rates or tax treatment of capital investments, including the effect of repair tax; capital expenditures that are not eligible for a DSIC between rate cases; acquisitions which have not yet been included in rate base; and issuances of equity. We anticipate that we may experience periods in which growth in earnings is less than growth in rate base; such differences may be material and may persist over multiple reporting periods.

Our ability to meet customers' natural gas requirements may be impaired if contracted natural gas supplies and interstate pipelines services are not available, are not delivered in a timely manner or if federal regulations decrease its available capacity, which may result in a loss of customers and an adverse effect on our financial conditions and results of operations.

We are responsible for acquiring sufficient natural gas supplies, interstate pipeline capacity and storage capacity to meet current and future customers' peak, annual and seasonal natural gas requirements. We rely on third-party service providers, as we purchase a portion of our natural gas supply from interstate sources and rely on interstate pipelines to transport natural gas to our distribution system, in addition to local production that is delivered directly into our pipeline system. The Federal Energy Regulatory Commission (FERC) regulates the transportation of the natural gas received from interstate sources, and any change in regulatory policies could increase our transportation costs or decrease our available pipeline capacity. A decrease in interstate pipeline capacity available, an increase in competition for interstate pipeline transportation service or other interruptions to pipeline gas supplies could reduce our normal interstate supply of natural gas. Additionally, federal or state legislation could restrict or limit natural gas drilling, which could decrease the supply of available natural gas. If we are unable to maintain access to a reliable and adequate natural gas supply or sufficient pipeline capacity to deliver that supply, we may be unable to meet our customers' requirements, resulting in a loss of customers and an adverse effect on our financial conditions and results of operations.

Peoples has traditionally used local production as a source of supply to fulfill a portion of its supply requirements. In order to absorb local gas into its system, Peoples has in place a network of pipelines and related facilities that move the gas either to customers located where gas is produced or to the more populated areas of the service territory where the greatest level of consumption occurs, and, in summer months, to Peoples' on-system and off-system storage facilities. This network of facilities includes gathering lines, compressor stations, and transmission lines. Peoples has entered into gas purchase agreements with various producers to supply this local production. A decrease in this supply could occur, for example, if the local gas producers no longer drill wells to offset natural well production decline or if such producers decide to cease production or produce into another pipeline. State and federal legislation or regulations could also limit drilling activities and in turn limit gas supply. If supply is limited, we would be faced with purchasing gas supplies likely at a higher cost, may be unable to find alternative gas supply, and accordingly, may be unable to meet customer requirements, resulting in a loss of customers and an adverse effect on our financial condition and results of operations.

Any failure of our water and wastewater treatment plants, network of water and wastewater pipes, or water reservoirs could result in damages that may harm our business, financial condition, and results of operations.

Our operating subsidiaries treat water and wastewater, distribute water, and collect wastewater through an extensive network of pipes, and store water in reservoirs. A failure of a major treatment plant, pipe, or reservoir could result in claims for injuries or property damage. The failure of a major treatment plant, pipe, or reservoir may also result in the need to shut down some facilities or parts of our network in order to conduct repairs. Such failures and shutdowns may limit our ability to supply water in sufficient quality and quantities to our customers or collect and treat wastewater in accordance with standards prescribed by governmental regulators, including state utility commissions, and may harm our business, financial condition, and results of operations. Any business interruption or other losses might not be covered by insurance policies or be recoverable in rates, and such losses may make it difficult for us to secure insurance in the future at acceptable rates.

Our facilities could be the target of a possible terrorist or other deliberate attack which could harm our business, financial condition and results of operations.

In addition to the potential contamination of our water supply or deliberate gas explosions as described in separate risk factors herein, we maintain security measures at our facilities and have heightened employee and public safety official awareness of potential threats to our utility systems. We have and will continue to bear increases in costs for security precautions to protect our facilities, operations, and supplies, most of which have been recoverable under state regulatory policies. While the costs of increases in security, including capital expenditures, may be significant, we expect these costs to continue to be recoverable in utility rates. Despite our security measures, we may not be in a position to control the outcome of terrorist events, or other attacks on our utility systems, should they occur. Such an event could harm our business, financial condition, and results of operations.

Our business is impacted by weather conditions and is subject to seasonal fluctuations, which could harm demand for water and natural gas services and our business, financial condition, and results of operations.

Demand for our water during the warmer months is generally greater than during cooler months due primarily to additional requirements for water in connection with irrigation systems, swimming pools, cooling systems, and other outside water use. Throughout the year, and particularly during typically warmer months, demand will vary with temperature, rainfall levels, and rainfall frequency. In the event that temperatures during the typically warmer months are cooler than normal, if there is more rainfall than normal, or rainfall is more frequent than normal, the demand for our water may decrease and harm our business, financial condition, and results of operations. In Illinois, our operating subsidiary has adopted a revenue stability mechanism which allows us to recognize state PUC authorized revenue for a period which is not based upon the volume of water sold during that period, and effectively reduces the impact of weather and consumption variability.

Peoples' revenues are seasonal and temperature sensitive and vary from year-to-year, depending on weather conditions, with a substantial portion of Peoples' revenue occurring in the first and fourth quarters of the year due to colder temperatures. In 2021, this amounted to 72%, for the first and fourth quarters. This has the effect of reducing our quarterly revenues in the spring and summer months. In addition, warmer-than-normal-weather conditions can decrease the amount of natural gas Peoples sells in any year, which could adversely affect our business, financial condition, and results of operations.

Decreased residential customer water and natural gas usage as a result of conservation efforts, and the impact of more efficient appliances and furnaces, may harm demand for our utility services and may reduce our revenues and earnings.

There has been a general decline in water usage per residential customer as a result of an increase in conservation awareness, and the impact of an increased use of more efficient plumbing fixtures and appliances. These gradual, long-term changes are normally taken into account by the utility commissions in setting rates, whereas short-term changes in water usage, if significant, may not be fully reflected in the rates we charge. We are dependent upon the revenue generated from rates charged to our residential customers for the volume of water used. If we are unable to obtain future rate increases to offset decreased residential customer water consumption to cover our investments, expenses, and return for which we initially sought the rate increase, our business, financial condition, and results of operations may be harmed.

In addition, over time, average customer gas consumption has declined, as more energy efficient appliances and furnaces have been installed and conservation programs have been implemented. If we are unable to compete effectively or if customers further reduce their gas needs, we may lose existing customers, sell less gas to our customers and/or fail to acquire new customers, which could have a material adverse effect on our business, financial condition, and results of operations.

Drought conditions and government imposed water use restrictions may impact our ability to serve our current and future customers, and may impact our customers' use of our water, which may harm our business, financial condition, and results of operations.

We depend on an adequate water supply to meet the present and future demands of our customers. Drought conditions could interfere with our sources of water supply and could harm our ability to supply water in sufficient quantities to our existing and future customers. An interruption in our water supply could harm our business, financial condition, and results of operations. Moreover, governmental restrictions on water usage during drought conditions may result in a decreased demand for our water, even if our water supplies are sufficient to serve our customers during these drought conditions, which may harm our business, financial condition, and results of operations.

The failure of, or the requirement to repair, upgrade or dismantle any of our dams or reservoirs may harm our business, financial condition, and results of operations.

Several of our water systems include impounding dams and reservoirs of various sizes. Although we believe our dam review program, which includes regular inspections and other engineering studies, will ensure our dams are structurally sound and well-maintained, the failure of a dam could result in significant downstream damage and could result in claims for property damage or for injuries or fatalities. We periodically inspect our dams and purchase liability insurance to cover such risks, but depending on the nature of the downstream damage and cause of the failure, the policy limits of insurance coverage may not be sufficient, and losses incurred may make it difficult for us to secure insurance in the future at acceptable rates. A dam failure could also result in damage to, or disruption of, our water treatment and pumping facilities that are often located downstream from our dams and reservoirs. Significant damage to these facilities, or a significant decline in the storage of the raw water impoundment, could affect our ability to provide water to our customers until the facilities and a sufficient raw water impoundment can be restored. The estimated costs to maintain our dams are included in our capital budget projections and, although such costs to date have been recoverable in rates, there can be no assurance that rate increases will be granted in a timely or sufficient manner to recover such costs in the future, if at all.

Our operations are geographically concentrated in Pennsylvania, which make us susceptible to risks affecting Pennsylvania.

Although we operate water, wastewater, and natural gas utility infrastructure in a number of states, our operations are concentrated in Pennsylvania. As a result, our financial results are largely subject to political, resource supply, labor, utility cost and regulatory risks, economic conditions, natural disasters, and other risks affecting Pennsylvania.

Federal and state environmental laws and regulations impose substantial compliance requirements on our operations. Our operating costs could be significantly increased in order to comply with new or stricter regulatory standards imposed by federal and state environmental agencies.

Our water, wastewater, and natural gas services are governed by various federal and state environmental protection and health and safety laws and regulations, including the federal Safe Drinking Water Act, the Clean Water Act, Clean Air Act, Resource Conservation and Recovery Act and similar state laws, and federal and state regulations issued under these laws by the EPA and state environmental regulatory agencies. These laws and regulations establish, among other things, criteria and standards for drinking water and for discharges into the waters of the U.S. as well as dam safety, air emissions, and residuals management. Pursuant to these laws, we are required to obtain various environmental permits from environmental regulatory agencies for our operations. The Company routinely seeks to acquire wastewater systems, some of which may have combined wastewater and stormwater systems which may overflow and be subject to increased regulation by the U.S. EPA. We cannot assure you that we will be at all times in total compliance with these laws, regulations and permits. If we fail to comply with these laws, regulations or permits, we could be fined or otherwise sanctioned by regulators and such noncompliance could result in civil suits. Environmental laws and regulations are complex and change frequently. These laws, and the enforcement thereof, have tended to become more stringent over time. While we have budgeted for future capital and operating expenditures to comply with these laws and our permits, it is possible that new or stricter standards could be imposed that will require additional capital expenditures or raise our operating costs. Although these expenditures and costs may be recovered in the form of higher rates, there can be no assurance that the various state utility commissions that govern our business would approve rate increases to enable us to recover such expenditures and costs. In summary, we cannot assure you that our costs of complying with, current and future environmental and health and safety laws will not harm our business, financial condition, and results of operations.

Additionally, following the Peoples Gas Acquisition, the discovery of presently unknown environmental conditions, including former manufactured gas plant sites, and claims under environmental laws and regulations may result in expenditures and liabilities, which could be material, and could materially harm our business, financial condition and results of operations.

We are increasingly dependent on the continuous and reliable operation of our information technology systems, and a disruption of these systems, resulting from cyber security attacks or other events, could harm our business.

We rely on our information technology systems in connection with the operation of our business, especially with respect to customer service and billing, accounting and, in some cases, the monitoring and operation of our treatment, storage and pumping facilities, and our natural gas pipelines. In addition, we rely on our systems to track our utility assets and to manage maintenance and construction projects, materials and supplies, and our human resource functions. We believe the addition of the Peoples information technology systems, and the integration of such systems with ours adds additional complexity. A loss of these systems, or major problems with the operation of these systems, could harm our business, financial condition, and results of operations. Our information technology systems may be vulnerable to damage or interruption from the following types of cyber security attacks or other events:

- power loss, computer systems failures, and internet, telecommunications or data network failures;
- operator negligence or improper operation by, or supervision of, employees;
- physical and electronic loss of data;
- computer viruses, cyber security attacks, intentional security breaches, hacking, denial of service actions, misappropriation of data and similar events;
- difficulties in the implementation of upgrades or modification to our information technology systems; and
- hurricanes, fires, floods, earthquakes and other natural disasters.

Although we do not believe that our systems are at a materially greater risk of cyber security attacks than other similar organizations, our information technology systems may be vulnerable to damage or interruption from the types of cyber security attacks or other events listed above or other similar actions, and such incidents may go undetected for a period of time. Such cyber security attacks or other events may result in:

- the loss or compromise of customer, financial, employee, or operational data;
- disruption of billing, collections or normal field service activities;
- disruption of electronic monitoring and control of operational systems;
- delays in financial reporting and other normal management functions; and
- disruption in normal system operations.

Possible impacts associated with a cyber security attack or other events may include: remediation costs related to lost, stolen, or compromised data; repairs to data processing or physical systems; increased cyber security protection costs; adverse effects on our compliance with regulatory and environmental laws and regulation, including standards for drinking water; litigation; loss of revenue; and reputational damage. We maintain insurance to help defray costs associated with cyber security attacks or other events, but we cannot provide assurance that such insurance will provide coverage for any particular type of incident or event or that such insurance will be adequate, and losses incurred may make it difficult for us to secure insurance in the future at acceptable rates.

We have a cyber security controls framework in place. We monitor our control effectiveness in an increasing threat landscape and continuously take action to improve our security posture. We cannot assure you that, despite such measures, a form of system failure or data security breach will not have a material adverse effect on our financial condition and results of operations.

Our water or wastewater utility systems may be subject to condemnations or other methods of taking by governmental entities.

In the states where our subsidiaries operate water or wastewater utility systems, it is possible that portions of our subsidiaries' operations could be acquired by municipal governments by one or more of the following methods:

- eminent domain;
- the right of purchase given or reserved by a municipality or political subdivision when the original franchise was granted; and
- the right of purchase given or reserved under the law of the state in which the subsidiary was incorporated or from which it received its permit.

The price to be paid upon such an acquisition by the municipal government is usually determined in accordance with applicable law under eminent domain. In other instances, the price may be negotiated, fixed by appraisers selected by the parties or computed in accordance with a formula prescribed in the law of the state or in the particular franchise or charter. We believe that our operating subsidiaries would be entitled to receive fair market value for any assets that are condemned. However, there is no assurance that the fair market value received for assets condemned would be in excess of book value.

In a very small number of instances, in one of our southern states where there are municipally-owned water or wastewater systems near our operating divisions, the municipally-owned system may either have water distribution or wastewater collection mains that are located adjacent to our division's mains or may construct new mains that parallel our mains. In these circumstances, on occasion, the municipally-owned system may attempt to offer service to customers who are connected to our mains, resulting in our mains becoming surplus or underutilized without compensation.

The final determination of our income tax liability may be materially different from our income tax provision.

Significant judgment is required in determining our provision for income taxes. Our calculation of the provision for income taxes is subject to our interpretation of applicable business tax laws in the jurisdictions in which we file. In addition, our income tax returns are subject to periodic examination by the Internal Revenue Service and other taxing authorities. In December 2012, Aqua Pennsylvania changed its tax method of accounting to permit the expensing of qualifying utility asset improvement costs that were previously being capitalized and depreciated for tax purposes. Subsequently, the Company's Ohio and North Carolina regulated subsidiaries similarly changed their tax method of accounting, and in March 2020 Peoples Natural Gas, LLC changed its tax method of accounting. Our determination of what qualifies as a capital cost versus a tax deduction for utility asset improvements is subject to subsequent adjustment and may impact the income tax benefits that have been recognized.

Although we believe our income tax estimates, including any tax reserves for uncertain tax positions or valuation allowances on deferred tax assets are appropriate, there is no assurance that the final determination of our income tax liability will not be materially different; either higher or lower, from what is reflected in our income tax provision. In the event we are assessed additional income taxes, our business, financial condition, and results of operations could be harmed.

Wastewater operations entail significant risks and may impose significant costs.

Wastewater collection and treatment involve various unique risks. If collection or treatment systems fail or do not operate properly, or if there is a spill, untreated or partially treated wastewater could discharge onto property or into nearby streams and rivers, causing various damages and injuries, including environmental damage. These risks are most acute during periods of substantial rainfall or flooding, which are the main causes of wastewater overflow and system failure. Liabilities resulting from such damages and injuries could harm our business, financial condition, and results of operations.

Work stoppages and other labor relations matters could harm our operating results.

Approximately 48% of our Regulated Water and Regulated Natural Gas segments' workforce are unionized under 19 labor contracts with labor unions, which expire between at various times up until 2026. In light of rising costs for healthcare and retirement benefits, contract negotiations in the future may be difficult. We are subject to a risk of work stoppages and other labor actions as we negotiate with the unions to address these issues, which could harm our business, financial condition, and results of operations. We cannot assure you that issues with our labor forces will be resolved favorably to us in the future or that we will not experience work stoppages.

Workforce-related risks may affect our results of operations.

We are subject to various workforce-related risks, including the risk that we will be unable to attract and retain qualified personnel for our water, wastewater, and natural gas operations, that we will be unable to effectively transfer the knowledge and expertise of an aging workforce to new personnel as those workers retire, and that we will be unable to reach collective bargaining arrangements with the unions that represent certain of our workers, which could result in work stoppages. Additionally, we rely on outside resources to supplement our workforce, including construction crews which are key to our infrastructure replacement program. We face the same risks associated with these outside resources as we do with our own workforce. As a result, we may be unable to hire or retain an adequate number of individuals who are knowledgeable about public utilities, water or the natural gas industry or face a lengthy time period associated with skill development and knowledge transfer. Failure to address these risks may result in increased operational and safety risks as well as increased costs. Even with reasonable plans in place to address succession planning and workforce training, we cannot control the future availability of qualified labor. If we are unable to successfully attract and retain an appropriately qualified workforce, it could adversely affect our financial condition and results of operations.

Significant or prolonged disruptions in the supply of important goods or services from third parties could harm our business, financial condition, and results of operations.

We are dependent on a continuing flow of important goods and services from suppliers for our businesses. A disruption or prolonged delays in obtaining important supplies or services, such as maintenance services, purchased water, chemicals, utility pipe, valves, hydrants, electricity, or other materials, could harm our utility services and our ability to operate in compliance with all regulatory requirements, which could harm our business, financial condition, and results of operations. In some circumstances, we rely on third parties to provide important services (such as customer bill print and mail activities or utility service operations in some of our divisions) and a disruption in these services could harm our business, financial condition, and results of operations. Some possible reasons for a delay or disruption in the supply of important goods and services include:

- our suppliers may not provide materials that meet our specifications in sufficient quantities;
- our suppliers may provide us with water that does not meet applicable quality standards or is contaminated;
- our suppliers may provide us with natural gas not meeting quality standards or is of insufficient volume or pressure;
- our suppliers may face production or shipping delays due to the COVID-19 pandemic, natural disasters, strikes, lock-outs, political disputes, or other such actions;
- one or more suppliers could make strategic changes in the lines of products and services they offer; and
- some of our suppliers, such as small companies, may be more likely to experience financial and operational difficulties than larger, well-established companies, because of their limited financial and other resources.

As a result of any of these factors, we may be required to find alternative suppliers for the materials and services on which we rely. Accordingly, we may experience delays in obtaining appropriate materials and services on a timely basis and in sufficient quantities from such alternative suppliers at a reasonable price, which could interrupt services to our customers and harm our business, financial condition, and results of operations.

We depend significantly on the services of the members of our management team, and the departure of any of those persons could cause our operating results to suffer.

Our success depends significantly on the continued individual and collective contributions of our management team. The loss of the services of any member of our management team or the inability to hire and retain experienced management personnel could harm our business, financial condition, and results of operations.

We may incur significant costs and liabilities resulting from pipeline integrity and other similar programs and related repairs.

Certain of Peoples' pipeline operations are subject to pipeline safety laws and regulations. The Department of Transportation's Pipeline and Hazardous Materials Safety Administration has adopted regulations requiring pipeline operators to develop integrity management programs, including more frequent inspections and other measures, for transmission pipelines located in "high consequence areas," which are those areas where a leak or rupture could do the most harm. The regulations require pipeline operators, including Peoples, to, among other things:

- perform ongoing assessments of pipeline integrity;
- develop a baseline plan to prioritize the assessment of a covered pipeline segment;
- identify and characterize applicable threats that could impact a high consequence area;
- improve data collection, integration, and analysis;
- develop processes for performance management, record keeping, management of change and communication;
- repair and remediate pipelines as necessary; and
- implement preventative and mitigating action.

We are required to maintain pipeline integrity testing programs that are intended to assess pipeline integrity. Peoples is also required to establish and maintain a Distribution Integrity Management Program for all distribution assets. This program requires protocols for identifying risks and threats to the distribution systems. The program incorporates a relative risk model to measure risk reduction to these threats. Any repair, remediation, preventative or mitigating actions may require significant capital and operating expenditures. Should we fail to comply with applicable statutes and related rules, regulations and orders, we could be subject to significant penalties and fines.

Our liquidity and, in certain circumstances, results of operations may be adversely affected by the cost of purchasing natural gas during periods in which natural gas prices are rising significantly.

The Peoples' regulated companies purchase their natural gas supply primarily through a combination of requirements contracts, some of which contain minimum purchase obligations, monthly spot purchase contracts and forward purchase contracts. The price paid for natural gas acquired under forward purchase contracts is fixed prior to the delivery of the natural gas. Additionally, a portion of natural gas purchases is injected into natural gas storage facilities in the non-heating months and withdrawn from storage for delivery to customers during the heating months.

Our short-term borrowing requirements and liquidity are also significantly affected by the seasonal nature of the natural gas business. Changes in the price of natural gas due to, for example, extreme weather events, geopolitical forces, or regulatory policy changes, and the amount of natural gas needed to supply customers' needs due to, for example, colder than expected seasonal temperatures, could significantly affect the price and amount of natural gas we are required to purchase and the timing of such purchases, and, in turn, affect our borrowing requirements and liquidity position. If we fail to secure sufficient natural gas supplies at appropriate prices (due to, for example, more extreme winter conditions), we may be required to purchase additional natural gas supplies or purchase natural gas at elevated prices, which could adversely affect our borrowing levels, liquidity and financial condition.

Peoples' tariff rate schedules contain Purchased Gas Adjustment (PGA) clauses that permit filings for rate adjustments to recover the cost of purchased gas. Subject to regulatory approval, as described below, changes in the cost of purchased gas are flowed through to customers and may affect uncollectible amounts and cash flows and can therefore impact our financial condition and results of operations.

The state regulatory commissions approve the PGA changes on an interim basis, subject to refund and the outcome of a subsequent audit and prudence review. Due to such review process, there is a risk of a disallowance of full recovery of these costs. We are also subject to regulations and standards regarding the amount of lost and unaccounted for gas that may be recovered from customers. Any material disallowance of purchased gas costs would adversely affect our financial condition and results of operations.

Increases in the prices that we charge for gas may also adversely affect our business because increased prices could lead customers to reduce usage and cause some customers to have difficulty paying the resulting higher bills. These higher prices may increase bad debt expenses and ultimately reduce earnings. Additionally, rapid increases in the price of purchased gas may result in an increase in short-term debt.

Our non-regulated natural gas operations purchase natural gas utilizing a combination of requirements contracts, some of which contain minimum purchase obligations, monthly spot purchase contracts and forward purchase contracts. Although price risk for the non-regulated companies is mitigated to a degree by efforts aimed at balancing supply and demand, there are practical limitations on the ability to accurately predict demand and any failure to do so could adversely affect our financial condition and results of operations.

Risks Related to the Company's Capital Needs and Common Stock

The Company has incurred significant additional indebtedness in connection with the Peoples Gas Acquisition. As a result, it may be more difficult for the Company to pay or refinance its debts or take other actions, and the Company may need to divert cash to fund debt service payments.

The Company has incurred significant additional indebtedness to finance the Peoples Gas Acquisition and to fund the debt refinancing of the Company's outstanding existing debt (the Company Debt Refinancing). Additionally, in connection with the Peoples Gas Acquisition, the Company assumed approximately \$1,106 million of Peoples' indebtedness.

The Company's increased indebtedness could:

- make it more difficult and/or costly for the Company to pay or refinance its debts as they become due, particularly during adverse economic and industry conditions, because a decrease in revenues or increase in costs could cause cash flow from operations to be insufficient to make scheduled debt service payments;
- limit the Company's flexibility to pursue other strategic opportunities or react to changes in its business and the industry sectors in which it operates and, consequently, put the Company at a competitive disadvantage to its competitors that have less debt;
- require a substantial portion of the Company's available cash to be used for debt service payments, thereby reducing the availability of its cash to fund working capital, capital expenditures, development projects, acquisitions, dividend payments, and other general corporate purposes, which could harm the Company's prospects for growth;
- result in a downgrade in the credit ratings on the Company's indebtedness, which could limit the Company's ability to borrow additional funds on favorable terms or at all and increase the interest rates under its credit facilities and under any new indebtedness it may incur;
- make it more difficult for the Company to raise capital to fund working capital, make capital expenditures, pay dividends, pursue strategic initiatives or for other purposes;
- result in higher interest expense, which could be further increased in the event of increases in interest rates on the Company's current or future borrowings subject to variable rates of interest; and
- require that additional materially adverse terms, conditions or covenants be placed on the Company under its debt instruments, which covenants might include, for example, limitations on additional borrowings and specific restrictions on uses of its assets, as well as prohibitions or limitations on its ability to create liens, pay dividends, receive distributions from its subsidiaries, redeem or repurchase its stock or make investments, any of which could hinder its access to capital markets and limit or delay its ability to carry out its capital expenditure program or otherwise limit its flexibility in the conduct of its business and make it more vulnerable to economic downturns and adverse competitive and industry conditions.

The increased indebtedness in connection with the Peoples Gas Acquisition could cause us to place more reliance on cash flows from operations to pay principal and interest on debt and to satisfy our other obligations. Based on the current and expected results of operations and financial condition of the Company and the financing structure for the Peoples Gas Acquisition, the Company believes that its cash flows from operations, together with the proceeds from borrowings, and issuances of equity and debt securities in the capital markets will generate sufficient cash on a consolidated basis to make all of the principal and interest payments when such payments are due under the Company's and its current subsidiaries' existing credit facilities, indentures and other instruments governing their outstanding indebtedness, including the indebtedness we have incurred to fund the Peoples Gas Acquisition, and under the indebtedness assumed as a result of the Peoples Gas Acquisition. However, the Company's expectation is based upon numerous estimates and assumptions and is subject to numerous uncertainties.

Our business requires significant capital expenditures that are partially dependent on our ability to secure appropriate funding. Disruptions in the capital markets may limit our access to capital. If we are unable to obtain sufficient capital, or if the cost of borrowing increases, it may harm our business, financial condition, results of operations, and our ability to pay dividends.

Our business is capital intensive. In addition to the capital required to fund customer growth through our acquisition strategy, on an annual basis, and particularly the Peoples Gas Acquisition, we invest significant sums for additions to or replacement of property, plant and equipment. We obtain funds for our capital expenditures from operations, contributions and advances by developers and others, debt issuances, and equity issuances. We have paid dividends consecutively for 77 years, and our Board of Directors recognizes the value that our common shareholders place on both our historical payment record and on our future anticipated dividend payments. Our ability to continue our growth through acquisitions and to maintain and meet our financial objectives is dependent upon the availability of adequate capital, and we may not be able to access the capital markets on favorable terms or at all. Additionally, if in the future, our credit facilities are not renewed or our short-term borrowings are called for repayment, we would need to seek alternative financing sources; however, there can be no assurance that these alternative financing sources would be available on terms acceptable to us. In the event we are unable to obtain sufficient capital, we may need to take steps to conserve cash by reducing our capital expenditures or dividend payments and our ability to pursue acquisitions may be limited. The reduction in capital expenditures may result in reduced potential earnings growth, affect our ability to meet environmental laws and regulations, and limit our ability to improve or expand our utility systems to the level we believe appropriate. There is no guarantee that we will be able to obtain sufficient capital in the future on reasonable terms and conditions for expansion, construction, and maintenance. In addition, delays in completing major capital projects could delay the recovery of the capital expenditures associated with such projects through rates.

If the cost of borrowing increases, we might not be able to recover increases in our cost of capital through rates. The inability to recover higher borrowing costs through rates, or the regulatory lag associated with the time that it takes to begin recovery, may harm our business, financial condition, results of operations and cash flows.

Our inability to comply with debt covenants under our loan and debt agreements could result in prepayment obligations.

We are obligated to comply with debt covenants under some of our loan and debt agreements. In addition, we incurred additional indebtedness in connection with the Peoples Gas Acquisition, including the assumption of certain outstanding indebtedness of Peoples, and are obligated to comply with the debt covenants under the agreements governing such indebtedness. Failure to comply with covenants under our loan and debt agreements could result in an event of default, which if not cured or waived, could result in us being required to repay or finance these borrowings before their due date, limit future borrowings, cause us to default on other obligations, and increase borrowing costs. If we are forced to repay or refinance (on less favorable terms) these borrowings, our business, financial condition, and results of operations could be harmed by reduced access to capital and increased costs and rates.

The price of our common stock may be volatile. This volatility may affect the price at which one could sell our common stock, and the sale or resale of substantial amounts of our common stock could adversely affect the market price of our common stock.

The sale or issuance of substantial amounts of our common stock, or the perception that additional sales or issuances could occur, could adversely affect the market price of our common stock, even if the business is doing well. In addition, the availability for sale of substantial amounts of our common stock could adversely impact its market price. Shares of our common stock will also be issuable upon settlement or redemption of our stock purchase contracts and the number of shares may be substantial. The settlement rates for the stock purchase contracts will be subject to certain anti-dilution adjustments that could increase, potentially significantly, the number of shares of our common stock issuable upon such settlement or redemption. Any of the foregoing may also impair our ability to raise additional capital through the sale of our equity securities.

Item 1B *Unresolved Staff Comments*

None

Item 2. *Properties*

Our Regulated Water properties consist of water transmission and distribution mains and wastewater collection pipelines, water and wastewater treatment plants, pumping facilities, wells, tanks, meters, pipes, dams, reservoirs, buildings, vehicles, land, easements, rights-of-way, and other facilities and equipment used for the operation of our systems, including the collection, treatment, storage, and distribution of water and the collection and treatment of wastewater. Substantially all of our treatment, storage, and distribution properties are owned by our subsidiaries, and a substantial portion of our property is subject to liens of mortgage or indentures. These liens secure bonds, notes and other evidences of long-term indebtedness of our subsidiaries. For some properties that we acquired through the exercise of the power of eminent domain and other properties we purchased, we hold title for water supply purposes only. We own, operate and maintain approximately 14,275 miles of transmission and distribution mains, 23 surface water treatment plants, many well treatment stations, and 201 wastewater treatment plants. A small portion of the properties are leased under long-term leases.

Our Regulated Natural Gas properties consist of approximately 15,400 miles of natural gas distribution mains, varying in size from one-half inch to 36 inches in diameter, 1,700 miles of gathering pipeline, and 300 miles of intrastate transmission/storage pipeline. Further, in each of the cities, towns, and rural areas where we serve natural gas customers, we own the underground gas mains and service lines, metering, and regulating equipment located on customers' premises and the district regulating equipment necessary for pressure maintenance. With a few exceptions, the measuring stations at which we receive gas from third parties are owned, operated, and maintained by others, and our distribution facilities begin at the outlet of the measuring equipment. These facilities, including odorizing equipment, are usually located on land owned by suppliers.

The following table indicates our net property, plant and equipment, in thousands of dollars, as of December 31, 2021 in the principal states where we operate:

	Net Property, Plant and Equipment		
Pennsylvania	\$	7,318,160	71.4%

Ohio	594,535	5.8%
Illinois	564,783	5.5%
North Carolina	474,282	4.6%
Texas	509,563	4.9%
Other (1)	790,543	7.8%
Consolidated	<u>\$ 10,251,866</u>	<u>100.0%</u>

(1) Consists primarily of our operating subsidiaries in the following states: New Jersey, Indiana, Virginia, West Virginia, and Kentucky.

We believe that our properties are generally maintained in good condition and in accordance with current standards of good water, wastewater, and natural gas industry practice. We believe that our facilities are adequate and suitable for the conduct of our business and to meet customer requirements under normal circumstances.

Our corporate offices are leased from our subsidiary, Aqua Pennsylvania, and are located in Bryn Mawr, Pennsylvania.

Item 3. *Legal Proceedings*

There are various legal proceedings in which we are involved. Although the results of legal proceedings cannot be predicted with certainty, there are no pending legal proceedings to which we or any of our subsidiaries is a party or to which any of our properties is the subject that we believe are material or are expected to materially harm our business, operating results, reputation, or financial condition.

Item 4. *Mine Safety Disclosures*

Not applicable.

PART II

Item 5. *Market for the Registrant's Common Stock, Related Stockholder Matters and Purchases of Equity Securities*

Our common stock is traded on the New York Stock Exchange under the ticker symbol WTRG. As of February 15, 2022, there were approximately 20,974 holders of record of our common stock.

The following table shows the cash dividends paid per share for the periods indicated:

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
2021					
Dividend paid per common share	\$ 0.2507	\$ 0.2507	\$ 0.2682	\$ 0.2682	\$ 1.0378
Dividend declared per common share	0.2507	0.2507	0.2682	0.2682	1.0378
2020					
Dividend paid per common share	\$ 0.2343	\$ 0.2343	\$ 0.2507	\$ 0.2507	\$ 0.9700
Dividend declared per common share	0.2343	0.2343	0.2507	0.2507	0.9700

We have paid dividends consecutively for 77 years. On July 2, 2021, our Board of Directors authorized an increase of 7.0% in the September 1, 2021 quarterly dividend over the dividend Essential Utilities paid in the previous quarter. As a result of this authorization, beginning with the dividend payment in September 2021, the annualized dividend rate increased to \$1.0728 per share. This is the 31st dividend increase in the past 30 years and the 23rd consecutive year that we have increased our dividend in excess of five percent. We presently intend to pay quarterly cash dividends in the future, on March 1, June 1, September 1, and December 1, subject to our earnings and financial condition, restrictions set forth in our debt instruments, regulatory requirements and such other factors as our Board of Directors may deem relevant. In 2021, our dividends paid represented 59.9% of net income.

Information with respect to restrictions set forth in our debt instruments is disclosed in Note 11 – *Long-term Debt and Loans Payable* in the *Notes to Consolidated Financial Statements* which is contained in Item 8 of this Annual Report.

During the fourth quarter of 2021, the Company did not repurchase any of its equity securities under any repurchase plan or program.

The following table summarizes the Company's purchases of its common stock under its equity incentive plans for the quarter ending December 31, 2021:

<u>Period</u>	<u>Issuer Purchases of Equity Securities</u>		Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plan or Programs
	Total Number of Shares Purchased (1)	Average Price Paid per Share		
October 1-31, 2021	-	\$ -	-	-
November 1-30, 2021	-	\$ -	-	-
December 1-31, 2021	87	\$ 48.94	-	-
Total	<u>87</u>	<u>\$ 48.94</u>	<u>-</u>	<u>-</u>

- (1) These amounts consist of 87 shares acquired from employees associated with the withholding of shares to pay certain withholding taxes upon the vesting of stock-based compensation under the plan. This feature of our equity compensation plan is available to all employees who receive stock-based compensation under the plan. We purchased these shares at their fair market value, as determined by reference to closing price of our common stock on the day prior to award vesting.

Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations***OVERVIEW**

The following discussion and analysis of our financial condition and results of operations for 2021 compared to 2020 should be read together with our Consolidated Financial Statements and accompanying Notes included in this Annual Report. For discussion of our results of operations and cash flows for 2020 compared with 2019, refer to Part II, Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our Annual Report on [Form 10-K for our fiscal year ended December 31, 2020](#), filed with the SEC on March 1, 2021. This discussion contains forward-looking statements that are based on management’s current expectations, estimates, and projections about our business, operations, and financial performance. All dollar amounts are in thousands of dollars, except per share amounts.

The Company

Essential Utilities, Inc., (Essential Utilities, the Company, we, us, or our), a Pennsylvania corporation, is the holding company for regulated utilities providing water, wastewater, or natural gas services to an estimated five million people in Pennsylvania, Ohio, Texas, Illinois, North Carolina, New Jersey, Indiana, Virginia, West Virginia, and Kentucky under the Aqua and Peoples brands. One of our largest operating subsidiaries, Aqua Pennsylvania, Inc. (Aqua Pennsylvania), provides water or wastewater services to approximately one-half of the total number of water or wastewater customers we serve. These customers are located in the suburban areas in counties north and west of the City of Philadelphia and in 27 other counties in Pennsylvania. Our other regulated water or wastewater utility subsidiaries provide similar services in seven additional states. Additionally, pursuant to the Company’s growth strategy, commencing on March 16, 2020, with the completion of the Peoples Gas Acquisition, the Company began to provide natural gas distribution services to customers in western Pennsylvania, Kentucky, and West Virginia. Approximately 93% of the total number of natural gas utility customers we serve are in western Pennsylvania. Lastly, the Company’s market-based activities are conducted through Aqua Infrastructure, LLC and Aqua Resources, Inc. and certain other non-regulated subsidiaries of Peoples. Prior to our October 30, 2020 sale of our investment in a joint venture, Aqua Infrastructure provided non-utility raw water supply services for firms in the natural gas drilling industry. Following the October 30, 2020 closing, Aqua Infrastructure does not provide any services to the natural gas drilling industry. Aqua Resources offers, through a third-party, water and sewer service line protection solutions and repair services to households. Other non-regulated subsidiaries of Peoples provide utility service line protection services to households and operate gas marketing and production businesses.

COVID-19 Pandemic

We provide a critical service to our customers, which means that it is paramount that we keep our employees who operate the business safe and informed while supporting our customers and assuring the continuity of our operations. We continue to monitor the COVID-19 pandemic and continue to take steps to mitigate the potential risks to our employees. We continue to implement strong physical and cyber security measures in an effort to ensure that our systems remain functional in order to both serve our operational needs with a hybrid workforce and maintain uninterrupted service to our customers. We continue to monitor developments affecting our business, workforce, and suppliers and take additional precautions as we believe are warranted. We are continuing with our capital investment program and continue to work with our suppliers to monitor and address the risks present in our supply chain. While we have experienced some delays in certain materials, we have been able to adjust our purchasing procedures to secure and stock the necessary materials without materially impacting our operations or capital investment program. We are actively monitoring our utility billings for changes in residential, commercial and industrial usage. In addition, we are monitoring collections of customer utility accounts as to potential impacts on cash flows, and increased expenses for costs associated with workforce-related expenses, security and cleaning of company offices and operating facilities, as well as other one-time expenses above the expense amounts included in general rates.

While the pandemic presents risks to the Company's business, as further described in Part I, Item 1A — Risk Factors in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, the Company has not experienced any material financial or operational impacts related to COVID-19. Despite our efforts, the potential for a material negative impact on the Company exists as the COVID-19 pandemic also depends on factors beyond our knowledge, control, or ability to predict, including the duration and severity of this pandemic, the emergence of new variants of the virus, the development and availability of effective treatments and vaccines, as well as third party actions taken to contain its spread and mitigate its public health effects.

Economic Regulation

Most of our utility operations are subject to regulation by their respective state utility commissions, which have broad administrative power and authority to regulate billing rates, determine franchise areas and conditions of service, approve acquisitions, and authorize the issuance of securities. The utility commissions also generally establish uniform systems of accounts and approve the terms of contracts with affiliates and customers, business combinations with other utility systems, and loans and other financings. The policies of the utility commissions often differ from state to state and may change over time. A small number of our operations are subject to rate regulation by county or city government. Over time, the regulatory party in a particular state may change. The profitability of our utility operations is influenced to a great extent by the timeliness and adequacy of rate allowances in the various states in which we operate. One consideration we may undertake in evaluating on which states to focus our growth and investment strategy is whether a state provides for consolidated rates, a surcharge for replacing and rehabilitating infrastructure, fair value treatment of acquired utility systems, and other regulatory policies that promote infrastructure investment and efficiency in processing rate cases.

Rate Case Management Capability – The mission of the regulated utility industry is to provide quality and reliable utility service at reasonable rates to customers, while earning a fair return for shareholders. We strive to achieve the industry's mission by effective planning, efficient investments, and productive use of our resources. We maintain a rate case management capability to pursue timely and adequate returns on the capital investments that we make in improving our distribution system, treatment plants, information technology systems, and other infrastructure. This capital investment creates assets that are used and useful in providing utility service and is commonly referred to as rate base. Timely and adequate rate relief is important to our continued profitability and in providing a fair return to our shareholders; thus, providing access to capital markets to help fund these investments. In pursuing our rate case strategy, we consider the amount of net utility plant additions and replacements made since the previous rate decision, the changes in the cost of capital, changes in our capital structure, and changes in operating and other costs. Based on these assessments, our utility operations periodically file rate increase requests with their respective state utility commissions or local regulatory authorities. In general, as a regulated enterprise, our utility rates are established to provide full recovery of utility operating costs, taxes, interest on debt used to finance capital investments, and a return on equity used to finance capital investments. Our ability to recover our expenses in a timely manner and earn a return on equity employed in the business helps determine the profitability of the Company.

As of December 31, 2021, the Company's rate base is estimated to be \$8,600,000, which is comprised of:

- \$5,900,000 in the Regulated Water segment; and
- \$2,700,000 in the Regulated Natural Gas segment.

As of December 31, 2021, the regulatory status of the Company's rate base is estimated to be as follows:

- \$7,200,000 filed with respective state utility commissions or local regulatory authorities; and
- \$1,400,000 not yet filed with respective state utility commissions or local regulatory authorities.

Our water and wastewater operations are composed of 45 rate divisions, and our natural gas operations are comprised of 4 rate divisions. Each of our utility rate divisions require a separate rate filing for the evaluation of the cost of service and recovery of investments in connection with the establishment of tariff rates for that rate division. When feasible and beneficial to our utility customers, we have sought approval from the applicable state utility commission to consolidate rate divisions to achieve a more even distribution of costs over a larger customer base. All of the eight states in which we operate water and wastewater utilities currently permit us to file a revenue requirement using some form of consolidated rates for some or all of the rate divisions in that state.

Our operating subsidiaries received rate increases representing estimated annualized revenues of \$3,390 in 2021 resulting from six base rate decisions, \$4,480 in 2020 resulting from five base rate decisions, and \$52,974 in 2019 resulting from four base rate decisions. Revenues from these increases realized in the year of grant were \$2,995 in 2021, \$1,594 in 2020, and \$32,287 in 2019.

Revenue Surcharges – Eight states in which we operate water and wastewater utilities, and three states in which we operate natural gas utilities permit us to add an infrastructure rehabilitation surcharge to their respective bills to offset the additional depreciation and capital costs associated with capital expenditures related to replacing and rehabilitating infrastructure systems. In our other states, utilities absorb all of the depreciation and capital costs of these projects between base rate increases without the benefit of additional revenues. The gap between the time that a capital project is completed and the recovery of its costs in rates is known as regulatory lag. This surcharge is intended to substantially reduce regulatory lag, which could act as a disincentive for utilities to rehabilitate their infrastructure. In addition, some states permit our subsidiaries to use a surcharge or credit on their bills to reflect allowable changes in costs, such as changes in state tax rates, other taxes and purchased water costs, until such time as the new costs are fully incorporated in base rates. Additional information regarding revenue surcharges is provided in Note 17 – *Rate Activity* in this Annual Report.

Inflation and Operating Costs – Most elements of operating costs are subject to the effects of inflation and changes in the number of customers served. Several elements are subject to the effects of changes in water or gas consumption, weather conditions, and the degree of water treatment required due to variations in the quality of the raw water. The principal elements of operating costs are purchased gas, labor and employee benefits, electricity, chemicals, transportation, maintenance expenses, insurance and claims costs, and costs to comply with environmental regulations. Electricity and chemical expenses vary in relationship to water or gas consumption, raw water quality, wastewater volumes, and price changes. Maintenance expenses are sensitive to extremely cold weather, which can cause utility mains to rupture and natural gas service lines to freeze, resulting in additional costs to repair the affected mains.

Materials and supplies, freight, and labor inflation resulted in increased costs in fiscal 2021, and we expect this trend will continue in fiscal 2022. Recovery of the effects of inflation through higher customer rates is dependent upon receiving adequate and timely rate increases. However, rate increases are not retroactive and often lag increases in costs caused by inflation. On occasion, our regulated utility companies may enter into rate settlement agreements, which require us to wait for a period of time to file the next base rate increase request. These agreements may result in regulatory lag whereby inflationary increases in expenses may not be reflected in rates, and may not yet be requested, or a gap may exist between when a capital project is completed and the start of its recovery in rates. Even during periods of moderate inflation, the effects of inflation can have a negative impact on our operating results.

Our natural gas distribution operations are also affected by the cost of natural gas. We are able to generally pass the cost of gas to our customers without markup under purchase gas cost adjustment mechanisms; therefore, increases in the cost of gas are offset by a corresponding increase in revenues. However, higher gas costs may adversely impact our accounts receivable collections, resulting in higher bad debt expense. This risk is currently mitigated by rate design that allows us to collect from our customers a portion of our bad debt expense. Additionally, higher gas costs may require us to increase borrowings under our credit facilities, resulting in higher interest expense. A typical residential natural gas bill includes charges for the cost of gas, delivery, and other charges. As of January 1, 2022, the annual portion of a typical Peoples Natural Gas residential bill related to gas costs is approximately 49%. In periods when we experience market increases in natural gas costs, such as in 2021, customer affordability and usage may be reduced. Customer conservation measures may occur that can reduce natural gas revenues, either temporarily or over time.

Income Tax Accounting Change - On March 31, 2020, the Company changed the method of tax accounting for certain qualifying infrastructure investments at its Peoples Natural Gas subsidiary, its largest natural gas subsidiary in Pennsylvania. This change allows a tax deduction for qualifying utility asset improvement costs that were formerly capitalized for tax purposes. Consistent with the Company's accounting for differences between book and tax expenditures for its Aqua Pennsylvania subsidiary, the Company is utilizing the flow-through method to account for this timing difference. In addition, the Company calculated the income tax benefits for qualifying capital expenditures made prior to March 16, 2020 (catch-up adjustment) and has recorded a regulatory liability for \$160,655 for these income tax benefits. In August 2020, the Company filed a petition with the Pennsylvania Public Utility Commission proposing treatment of the catch-up adjustment. On March 11, 2021, the Company and the statutory advocates filed a Joint Petition of Settlement (Settlement) representing a settlement of the parties, and, on May 6, 2021, it was approved by the Pennsylvania Public Utility Commission. The Settlement stipulates, among other points, that the catch-up adjustment be provided to utility customers over a five-year period, and the Company can continue to use flow-through accounting for the current tax repair benefit until its next base rate case. The five-year customer surcredit for the catch-up adjustment was initiated in August 2021. In addition, consistent with the Settlement, the Company contributed \$500 to a customer-bill payment assistance program in July 2021 and in December 2021, provided \$5,000 in customer rate credit relief for past-due accounts of natural gas customers impacted by the COVID-19 pandemic.

Growth-Through-Acquisition Strategy

Part of our strategy to meet the industry challenges is to actively explore opportunities to expand our utility operations through acquisitions of water, wastewater, and other utilities either in areas adjacent to our existing service areas or in new service areas, and to explore acquiring market-based businesses that are complementary to our regulated utility operations. To complement our growth strategy, we routinely evaluate the operating performance of our individual utility systems, and in instances where limited economic growth opportunities exist or where we are unable to achieve favorable operating results or a return on equity that we consider acceptable, we will seek to sell the utility system and reinvest the proceeds in other utility systems. Consistent with this strategy, we are focusing our acquisitions and resources in states where we have critical mass of operations in an effort to achieve economies of scale and increased efficiency. Our growth-through-acquisition strategy allows us to operate more efficiently by sharing operating expenses over more utility customers and provides new locations for future earnings growth through capital investment. Another element of our growth strategy is the consideration of opportunities to expand by acquiring other utilities, including those that may be in a new state if they provide promising economic growth opportunities and a return on equity that we consider acceptable. Our ability to successfully execute this strategy historically and to meet the industry challenges has largely been due to our core competencies, financial position, and our qualified and trained workforce, which we strive to retain by treating employees fairly and providing our employees with development and growth opportunities.

On March 16, 2020, we completed the acquisition of Peoples Natural Gas (the Peoples Gas Acquisition), which expanded the Company's regulated utility business to include natural gas distribution, serving approximately 750,000 natural gas utility customers in western Pennsylvania, West Virginia, and Kentucky.

During 2021, we completed two acquisitions of water and wastewater systems, which along with the organic growth in our existing systems, represents 21,364 new customers. During 2020, in addition to the Peoples Gas Acquisition, we completed six acquisitions of water and wastewater systems, which along with the organic growth in our existing systems, represents 24,169 new customers. During 2019, we completed eight acquisitions, which along with the organic growth in our existing systems, represents 21,613 new customers.

The Company currently has eight signed purchase agreements for additional water and wastewater systems that are expected to serve approximately 235,000 equivalent retail customers or equivalent dwelling units and total approximately \$471,000 in purchase price in three of our existing states. This includes the Company's agreement to acquire the Delaware County Regional Water Quality Control Authority (DELCORA) for \$276,500. DELCORA, a Pennsylvania sewer authority, serves approximately 198,000 equivalent dwelling units in the Philadelphia suburbs. Refer to Note 2 – *Acquisitions* in this Annual Report for further discussion.

As of December 31, 2021, the pipeline of potential water and wastewater municipal acquisitions the company is actively pursuing represents approximately 400,000 total customers or equivalent dwelling units. The Company remains on track to, on average, annually increase customers between 2 and 3% through acquisitions and organic customer growth.

Performance Measures Considered by Management

We consider the following financial measures (and the period to period changes in these financial measures) to be the fundamental basis by which we evaluate our operating results:

- earnings per share;
- operating revenues;
- gross margin;

- earnings before interest, taxes, and depreciation (EBITD);
- income adjusted to remove transaction-related expenses associated with the Peoples Gas Acquisition;
- earnings before income taxes;
- net income; and
- the dividend rate on common stock.

In addition, we consider other key measures in evaluating our utility business performance within our Regulated Water and Natural Gas segments:

- our number of utility customers;
- the ratio of operations and maintenance expense compared to operating revenues (this percentage is termed “operating expense ratio”);
- return on revenues (net income divided by operating revenues);
- rate base growth;
- return on equity (net income divided by stockholders’ equity); and
- the ratio of capital expenditures to depreciation expense.

Some of these measures, like EBITD and gross margin, are non-GAAP financial measures. The Company believes that the non-GAAP financial measures provide management the ability to measure the Company’s financial operating performance across periods and as contrasted to historical financial results, which are more indicative of the Company’s ongoing performance and more comparable to measures reported by other companies. When the Company discloses such non-GAAP financial measures, we believe they are useful to investors as a meaningful way to compare the Company’s operating performance against its historical financial results. We believe EBITD is a relevant and useful indicator of operating performance, as we measure it for management purposes because it provides a better understanding of our results of operations by highlighting our operations and the underlying profitability of our core businesses. Furthermore, we review the measure of earnings before unusual items that are not directly related to our core businesses, such as the measure of adjusted earnings to remove the Peoples Gas Acquisition expenses, such as transaction expenses and the change in fair value of interest rate swap agreements, which were recognized in 2019. Refer to Note 11 – *Long-term Debt and Loans Payable* in this Annual Report for information regarding the interest rate swap agreements.

We review these measurements regularly and compare them to historical periods, to our operating budget as approved by our Board of Directors, and to other publicly-traded utilities. Additionally, our Regulated Natural Gas segment is affected by the cost of natural gas, which is passed through to customers using a purchased gas adjustment mechanism and includes commodity price, transportation and storage costs. These costs are reflected in the consolidated statement of operations and comprehensive income as purchased gas expenses. Therefore, fluctuations in the cost of purchased gas impact operating revenues on dollar-for-dollar basis, but does not impact gross margin. Management uses gross margin, a non-GAAP financial measure, defined as operating revenues less purchased gas expense, to analyze the financial performance of our Regulated Natural Gas segment, as management believes gross margin provides a meaningful basis for evaluating our natural gas utility operations since purchased gas expenses are included in operating revenues and passed through to customers.

Our operating expense ratio is one measure that we use to evaluate our operating efficiency and management effectiveness of our regulated operations. Our operating expense ratio is affected by a number of factors, including the following:

- **Regulatory lag** – Our rate filings are designed to provide for the recovery of increases in costs of operations (primarily labor and employee benefits, electricity, chemicals, transportation, maintenance expenses, insurance and claim costs, and costs to comply with environmental regulations), capital, and taxes. The revenue portion of the operating expense ratio can be impacted by the timeliness of recovery of, and the return on capital investments. The operating expense ratio is further influenced by regulatory lag (increases in operations and maintenance expenses not yet recovered in rates or a gap between the time that a capital project is completed and the start of its cost recovery in rates). The operating expense ratio is also influenced by decreases in operating revenues without a commensurate decrease in operations and maintenance expense, such as changes in customer usage as impacted by adverse weather conditions, or conservation trends. During periods of inflation, our operations and maintenance expenses may increase, impacting the operating expense ratio, as a result of regulatory lag, since our rate cases may not be filed timely and are not retroactive.
- **Acquisitions** – In general, acquisitions of smaller undercapitalized utility systems in some areas may initially increase our operating expense ratio if the operating revenues generated by these operations do not reflect the true cost of service and are accompanied by a higher ratio of operations and maintenance expenses as compared to other operational areas of the company that are more densely populated and have integrated operations. In these cases, the acquired operations are characterized as having relatively higher operating costs to fixed capital costs, in contrast to the majority of our operations, which generally consist of larger, interconnected systems, with higher fixed capital costs (utility plant investment) and lower operating costs per customer. For larger acquisitions, such as the Peoples Gas Acquisition, we have incurred significant transaction expenses, which increase operations and maintenance expenses in periods prior to and in the period of the closing of the acquisition. In addition, we operate market-based subsidiary companies consisting of our non-regulated natural gas operations, Aqua Resources, and Aqua Infrastructure. The cost-structure of these market-based companies differs from our utility companies in that, although they may generate free cash flow, these companies may at times have a higher ratio of operations and maintenance expenses to operating revenues and a lower capital investment and, consequently, a lower ratio of fixed capital costs versus operating revenues in contrast to our regulated operations. As a result, the operating expense ratio is not comparable between the businesses. These market-based subsidiary companies are not a component of our Regulated Water or Regulated Natural Gas segments.

We continue to evaluate initiatives to help control operating costs and improve efficiencies.

Other Operational Measures Considered by Management

Sendout - Sendout represents the quantity of treated water delivered to our distribution systems. We use sendout as an indicator of customer demand. Weather conditions tend to impact water consumption, particularly during the late spring, summer, and early fall when discretionary and recreational use of water is at its highest. Consequently, a higher proportion of annual Regulated Water segment operating revenues are realized in the second and third quarters. In general, during this period, an extended period of hot and dry weather increases water consumption, while above-average rainfall and cool weather decreases water consumption. Conservation efforts, construction codes that require the use of low-flow plumbing fixtures, as well as mandated water use restrictions in response to drought conditions can reduce water consumption. We believe an increase in conservation awareness by our customers, including the increased use of more efficient plumbing fixtures and appliances, may continue to result in a long-term structural trend of declining water usage per customer. These gradual long-term changes are normally taken into account by the utility commissions in setting rates, whereas significant short-term changes in water usage, resulting from drought warnings, water use restrictions, or extreme weather conditions, may not be fully reflected in the rates we charge between rate proceedings. In Illinois, our operating subsidiary has adopted a revenue stability mechanism which allows us to recognize state PUC-authorized revenue for a period which is not based upon the volume of water sold during that period, and effectively lessens the impact of weather and consumption variability.

On occasion, drought warnings and water use restrictions are issued by governmental authorities for portions of our service territories in response to extended periods of dry weather conditions, regardless of our ability to meet unrestricted customer water demands. The timing and duration of the warnings and restrictions can have an impact on our water revenues and net income. In general, water consumption in the summer months is affected by drought warnings and restrictions to a higher degree because discretionary and recreational use of water is highest during the summer months, particularly in our northern service territories. At other times of the year, warnings and restrictions generally have less of an effect on water consumption. Portions of our northern and central Texas service areas have conservation water restrictions. Drought warnings and watches result in the public being asked to voluntarily reduce water consumption.

The geographic diversity of our utility customer base reduces the effect of our exposure to extreme or unusual weather conditions in any one area of the country. During the year ended December 31, 2021, our operating revenues for our Regulated Water segment were derived principally from the following states: approximately 55% in Pennsylvania, 12% in Ohio, 9% in Illinois, 8% in Texas, and 7% in North Carolina.

Heating Degree Days – The regulated natural gas utility business is subject to seasonal fluctuations with the peak usage period occurring in the heating season which generally runs from October to March. A heating degree day (HDD) is each degree that the average of the high and the low temperatures for a day is below 65 degrees Fahrenheit in a specific geographic location. Particularly during the heating season, this measure is used to reflect the demand for natural gas needed for heating based on the extent to which the average temperature falls below a reference temperature for which no heating is required (65 degrees Fahrenheit). HDDs are used in the natural gas industry to measure the relative coldness of weather and to estimate the demand for natural gas. Normal temperatures are based on a historical twenty-year average heating degree days, as calculated from data provided by the National Weather Service for the same geographic location. During the year ended December 31, 2021, we experienced actual HDDs of 5,139 days, which was warmer by 6% than the average or normal HDDs for Pittsburgh, Pennsylvania, which we use as a proxy for our western Pennsylvania service territory.

(In thousands of dollars, except per share amounts)

RESULTS OF OPERATIONS

Consolidated financial and operational highlights for the years ended December 31, 2021, 2020 and 2019 are presented below. Our Regulated Natural Gas segment results, which represent Peoples Gas' operating results, are included since its acquisition on March 16, 2020. The variance of the operating results in the first quarter of 2021 as compared to 2020 in the Regulated Natural Gas segment for the timing of the Peoples Gas Acquisition closing, resulted in an increase in the following income statement amounts for 2021: \$304,571 of operating revenues, \$42,503 of operations and maintenance expense, \$110,117 of purchased gas expense, \$23,022 of depreciation and amortization, \$125,149 of operating income, and \$105,853 of net income.

Years ended December 31,	2021	2020	2019	2021 vs. 2020	2020 vs. 2019
Operating revenues:					
Regulated water segment	\$ 980,203	\$ 938,540	\$ 886,430	\$ 41,663	\$ 52,110
Regulated gas segment	859,902	506,564	-	353,338	506,564
Other and eliminations	38,039	17,594	3,262	20,445	14,332
Consolidated operating revenues	\$ 1,878,144	\$ 1,462,698	\$ 889,692	\$ 415,446	\$ 573,006
Operations and maintenance expense	\$ 550,580	\$ 528,611	\$ 333,102	\$ 21,969	\$ 195,509
Net income (1)	\$ 431,612	\$ 284,849	\$ 224,543	\$ 146,763	\$ 60,306
Capital expenditures	\$ 1,020,519	\$ 835,642	\$ 550,273	\$ 184,877	\$ 285,369
Operating Statistics					
Selected operating results as a percentage of operating revenues:					
Operations and maintenance	29.3%	36.1%	37.4%	-6.8%	-1.3%
Depreciation and amortization	15.9%	17.6%	17.6%	-1.7%	0.0%
Taxes other than income taxes	4.6%	5.2%	6.7%	-0.6%	-1.5%
Interest expense, net of interest income	10.9%	12.9%	14.1%	-2.0%	-1.2%
Net income (1)	23.0%	19.5%	25.2%	3.5%	-5.7%
Return on Essential Utilities stockholders' equity (1)	8.3%	6.1%	5.8%	2.2%	0.3%
Ratio of capital expenditures to depreciation expense	3.5	3.3	3.5	0.2	-0.2
Effective tax rate	(2.3%)	(7.5%)	(6.2%)	5.2%	(1.3%)

(1) Reflects Peoples Gas Acquisition transaction-related expenses of \$20,925 (\$25,573 pre-tax) in 2020 and \$18,246 (\$22,891 pre-tax) in 2019; utility customer rate credits issued in 2020 of \$23,004 (or \$16,357 net of tax); a mark-to-market fair value adjustment expense for 2019 of \$18,756 (\$23,742 pre-tax) associated with interest rate swap agreements entered into to mitigate interest rate risk associated with issuance of long-term debt to fund a portion of the Peoples Gas Acquisition; and in 2019 a \$14,637 (\$18,528 pre-tax) loss on debt extinguishment associated with the early redemption of \$313,500 of the Company's long-term debt.

Consolidated Results of Operations Comparison for 2021 and 2020

Operating revenues - Operating revenues increased by \$415,446 or 28.4% for the year ended December 31, 2021 compared to the year ended December 31, 2020. Revenues from our Regulated Water segment increased by \$41,663, Regulated Natural Gas segment by \$353,338 and other revenues by \$20,445. The growth in our Regulated Water segment's revenues is primarily a result of increases in our water and wastewater rates and our customer base. The increase in our Regulated Natural Gas Revenues is primarily due to a full year of People's revenue in 2021 compared to nine months and sixteen days of results in 2020 and higher natural gas cost pass-through to customers. The variance in operating revenues in the first quarter of 2021 as compared to 2020, as a result of the timing of the Peoples' acquisition, was \$304,571. Refer below for further details on the changes on Regulated Water and Regulated Natural Gas segment revenues.

Our other revenues consist of market-based revenues at Aqua Resources, Aqua Infrastructure, and our non-regulated natural gas operations (post-closing) amounting to \$38,435 in 2021, \$17,776 in 2020, and \$3,395 in 2019. The increase in other revenues in 2021 as compared to 2020 is largely due to higher purchased gas revenues from our non-regulated natural gas operations of \$15,230 resulting from the timing of Peoples' acquisition in 2020 and higher gas costs in 2021.

Operating expenses - Operations and maintenance expenses increased in 2021, as compared to 2020, by \$21,969 or 4.2%, primarily due to:

- increase in operations and maintenance expenses for our Regulated Natural Gas business of \$42,503 representing the variance in the first quarter of 2021 versus first quarter of 2020 as a result of the timing of the Peoples Gas Acquisition in 2020;
- costs related to the restoration and repair of facilities in southeastern Pennsylvania damaged by Hurricane Ida of \$2,820;
- increase in employee related costs of \$8,624 related to pension and post-retirement benefits, medical and labor;
- increase in insurance expense of \$6,397 due to higher insurance claims;
- an asset impairment charge of \$4,695 to write down a portion of the right of use asset of our Regulated Natural Gas Segment's office space to fair value;
- increase in outside services of \$9,586;
- the prior year effect of net insurance proceeds of \$2,874 and a reduction in expenses in 2021 of \$690 associated with remediating an advisory for some of our water utility customers served by our Illinois subsidiary. We expect the expenses associated with remediating the advisory to continue into 2022; offset by
- decrease in COVID-19 pandemic related expenses of \$18,044 and decrease in charitable donations expense of \$14,014; and,
- the prior year effect of transaction expenses of \$25,397 in the first quarter of 2020 for the Peoples Gas Acquisition, primarily representing expenses associated with investment banking fees, employee related expenses, obtaining regulatory approvals, legal expenses, and integration planning.

Purchased gas increased by \$174,517 or 105.3% in 2021 compared to 2020. Purchased gas represents the cost of gas sold by Peoples for the regulated and non-regulated gas business and has a corresponding offset in revenue. This expense increased for the regulated natural gas business and non-regulated business by \$159,287 and \$15,230, respectively, as a result of the increase in natural gas prices and the timing of People's acquisition.

Depreciation and amortization expense increased by \$40,748 or 16.2% and \$145 or 2.6%, respectively, in 2021 over 2020, principally due to the timing of the Peoples Gas Acquisition, continued capital expenditures to expand and improve our utility facilities, our acquisitions of new utility systems, and additional rate case filings. Expenses associated with filing rate cases are deferred and amortized over periods that generally range from one to three years.

Taxes other than income taxes totaled \$86,641 in 2021, \$76,597 in 2020, and \$59,955 in 2019, and has increased by \$10,044 or 13.1% in 2021 as compared to 2020 principally due to the timing of the Peoples Gas Acquisition, increase in payroll taxes of \$2,736 and reclassification of regulatory fees and assessments previously recorded in Operations and maintenance expense of \$3,210.

Other expense, net - Interest expense was \$207,709 in 2021, \$188,435 in 2020, and 125,383 in 2019. Interest expense increased in 2021 primarily due to an increase in average borrowings, and interest on debt assumed in the Peoples Gas Acquisition, offset by a decrease in average interest rates. The weighted average cost of fixed rate long-term debt was 3.61% at December 31, 2021, 3.73% at December 31, 2020, and 4.09% at December 31, 2019. The weighted average cost of fixed and variable rate long-term debt was 3.49% at December 31, 2021, 3.56% at December 31, 2020, and 4.09% at December 31, 2019.

Interest income was \$2,384 in 2021, \$5,363 in 2020, and \$25,406 in 2019. The decrease in 2021 is primarily due to the utilization of the proceeds held from our 2019 equity and debt offerings to close the Peoples Gas Acquisition on March 16, 2020.

(In thousands of dollars, except per share amounts)

Allowance for funds used during construction (AFUDC) was \$20,792 in 2021, \$12,687 in 2020, and \$16,172 in 2019, and varies as a result of changes in the average balance of utility plant construction work in progress, to which AFUDC is applied, changes in the AFUDC rate which is based predominantly on short-term interest rates, changes in the balance of short-debt, and changes in the amount of AFUDC related to equity. The increase in 2021 is primarily due to an increase in the average balance of utility plant construction work in progress, to which AFUDC is applied. The amount of AFUDC related to equity was \$16,282 in 2021, \$8,253 in 2020, and \$11,941 in 2019.

Gain on sale of other assets totaled \$976 in 2021, \$661 in 2020, and \$923 in 2019, and consists of the sales of property, plant and equipment.

Equity loss (earnings) in joint venture was \$3,374 in 2020, and \$(2,210) in 2019. Our investment in the joint venture was sold in October 2020.

Other totaled \$(2,848) in 2021, \$(3,383) in 2020, and \$5,691 in 2019, and largely consists of the non-service cost component of our net benefit cost for pension benefits. In 2021, there was a higher return on assets than costs recognized which resulted to a net benefit for the year. The net benefit in 2020 is primarily due to a recovery of a previously incurred cost that resulted in the recognition of a regulatory asset based on the Company's recovery in a rate case.

Provision for income tax (benefit) - Our effective income tax rate was (2.3)% in 2021, (7.5)% in 2020, and (6.2)% in 2019. The Company's provision for income taxes represents an income tax benefit due to the effects of tax deductions recognized for certain qualifying infrastructure improvements for Aqua Pennsylvania and Peoples Natural Gas. The effective income tax rate increased in 2021 due to the increase in our income before income taxes of \$157,029, offset partially by the income tax benefit recognized as a result of tax deductions for qualifying infrastructure investments of Peoples Natural Gas. On March 31, 2020, we changed the method of tax accounting for certain qualifying infrastructure investments at Peoples Natural Gas, our largest natural gas subsidiary in Pennsylvania, which provided for a reduction to income tax expense of \$27,822 in 2020 and \$55,132 in 2021 due to the flow-through treatment of the current tax repair benefits.

Net income -

	Years ended December 31,		
	2021	2020	2019
Operating income	\$ 602,709	\$ 434,686	\$ 340,159
Net income	431,612	284,849	224,543
Diluted net income per share	1.67	1.12	1.04

The changes in diluted net income per share in 2021 over the previous year were due to the aforementioned changes.

While the importance to the future realization of improved profitability relies on continued adequate rate increases reflecting increased operating costs and new capital improvements, other factors such as transaction expenses for acquisitions will likely cause changes in operating income, net income and diluted net income per share.

Segment Results of Operations Comparison for 2021 and 2020

We have identified twelve operating segments, and we have two reportable segments based on the following:

- Eight segments are composed of our water and wastewater regulated utility operations in the eight states where we provide these services. These operating segments are aggregated into one reportable segment, Regulated Water, since each of these operating segments has the following similarities: economic characteristics, nature of services, production processes, customers, water distribution and/or wastewater collection methods, and the nature of the regulatory environment.

□ Our Regulated Natural Gas segment is composed of natural gas utility companies in three states acquired in the Peoples Gas Acquisition. These utilities provide natural gas distribution services, and their operating results subsequent to the March 16, 2020 acquisition date are reported in the Regulated Natural Gas segment.

□ Three segments are not quantitatively significant to be reportable and are composed of our non-regulated natural gas operations, Aqua Resources, and Aqua Infrastructure. These segments are included as a component of “Other,” in addition to corporate costs that have not been allocated to the Regulated Water and Regulated Natural Gas segments, because they would not be recoverable as a cost of utility service, and intersegment eliminations. Corporate costs include general and administrative expenses, and interest expense.

Regulated Water Segment

The following tables present the operating results and customers served for our Regulated Water segment, for and as of the year ended December 31,:

	2021	2020	2019	2021 vs. 2020	2020 vs. 2019
Sendout (in millions of gallons)					
Pennsylvania	42,198	41,683	42,074	515	(391)
Ohio	13,971	14,020	13,346	(49)	674
Illinois	8,764	8,651	8,712	113	(61)
Texas	7,212	7,393	6,937	(181)	456
North Carolina	5,984	5,780	5,727	204	53
Other states	6,191	6,299	6,113	(108)	186
Subtotal	84,320	83,826	82,909	494	917
Elimination	(154)	(65)	(65)	(89)	-
Total sendout by state	84,166	83,761	82,844	405	917

Utility customers:					
Residential water	842,200	832,902	822,817	9,298	10,085
Commercial water	42,864	42,535	41,892	329	643
Industrial water	1,331	1,338	1,339	(7)	(1)
Other water	17,932	18,561	18,984	(629)	(423)
Wastewater	162,478	151,965	141,672	10,513	10,293
Total water and wastewater utility customers	1,066,805	1,047,301	1,026,704	19,504	20,597

Operating revenues:					
Residential water	\$ 561,996	\$ 567,485	\$ 518,192	\$ (5,489)	\$ 49,293
Commercial water	151,071	143,479	145,599	7,592	(2,120)
Industrial water	30,230	29,764	30,667	466	(903)
Other water	89,472	67,712	72,942	21,760	(5,230)
Wastewater	132,316	121,117	105,204	11,199	15,913
Customer rate credits	-	(4,080)	-	4,080	(4,080)
Other utility	15,118	13,063	13,826	2,055	(763)
Total operating revenues	980,203	938,540	886,430	41,663	52,110
Operating expenses:					
Operations and maintenance expense	332,598	309,608	315,052	22,990	(5,444)
Depreciation and amortization	182,074	171,152	155,898	10,922	15,254
Taxes other than income taxes	63,264	60,505	59,955	2,759	550
Operating income	402,267	397,275	355,525	4,992	41,750
Other expense, net	81,931	91,001	81,872	(9,070)	9,129
Income before income taxes	320,336	306,274	273,653	14,062	32,621
Provision for income taxes (benefit)	26,633	22,481	(1,267)	4,152	23,748
Net income	\$ 293,703	\$ 283,793	\$ 274,920	\$ 9,910	\$ 8,873

(In thousands of dollars, except per share amounts)

Operating revenues - The growth in our Regulated Water segment's revenues over the past three years is primarily a result of increases in our water and wastewater rates and our customer base. Water and wastewater rate increases, including infrastructure rehabilitation surcharges, implemented during the past three years have provided additional operating revenues of \$27,421 in 2021, \$32,660 in 2020, \$55,658 in 2019. The number of customers increased at an annual compound rate of 2.0% over the past three years due to acquisitions and organic growth, adjusted to exclude customers associated with utility system dispositions. Acquisitions in our Regulated Water segment have provided additional water and wastewater revenues of \$6,750 in 2021, \$10,951 in 2020, and \$8,393 in 2019.

In 2021 and 2020, we experienced a decrease in water and wastewater revenues of \$1,146 and \$1,402, respectively, as a result of an advisory for some of our water utility customers served by our Illinois subsidiary, and do not expect the revenue impact to continue into 2022.

Associated with the approval of the Peoples Gas Acquisition from the Pennsylvania Public Utility Commission, the Company granted \$4,080 of customer rate credits to its water and wastewater customers in 2020. There were no water and wastewater customer rate credits issued in 2021.

Our Regulated Water segment also includes operating revenues of \$13,358 in 2021 and \$8,781 in 2020, and \$13,835 in 2019, associated with revenues earned primarily from fees received from telecommunication operators that have put cellular antennas on our water towers, fees earned from municipalities for our operation of their water or wastewater treatment services or to perform billing services, and fees earned from developers for accessing our water mains.

Operating expenses - Operations and maintenance expense for the year ended December 31, 2021 was \$332,598 compared to \$309,608 in the prior period. The increase of \$22,990 or 7.4% was primarily due to the following:

- costs related to the restoration and repair of facilities damaged by Hurricane Ida of \$2,820;
- increase in employee related costs of \$10,495 related to pension and post-retirement benefits, medical and labor
- increase in outside services of \$5,986; and,
- the prior year effect of net insurance proceeds of \$2,874 and a reduction in expenses in 2021 of \$690 associated with remediating an advisory for some of our water utility customers served by our Illinois subsidiary. We expect the expenses associated with remediating the advisory to continue into 2022; offset by
- the decrease in COVID-19 pandemic related expenses of \$2,366.

Depreciation and amortization increased by \$10,922 or 6.4% primarily due to continued capital spend.

Taxes other than income taxes increased by \$2,759 or 4.6%.

Other expense, net - Interest expense, net, increased by \$6,546 or 6.4% primarily due to the increase in average borrowings.

AFUDC increased by \$8,027 or 71.5% due to the increase in the average balance of utility plant construction work in progress, to which AFUDC is applied.

Other expense decreased by \$7,589, primarily due to the decrease in the non-service cost component of net pension and postretirement benefit cost in our Regulated Water segment. This is driven by improved investment returns as a result of favorable market experience from the prior period.

(In thousands of dollars, except per share amounts)

Regulated Natural Gas Segment

The following tables present the operating results and customers served for our Regulated Natural Gas segment, for the period since the acquisition date of March 16, 2020, for and as of the year ended December 31,:

	2021	2020 (a)	2021 vs. 2020
Gas utility customers:			
Residential gas	692,174	690,642	1,532
Commercial gas	59,595	59,424	171
Industrial gas	1,475	1,436	39
Total gas utility customers	<u>753,244</u>	<u>751,502</u>	<u>1,742</u>
Delivered volumes (thousand cubic feet)			
Residential gas	56,542,038	33,675,963	22,866,075
Commercial gas	33,403,899	20,082,555	13,321,344
Industrial gas	49,726,237	37,936,661	11,789,576
Total delivered volumes	<u>139,672,174</u>	<u>91,695,179</u>	<u>47,976,995</u>
Heating Degree Days (b)	<u>5,139</u>	<u>3,013</u>	<u>2,126</u>
Average Heating Degree Days (c)	<u>5,466</u>	<u>2,973</u>	<u>2,493</u>
Operating revenues:			
Residential gas	\$ 530,338	\$ 314,274	\$ 216,064
Commercial gas	99,596	50,239	49,357
Industrial gas	3,427	6,923	(3,496)
Gas transportation	198,195	133,685	64,510
Customer rate credits	(5,000)	(18,924)	13,924
Other utility	33,346	20,367	12,979
Total operating revenues	<u>859,902</u>	<u>506,564</u>	<u>353,338</u>
Operating expenses:			
Operations and maintenance expense	226,194	198,383	27,811
Purchased gas	313,390	154,103	159,287
Depreciation and amortization	113,238	84,201	29,037
Taxes other than income taxes	20,801	13,307	7,494
Operating income	<u>186,279</u>	<u>56,570</u>	<u>129,709</u>
Other expense, net	78,099	25,252	52,847
Income before income taxes	<u>108,180</u>	<u>31,318</u>	<u>76,862</u>
Income tax benefit	(40,013)	(25,133)	(14,880)
Net income	<u>\$ 148,193</u>	<u>\$ 56,451</u>	<u>\$ 91,742</u>

(a) Includes operating results since the completion of the Peoples Gas Acquisition on March 16, 2020.

(b) Unit of measure reflecting temperature-sensitive natural gas consumption, calculated by subtracting the average of a day's high and low temperatures from 65 degrees Fahrenheit.

(c) Based on historical twenty-year average heating degree days, as calculated from data provided by the National Weather Service for the same geographic location.

Operating revenues - Operating revenues from the Regulated Natural Gas segment increased by \$353,338 or 69.8% due to:

- increase of \$304,571 representing variance in the first quarter of 2021 versus first quarter of 2020 as a result of the timing of the Peoples Gas Acquisition in 2020;
- impact of higher gas cost of \$47,548 in 2021 as compared to 2020;
- higher average delivery and rider rates of \$5,272;
- prior year effect of customer rate credits of \$18,924 granted to our natural gas customers associated with the approval of the Peoples Gas Acquisition;
- and rate variance of \$3,346;

- offset by lower usage of \$13,664 due to warmer weather in 2021 as compared to 2020; \$11,124 credit to customers for tax repair catch-up; \$5,000 rate credit to customers with past-due accounts receivable; and an increased refund of the tax benefit associated with the Tax Cuts and Jobs Act of \$1,456.

Operating expenses - Operations and maintenance expense for the year ended December 31, 2021 increased by \$27,811 or 14.0% primarily due to the following:

- increase of \$42,503 representing variance in the first quarter of 2021 versus first quarter of 2020 as a result of the timing of the Peoples' acquisition in 2020;
- increases in employee related costs of \$1,918 and outside services expense of \$3,600;
- and an asset impairment charge of \$4,695 to write down a portion of the right of use asset of our Regulated Natural Gas Segment's office space to fair value;
- offset by decreases in COVID-19 pandemic related expenses of \$8,371 and a decrease of \$14,514 in charitable donations expense.

Our Regulated Natural Gas segment is affected by the cost of natural gas, which is passed through to customers using a purchased gas adjustment clause and includes commodity price, transportation and storage costs. These costs are reflected in the consolidated statement of operations and comprehensive income as purchased gas expenses. Therefore, fluctuations in the cost of purchased gas impact operating revenues on dollar-for-dollar basis but does not impact gross margin. Purchased gas increased by \$159,287 or 103.4% due to an increase in the price of natural gas in 2021 as compared to the prior year. Management uses gross margin, a non-GAAP financial measure, defined as operating revenues less purchased gas expense, to analyze the financial performance of our Regulated Natural Gas segment, as management believes gross margin provides a meaningful basis for evaluating our natural gas utility operations since purchased gas expenses are included in operating revenues and passed through to customers. The following table includes the reconciliation of gross margin (non-GAAP) to operating revenues (GAAP) for our Regulated Natural Gas segment for the period since the acquisition date of March 16, 2020:

	Years ended December 31,	
	2021	2020
Operating revenues (GAAP)	\$ 859,902	\$ 506,564
Purchased gas	313,390	154,103
Gross margin (non-GAAP)	\$ 546,512	\$ 352,461

The term gross margin is not intended to represent operating revenues, the most comparable GAAP financial measure, as an indicator of operating performance. In addition, our measurement of gross margin is not necessarily comparable to similarly titled measures reported by other companies.

Depreciation and amortization increased by \$29,037 or 34.5% primarily due to the timing of the Peoples Gas Acquisition and continued capital spend.

Taxes other than income taxes increased by \$7,494 or 56.3% mainly due to the timing of the Peoples Gas Acquisition and higher property tax expense.

Other expense, net - Interest expense, net, increased by \$46,612 or 160.6% for 2021 compared to 2020 due to additional borrowings pushed down by Parent.

AFUDC increased by \$78 or 5.4% due to the increase in the average balance of utility plant construction work in progress, to which AFUDC is applied.

Other expense increased by \$6,313 due to the non-service cost component of our net benefit cost for pension and post-retirement benefits.

(In thousands of dollars, except per share amounts)

LIQUIDITY AND CAPITAL RESOURCES**Consolidated Cash Flow and Capital Expenditures**

Net operating cash flows, dividends paid on common stock, capital expenditures, including allowances for funds used during construction, and expenditures for acquiring utility systems for the three years ended December 31, 2021, 2020 and 2019 were as follows:

	Net Operating Cash Flows	Dividends	Capital Expenditures	Acquisitions
2019	338,523	188,512	550,273	59,687
2020	508,024	232,571	835,642	3,501,835
2021	644,679	258,650	1,020,519	36,326
	\$ 1,491,226	\$ 679,733	\$ 2,406,434	\$ 3,597,848

Net cash flows from operating activities increased primarily due to higher net income resulting from full year of Peoples' operating results in 2021 compared to nine and a half months in 2020. Net cash flows from operating activities increased from 2019 to 2020 primarily due to the prior year effect of the 2019 payment for the settlement of the interest rate swap agreements of \$83,520, and an increase in net income.

Included in capital expenditures for the three year period are: expenditures for the rehabilitation of existing utility systems, the expansion of our utility systems, modernization and replacement of existing treatment facilities, meters, office facilities, information technology, vehicles, and equipment. During this three year period, we received \$33,941 of customer advances and contributions in aid of construction to finance new utility mains and related facilities that are not included in the capital expenditures presented in the above table. In addition, during this period, we have made repayments of debt, which includes the net effect of borrowings and repayments under our long-term revolving credit facility, of \$2,571,586 and have refunded \$22,887 of customers' advances for construction. Dividends increased during the past three years as a result of annual increases in the dividends declared and paid and increases in the number of shares outstanding.

Our planned 2022 capital program, excluding the costs of new mains financed by advances and contributions in aid of construction is estimated to be approximately \$1,000,000 in infrastructure improvements for the communities we serve. The 2022 capital program is expected to include \$618,200 for infrastructure rehabilitation surcharge qualified projects. Our planned 2022 capital program in Pennsylvania for our water and natural gas utilities is estimated to be approximately \$709,600, a portion of which is expected to be eligible as a deduction for qualifying utility asset improvements for Federal income tax purposes. Our overall 2022 capital program along with \$132,146 of debt repayments and \$428,319 of other contractual cash obligations, as reported in the section captioned "Management's Discussion and Analysis of Financial Condition and Results of Operations – *Contractual Obligations*", has been, or is expected to be, financed through internally-generated funds, our revolving credit facilities, and the issuance of long-term debt.

Future utility construction in the period 2023 through 2024, including recurring programs, such as the ongoing replacement or rehabilitation of utility meters and mains, water treatment plant upgrades, storage facility renovations, pipes, service lines, and additional transmission mains to meet customer demands, excluding the costs of new mains financed by advances and contributions in aid of construction, is estimated to require aggregate expenditures of approximately \$1,940,000. We anticipate that approximately less than one-half of these expenditures will require external financing. We expect to refinance \$576,580 of long-term debt during this period as it becomes due with new issues of long-term debt, internally-generated funds, and our revolving credit facilities. The estimates discussed above do not include any amounts for possible future acquisitions of utility systems or the financing necessary to support them.

Our primary sources of liquidity are cash flows from operations (including the allowed deferral of Federal income tax payments), borrowings under various short-term lines of credit and other credit facilities, and customer advances and contributions in aid of construction. Our cash flow from operations, or internally-generated funds, is impacted by the timing of rate relief, utility operating revenues, and changes in Federal tax laws, and accelerated tax depreciation or deductions for utility construction projects. We fund our capital and typical acquisitions through internally-generated funds, supplemented by short-term lines of credit. Over time, we partially repay or pay-down our short-term lines of credit with long-term debt. In 2020, we financed a portion of the Peoples Gas Acquisition purchase price, and refinanced certain debt of the Company, with a mix of common equity, equity-linked securities, and debt financing, which included senior notes issued in capital markets transactions, and credit facilities. The ability to finance our future construction programs, as well as our acquisition activities, depends on our ability to attract the necessary external debt and equity financing and maintain internally-generated funds. Timely rate orders permitting compensatory rates of return on invested capital will be required by our operating subsidiaries to achieve an adequate level of earnings and cash flow to enable them to secure the capital they will need to operate and to maintain satisfactory debt coverage ratios.

Acquisitions

As part of the Company's growth-through-acquisition strategy, as of December 31, 2021, the Company has entered into purchase agreements to acquire the water or wastewater utility system assets of seven municipalities and a private company for a total combined purchase price in cash of \$471,000. The purchase price for these pending acquisitions is subject to certain adjustments at closing, and the pending acquisitions are subject to regulatory approvals, including the final determination of the fair value of the rate base acquired. Closings for these acquisitions are expected to occur through 2023, which is subject to the timing of the various regulatory approval processes. These acquisitions are expected to add approximately 235,000 equivalent retail customers in three of the states in which the Company operates.

In August 2021, the Company acquired the water utility system assets of The Commons Water Supply, Inc., which serves 992 customers in Harris County, Texas, and the wastewater utility system assets of the Village of Bourbonnais, which serves approximately 6,500 customers in Kankakee County, Illinois. The total cash purchase prices for these utility systems were \$4,000 and \$32,100, respectively.

On March 16, 2020, the Company completed the Peoples Gas Acquisition, which expanded the Company's regulated utility business to include natural gas distribution, serving approximately 750,000 natural gas utility customers in western Pennsylvania, West Virginia and Kentucky. The Company paid cash consideration of \$3,465,344, which was subject to adjustment based upon the terms of the purchase agreement. The Company financed this acquisition through the April 2019 issuances of \$1,293,750 of common stock, \$900,000 of senior notes (of which \$436,000 was for this acquisition), \$690,000 of tangible equity units, and the issuance of \$750,000 of common stock through a private placement, and borrowings on our revolving credit facility. Additionally, during 2020, we completed six acquisitions of water and wastewater utility systems for \$63,279 in cash in three of the states in which we operate, adding 10,585 customers.

In December 2019, the Company acquired the wastewater utility system assets of Cheltenham Township, Pennsylvania, which serves 9,887 customers. The total cash purchase price for the utility system was \$50,250. The purchase price allocation for this acquisition consisted primarily of acquired property, plant and equipment of \$44,558 and goodwill of \$5,692. Additionally, during 2019, we completed seven acquisitions of water and wastewater utility systems for \$9,437 in cash in four of the states in which we operate, adding 2,393 customers. Refer to Note 2 – *Acquisitions* in this Annual Report for additional information.

Excluding the Peoples Gas Acquisition, during the past three years, we have expended cash of \$159,292 related to the acquisition of both water and wastewater utility systems. We continue to pursue the acquisition of water and wastewater utility systems and explore other utility acquisitions that may be in a new state. Our typical acquisitions are expected to be financed with short-term debt with subsequent repayment from the proceeds of long-term debt, retained earnings, or equity issuances.

Dispositions

We routinely review and evaluate areas of our business and operating divisions and, over time, may sell utility systems or portions of systems. In 2019, the Company sold a water system in Virginia that served approximately 500 customers, which resulted in proceeds of \$1,882, and recognized a gain on sale of \$405.

In October 2020, the Company also sold its investment in a joint venture. Its investment represented its 49% investment in a joint venture that operates a private pipeline system to supply raw water to natural gas well drilling operations in the Marcellus Shale of north central Pennsylvania, and recorded a charge of \$3,700 associated with the sale. Refer to Note 3 – *Dispositions* in this Annual Report for additional information.

Sources of Capital

Since net operating cash flow plus advances and contributions in aid of construction have not been sufficient to fully fund our cash requirements including capital expenditures and our growth through acquisitions program, which included financings for a portion of the Peoples Gas Acquisition, we issued \$5,979,914 of long-term debt, and obtained other short-term borrowings during the past three years. At December 31, 2021, we have a \$1,000,000 long-term revolving credit facility that expires in December 2023, of which \$20,922 was designated for letter of credit usage, \$679,078 was available for borrowing, and \$300,000 of borrowings were outstanding at December 31, 2021. In addition, we have short-term lines of credit of \$235,500 of which \$170,500 was available as of December 31, 2021. Included in the short-term lines of credit is an Aqua Pennsylvania \$100,000 364 day unsecured revolving credit facility and a Peoples Natural Gas \$100,000 364 day unsecured revolving credit facility. These short-term lines of credit are subject to renewal on an annual basis. Although we believe we will be able to renew these facilities, there is no assurance that they will be renewed, or what the terms of any such renewal will be.

On April 15, 2021, our operating subsidiary, Aqua Ohio, Inc., issued \$100,000 of first mortgage bonds, of which \$50,000 is due in 2031 and \$50,000 is due in 2051, with interest rates of 2.37% and 3.35%, respectively. The proceeds from these bonds were used for general corporate purposes and to repay existing indebtedness. Further, on April 19, 2021, the Company issued \$400,000 of long-term debt, with expenses of \$4,010, which is due in 2031 with an interest rate of 2.40%. The Company used the proceeds from this issuance to repay \$50,000 of borrowings under the Aqua Pennsylvania revolving credit facility, and the balance was used to repay in full the borrowings under its existing five-year unsecured revolving credit agreement.

In August 2020, we entered into a forward equity sale agreement for 6,700,000 shares of common stock with a third party (the “forward purchaser”). In connection with the forward equity sale agreement, the forward purchaser borrowed an equal number of shares of our common stock from stock lenders and sold the borrowed shares to the public. We did not receive any proceeds from the sale of our common stock by the forward purchaser until settlement of the forward equity sale agreement. On August 9, 2021, the Company settled the forward equity sale agreement in full by physical share settlement. The Company issued 6,700,000 shares and received cash proceeds of \$299,739 at a forward price of \$44.74 per share. Pursuant to the agreement, the forward price was computed based upon the initial forward price of \$46.00 per share, adjusted for a floating interest rate factor equal to a specified daily rate less a spread and scheduled dividends during the term of the agreement. The Company used the proceeds received upon settlement of the forward equity sale agreement to fund general corporate purposes, including for water and wastewater acquisitions, working capital and capital expenditures. The forward equity sale agreement has now been completely settled, and there are no additional shares subject to the forward equity sale agreement.

On March 29, 2019, the Company entered into a Stock Purchase Agreement (the Stock Purchase Agreement) with Canada Pension Plan Investment Board (the Investor), pursuant to which the Company agreed to issue and sell to the Investor in a private placement (the Private Placement) 21,661,095 newly issued shares of common stock, par value \$0.50 per share (the Common Stock). On March 16, 2020, in connection with the closing of the Peoples Gas Acquisition, the Company closed on the Private Placement and received gross proceeds of \$749,907, less expenses of \$20,606. In June 2021, the Company filed a registration statement on Form S-3 ASR registering the Private Placement shares for resale. Refer to Note 13 – *Stockholders’ Equity* in this Annual Report for further information.

Our consolidated balance sheet historically has had a negative working capital position, whereby routinely our current liabilities exceed our current assets. Management believes that internally-generated funds along with existing credit facilities and the proceeds from the issuance of long-term debt and common equity will be adequate to provide sufficient working capital to maintain normal operations and to meet our financing requirements for at least the next twelve months.

Our loan and debt agreements require us to comply with certain financial covenants, which among other things, subject to specific exceptions, limit the Company's ratio of consolidated total indebtedness to consolidated total capitalization, and require a minimum level of earnings coverage over interest expense. During 2021, we were in compliance with our debt covenants under our credit facilities. Failure to comply with our debt covenants could result in an event of default, which could result in us being required to repay or refinance our borrowings before their due date, possibly limiting our future borrowings, and increasing our borrowing costs.

In April 2021, the Company filed a universal shelf registration statement through a filing with the SEC to allow for the potential future offer and sale by the Company, from time to time, in one or more public offerings, of an indeterminate amount of our common stock, preferred stock, debt securities, and other securities specified therein at indeterminate prices. In April 2019, March 2020 and August 2020, we issued common stock, including common stock in connection with a forward equity sale agreement, long-term debt and tangible equity units in several offerings under this shelf registration statement. Refer to Note 11 – *Long-term Debt and Loans Payable* and Note 13 – *Stockholders' Equity* in this Annual Report for further information regarding these financings.

In addition, we have an acquisition shelf registration statement, which was filed with the SEC on February 27, 2015, to permit the offering from time to time of an aggregate of \$500,000 of our common stock and shares of preferred stock in connection with acquisitions. During 2016, we issued 439,943 shares of common stock totaling \$12,845 to acquire a water system. The balance remaining available for use under the acquisition shelf registration as of December 31, 2021 is \$487,155.

We will determine the form and terms of any further securities issued under the universal shelf registration statement and the acquisition shelf registration statement at the time of issuance.

We offer a Dividend Reinvestment and Direct Stock Purchase Plan (the Plan) that provides a convenient and economical way to purchase shares of the Company. Under the direct stock purchase portion of the Plan, shares are issued throughout the year. The dividend reinvestment portion of the Plan offers a five percent discount on the purchase of shares of common stock with reinvested dividends. As of the December 2021 dividend payment, holders of 5.8% of the common shares outstanding participated in the dividend reinvestment portion of the Plan. The shares issued under the Plan are either original issue shares or shares purchased by the Company's transfer agent in the open-market. During the past three years, we have sold 1,000,468 original issue shares of common stock for net proceeds of \$42,280 through the dividend reinvestment portion of the Plan, and we used the proceeds to invest in our operating subsidiaries, to repay short-term debt, and for general corporate purposes. In 2021, 2020 and 2019, we sold 374,824, 388,978 and 236,666 original issues shares of common stock for net proceeds of \$16,799, \$16,522 and \$8,959, respectively, through the dividend reinvestment portion of the plan. In 2019, 183,731 shares of common stock were purchased under the dividend reinvestment portion of the Plan by the Company's transfer agent in the open-market for \$7,777.

Off-Balance Sheet Financing Arrangements

We do not engage in any off-balance sheet financing arrangements. We do not have any interest in entities referred to as variable interest entities, which includes special purpose entities and other structured finance entities. For risk management purposes, the Company has used interest rate swap agreements. Refer to Note 11 – *Long-term Debt and Loans Payable* in this Annual Report for further information regarding these agreements.

(In thousands of dollars, except per share amounts)

Contractual Obligations

The following table summarizes our contractual cash obligations as of December 31, 2021:

	Payments Due By Period				
	Total	Less than 1 year	1 - 3 years	3 - 5 years	More than 5 years
Long-term debt	\$ 5,947,357	\$ 132,146	\$ 576,580	\$ 173,328	\$ 5,065,303
Interest on fixed-rate, long-term debt (1)	194,374	3,880	15,968	8,302	166,224
Operating leases (2)	71,243	9,730	18,301	15,692	27,520
Unconditional purchase obligations (3)	16,914	4,535	7,497	4,551	331
Gas purchase obligations (4)	3,045,125	271,168	508,699	505,417	1,759,841
Other purchase obligations (5)	113,299	113,299	-	-	-
Pension plan obligations (6)	20,390	20,390	-	-	-
Other obligations (7)	19,837	5,317	6,384	4,550	3,586
Total	\$ 9,428,539	\$ 560,465	\$ 1,133,429	\$ 711,840	\$ 7,022,805

(1) Represents interest payable on fixed rate, long-term debt. Amounts reported may differ from actual due to future refinancing of debt.

(2) Represents minimum lease payments for long-term operating leases of land, office facilities, office equipment, and vehicles.

(3) Represents our commitment to purchase minimum quantities of water as stipulated in agreements with other water purveyors. We use purchased water to supplement our water supply, particularly during periods of peak customer demand. Our actual purchases may exceed the minimum required levels.

(4) Represents our commitment to purchase minimum quantities of natural gas stipulated in agreements with various producers of natural gas to meet regulated customers' natural gas requirements.

(5) Represents an approximation of the open purchase orders for goods and services purchased in the ordinary course of business.

(6) Represents contributions to be made to the Company's retirement plans.

(7) Represents expenditures estimated to be required under legal and binding contractual obligations.

In addition to the contractual obligations table above, we have the following obligations:

Refunds of customer's advances for construction - We pay refunds on customers' advances for construction over a specific period of time based on operating revenues related to developer-installed utility mains or as new customers are connected to and take service from such mains. After all refunds are paid, any remaining balance is transferred to contributions in aid of construction. The refund amounts are not included in the above table because the refund amounts and timing are dependent upon several variables, including new customer connections, customer consumption levels and future rate increases, which cannot be accurately estimated. Portions of these refund amounts are payable annually through 2030 and amounts not paid by the contract expiration dates become non-refundable.

Asset Retirement Obligations - We recognize asset retirement obligations associated with retirements of production, storage wells and other pipeline components at fair value, as incurred, or when sufficient information becomes available to determine a reasonable estimate of the fair value of the retirement activities to be performed. Expected obligations are not included in the above table because the amounts and timing are dependent upon several variables, which cannot be accurately estimated.

(In thousands of dollars, except per share amounts)

- *Uncertain tax positions* - We have uncertain tax positions of \$20,201. Although we believe our tax positions comply with applicable law, we have made judgments as to the sustainability of each uncertain tax position based on its technical merits. Due to the uncertainty of future cash outflows, if any, associated with our uncertain tax positions, we are unable to make a reasonable estimate of the timing or amounts that may be paid. See Note 7 – *Income Taxes* in this Annual Report for further information on our uncertain tax positions.

We will fund these contractual obligations with cash flows from operations and liquidity sources held by or available to us.

The Company is routinely involved in legal matters, including both asserted and unasserted legal claims, during the ordinary course of business. See Note 9 – *Commitments and Contingencies* in this Annual Report for a discussion of the Company’s legal matters. It is not always possible for management to make a meaningful estimate of the potential loss or range of loss associated with such litigation. Also, unanticipated changes in circumstances and/or revisions to the assessed probability of the outcomes of legal matters could result in expenses being incurred in future periods as well as an increase in actual cash required to resolve the legal matter.

Capitalization

The following table summarizes our capitalization as of December 31, 2021 and 2020:

December 31,	2021	2020
Long-term debt (1)	53.4%	54.6%
Essential Utilities stockholders' equity	46.6%	45.4%
	100.0%	100.0%

- (1) Includes current portion, as well as our borrowings under a variable rate revolving credit agreement of \$300,000 at December 31, 2021, \$385,000 at December 31, 2020.

Over the past two years, the changes in the capitalization ratios primarily resulted from the issuance of debt to finance our acquisitions and capital program, changes in net income, the issuance of common stock, and the declaration of dividends.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our financial condition and results of operations are impacted by the methods, assumptions, and estimates used in the application of critical accounting policies. The following accounting policies are particularly important to our financial condition or results of operations and require estimates or other judgments of matters of uncertainty. Changes in the estimates or other judgments included within these accounting policies could result in a significant change to the financial statements. We believe our most critical accounting policies include the use of regulatory assets and liabilities, revenue recognition, the valuation of our long-lived assets (which consist primarily of utility plant in service, regulatory assets, and goodwill), our accounting for post-retirement benefits, and our accounting for income taxes. We have discussed the selection and development of our critical accounting policies and estimates with the Audit Committee of the Board of Directors.

Regulatory Assets and Liabilities — We defer costs and credits on the balance sheet as regulatory assets and liabilities when it is probable that these costs and credits will be recognized in the rate-making process in a period different from when the costs and credits were incurred. These deferred amounts, both assets and liabilities, are then recognized in the consolidated statement of operations in the same period that they are reflected in our rates charged for utility service. We make significant judgments and estimates to record regulatory assets and liabilities, such as for amounts related to income taxes, pension and postretirement benefits, acquisitions and capital projects. For each regulatory jurisdiction with regulated operations, we evaluate at the end of each reporting period, whether the regulatory assets and liabilities continue to meet the probable criteria for future recovery or refund. The evaluation considers factors such as regulatory orders or guidelines, in the same regulatory jurisdiction, of a specific matter or a similar matter, as provided to us in the past or to other regulated utilities. In addition, the evaluation may be impacted by changes in the regulatory environment and pending or new legislation that could impact the ability to recover costs through regulated rates. There may be multiple participants to rate or transactional regulatory proceedings who might offer different views on various aspects of such proceedings, and in these instances may challenge our prudence of business policies and practices, seek cost disallowances or request other relief.

In the event that our assessment as to the probability of the inclusion in the rate-making process is incorrect, the associated regulatory asset or liability would be adjusted to reflect the change in our assessment or change in regulatory approval.

Revenue Recognition — Our utility revenues recognized in an accounting period include amounts billed to customers on a cycle basis and unbilled amounts based on estimated usage from the last billing to the end of the accounting period. The estimated usage is based on our judgment and assumptions; our actual results could differ from these estimates, which would result in operating revenues being adjusted in the period that the revision to our estimates is determined.

In Virginia, North Carolina, and Kentucky, we may bill our utility customers, in certain circumstances, in accordance with a rate filing that is pending before the respective regulatory commission, which would allow interim rates before the final commission rate order is issued. The revenue recognized reflects an estimate based on our judgment of the final outcome of the commission's ruling. We monitor the applicable facts and circumstances regularly and revise the estimate as required. The revenue billed and collected prior to the final ruling is subject to refund based on the commission's final ruling.

Valuation of Long-Lived Assets, Goodwill and Intangible Assets — We review our long-lived assets for impairment, including utility plant in service and investment in joint venture. We also review regulatory assets for the continued application of the FASB accounting guidance for regulated operations. Our review determines whether there have been changes in circumstances or events, such as regulatory disallowances, or abandonments, that have occurred that require adjustments to the carrying value of these assets. Adjustments to the carrying value of these assets would be made in instances where their inclusion in the rate-making process is unlikely. For utility plant in service, we would recognize an impairment loss for any amount disallowed by the respective utility commission.

Our long-lived assets, which consist primarily of utility plant in service, operating lease right-of-use assets and intangible assets, are reviewed for impairment when changes in circumstances or events occur. These circumstances or events could include a decline in the market value or physical condition of a long-lived asset, an adverse change in the manner in which long-lived assets are used or planned to be used, a change in historical trends, operating cash flows associated with the long-lived assets, changes in macroeconomic conditions, industry and market conditions, or overall financial performance. When these circumstances or events occur, we determine whether it is more likely than not that the fair value of those assets is less than their carrying amount. If we determine that it is more likely than not (that is, the likelihood of more than 50 percent), we would recognize an impairment charge if it is determined that the carrying amount of an asset exceeds the sum of the undiscounted estimated cash flows. In this circumstance, we would recognize an impairment charge equal to the difference between the carrying amount and the fair value of the asset. Fair value is estimated to be the present value of future net cash flows associated with the asset, discounted using a discount rate commensurate with the risk and remaining life of the asset. This assessment requires significant management judgment and estimates that are based on budgets, general strategic business plans, historical trends and other data and relevant factors. These estimates include significant inherent uncertainties, since they involve forecasting future events. If changes in circumstances or events occur, or estimates and assumptions that were used in this review are changed, we may be required to record an impairment charge on our long-lived assets. During the year ended December 31, 2021, the Company recorded an impairment loss to write down a portion of the operating lease right-of-use asset for office space not used in operations. Refer to Note 1 – *Summary of Significant Accounting Policies – Impairment of Long-Lived Assets* in this Annual Report for additional information regarding the review of long-lived assets for impairment.

We test the goodwill attributable for each of our reporting units for impairment at least annually on July 31, or more often, if circumstances indicate a possible impairment may exist. When testing goodwill for impairment, we may assess qualitative factors, including macroeconomic conditions, industry and market considerations, cost factors, overall financial performance, and entity specific events, for some or all of our reporting units to determine whether it's more likely than not that the fair value of a reporting unit is less than its carrying amount. Alternatively, based on our assessment of the qualitative factors previously noted, or at our discretion, we may perform a quantitative goodwill impairment test by determining the fair value of a reporting unit by weighting the results from the income approach and the market approach. These valuation approaches consider a number of factors that include, but are not limited to, prospective financial information, growth rates, terminal value, discount rates, and comparable multiples from publicly traded companies in our industry and require us to make certain assumptions and estimates regarding industry economic factors and future profitability of our business. If we perform a quantitative test and determine that the fair value of a reporting unit is less than its carrying amount, we would record an impairment loss for the amount by which a reporting unit's carrying amount exceeds its fair value, not to exceed the carrying amount of goodwill. The assessment requires significant management judgment and estimates that are based on budgets, general strategic business plans, historical trends and other data and relevant factors. If changes in circumstances or events occur, or estimates and assumptions that were used in our impairment test change, we may be required to record an impairment charge for goodwill. Refer to Note 1 – *Summary of Significant Accounting Policies – Goodwill* in this Annual Report for information regarding the results of our annual impairment test.

Accounting for Post-Retirement Benefits — We maintain a qualified and a non-qualified defined benefit pension plan and plans that provide for post-retirement benefits other than pensions. Accounting for pension and other post-retirement benefits requires an extensive use of assumptions including the discount rate, expected return on plan assets, the rate of future compensation increases received by our employees, mortality, turnover and medical costs. Each assumption is reviewed annually with assistance from our actuarial consultant, who provides guidance in establishing the assumptions. The assumptions are selected to represent the average expected experience over time and may differ in any one year from actual experience due to changes in capital markets and the overall economy. These differences will impact the amount of pension and other post-retirement benefits expense that we recognize.

Our discount rate assumption, which is used to calculate the present value of the projected benefit payments of our post-retirement benefits, was determined by selecting a hypothetical portfolio of high quality corporate bonds appropriate to match the projected benefit payments of the plans. The selected bond portfolio was derived from a universe of Aa-graded corporate bonds. The discount rate was then developed as the rate that equates the market value of the bonds purchased to the discounted value of the projected benefit payments of the plans. A decrease in the discount rate would generally increase our post-retirement benefits expense and benefit obligation. After reviewing the hypothetical portfolio of bonds, we selected a discount rate of 2.91% for our pension plan, and 2.96% for our other post-retirement benefit plans as of December 31, 2021, which represent a 34 and 28 basis-point increase as compared to the discount rates selected at December 31, 2020, respectively. Our post-retirement benefits expense under these plans is determined using the discount rate as of the beginning of the year, which was 2.57% for our pension plan and 2.68% for our other-postretirement benefit plan for 2021, and will be 2.91% for our pension plan, and 2.96% for our other post-retirement benefit plans for 2022.

Our expected return on plan assets is determined by evaluating the asset class return expectations with our advisors as well as actual, long-term, historical results of our asset returns. The Company's market-related value of plan assets is equal to the fair value of the plans' assets as of the last day of its fiscal year and is a determinant for the expected return on plan assets, which is a component of post-retirement benefits expense. The allocation of our plans' assets impacts our expected return on plan assets. The expected return on plan assets is based on a targeted allocation of 50% to 70% return seeking assets and 30% to 50% liability hedging assets. Our post-retirement benefits expense increases as the expected return on plan assets decreases. We believe that our actual long-term asset allocations on average will approximate our targeted allocations. Our targeted allocations are driven by our investment strategy to earn a reasonable rate of return while maintaining risk at acceptable levels through the diversification of investments across and within various asset categories. For 2021, we used a 5.6% expected return on plan assets assumption, and are currently reviewing this assumption for 2022 and expect it may decrease slightly in 2022.

Funding requirements for qualified defined benefit pension plans are determined by government regulations and not by accounting pronouncements. In accordance with funding rules and our funding policy, during 2022 our pension contribution is expected to be \$20,390. Future years' contributions will be subject to economic conditions, plan participant data and the funding rules in effect at such time as the funding calculations are performed, though we expect future changes in the amount of contributions and expense recognized to be generally included in customer rates.

Accounting for Income Taxes — We estimate the amount of income tax payable or refundable for the current year and the deferred income tax liabilities and assets that results from estimating temporary differences resulting from the treatment of specific items, such as depreciation, for tax and financial statement reporting. Generally, these differences result in the recognition of a deferred tax asset or liability on our consolidated balance sheet and require us to make judgments regarding the probability of the ultimate tax impact of the various transactions we enter into. Based on these judgments, we may record tax reserves or adjustments to valuation allowances on deferred tax assets to reflect the expected realization of future tax benefits. Actual income taxes could vary from these estimates and changes in these estimates can increase income tax expense in the period that these changes in estimates occur.

Our determination of what qualifies as a capital cost versus a tax deduction, for qualifying utility asset improvements, as it relates to our income tax accounting method, is subject to subsequent adjustment as well as IRS audits, changes in income tax laws, including regulations regarding tax-basis depreciation as it applies to our capital expenditures, or qualifying utility asset improvements, the expiration of a statute of limitations, or other unforeseen matters could impact the tax benefits that have already been recognized. We establish reserves for uncertain tax positions based upon management's judgment as to the sustainability of these positions. These accounting estimates related to the uncertain tax position reserve require judgments to be made as to the sustainability of each uncertain tax position based on its technical merits. We believe our tax positions comply with applicable law and that we have adequately recorded reserves as required. However, to the extent the final tax outcome of these matters is different than our estimates recorded, we would then need to adjust our tax reserves which could result in additional income tax expense or benefits in the period that this information is known.

IMPACT OF RECENT ACCOUNTING PRONOUNCEMENTS

We describe the impact of recent accounting pronouncements in Note 1 – *Summary of Significant Accounting Policies* in this Annual Report.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are subject to market risks in the normal course of business, including changes in interest rates, gas commodity prices and equity prices. Volatile equity market conditions arising from the COVID-19 pandemic may result in our pension and other post-retirement plans' assets market values suffering a decline, which could increase our required cash contributions to the plans and expense in subsequent years. The exposure to changes in interest rates is a result of financings through the issuance of fixed rate long-term debt. Such exposure is typically related to financings between utility rate increases, since generally our rate increases include a revenue level to allow recovery of our current cost of capital. Interest rate risk is managed through the use of a combination of long-term debt, which is at fixed interest rates; short-term debt, which is at floating interest rates; and at times in the past interest rate swap agreements. As of December 31, 2021, the debt maturities by period, in thousands of dollars, and the weighted average interest rate for long-term debt are as follows:

	2022	2023	2024	2025	2026	Thereafter	Total	Fair Value
Long-term debt:								
Fixed rate	\$ 132,146	\$ 207,262	\$ 69,318	\$ 151,848	\$ 21,480	5,065,303	\$ 5,647,357	\$ 6,182,499
Variable rate	-	300,000	-	-	-	-	300,000	300,000
Total	\$ 132,146	\$ 507,262	\$ 69,318	\$ 151,848	\$ 21,480	\$ 5,065,303	\$ 5,947,357	\$ 6,482,499
Weighted average interest rate	3.03%	2.45%	4.05%	5.05%	7.38%	3.36%	3.49%	

From time to time, we make investments in marketable equity securities. As a result, we are exposed to the risk of changes in equity prices for the marketable equity securities. As of December 31, 2021, we have assets of, in thousands of dollars, \$28,576 to fund our deferred compensation and non-qualified pension plan liabilities. The market risk of the deferred compensation plan assets are borne by the participants in the deferred compensation plan.

In October 2018, the Company entered into interest rate swap agreements to mitigate interest rate risk associated with our debt issuances to fund a portion of the Peoples Gas Acquisition. The interest rate swaps were settled in April 2019 upon issuance of the debt used to finance a portion of the purchase price of this acquisition. The interest rate swap agreements did not qualify for hedge accounting and any changes in the fair value of the swaps was included in our earnings. The interest rate swap agreements were classified as financial derivatives used for non-trading activities.

Our natural gas commodity price risk, driven mainly by price fluctuations of natural gas, is mitigated by our purchased-gas cost adjustment mechanisms. We also use derivative instruments to economically hedge the cost of anticipated natural gas purchases during the winter heating months that seeks to offset the risk to our customers from upward market price volatility. These instruments include requirements contracts and spot purchase contracts to meet our regulated customers' natural gas requirements and these instruments may have fixed or variable pricing. The variable price contracts qualify as derivative instruments; however, because the contract price is the prevailing price at the future transaction date the contract has no determinable fair value. The fixed price contracts and firm commitments to purchase a fixed quantity of gas in the future qualify for the normal purchases and normal sales exception that is allowed for contracts that are probable of delivery in the normal course of business and, as such, are accounted for under the accrual basis and not recorded at fair value in the Company's consolidated financial statements. We also manage gas commodity price risk and supply risk by injecting natural gas into storage during the summer months and withdrawing the natural gas during the winter heating season.

Item 8. *Financial Statements and Supplementary Data*

Index to Consolidated Financial Statements

	<u>Page Number</u>
Report of Independent Registered Public Accounting Firm (PCAOB ID 238)	65
Consolidated Balance Sheets – December 31, 2021 and 2020	67
Consolidated Statements of Operations and Comprehensive Income – 2021, 2020, and 2019	69
Consolidated Statements of Capitalization – December 31, 2021 and 2020	70
Consolidated Statements of Equity – December 31, 2021, 2020, and 2019	71
Consolidated Statements of Cash Flows – 2021, 2020, and 2019	71
Notes to Consolidated Financial Statements	73

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Essential Utilities, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets, including the consolidated statements of capitalization, of Essential Utilities, Inc. and its subsidiaries (the "Company") as of December 31, 2021 and 2020, and the related consolidated statements of operations and comprehensive income, of equity, and of cash flows for each of the three years in the period ended December 31, 2021, including the related notes and schedule of condensed parent company financial statements as of December 31, 2021 and 2020 and for each of the three years in the period ended December 31, 2021 appearing after the signature pages (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Accounting for Rate Regulation

As described in Notes 1 and 6 to the consolidated financial statements, most of the operating companies of the Company that are regulated public utilities are subject to regulation by the utility commissions of the states in which they operate. Some of the operating companies that are regulated public utilities are subject to rate regulation by county or city government. As of December 31, 2021, regulatory assets were \$1.4 billion and regulatory liabilities were \$0.8 billion. Regulated public utilities follow the Financial Accounting Standards Board's accounting guidance for regulated operations, which provides for the recognition of regulatory assets and liabilities as allowed by regulators for costs or credits that are reflected in current rates or are considered probable of being included in future rates. The regulatory assets represent costs that are probable to be fully recovered from customers in future rates while regulatory liabilities represent amounts that are expected to be refunded to customers in future rates or amounts recovered from customers in advance of incurring the costs. The regulatory assets or liabilities are then relieved as the cost or credit is reflected in the Company's rates charged for utility service. If, as a result of a change in circumstances, it is determined that a regulated operating company no longer meets the criteria to apply regulatory accounting, the operating company would have to discontinue regulatory accounting and write-off the respective regulatory assets and liabilities. Management makes significant judgments and estimates to record regulatory assets and liabilities. For each regulatory jurisdiction with regulated operations, management evaluates at the end of each reporting period, whether the regulatory assets and liabilities continue to meet the probable criteria for future recovery or refund. The evaluation considers factors such as regulatory orders or guidelines, in the same regulatory jurisdiction, of a specific matter or a similar matter, as provided to the Company in the past or to other regulated utilities. In addition, the evaluation may be impacted by changes in the regulatory environment and pending or new legislation that could impact the ability to recover costs through regulated rates. There may be multiple participants to rate or transactional regulatory proceedings who might offer different views on various aspects of such proceedings, and in these instances, may challenge the prudence of business policies and practices, seek cost disallowances or request other relief.

The principal considerations for our determination that performing procedures relating to management's accounting for rate regulation is a critical audit matter are the significant judgment by management when assessing the impact of regulation on the accounting for regulatory assets and liabilities, which in turn led to a high degree of auditor judgment and effort in performing procedures and in evaluating audit evidence related to whether the regulatory assets will be recovered and liabilities will be refunded.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's evaluation of regulatory matters impacting regulatory assets and liabilities, including controls over the recovery of regulatory assets and the refund of regulatory liabilities. These procedures also included, among others (i) obtaining the Company's correspondence with regulators and assessing the reasonableness of management's judgments regarding the recovery of regulatory assets and refund of regulatory liabilities, (ii) assessing the reasonableness of management's accounting judgments related to new and updated regulatory orders and guidelines, and (iii) testing the calculation of regulatory assets and liabilities based on provisions outlined in regulatory correspondence.

/s/ PricewaterhouseCoopers LLP
Philadelphia, Pennsylvania
March 1, 2022

We have served as the Company's auditor since 2000.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(In thousands of dollars, except per share amounts)

	December 31,	
	2021	2020
Assets		
Property, plant and equipment, at cost	\$ 12,610,376	\$ 11,620,019
Less: accumulated depreciation	2,358,510	2,107,142
Net property, plant and equipment	<u>10,251,866</u>	<u>9,512,877</u>
Current assets:		
Cash and cash equivalents	10,567	4,827
Accounts receivable, net	141,025	154,775
Unbilled revenues	119,896	118,538
Inventory - materials and supplies	33,756	21,669
Inventory - gas stored	75,804	36,732
Prepayments and other current assets	36,597	38,594
Regulatory assets	20,150	5,085
Total current assets	<u>437,795</u>	<u>380,220</u>
Regulatory assets	1,429,840	1,362,788
Deferred charges and other assets, net	141,955	56,002
Funds restricted for construction activity	1,313	1,268
Goodwill	2,340,815	2,324,547
Operating lease right-of-use assets	48,930	60,334
Intangible assets	5,764	7,241
Total assets	<u>\$ 14,658,278</u>	<u>\$ 13,705,277</u>

See accompanying notes to consolidated financial statements.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS (continued)
(In thousands of dollars, except per share amounts)

	December 31,	
	2021	2020
Liabilities and Equity		
Essential Utilities stockholders' equity:		
Common stock at \$0.50 par value, authorized 600,000,000 shares, issued 256,102,388 and 248,571,355 as of December 31, 2021 and December 31, 2020	\$ 128,050	\$ 124,285
Capital in excess of par value	3,705,814	3,379,057
Retained earnings	1,434,201	1,261,862
Treasury stock, at cost, 3,234,765 and 3,180,887 shares as of December 31, 2021 and December 31, 2020	(83,615)	(81,327)
Total stockholders' equity	5,184,450	4,683,877
Long-term debt, excluding current portion	5,815,211	5,545,890
Less: debt issuance costs	35,707	38,146
Long-term debt, excluding current portion, net of debt issuance costs	5,779,504	5,507,744
Commitments and contingencies (See Note 9)		
Current liabilities:		
Current portion of long-term debt	132,146	84,353
Loans payable	65,000	78,198
Accounts payable	192,932	177,489
Book overdraft	81,722	44,003
Accrued interest	40,815	39,408
Accrued taxes	37,924	37,172
Regulatory liabilities	384	19,866
Other accrued liabilities	124,140	123,384
Total current liabilities	675,063	603,873
Deferred credits and other liabilities:		
Deferred income taxes and investment tax credits	1,406,537	1,258,098
Customers' advances for construction	103,619	99,014
Regulatory liabilities	769,617	773,310
Asset retirement obligations	1,256	1,336
Operating lease liabilities	48,230	55,642
Pension and other postretirement benefit liabilities	50,226	91,896
Other	43,666	56,713
Total deferred credits and other liabilities	2,423,151	2,336,009
Contributions in aid of construction	596,110	573,774
Total liabilities and equity	\$ 14,658,278	\$ 13,705,277

See accompanying notes to consolidated financial statements.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME
(In thousands, except per share amounts)

	Years ended December 31,		
	2021	2020	2019
Operating revenues	\$ 1,878,144	\$ 1,462,698	\$ 889,692
Operating expenses:			
Operations and maintenance	550,580	528,611	333,102
Purchased gas	340,262	165,745	-
Depreciation	292,191	251,443	158,179
Amortization	5,761	5,616	(1,703)
Taxes other than income taxes	86,641	76,597	59,955
Total operating expenses	1,275,435	1,028,012	549,533
Operating income	602,709	434,686	340,159
Other expense (income):			
Interest expense	207,709	188,435	125,383
Interest income	(2,384)	(5,363)	(25,406)
Allowance for funds used during construction	(20,792)	(12,687)	(16,172)
Change in fair value of interest rate swap agreements	-	-	23,742
Loss on debt extinguishment	-	-	18,528
Gain on sale of other assets	(976)	(661)	(923)
Equity loss (earnings) in joint venture	-	3,374	(2,210)
Other	(2,848)	(3,383)	5,691
Income before income taxes	422,000	264,971	211,526
Provision for income tax benefit	(9,612)	(19,878)	(13,017)
Net income	\$ 431,612	\$ 284,849	\$ 224,543
Comprehensive income	\$ 431,612	\$ 284,849	\$ 224,543
Net income per common share:			
Basic	\$ 1.68	\$ 1.14	\$ 1.04
Diluted	\$ 1.67	\$ 1.12	\$ 1.04
Average common shares outstanding during the period:			
Basic	257,487	249,768	215,550
Diluted	258,180	254,629	215,931

See accompanying notes to consolidated financial statements.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CAPITALIZATION
(In thousands of dollars, except per share amounts)

	December 31,	
	2021	2020
Essential Utilities stockholders' equity:		
Common stock, \$0.50 par value	\$ 128,050	\$ 124,285
Capital in excess of par value	3,705,814	3,379,057
Retained earnings	1,434,201	1,261,862
Treasury stock, at cost	(83,615)	(81,327)
Total stockholders' equity	5,184,450	4,683,877
Long-term debt of subsidiaries (substantially collateralized by utility plant):		
<u>Interest Rate Range</u>	<u>Maturity Date Range</u>	
0.00% to 0.99%	2023 to 2033	2,341
1.00% to 1.99%	2021 to 2039	9,341
2.00% to 2.99%	2022 to 2058	312,751
3.00% to 3.99%	2021 to 2056	1,359,284
4.00% to 4.99%	2021 to 2059	1,286,024
5.00% to 5.99%	2021 to 2043	16,119
6.00% to 6.99%	2022 to 2036	32,475
7.00% to 7.99%	2022 to 2027	28,980
8.00% to 8.99%	2021 to 2025	2,772
9.00% to 9.99%	2021 to 2026	11,800
		3,061,887
		3,014,280
Notes payable to bank under revolving credit agreement, variable rate, due 2023	300,000	385,000
Unsecured notes payable:		
Amortizing notes at 3.00% due 2022	20,470	60,502
Notes at 2.40% due 2031	400,000	-
Notes at 2.704% due 2030	500,000	500,000
Notes ranging from 3.01% to 3.59%, due 2029 through 2050	1,125,000	1,125,000
Notes at 4.28%, due 2049	500,000	500,000
Notes ranging from 5.64% to 5.95%, due 2021 through 2034	40,000	45,461
Total long-term debt	5,947,357	5,630,243
Current portion of long-term debt	132,146	84,353
Long-term debt, excluding current portion	5,815,211	5,545,890
Less: debt issuance costs	35,707	38,146
Long-term debt, excluding current portion, net of debt issuance costs	5,779,504	5,507,744
Total capitalization	\$ 10,963,954	\$ 10,191,621

See accompanying notes to consolidated financial statements.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF EQUITY
(In thousands of dollars, except per share amounts)

	Common stock	Capital in excess of par value	Retained earnings	Treasury stock	Total
Balance at December 31, 2018	\$ 90,576	\$ 820,378	\$ 1,174,245	\$ (75,835)	\$ 2,009,364
Net income	-	-	224,543	-	224,543
Dividends declared (\$0.9066 per share)	-	-	(188,512)	-	(188,512)
Stock issued to finance acquisition (37,370,017 shares)	18,685	1,244,414	-	-	1,263,099
Proceeds from stock purchase contracts issued under tangible equity units	-	557,389	-	-	557,389
Issuance of common stock from stock purchase contracts (4,846,601 shares)	2,423	(2,423)	-	-	-
Issuance of common stock under dividend reinvestment plan (236,666 shares)	118	8,841	-	-	8,959
Repurchase of stock (52,359 shares)	-	-	-	(1,867)	(1,867)
Equity compensation plan (146,867 shares)	73	(73)	-	-	-
Exercise of stock options (119,306 shares)	60	1,838	-	-	1,898
Stock-based compensation	-	7,368	(204)	-	7,164
Other	-	(1,177)	-	-	(1,177)
Balance at December 31, 2019	111,935	2,636,555	1,210,072	(77,702)	3,880,860
Net income	-	-	284,849	-	284,849
Dividends declared (\$0.97 per share)	-	-	(232,571)	-	(232,571)
Issuance of common stock from private placement (21,661,095 shares)	10,831	718,470	-	-	729,301
Issuance of common stock from stock purchase contracts (2,335,654 shares)	1,168	(1,168)	-	-	-
Issuance of common stock under dividend reinvestment plan (388,978 shares)	194	16,328	-	-	16,522
Repurchase of stock (82,320 shares)	-	-	-	(4,365)	(4,365)
Equity compensation plan (239,512 shares)	120	(120)	-	-	-
Exercise of stock options (74,832 shares)	37	1,552	-	-	1,589
Stock-based compensation	-	8,276	(488)	-	7,788
Other	-	(836)	-	740	(96)
Balance at December 31, 2020	124,285	3,379,057	1,261,862	(81,327)	4,683,877
Net income	-	-	431,612	-	431,612
Dividends declared (\$1.0378 per share)	-	-	(258,650)	-	(258,650)
Issuance of common stock from stock purchase contracts (127,749 shares)	64	(64)	-	-	-
Issuance of common stock under dividend reinvestment plan (374,824 shares)	187	16,612	-	-	16,799
Issuance of common stock from forward equity sale agreement (6,700,000 shares)	3,350	296,389	-	-	299,739
Repurchase of stock (76,732 shares)	-	-	-	(3,291)	(3,291)
Equity compensation plan (206,163 shares)	103	(103)	-	-	-
Exercise of stock options (122,297 shares)	61	4,111	-	-	4,172
Stock-based compensation	-	9,998	(623)	-	9,375
Other	-	(186)	-	1,003	817
Balance at December 31, 2021	\$ 128,050	\$ 3,705,814	\$ 1,434,201	\$ (83,615)	\$ 5,184,450

See accompanying notes to consolidated financial statements.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands of dollars, except per share amounts)

	Years ended December 31,		
	2021	2020	2019
Cash flows from operating activities:			
Net income	\$ 431,612	\$ 284,849	\$ 224,543
Adjustments to reconcile net income to net cash flows from operating activities:			
Depreciation and amortization	297,952	257,059	156,476
Deferred income taxes	(8,514)	(17,782)	(10,436)
Provision for doubtful accounts	27,336	32,325	5,306
Stock-based compensation	10,078	8,160	7,368
Gain on sale of utility system and other assets	(1,589)	(642)	(1,328)
Loss on interest rate swap agreements	-	-	23,742
Loss on debt extinguishment	-	-	18,528
Settlement of interest rate swap agreements	-	-	(83,520)
Net change in receivables, inventory, deferred purchased gas costs and prepayments	(109,605)	(35,348)	(4,335)
Net change in payables, accrued interest, accrued taxes and other accrued liabilities	5,190	(1,819)	5,108
Pension and other postretirement benefits contributions	(15,135)	(20,282)	(8,597)
Other	7,354	1,504	5,668
Net cash flows from operating activities	644,679	508,024	338,523
Cash flows from investing activities:			
Property, plant and equipment additions, including the debt component of allowance for funds used during construction of \$4,510, \$4,434 and \$4,231	(1,020,519)	(835,642)	(550,273)
Acquisitions of utility systems and other, net	(36,326)	(3,501,835)	(59,687)
Net proceeds from the sale of utility systems and other assets	1,819	2,115	2,893
Other	(1,032)	1,696	2,464
Net cash flows used in investing activities	(1,056,058)	(4,333,666)	(604,603)
Cash flows from financing activities:			
Customers' advances and contributions in aid of construction	15,264	9,585	9,092
Repayments of customers' advances	(7,725)	(8,337)	(6,825)
Net proceeds (repayments) of short-term debt	(13,350)	(129,407)	10,275
Proceeds from long-term debt	1,095,171	3,366,838	1,434,506
Repayments of long-term debt	(769,546)	(1,820,571)	(1,048,471)
Extinguishment of long-term debt	-	-	(25,237)
Change in cash overdraft position	37,719	33,059	1,993
Proceeds from issuance of common stock under dividend reinvestment plan	16,799	16,522	8,959
Proceeds from issuance of common stock from private placement	-	729,301	1,263,099
Proceeds from issuance of common stock from forward equity sale agreement	299,739	-	-
Proceeds from tangible equity unit issuance	-	-	673,642
Proceeds from exercised stock options	4,172	1,589	1,898
Repurchase of common stock	(3,291)	(4,365)	(1,867)
Dividends paid on common stock	(258,650)	(232,571)	(188,512)
Other	817	(96)	(1,177)
Net cash flows from financing activities	417,119	1,961,547	2,131,375
Net increase (decrease) in cash and cash equivalents	5,740	(1,864,095)	1,865,295
Cash and cash equivalents at beginning of year	4,827	1,868,922	3,627
Cash and cash equivalents at end of year	\$ 10,567	\$ 4,827	\$ 1,868,922
Cash paid during the year for:			
Interest, net of amounts capitalized	\$ 201,792	\$ 169,048	\$ 89,228
Income taxes	5,692	4,853	970
Non-cash investing activities:			
Property, plant and equipment additions purchased at the period end, but not yet paid	\$ 95,945	\$ 98,569	\$ 60,628
Non-cash utility property contributions	36,882	36,181	30,693

See accompanying notes to consolidated financial statements.

Refer to Note 2 – *Acquisitions*, Note 11 – *Long-term Debt and Loans Payable*, and Note 15 – *Employee Stock and Incentive Plan* for a description of non-cash activities.

Note 1 – Summary of Significant Accounting Policies

Nature of Operations — Essential Utilities, Inc. (“Essential Utilities,” the “Company,” “we,” “our”, or “us”) is the holding company for regulated utilities providing water, wastewater, or natural gas services concentrated in Pennsylvania, Ohio, Texas, Illinois, North Carolina, New Jersey, Indiana, Virginia, West Virginia, and Kentucky under the Aqua and Peoples brands. One of our largest operating subsidiaries is Aqua Pennsylvania, Inc., which accounted for approximately 55% of our Regulated Water segment’s operating revenues and approximately 68% of our Regulated Water segment’s income for 2021. As of December 31, 2021, Aqua Pennsylvania provided water or wastewater services to approximately one-half of the total number of Regulated Water customers we serve. Aqua Pennsylvania’s service territory is located in the suburban areas north and west of the City of Philadelphia and in 27 other counties in Pennsylvania. The Company’s other regulated water or wastewater utility subsidiaries provide similar services in seven additional states. Additionally, pursuant to the Company’s growth strategy, commencing on March 16, 2020 with the completion of the Peoples Gas Acquisition, the Company began to provide natural gas distribution services to customers in western Pennsylvania, Kentucky, and West Virginia. Approximately 93% of the total number of natural gas utility customers we serve are in western Pennsylvania. Lastly, the Company’s market-based activities are conducted through Aqua Infrastructure LLC, and Aqua Resources, Inc., and certain other non-regulated subsidiaries of Peoples. Prior to our October 2020 sale of our investment in a joint venture, Aqua Infrastructure provided non-utility raw water supply services for firms in the natural gas drilling industry. Aqua Resources offers, through a third-party, water and sewer line protection solutions and repair services to households. Other non-regulated subsidiaries of Peoples provide utility service line protection services to households and operate gas marketing and production businesses.

The Company has identified twelve operating segments and has two reportable segments. The Regulated Water segment is comprised of eight operating segments representing its water and wastewater regulated utility companies, which are organized by the states where the Company provides water and wastewater services. These operating segments are aggregated into one reportable segment since each of the Company’s operating segments has the following similarities: economic characteristics, nature of services, production processes, customers, water distribution or wastewater collection methods, and the nature of the regulatory environment. The Regulated Natural Gas segment is comprised of one operating segment representing natural gas utility companies, acquired in the Peoples Gas Acquisition, where the Company provides natural gas distribution services. In addition, our non-regulated natural gas operations, Aqua Resources, and Aqua Infrastructure are not quantitatively significant to be reportable and are included as a component of “Other,” in addition to corporate costs that have not been allocated to the Regulated Water and Regulated Natural Gas segments, because they would not be recoverable as a cost of utility service, and intersegment eliminations.

Regulation — Most of the operating companies that are regulated public utilities are subject to regulation by the utility commissions of the states in which they operate. The respective utility commissions have jurisdiction with respect to rates, service, accounting procedures, issuance of securities, acquisitions and other matters. Some of the operating companies that are regulated public utilities are subject to rate regulation by county or city government. Regulated public utilities follow the Financial Accounting Standards Board’s (“FASB”) accounting guidance for regulated operations, which provides for the recognition of regulatory assets and liabilities as allowed by regulators for costs or credits that are reflected in current rates or are considered probable of being included in future rates. Costs, for which the Company has received or expects to receive prospective rate recovery, are deferred as a regulatory asset and amortized over the period of rate recovery in accordance with the FASB’s accounting guidance for regulated operations. The regulatory assets or liabilities are then relieved as the cost or credit is reflected in Company’s rates charged for utility service. If, as a result of a change in circumstances, it is determined that a regulated operating company no longer meets the criteria to apply regulatory accounting, the operating company would have to discontinue regulatory accounting and write-off the respective regulatory assets and liabilities. See Note 6 - *Regulatory Assets and Liabilities* for further information regarding the Company’s regulatory assets.

The Company makes significant judgments and estimates to record regulatory assets and liabilities. For each regulatory jurisdiction with regulated operations, the Company evaluates at the end of each reporting period, whether the regulatory assets and liabilities continue to meet the probable criteria for future recovery or refund. The evaluation considers factors such as regulatory orders or guidelines, in the same regulatory jurisdiction, of a specific matter or a similar matter, as provided to the Company in the past or to other regulated utilities. In addition, the evaluation may be impacted by changes in the regulatory environment and pending or new legislation that could impact the ability to recover costs through regulated rates. There may be multiple participants to rate or transactional regulatory proceedings who might offer different views on various aspects of such proceedings, and in these instances may challenge the prudence of our business policies and practices, seek cost disallowances or request other relief.

Use of Estimates in Preparation of Consolidated Financial Statements – The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

The current novel coronavirus (“COVID-19”) pandemic has, at times, caused significant social and economic restrictions that have been imposed in the United States and abroad, which resulted in significant volatility in the global economy and led to reduced economic activity in some industries. In the preparation of these financial statements and related disclosures, we have assessed the impact that the COVID-19 pandemic has had on our estimates, assumptions, forecasts, and accounting policies. Because of the essential nature of our business, we do not believe the COVID-19 pandemic had a material impact on our estimates, assumptions and forecasts used in the preparation of our financial statements, although we continue to monitor this closely. As the COVID-19 situation is ever evolving, future events and effects related to the COVID-19 pandemic, including the effects of potential vaccination requirements, cannot be determined with precision, and actual results could significantly differ from our estimates or forecasts.

Basis of Presentation – The consolidated financial statements include the accounts of the Company and its subsidiaries. All intercompany accounts and transactions have been eliminated.

Property, Plant and Equipment and Depreciation – Property, plant and equipment consist primarily of utility plant. The cost of additions includes contracted cost, direct labor and fringe benefits, materials, overheads, and for additions meeting certain criteria, allowance for funds used during construction. Utility systems acquired are typically recorded at estimated original cost of utility plant when first devoted to utility service and the applicable depreciation is recorded to accumulated depreciation. Further, utility systems acquired under fair value regulations would be recorded based on the valuation of the utility plant as approved by the respective utility commission. The difference between the estimated original cost, less applicable accumulated depreciation, and the purchase price may be recorded as an acquisition adjustment within utility plant as permitted by the applicable regulatory jurisdiction. At December 31, 2021 and 2020, utility plant includes a net credit acquisition adjustment of \$9,055 and \$12,215, respectively, which is generally being amortized from 2 to 59 years. Amortization of the acquisition adjustments totaled \$2,842 in 2021, \$2,895 in 2020, and \$6,076 in 2019.

Utility expenditures for maintenance and repairs, including major maintenance projects and minor renewals, are charged to operating expenses when incurred in accordance with the system of accounts prescribed by the utility commissions of the states in which the company operates. The cost of new units of property and betterments are capitalized. Utility expenditures for water main cleaning and relining of pipes are deferred and are presented in net property, plant and equipment in accordance with the FASB’s accounting guidance for regulated operations. As of December 31, 2021, \$1,635 of these costs have been incurred since the last respective rate proceeding and the Company expects to recover these costs in future rates.

The cost of software upgrades and enhancements are capitalized if they result in added functionality, which enables the software to perform tasks it was previously incapable of performing. Information technology costs associated with major system installations, conversions and improvements, such as software training, data conversion and business process reengineering costs, are deferred as a regulatory asset if the Company expects to recover these costs in future rates. If these costs are not deferred, then these costs are charged to operating expenses when incurred. As of December 31, 2021, \$52,810 of these costs have been deferred since the last respective rate proceeding as a regulatory asset, and the deferral is reported as a component of net property, plant and equipment.

When units of utility property are replaced, retired or abandoned, the recorded value thereof is credited to the asset account and such value, together with the net cost of removal, is charged to accumulated depreciation. To the extent the Company anticipates recovery of the cost of removal or other retirement costs through rates after the retirement costs are incurred, a regulatory asset is recorded as those costs are incurred. In some cases, the Company recovers retirement costs through rates during the life of the associated asset and before the costs are incurred. These amounts, which are not yet utilized, result in a regulatory liability being reported based on the amounts previously recovered through customer rates.

The straight-line remaining life method is used to compute depreciation on utility plant. Generally, the straight-line method is used with respect to transportation and mechanical equipment, office equipment and laboratory equipment.

Impairment of Long-Lived Assets - Long-lived assets of the Company, which consist primarily of utility plant in service, operating lease right-of-use assets and intangible assets, are reviewed for impairment when changes in circumstances or events occur. These circumstances or events could include a decline in the market value or physical condition of a long-lived asset, an adverse change in the manner in which long-lived assets are used or planned to be used, a change in historical trends, operating cash flows associated with the long-lived assets, changes in macroeconomic conditions, industry and market conditions, or overall financial performance. When these circumstances or events occur, the Company determines whether it is more likely than not that the fair value of those assets is less than their carrying amount. If the Company determines that it is more likely than not (that is, the likelihood of more than 50 percent), the Company would recognize an impairment charge if it is determined that the carrying amount of an asset exceeds the sum of the undiscounted estimated cash flows. In this circumstance, the Company would recognize an impairment charge equal to the difference between the carrying amount and the fair value of the asset. Fair value is estimated to be the present value of future net cash flows associated with the asset, discounted using a discount rate commensurate with the risk and remaining life of the asset. During the year ended December 31, 2021, the Company recorded an impairment loss to write down a portion of the operating lease right-of-use asset for office space not used in operations to fair value. Refer to Note 10 – *Leases*, for further details.

Regulatory assets are reviewed for the continued application of the FASB accounting guidance for regulated operations. The Company's review determines whether there have been changes in circumstances or events, such as regulatory disallowances, or abandonments, that have occurred that require adjustments to the carrying value of these assets. Adjustments to the carrying value of these assets would be made in instances where their inclusion in the rate-making process is unlikely. For utility plant in service, we would recognize an impairment loss for any amount disallowed by the respective utility commission.

Allowance for Funds Used During Construction – The allowance for funds used during construction (“AFUDC”) represents the capitalized cost of funds used to finance the construction of utility plant. In general, AFUDC is applied to construction projects requiring more than one month to complete. No AFUDC is applied to projects funded by customer advances for construction, contributions in aid of construction, or applicable state-revolving fund loans. AFUDC includes the net cost of borrowed funds and a rate of return on other funds when used and is recovered through rates as the utility plant is depreciated. The amount of AFUDC related to equity funds in 2021 was \$16,282, 2020 was \$8,253, and 2019 was \$11,941. No interest was capitalized by our market-based businesses.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

Lease Accounting — The Company evaluates the contracts it enters into to determine whether such contracts contain leases. A contract contains a lease if the contract conveys the right to control the use of identified property, plant or equipment for a period of time in exchange for consideration. We enter into operating lease contracts for the right to utilize certain land, office facilities, office equipment, and vehicles from third parties. For contracts that extend for a period greater than 12 months, we recognize a right of use asset and a corresponding lease liability on our consolidated balance sheet. The present value of each lease is based on the future minimum lease payments in accordance with Accounting Standards Codification (“ASC”) 842 and is determined by discounting these payments using an incremental borrowing rate.

Recognition of Revenues — The Company recognizes revenue as utility services are provided to our customers, which happens over time as the services are delivered and the performance obligation is satisfied. The Company’s utility revenues recognized in an accounting period includes amounts billed to customers on a cycle basis and unbilled amounts based on estimated usage from the last billing to the end of the accounting period. Unbilled amounts are calculated by deriving estimates based on average usage of the prior month. The Company’s actual results could differ from these estimates, which would result in operating revenues being adjusted in the period that the revision to our estimates are determined.

Generally, payment is due within 30 days once a bill is issued to a customer. Sales tax and other taxes we collect on behalf of government authorities, concurrent with our revenue-producing activities, are primarily excluded from revenue.

The following table presents our revenues disaggregated by major source and customer class:

2021	Water Revenues	Wastewater Revenues	Natural Gas Revenues	Other Revenues
Revenues from contracts with customers:				
Residential	\$ 561,996	\$ 99,931	\$ 530,338	\$ -
Commercial	151,071	22,060	99,596	-
Fire protection	35,984	-	-	-
Industrial	30,230	1,729	3,427	-
Gas transportation	-	-	198,195	-
Other water	53,488	-	-	-
Other wastewater	-	8,860	-	-
Customer rate credits	-	-	(5,000)	-
Other utility	-	-	32,812	13,358
Revenues from contracts with customers	832,769	132,580	859,368	13,358
Alternative revenue program	1,760	(264)	534	-
Other and eliminations	-	-	-	38,039
Consolidated	<u>\$ 834,529</u>	<u>\$ 132,316</u>	<u>\$ 859,902</u>	<u>\$ 51,397</u>

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

2020	Water Revenues	Wastewater Revenues	Natural Gas Revenues	Other Revenues
Revenues from contracts with customers:				
Residential	\$ 567,486	\$ 95,051	\$ 314,274	\$ -
Commercial	143,479	19,062	50,239	-
Fire protection	35,340	-	-	-
Industrial	29,764	1,619	6,923	-
Gas transportation	-	-	133,685	-
Other water	32,372	-	-	-
Other wastewater	-	5,385	-	-
Customer rate credits	(3,757)	(323)	(18,924)	-
Other utility	-	-	20,243	12,861
Revenues from contracts with customers	804,684	120,794	506,440	12,861
Alternative revenue program	87	114	124	-
Other and eliminations	-	-	-	17,594
Consolidated	\$ 804,771	\$ 120,908	\$ 506,564	\$ 30,455

2019	Water Revenues	Wastewater Revenues	Other Revenues
Revenues from contracts with customers:			
Residential	\$ 518,192	\$ 83,561	\$ -
Commercial	145,599	15,222	-
Fire protection	33,589	-	-
Industrial	30,667	1,765	-
Other water	39,353	-	-
Other wastewater	-	4,656	-
Other utility	-	-	13,835
Revenues from contracts with customers	767,400	105,204	13,835
Alternative revenue program	80	(89)	-
Other and eliminations	-	-	3,262
Consolidated	\$ 767,480	\$ 105,115	\$ 17,097

On March 16, 2020, the Company completed the Peoples Gas Acquisition, which expanded the Company's regulated utility business to include natural gas distribution. The natural gas revenues of Peoples are included for the period since the date of the acquisition.

Revenues from Contracts with Customers – These revenues are composed of four main categories: water, wastewater, natural gas, and other. Water revenues represent revenues earned for supplying customers with water service. Wastewater revenues represent revenues earned for treating wastewater and releasing it into the environment. Natural gas revenues represent revenues earned for the gas commodity and delivery of natural gas to customers. Other revenues are associated fees that relate to our utility businesses but are not water, wastewater, or natural gas revenues. Refer to the description below for a discussion of the performance obligation for each of these revenue streams.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

- **Tariff Revenues** – These revenues are categorized by customer class: residential, commercial, fire protection, industrial, gas transportation, other water, and other wastewater. The rates that generate these revenues are approved by the respective state utility commission, and revenues are billed cyclically and accrued for when unbilled. The regulated natural gas rates are set and adjusted for increases or decreases in our purchased gas costs through purchased gas adjustment mechanisms. Purchased gas adjustment mechanisms provide us with a means to recover purchased gas costs on an ongoing basis without filing a rate case. Other water and other wastewater revenues consists primarily of fines, penalties, surcharges, and availability lot fees. Our performance obligation for tariff revenues is to provide potable water, wastewater treatment service, or delivery and sale of natural gas to customers. This performance obligation is satisfied over time as the services are rendered. The amounts that the Company has a right to invoice for tariff revenues reflect the right to consideration from the customers in an amount that corresponds directly with the value transferred to the customer for the performance completed to date.
- **Other Utility Revenues** – Other utility revenues represent revenues earned primarily from: antenna revenues, which represents fees received from telecommunication operators that have put cellular antennas on our water towers; operation and maintenance and billing contracts, which represent fees earned from municipalities for our operation of their water or wastewater treatment services or performing billing services; and fees earned from developers for accessing our water mains, miscellaneous service revenue from gas distribution operations, gas processing and handling revenue, sales of natural gas at market-based rates and contracted fixed prices, sales of gas purchased from third parties, and other gas marketing activities. The performance obligations vary for these revenues, but all are primarily recognized over time as the service is delivered.
- **Alternative Revenue Program:**
 - **Water / Wastewater Revenues** – These revenues represent the difference between the actual billed utility volumetric water and wastewater revenues for Aqua Illinois and the revenues set in the last Aqua Illinois rate case. In accordance with the Illinois Commerce Commission, we recognize revenues based on the target amount established in the last rate case, and then record either a regulatory asset or liability based on the cumulative annual difference between the target and actual amounts billed, which results in either a payment from customers or a refund due to customers. The cumulative annual difference is either refunded to customers or collected from customers over a nine-month period.
 - **Natural Gas Revenues** – These revenues represent the weather-normalization adjustment (“WNA”) mechanism in place for our natural gas customers served in Kentucky. The WNA serves to minimize the effects of weather on the Company’s results for its residential and small commercial natural gas customers. This regulatory mechanism adjusts revenues earned for the variance between actual and normal weather and can have either positive (warmer than normal) or negative (colder than normal) effects on revenues. Customer bills are adjusted in the December through April billing months, with rates adjusted for the difference between actual revenues and revenues calculated under this mechanism billed to the customers.

These revenue programs represent a contract between the utility and its regulators, not customers, and therefore are not within the scope of the FASB’s accounting guidance for recognizing revenue from contracts with customers.

- **Other and Eliminations** – Other and eliminations consist of our market-based revenues, which comprises: our non-regulated natural gas operations, Aqua Infrastructure, and Aqua Resources (described below), and intercompany eliminations for revenue billed between our subsidiaries. Our non-regulated natural gas operations consist of utility service line protection solutions and repair services for households and the operation of gas marketing and production entities. Revenue is recognized and the performance obligation is satisfied over time as the service is delivered.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

Aqua Infrastructure is the holding company for our former 49% investment in a joint venture that operated a private pipeline system to supply raw water to natural gas well drilling operations in the Marcellus Shale of north central Pennsylvania. Prior to our October 30, 2020 sale of our investment in the joint venture, the joint venture earned revenues through providing non-utility raw water supply services to natural gas drilling companies which enter into water supply contracts. The performance obligation was to deliver non-potable water to the joint venture's customers. Aqua Infrastructure's share of the revenues recognized by the joint venture was reflected, net, in equity earnings in joint venture on our consolidated statements of operations and comprehensive income. Aqua Resources earned revenues by providing non-regulated water and wastewater services through an operating and maintenance contract, which concluded in 2020, and continues to earn revenue through third-party water and sewer service line protection and repair services. For the contract operations and maintenance business, the performance obligations were performing agreed upon contract services to operate the water and wastewater system. For the service line protection business, the performance obligations are allowing the use of our logo to a third-party water and sewer service line repair provider. Revenues are primarily recognized over time as service is delivered.

Cash and Cash Equivalents — The Company considers all highly liquid investments with an original maturity of three months or less, which are not restricted for construction activity, to be cash equivalents.

The Company had a book overdraft, which represents transactions that have not cleared the bank accounts at the end of the period, for specific disbursement cash accounts of \$81,722 and \$44,003 at December 31, 2021 and 2020, respectively. The Company transfers cash on an as-needed basis to fund these items as they clear the bank in subsequent periods. The balance of the book overdraft is reported as book overdraft and the change in the book overdraft balance is reported as cash flows from financing activities, due to our ability to fund the overdraft with the Company's credit facility.

Accounts Receivable — Accounts receivable are recorded at the invoiced amounts, which consists of billed and unbilled revenues. The allowance for doubtful accounts is the Company's best estimate of the amount of probable credit losses in our existing accounts receivable and is determined based on lifetime expected credit losses and the aging of account balances. The Company reviews the allowance for doubtful accounts quarterly. Account balances are written off against the allowance when it is probable the receivable will not be recovered. When utility customers request extended payment terms, credit is extended based on regulatory guidelines, and collateral is not required.

Inventories – Materials and Supplies – Inventories are stated at cost. Cost is determined using the first-in, first-out method.

Inventory – Gas Stored – The Company accounts for gas in storage inventory using the weighted average cost of gas method.

Investment in Joint Venture – The Company used the equity method of accounting to account for our former 49% investment in a joint venture with a firm in the natural gas industry for the construction and operation of a private pipeline system to supply raw water to natural gas well drilling operations in the Marcellus Shale in north-central Pennsylvania, which commenced operations in 2012. In 2020, the Company sold its investment in joint venture and recorded a charge of \$3,700 associated with the sale. Our share of equity loss (earnings) in the joint venture was reported in the consolidated statements of operations and comprehensive income as equity loss (earnings) in joint venture. During 2020 and 2019, we received distributions of \$2,137 and \$3,185, respectively.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

Goodwill — Goodwill represents the excess cost over the fair value of net tangible and identifiable intangible assets acquired through acquisitions. Goodwill is not amortized but is tested for impairment annually, or more often, if circumstances indicate a possible impairment may exist. When testing goodwill for impairment, we may assess qualitative factors, including macroeconomic conditions, industry and market considerations, cost factors, overall financial performance, and entity specific events, for some or all of our reporting units to determine whether it's more likely than not that the fair value of a reporting unit is less than its carrying amount. Alternatively, based on our assessment of the qualitative factors previously noted or at our discretion, we may perform a quantitative goodwill impairment test by determining the fair value of a reporting unit. If we perform a quantitative test and determine that the fair value of a reporting unit is less than its carrying amount, we would record an impairment loss for the amount by which a reporting unit's carrying amount exceeds its fair value, not to exceed the carrying amount of goodwill.

Impairment testing for goodwill is done at the reporting unit level. A reporting unit is an operating segment or one level below an operating segment (also known as a component). A component of an operating segment is a reporting unit if the component constitutes a business for which discrete financial information is available, and segment management regularly reviews the operating results of that component. We assigned assets and liabilities to each reporting unit based on either specific identification or by using judgment for the remaining assets and liabilities that are not specific to a reporting unit. Goodwill was assigned to the reporting units based on a combination of specific identification and relative fair values.

The Company performed a quantitative assessment for its annual test of the goodwill attributable to its Regulated Natural Gas reporting unit as of July 31, 2021. We estimated the fair value of the reporting unit by weighting results from the market approach and the income approach. Key assumptions in the valuation methodologies for goodwill included growth rates, terminal value, discount rates, and comparable multiples from publicly traded companies in our industry. Based on our analysis, we determined that the fair values of our Regulated Natural Gas reporting unit exceeded its carrying values, indicating none of its goodwill was impaired.

The Company performed a qualitative assessment for its annual test of the goodwill attributable to its Regulated Water and Aqua Resources reporting units as of July 31, 2021, and concluded that it is more likely than not that the fair value of each reporting unit, which has goodwill recorded, exceeded its carrying amount, indicating that none of the Company's goodwill was impaired.

The following table summarizes the changes in the Company's goodwill:

	Regulated Water	Regulated Natural Gas	Other	Consolidated
Balance at December 31, 2019	\$ 58,981	\$ -	\$ 4,841	\$ 63,822
Goodwill acquired	2,596	2,261,047	-	2,263,643
Reclassifications to utility plant acquisition adjustment	(2,918)	-	-	(2,918)
Balance at December 31, 2020	58,659	2,261,047	4,841	2,324,547
Goodwill acquired	-	-	-	-
Measurement period purchase price allocation adjustments	-	16,400	-	16,400
Reclassifications to utility plant acquisition adjustment	(132)	-	-	(132)
Balance at December 31, 2021	\$ 58,527	\$ 2,277,447	\$ 4,841	\$ 2,340,815

The measurement period purchase price allocation adjustments resulted from the completion of the Peoples Gas Acquisition on March 16, 2020, which resulted in goodwill of \$2,277,447 which was subject to adjustment over the one year measurement period that ended on March 15, 2021. Refer to Note 2 – *Acquisitions* for information about the goodwill attributed to our Regulated Natural Gas segment.

The reclassification of goodwill to utility plant acquisition adjustment results from either a regulatory order or a mechanism approved by the applicable utility commission. A regulatory order may provide for the one-time transfer of certain acquired goodwill. The mechanism provides for the transfer over time, and the recovery through customer rates, of goodwill associated with some acquisitions upon achieving specific objectives.

Intangible assets – The Company’s intangible assets consist of customer relationships for our non-regulated natural gas operations, and non-compete agreements with certain former employees of Peoples. These intangible assets are amortized on a straight-line basis over their estimated useful lives of fifteen years for the customer relationships and five years for the non-compete agreements.

Derivative Instruments – The Company’s natural gas commodity price risk, driven mainly by price fluctuations of natural gas, is mitigated by its purchased-gas cost adjustment mechanisms. The Company also uses derivative instruments to economically hedge the cost of anticipated natural gas purchases during the winter heating months that seeks to offset the risk to the Company’s utility customers from upward market price volatility. These strategies include requirements contracts, spot purchase contracts and underground storage to meet regulated customers’ natural gas requirements that may have fixed or variable pricing. The variable price contracts qualify as derivative instruments; however, because the contract price is the prevailing price at the future transaction date the contract has no determinable fair value. The fixed price contracts and firm commitments to purchase a fixed quantity of gas in the future qualify for the normal purchases and normal sales exception that is allowed for contracts that are probable of delivery in the normal course of business and, as such, are accounted for under the accrual basis and are not recorded at fair value in the Company’s consolidated financial statements.

Deferred Charges and Other Assets – Deferred charges and other assets consist primarily of assets held to compensate employees in the future who participate in the Company’s deferred compensation plan, prepaid pension and other post-retirement benefit plans assets, and the non-current portion of Peoples’ financing notes receivable, which amounted to \$28,576, \$25,978, and \$65,744 as of December 31, 2021; and, \$25,780, \$0, and \$0 as of December 31, 2020, respectively. The assets of the deferred compensation plan are invested in mutual funds which are carried on the consolidated balance sheet at fair market value, and changes in fair value are included in other expense (income), refer to Note 12 – *Fair Value of Financial Instruments* for further details. Refer to Note 16 – *Pension Plans and Other Post-Retirement Benefit Plans* for further information on the prepaid pension and other post-retirement benefit plan assets.

Pursuant to agreements entered into by Peoples in 2019, Peoples committed to design, construct, and operate over a 20-year period, three onsite natural gas fueled energy plants on customer-owned property in the western Pennsylvania area. Under the provisions of ASC 842, *Leases*, the Company determined that indicators of control over the assets constructed were not met, as such this failed sale-leaseback transaction was accounted for as a financing arrangement in accordance with ASC Topic 310, *Receivables*. During the period of construction of the plants, which began in 2020, expenditures incurred by Peoples on the projects were recorded in property, plant and equipment and amounted to \$58,380 as of December 31, 2020. During 2021, when construction was completed and the plants became on-line and began generation activity, the accumulated balances of the projects included in property, plant and equipment of \$71,665 was reclassified as a note receivable and included within deferred charges and other assets in the consolidated balance sheet. Amounts becoming due for payment by the customer in the current year are included within prepayments and other current assets in the consolidated balance sheets, which amounted to \$2,423 as of December 31, 2021. Interest income is recognized on these financing notes receivable using an imputed interest rate ranging from 3.4% to 4.3% and is recorded as interest income in the consolidated statements of operations and comprehensive income. For the year ended December 31, 2021, interest income on financing note receivable amounted to \$1,971.

Income Taxes — The Company accounts for some income and expense items in different time periods for financial and tax reporting purposes. Deferred income taxes are provided on specific temporary differences between the tax basis of the assets and liabilities, and the amounts at which they are carried in the consolidated financial statements. The income tax effect of temporary differences not currently included in rates is recorded as deferred taxes with an offsetting regulatory asset or liability. These deferred income taxes are based on the enacted tax rates expected to be in effect when such temporary differences are projected to reverse. Valuation allowances are established when necessary to reduce deferred tax assets to the amount more likely than not to be realized. Investment tax credits are deferred and amortized over the estimated useful lives of the related properties. Judgment is required in evaluating the Company's Federal and state tax positions. Despite management's belief that the Company's tax return positions are fully supportable, the Company establishes reserves when it believes that its tax positions are likely to be challenged and it may not fully prevail in these challenges. The Company's provision for income taxes includes interest, penalties and reserves for uncertain tax positions.

Customers' Advances for Construction and Contributions in Aid of Construction — Utility mains, other utility property or, in some instances, cash advances to reimburse the Company for its costs to construct utility mains or other utility property, are contributed to the Company by customers, real estate developers and builders in order to extend utility service to their properties. The value of these contributions is recorded as customers' advances for construction. Over time, the amount of non-cash contributed property will vary based on the timing of the contribution of the non-cash property and the volume of non-cash contributed property received in connection with development in our service territories. The Company makes refunds on these advances over a specific period of time based on operating revenues related to the property, or as new customers are connected to and take service from the applicable water main. After all refunds are made, any remaining balance is transferred to contributions in aid of construction for our regulated water business. Contributions in aid of construction include direct non-refundable contributions and the portion of customers' advances for construction that become non-refundable. For our regulated gas business, non-refundable contributions are netted against the cost of the related utility mains or other utility property.

Based on regulatory conventions in states where the Company operates, generally our subsidiaries depreciate contributed property and amortize contributions in aid of construction at the composite rate of the related property. Contributions in aid of construction and customers' advances for construction are deducted from the Company's rate base for rate-making purposes, and therefore, no return is earned on contributed property.

Stock-Based Compensation — The Company records compensation expense in the financial statements for stock-based awards based on the grant date fair value of those awards. Stock-based compensation expense includes an estimate for pre-vesting forfeitures and is recognized over the requisite service periods of the awards on either a straight-line basis, or the graded vesting method, which is generally commensurate with the vesting term.

Fair Value Measurements — The Company follows the FASB's accounting guidance for fair value measurements and disclosures, which defines fair value and establishes a framework for using fair value to measure assets and liabilities. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are as follows:

- Level 1: unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access;
- Level 2: inputs other than Level 1 that are observable, either directly or indirectly, such as quoted market prices in active markets for similar assets or liabilities, quoted prices for identical or similar assets or liabilities in non-active markets, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; or
- Level 3: inputs that are unobservable and significant to the fair value measurement.

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs. Additionally, assets that are measured at fair value using the net asset value ("NAV") per share practical expedient are not classified in the fair value hierarchy. There have been no changes in the valuation techniques used to measure fair value or asset or liability transfers between the levels of the fair value hierarchy for the years ended December 31, 2021 and 2020.

Recent Accounting Pronouncements —

Pronouncements to be adopted upon the effective date:

In August 2020, the FASB issued updated accounting guidance on accounting for convertible instruments and contracts in an entity's own equity. The updated guidance reduces the number of accounting models for convertible debt and convertible preferred stock instruments and makes certain disclosure amendments intended to improve the information provided to users. Additionally, the guidance also amends the derivative guidance for the "own stock" scope exception, which exempts qualifying instruments from being accounted for as derivatives if certain criteria are met. Further, the standard changes the way certain convertible instruments are treated when calculating earnings per share. The updated accounting guidance is effective for fiscal years beginning after December 15, 2021 with early adoption permitted beginning in 2021. The adoption of this standard is not expected to have a material impact to the Company's financial statements.

In October 2021, the FASB issued accounting guidance on accounting for acquired revenue contracts with customers in a business combination. The guidance specifies for all acquired revenue contracts, regardless of their timing of payment, the circumstances in which the acquirer should recognize contract assets and contract liabilities that are acquired in a business combination, as well as how to measure those contract assets and contract liabilities. The updated accounting guidance is effective for fiscal years beginning after December 15, 2022 with early adoption permitted. The Company is evaluating the requirements of the updated guidance to determine the impact of adoption.

Pronouncements adopted during the fiscal year:

In March 2020, the FASB issued accounting guidance that provides companies with optional guidance, including expedients and exceptions for applying generally accepted accounting principles to contracts and other transactions affected by reference rate reform, such as the London Interbank Offered Rate (LIBOR). The accounting guidance was effective upon issuance and generally can be applied to applicable contract modifications through December 31, 2022. The Company adopted the guidance in the fourth quarter of 2021 and there was no impact on its Consolidated Financial Statements upon adoption.

In December 2019, the FASB issued updated accounting guidance that simplifies the accounting for income taxes. The updated guidance removes certain exceptions to the general principles of accounting for income taxes to reduce the cost and complexity of its application, including the accounting for intraperiod tax allocation when there is a loss from continuing operations and income or a gain from other items, deferred tax liabilities for equity method investments when a foreign subsidiary becomes an equity method investment or when a foreign equity method investment becomes a subsidiary, and calculating income taxes in an interim period when a year-to-date loss exceeds the anticipated loss for the year. Additionally, the updated guidance clarifies and amends the existing guidance over accounting for franchise taxes and other taxes partially based on income, an entity's tax basis of goodwill, separate entity financial statements, interim recognition of enactment of tax laws or rate changes, and improvements to the codification for income taxes related to employee stock ownership plans and investments in qualified affordable housing projects accounted for using the equity method. As permitted, we adopted this updated guidance on January 1, 2021, which did not have a material impact on our consolidated financial statements.

Recently issued accounting standards or pronouncements not disclosed above have been excluded as they are not relevant to the Company.

Note 2 – Acquisitions

Peoples Gas Acquisition

On March 16, 2020 (the “Closing Date”), the Company completed the acquisition of Peoples Natural Gas (the “Peoples Gas Acquisition”), which expanded the Company’s regulated utility business to include natural gas distribution, serving approximately 750,000 natural gas utility customers in western Pennsylvania, West Virginia, and Kentucky. The Company paid cash consideration of \$3,465,344, which was subject to adjustment based upon the terms of the purchase agreement. Purchase price adjustments included the completion of a closing balance sheet, which was provided to the seller, and an adjustment for utility capital expenditures made by the seller during the period between November 1, 2018 and the Closing Date. There was a dispute between the parties regarding this adjustment for utility capital expenditures. In November 2021, the dispute between the parties regarding the adjustment for utility capital expenditures was resolved in accordance with the provisions of the purchase agreement and an inconsequential payment was made between the parties. The purchase price paid by the Company was determined as follows:

Base purchase price	\$	4,275,000
Adjustments:		
Estimated change in working capital		43,935
Certain estimated capital expenditures		247,500
Assumption of indebtedness		(1,101,091)
Cash consideration	\$	<u>3,465,344</u>

The assumption of \$1,101,091 of indebtedness as of the Closing Date, consisted of \$920,091 of senior notes and \$181,000 of short-term debt. The acquisition was financed through a series of financing transactions which included the issuance of common stock from a public offering and a private placement, a tangible equity unit offering, and short and long-term debt. Refer to Note 11 – *Long-term Debt and Loans Payable*, and Note 13 – *Stockholder’s Equity* for further information on these financings.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

The Company accounted for the Peoples Gas Acquisition as a business combination using the acquisition method of accounting. The purchase price was allocated to the net tangible and intangible assets based upon their estimated fair values at the date of the acquisition. The purchase price allocation was preliminary and was subject to revision through the end of the measurement period on March 15, 2021. During the first quarter of 2021, the Company recorded an adjustment to increase goodwill by \$16,400 primarily reflecting an adjustment to deferred income taxes and the valuation of accounts receivable. Goodwill recorded for the Peoples Gas Acquisition is not expected to be deductible for tax purposes. The following table summarizes the purchase price allocation as of the acquisition date and measurement period adjustments as of March 15, 2021:

	Amounts Previously Recognized as of Acquisition Date (a)	Measurement Period Adjustments	Amounts Recognized as of Acquisition Date (as Adjusted)
Property, plant and equipment, net	\$ 2,476,551	\$ -	\$ 2,476,551
Current assets	242,531	(9,197)	233,334
Regulatory assets	286,751	(22,293)	264,458
Goodwill	2,261,047	16,400	2,277,447
Other long-term assets	75,071	-	75,071
Total assets acquired	<u>5,341,951</u>	<u>(15,090)</u>	<u>5,326,861</u>
Current portion of long-term debt	5,136	-	5,136
Loans payable	181,000	-	181,000
Other current liabilities	186,120	(200)	185,920
Long-term debt	999,460	-	999,460
Deferred income taxes	213,647	(20,522)	193,125
Regulatory liabilities	123,029	6,389	129,418
Other long-term liabilities	168,215	(757)	167,458
Total liabilities assumed	<u>1,876,607</u>	<u>(15,090)</u>	<u>1,861,517</u>
Net assets acquired	<u>\$ 3,465,344</u>	<u>\$ -</u>	<u>\$ 3,465,344</u>

(a) As reported in the Essential Utilities, Inc. Form 10-K for the period ended December 31, 2020.

The fair value of long-term debt was determined based on prevailing market prices for similar debt issuances as of March 16, 2020, which resulted in an adjustment to increase the carrying amount by \$84,569. The fair value adjustment is being amortized over the remaining life of the debt.

Goodwill is attributable to the assembled workforce of Peoples, planned growth in new markets, and planned growth in rate base through continued investment in utility infrastructure. Goodwill recorded for the Peoples Gas Acquisition is not expected to be deductible for tax purposes.

The Company incurred transaction-related expenses for the Peoples Gas Acquisition, which consisted of costs recorded as operations and maintenance expenses in the first quarter of 2020 of \$25,397, and in 2019 of \$22,891, respectively, primarily representing expenses associated with investment banking fees, including bridge financing, employee related costs, obtaining regulatory approvals, legal expenses, and integration planning. Additionally, for the year to date 2019 period through settlement on April 24, 2019, the change in fair value of interest rate swap agreements of \$23,742 represents expense recognized from the mark-to-market adjustment. The interest rate swap agreements were settled on April 24, 2019, which coincided with debt financings to partially fund the Peoples Gas Acquisition. There were no further transaction-related expenses for the Peoples Gas Acquisition after the first quarter of 2020.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

The results of Peoples have been included in our consolidated financial statements as of the Closing Date. Peoples contributed revenues of \$520,944 and earnings of \$57,377 for the period from the Closing Date to December 31, 2020. The following pro forma summary presents consolidated unaudited information as if the Peoples Gas Acquisition had occurred on January 1, 2019:

	Years ended December 31,	
	2020	2019
Operating revenues	\$ 1,743,766	\$ 1,798,346
Net income	367,492	318,170

The supplemental pro forma information is not necessarily representative of the actual results that may have occurred for these periods or of the results that may occur in the future. This supplemental pro forma information is based upon the historical operating results of Peoples for periods prior to the Closing Date, and is adjusted to reflect the effect of non-recurring acquisition-related costs, incurred in 2020 and 2019 as if they occurred on January 1, 2019, including \$20,628 (\$25,197 pre-tax) and \$16,464 (\$21,406 pre-tax) of expenses incurred in 2020 and 2019, respectively, primarily associated with investment banking fees, obtaining regulatory approvals, legal expenses and other direct costs of the Peoples Gas Acquisition, adjustments to reflect net acquisition financing as of January 1, 2019 of \$39,567 (\$50,883 pre-tax), the elimination of interest on debt that was not assumed in the acquisition of \$7,971 (\$11,210 pre-tax), and the elimination of a management fee charged quarterly to Peoples by its former parent company of \$885 (\$1,245 pre-tax).

Associated with the approval of the Peoples Gas Acquisition from the Pennsylvania Public Utility Commission, the Company committed to addressing the replacement of gathering pipe over a seven year timeframe for an estimated cost of \$120,000, which will be recoverable through customer rates. Additionally, the Company committed to provide \$23,004 of one-time customer rate credits to its Pennsylvania natural gas utility customers and water and wastewater customers served by Aqua Pennsylvania. The Company granted \$4,080 of customer rate credits to its water and wastewater customers during the third quarter of 2020, and \$18,924 to its natural gas utility customers in the fourth quarter of 2020 to satisfy the \$23,004 commitment.

On October 23, 2018, the Company entered into interest rate swap agreements to mitigate interest rate risk associated with an anticipated \$850,000 of debt issuances to fund a portion of the Peoples Gas Acquisition. The interest rate swaps were settled on April 24, 2019 in conjunction with the issuance of long-term debt to be used to finance a portion of the purchase price of this acquisition, which resulted in a payment by the Company of \$83,520. The interest rate swap agreements did not qualify for hedge accounting and any changes in the fair value of the swaps was included in our earnings.

Water and Wastewater Utility Acquisitions – Pending Completion

In December 2021, the Company entered into a purchase agreement to acquire the water utility assets of the Southern Oaks Water System, which serves approximately 740 customers for \$3,300.

In October 2021, the Company entered into a purchase agreement to acquire the wastewater utility assets of the City of Beaver Falls, Pennsylvania which consists of approximately 7,600 customers for \$41,250. In July 2021, the Company entered into a purchase agreement to acquire the water utility assets of Shenandoah Borough, Pennsylvania which consists of approximately 2,930 customers for \$12,000. In April 2021, the Company entered into a purchase agreement to acquire certain water or wastewater utility assets of Oak Brook, Illinois which consists of approximately 4,000 customers for \$12,500. In January 2021, the Company entered into purchase agreements to acquire, in separate transactions, the wastewater utility system assets of East Whiteland Township, Pennsylvania and Willistown Township, Pennsylvania which consist of approximately 10,500 customers for \$72,400. In September 2020, the Company entered into a purchase agreement to acquire the wastewater utility system assets of Lower Makefield Township, Pennsylvania, which consists of approximately 11,000 customers for \$53,000.

The purchase price for these pending acquisitions are subject to certain adjustments at closing, and are subject to regulatory approval, including the final determination of the fair value of the rate based acquired. We plan to finance the purchase price of these acquisitions by utilizing our revolving credit facility until permanent debt and common equity are secured. The closing for the wastewater assets of Lower Makefield Township is expected to occur in the first quarter of 2022, and the closings of our acquisitions of East Whiteland Township, Willistown Township, Oak Brook and Shenandoah Borough are expected to occur in the second half of 2022. The closings of our Beaver Falls and Southern Oaks acquisitions are expected to occur late in 2022 or in early 2023. Closing for our utility acquisitions are subject to the timing of the regulatory approval process.

In September 2019, the Company entered into a purchase agreement to acquire the wastewater utility system assets of the Delaware County Regional Water Quality Control Authority ("DELCORA"), which consists of approximately 16,000 customers, or the equivalent of 198,000 retail customers, in 42 municipalities in Southeast Pennsylvania for \$276,500. In May 2020, Delaware County, Pennsylvania filed a lawsuit alleging that DELCORA does not have the legal authority to establish and fund a customer trust with the net proceeds of the transaction. In December 2020, the judge in the Delaware County Court lawsuit issued an order that (1) the County cannot interfere with the purchase agreement between DELCORA and the Company, (2) the County cannot terminate DELCORA prior to the closing of the transaction, and (3) that the establishment of the customer trust was valid. Delaware County appealed this decision to Commonwealth Court of Pennsylvania, where this case is continuing. A three-judge panel heard oral arguments on October 18, 2021; a decision is expected in the next several months. The administrative law judges in the regulatory approval process recommended that the Company's application be denied, and subsequently, the Company provided exceptions to the recommended decision. On March 25, 2021, the Pennsylvania Public Utility Commission ruled that the case be remanded back to the Office of Administrative Law Judge and vacated the original administrative law judges' recommended decision. On April 16, 2021, the administrative law judge issued an order staying the proceeding until the Delaware County Court lawsuit is final and unappealable. The purchase price for this pending acquisition is subject to certain adjustments at closing, and is subject to regulatory approval, including the final determination of the fair value of the rate base acquired. We plan to finance the purchase price of this acquisition by the issuance of common stock and by utilizing our revolving credit facility until permanent debt is secured. Closing of our acquisition of DELCORA is expected to occur in late 2022 or early 2023, subject to the timing of the regulatory approval process and DELCORA's above-referenced litigation with Delaware County.

Water and Wastewater Utility Acquisitions - Completed

In August 2021, the Company acquired the water utility system assets of The Commons Water Supply, Inc., which serves 992 customers in Harris County, Texas, and the wastewater utility system assets of the Village of Bourbonnais, which serves approximately 6,500 customers in Kankakee County, Illinois. The total cash purchase prices for these utility systems were \$4,000 and \$32,100, respectively. The purchase price allocation for these acquisitions consisted primarily of property, plant and equipment. The operating revenues included in the consolidated financial statements of the Company during the period owned by the Company for the utility systems acquired in 2021 are \$2,462.

In December 2020, the Company acquired the wastewater utility system asset of New Garden Township, Pennsylvania, which serves 1,965 customers. The total cash purchase price for the utility system was \$29,944. Further, in June 2020, the Company acquired the wastewater utility system assets of East Norriton Township, Pennsylvania, which serves 4,947 customers. The total cash purchase price for the utility system was \$21,000. The purchase price allocation for these acquisitions consisted primarily of property, plant and equipment. Additionally, during 2020, we completed four acquisitions of water and wastewater utility systems for \$12,335 in cash in three of the states in which we operate, adding 3,673 customers. The operating revenues included in the consolidated financial statements of the Company during the period owned by the Company for the utility systems acquired in 2020 were \$8,365 in 2021 and \$3,569 in 2020.

In December 2019, the Company acquired the wastewater utility system assets of Cheltenham Township, Pennsylvania, which serves 9,887 customers for \$50,250. The preliminary purchase price allocation for this acquisition consisted primarily of property, plant and equipment of \$44,558 and goodwill of \$5,692. Additionally, in 2019, the Company completed seven acquisitions of water and wastewater utility systems in three states adding 2,393 customers. The total purchase price of these utility systems consisted of \$9,437 in cash. The purchase price allocation for these acquisitions consisted primarily of acquired property, plant and equipment. The operating revenues included in the consolidated financial statements of the Company during the period owned by the Company for the utility systems acquired in 2019 were \$8,419 in 2021, \$8,353 in 2020 and \$506 in 2019.

The pro forma effect of the businesses acquired is not material either individually or collectively to the Company's results of operations.

Note 3 –Dispositions

The following dispositions have not been presented as discontinued operations in the Company's consolidated financial statements as they do not qualify as discontinued operations, since their disposal does not represent a strategic shift that has a major effect on our operations or financial results. Except where noted otherwise, the gains or losses disclosed below are reported in the consolidated statements of operations and comprehensive income as a component of operations and maintenance expense.

In October 2020 the Company sold its investment in a joint venture. Its investment represented its 49% investment in a joint venture that operates a private pipeline system to supply raw water to natural gas well drilling operations in the Marcellus Shale of north central Pennsylvania. This investment was an unconsolidated affiliate and was accounted for under the equity method of accounting within our Aqua Infrastructure subsidiary. In 2020, the Company recorded a charge of \$3,700 for the write-down of the Company's investment associated with the sale and is reported in equity loss in joint venture.

In 2018, the Company decided to market for sale a water system in Virginia that serves approximately 500 customers. This water system was reported as assets held for sale in the Company's consolidated balance sheet, and in April 2019, the Company completed the sale for proceeds of \$1,882 and recognized a gain on sale of \$405.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

Note 4 – Property, Plant and Equipment

	December 31,		Approximate Range of Useful Lives	Weighted Average Useful Life
	2021	2020		
Regulated Water segment:				
Utility plant and equipment				
Mains and accessories	\$ 4,014,507	\$ 3,800,878	32 - 94 years	76 years
Services, hydrants, treatment plants and reservoirs	2,672,186	2,425,303	5 - 89 years	56 years
Operations structures and water tanks	376,880	352,094	14 - 80 years	48 years
Miscellaneous pumping and purification equipment	1,011,487	976,719	9 - 76 years	42 years
Meters, transportation and other operating equipment	980,208	898,607	5 - 84 years	28 years
Land and other non-depreciable assets	116,888	137,390	-	-
Utility plant and equipment - regulated water segment	9,172,156	8,590,991		
Utility construction work in progress	304,373	225,208	-	-
Net utility plant acquisition adjustment	(9,055)	(12,215)	2 - 59 years	28 years
Non-utility plant and equipment	21,098	21,681	17 - 64 years	58 years
Property, Plant and Equipment - Regulated Water segment	9,488,572	8,825,665		
Regulated Gas segment:				
Natural gas transmission	365,051	362,477	5 - 93 years	67 years
Natural gas storage	60,985	60,846	5 - 85 years	47 years
Natural gas gathering and processing	131,237	126,105	5 - 88 years	59 years
Natural gas distribution	1,874,040	1,540,366	25 - 78 years	63 years
Meters, transportation and other operating equipment	588,716	580,043	5 - 95 years	25 years
Land and other non-depreciable assets	3,872	3,872	-	-
Utility plant and equipment - Regulated Natural Gas segment	3,023,901	2,673,709		
Utility construction work-in-progress	97,903	120,645	-	-
Property, plant and equipment-Regulated Natural Gas segment	3,121,804	2,794,354		
Total property, plant and equipment	\$ 12,610,376	\$ 11,620,019		

Note 5 – Accounts Receivable

	December 31,	
	2021	2020
Billed utility revenue	\$ 197,815	\$ 189,280
Other	1,283	5,594
	199,098	194,874
Less allowance for doubtful accounts	58,073	40,099
Net accounts receivable	\$ 141,025	\$ 154,775

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

The Company's utility customers are located principally in the following states: 66% in Pennsylvania, 9% in Ohio, 6% in North Carolina, 5% in Texas, and 5% in Illinois. No single customer accounted for more than one percent of the Company's utility operating revenues during the years ended December 31, 2021, 2020, and 2019. The following table summarizes the changes in the Company's allowance for doubtful accounts:

	2021	2020	2019
Balance at January 1,	\$ 40,099	\$ 7,353	\$ 6,914
Amounts charged to expense	27,336	32,325	5,306
Accounts written off	(19,731)	(12,613)	(5,980)
Recoveries of accounts written off and other	10,369	13,034	1,113
Balance at December 31,	<u>\$ 58,073</u>	<u>\$ 40,099</u>	<u>\$ 7,353</u>

For Recoveries of accounts written off and other, other represents the opening balance from the Peoples Gas Acquisition of \$10,962 in 2020 and additional measurement period adjustments in 2021 of \$12,851 before the measurement period ended.

Note 6 – Regulatory Assets and Liabilities

The regulatory assets represent costs that are probable to be fully recovered from customers in future rates while regulatory liabilities represent amounts that are expected to be refunded to customers in future rates or amounts recovered from customers in advance of incurring the costs. Except for income taxes and utility plant retirement costs, regulatory assets and regulatory liabilities are excluded from the Company's rate base and do not earn a return. The components of regulatory assets and regulatory liabilities are as follows:

	December 31, 2021		December 31, 2020	
	Regulatory Assets	Regulatory Liabilities	Regulatory Assets	Regulatory Liabilities
Income taxes	\$ 1,219,924	\$ 595,185	\$ 1,098,363	\$ 630,106
Purchased gas costs	13,798	-	585	18,618
Utility plant retirement costs	47,683	56,479	50,225	50,560
Post-retirement benefits	60,640	115,283	108,036	89,953
Accrued vacation	3,760	-	4,056	-
Water tank painting	7,553	-	6,306	978
Fair value adjustment of long-term debt assumed in acquisition	62,722	-	76,019	-
Debt refinancing	19,083	-	14,880	-
Rate case filing expenses and other	14,827	3,054	9,403	2,961
	<u>\$ 1,449,990</u>	<u>\$ 770,001</u>	<u>\$ 1,367,873</u>	<u>\$ 793,176</u>

Items giving rise to deferred state income taxes, as well as a portion of deferred Federal income taxes related to specific differences between tax and book depreciation expense, are recognized in the rate setting process on a cash basis or as a reduction in current income tax expense and will be recovered as they reverse. Amounts include differences that arise between specific utility asset improvement costs capitalized for book and deducted as an expense for tax purposes. Additionally, the recording of AFUDC for equity funds results in the recognition of a regulatory asset for income taxes, which represents amounts due related to the revenue requirement. The regulatory asset / (liability) for income taxes as of December 31, 2021 and 2020 includes an amount of \$(111) and \$659, respectively, related to Aqua Pennsylvania's deductions on qualifying utility system repairs. This regulatory asset/liability is recoverable (or refundable) in future rate filings based on the difference between the amount of the income tax benefits that were incorporated into the Company's cost of service in its latest rate case as compared to the actual income tax benefits recognized.

A portion of the regulatory liability for income taxes is related to Aqua Pennsylvania's income tax accounting change for the tax benefits realized on the Company's 2012 tax return, which have not yet reduced current income tax expense due to a rate order requiring a ten year amortization period which began in 2013. Beginning in 2013, the Company amortized \$38,000, annually, of its deferred income tax benefits, which reduced current income tax expense. In 2019, the amortization of this tax benefit was incorporated into the Company's cost of service by a rate order issued in May 2019. A portion of the income taxes regulatory liability is also related to Peoples Natural Gas' income tax accounting change for the tax benefits expected to be realized for the periods prior to adoption on March 16, 2020. The Company recorded a regulatory liability for this catch-up adjustment in the amount of \$160,655 in 2020 and it remained on the consolidated balance sheet as of December 31, 2020. In May 2021, the Company received a regulatory order directing the Company to refund the catch-up adjustment to its utility customers over a five-year period, which was initiated by the Company in August 2021.

The regulatory asset or liability for purchased gas costs reflects the differences between actual purchased gas costs and the levels of recovery for these costs in current rates. The unrecovered costs are recovered and the over-recovered costs are refunded in future periods, typically within a year, through quarterly and annual filings with the applicable state regulatory agency.

The regulatory asset for utility plant retirement costs, including cost of removal, represents costs already incurred that are expected to be recovered in future rates over a five year recovery period. The regulatory liability for utility plant retirement costs represents amounts recovered through rates during the life of the associated asset and before the costs are incurred.

The regulatory asset for accrued vacation represents costs that would otherwise be charged to operations and maintenance expense for vacation that is earned by employees, which is recovered as a cost of service.

The regulatory asset for post-retirement benefits, which includes pension and other post-retirement benefits, primarily reflects a regulatory asset that has been recorded for the costs that would otherwise be charged to stockholders' equity for the underfunded status of the Company's pension and other post-retirement benefit plans. The Company also has a regulatory asset related to post-retirement benefits costs that represent costs already incurred which are now being or anticipated to be recovered in rates over a period ranging from approximately 10 to 37 years. The regulatory liability for post-retirement benefits represents costs recovered in rates in excess of post-retirement benefits expense.

Expenses associated with water tank painting are deferred and amortized over a period of time as approved in the regulatory process. Water tank painting costs are generally being amortized over a period ranging from 10 to 20 years. The regulatory liability for water tank painting costs represents amounts recovered through rates and before the costs are incurred.

The Company recorded a fair value adjustment for fixed rate, long-term debt assumed in acquisitions that matures in various years ranging from 2022 to 2032. The regulatory asset or liability results from the rate setting process continuing to recognize the historical interest cost of the assumed debt.

The regulatory asset for debt refinancing represents a portion of a make whole payment of \$25,237 incurred in 2019 for the Company's redemption of \$313,500 of the Company's outstanding notes that had maturities ranging from 2019-2037 and interest rates ranging from 3.57-5.83%. The Company deferred a portion of the make whole payment as it represents an amount by which we expect to receive prospective rate recovery.

The regulatory asset related to rate case filing expenses and other represents the costs associated with filing for rate increases that are deferred and amortized over periods that generally range from one year to five years, and costs incurred by the Company for which it has received or expects to receive rate recovery.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

The regulatory asset related to the costs incurred for information technology software projects and water main cleaning and relining projects are described in Note 1 – *Summary of Significant Accounting Policies – Property, Plant and Equipment and Depreciation*.

Note 7 – Income Taxes

Income tax benefit for the years ended December 31, is comprised of the following:

	Years Ended December 31,		
	2021	2020	2019
Current:			
Federal	\$ (5,132)	\$ (1,831)	\$ (4,415)
State	4,034	(265)	1,834
	<u>(1,098)</u>	<u>(2,096)</u>	<u>(2,581)</u>
Deferred:			
Federal	3,036	(11,527)	(3,906)
State	(11,550)	(6,255)	(6,530)
	<u>(8,514)</u>	<u>(17,782)</u>	<u>(10,436)</u>
Total tax benefit	<u>\$ (9,612)</u>	<u>\$ (19,878)</u>	<u>\$ (13,017)</u>

The statutory Federal tax rate is 21% for 2021, 2020, and 2019. For states with a corporate net income tax, the state corporate net income tax rates range from 2.5% to 9.99% for all years presented. The Company's effective income tax rate for 2021, 2020, and 2019 was (2.3)%, (7.5)%, and (6.2)%, respectively. The Company remains subject to examination by federal and state tax authorities for the 2018 through 2021 tax years.

The reasons for the differences between amounts computed by applying the statutory Federal corporate income tax rate to income before income tax expense are as follows:

	Years Ended December 31,		
	2021	2020	2019
Computed Federal tax expense at statutory rate	\$ 88,620	\$ 55,644	\$ 44,420
Decrease in Federal tax expense related to an income tax accounting change for qualifying utility asset improvement costs	(76,534)	(53,532)	(48,518)
State income taxes, net of Federal tax benefit	(1,681)	(6,896)	(3,616)
Increase in tax expense for depreciation expense to be recovered in future rates	925	140	347
Stock-based compensation	(611)	(1,484)	(167)
Deduction for Essential Utilities common dividends paid under employee benefit plan	(330)	(315)	(315)
Amortization of deferred investment tax credits	(314)	(319)	(361)
Impact of Federal rate change and amortization of excess deferred income tax	(11,715)	(15,352)	(6,323)
Impact of acquisitions and reorganizations	(4,632)	-	-
Other, net	(3,340)	2,236	1,516
Actual income tax benefit	<u>\$ (9,612)</u>	<u>\$ (19,878)</u>	<u>\$ (13,017)</u>

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

In response to a June 2012 rate order issued by the Pennsylvania Public Utility Commission to Aqua Pennsylvania, the Company changed its tax method of accounting for qualifying utility system repairs, which provides for the expensing of qualifying utility asset improvement costs that were previously being capitalized and depreciated for book and tax purposes. The rate order allows for a reduction in current income tax expense as a result of the flow-through recognition of some income tax benefits due to the income tax accounting change. The Company recorded income tax benefits of \$48,965, \$49,077, and \$66,816 during 2021, 2020, and 2019, respectively. In May 2019 the Pennsylvania Public Utility Commission issued a rate order to Aqua Pennsylvania and commencing in 2020 the base rates are designed to include annual tax benefits for qualifying utility system improvement costs equal to \$158,865, subject to \$3,000 either above or below this target amount. To the extent actual tax benefits are outside this range, tax benefits will either be deferred or accrued, and settled in the next rate filing.

Aqua Pennsylvania adopted this method of tax accounting in 2012, and for prior tax years, the qualifying utility system asset improvement costs were previously capitalized and depreciated for book and tax purposes. The Company recognized a tax deduction on its 2012 Federal tax return of \$380,000 and based on a 2012 rate order, Aqua Pennsylvania began to amortize this benefit over ten years beginning in 2013. The amortization of this benefit, which annually amounted to \$38,000, effectively reduced current income tax expense annually by \$13,848. In May 2019, the Pennsylvania Public Utility Commission issued a new rate order and as a result, the amortization period was slightly shortened and now includes the tax benefits in establishing utility rates.

The following table provides the changes in the Company's unrecognized tax benefits:

	2021	2020
Balance at January 1,	\$ 19,194	\$ 18,671
Impact of current year activity on tax provision	1,007	523
Balance at December 31,	<u>\$ 20,201</u>	<u>\$ 19,194</u>

In accordance with the FASB's accounting guidance for income taxes we recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate resolution. From time to time, the Company may be assessed interest and penalties by taxing authorities, which would be recorded as income tax expense. There were no expenses for interest and penalties assessed by taxing authorities for the years ended December 31, 2021, 2020, and 2019. The Company accrued \$409 and \$24 in interest and penalties relative to their uncertain tax position during the years ended December 31, 2021 and 2020.

On its 2012 Federal tax return, filed in September 2013, Aqua Pennsylvania filed a change in accounting method to adopt the IRS temporary tangible property regulations. This method change allowed the Company to take a current year deduction for expenses that were previously capitalized for tax purposes. Since the filing of the 2012 tax return, the IRS has issued final regulations. While the Company maintains the belief that the deduction taken on its tax return is appropriate, the methodology for determining the deduction has not been agreed to by the taxing authorities. Provisions for uncertain tax positions were recorded to reflect the possible challenge of the Company's methodology for determining its repair deduction as required by the FASB's accounting guidance for income taxes. Should the taxing authority challenge the Company's tax treatment, and ultimately disallow a portion of the repair deduction, the Company expects Federal net operating loss carryforwards to offset any resulting liability, and state net operating loss carryforwards will offset a portion of any resulting liability.

The unrecognized tax benefits relate to the income tax accounting change, and the tax position is attributable to a temporary difference. The Company does not anticipate material changes to its unrecognized tax benefits within the next year. As a result of the regulatory treatment afforded by the income tax accounting change in Pennsylvania and despite this position being a temporary difference, as of December 31, 2021 and 2020, \$34,980 and \$33,050, respectively, of these tax benefits would have an impact on the Company's effective income tax rate in the event the Company does sustain all, or a portion, of its tax position.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

The following table provides the components of net deferred tax liability:

	December 31,	
	2021	2020
Deferred tax assets:		
Customers' advances for construction	\$ 28,845	\$ 30,155
Costs expensed for book not deducted for tax, principally accrued expenses	28,211	11,441
Post-retirement benefits	5,186	51,914
Tax effect of regulatory liabilities for post-retirement benefits	16,080	-
Tax attribute and credit carryforwards	243,131	206,347
Operating lease liabilities	16,064	17,432
Unrecovered purchased gas costs	-	5,239
Other	7,586	10,979
	<u>345,103</u>	<u>333,507</u>
Less valuation allowance	(36,662)	(34,772)
	<u>308,441</u>	<u>298,735</u>
Deferred tax liabilities:		
Utility plant, principally due to depreciation and differences in the basis of fixed assets due to variation in tax and book accounting	1,510,752	1,298,127
Deferred taxes associated with the gross-up of revenues necessary to recover, in rates, the effect of temporary differences	179,825	205,869
Tax effect of regulatory asset for post-retirement benefits	-	30,441
Utility plant acquisition adjustment basis differences	222	195
Deferred investment tax credit	5,406	5,744
Operating lease right-of-use assets	14,034	16,457
Over-recovered purchased gas costs	4,739	-
	<u>1,714,978</u>	<u>1,556,833</u>
Net deferred tax liability	<u>\$ 1,406,537</u>	<u>\$ 1,258,098</u>

At December 31, 2021, the Company has a cumulative Federal NOL of \$507,330. The Company believes the Federal NOLs are more likely than not to be recovered and require no valuation allowance. The Company's Federal NOLs do not begin to expire until 2032.

At December 31, 2021, the Company has a cumulative state NOL of \$1,657,743 a portion of which is offset by a valuation allowance because the Company does not believe these NOLs are more likely than not to be realized. The state NOLs do not begin to expire until 2023.

At December 31, 2021, the Company's Federal and state NOL carryforwards are reduced by an unrecognized tax position, on a gross basis, of \$80,150 and \$86,251, respectively, which results from the Company's adoption in 2013 of the FASB's accounting guidance on the presentation of an unrecognized tax benefit when a net operating loss carryforward, a similar tax loss, or a tax credit carryforward exists. The amounts of the Company's Federal and state NOL carryforwards prior to being reduced by the unrecognized tax positions are \$587,480 and \$1,743,994 respectively. The Company records its unrecognized tax benefit as a component of its net deferred income tax liability.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

On March 16, 2020, the Company completed the Peoples Gas Acquisition. On March 31, 2020, the Company changed the method of tax accounting for certain qualifying infrastructure investments at its Peoples Natural Gas subsidiary, its largest natural gas subsidiary in Pennsylvania. This change allows a tax deduction for qualifying utility asset improvement costs that were formerly capitalized for tax purposes. Consistent with the Company's accounting for differences between book and tax expenditures for its Aqua Pennsylvania subsidiary, the Company is utilizing the flow-through method to account for this timing difference. In addition, the Company calculated the income tax benefits for qualifying capital expenditures made prior to March 16, 2020 ("catch-up adjustment") and has recorded a regulatory liability for \$160,655 for these income tax benefits. In August 2020, the Company filed a petition with the Pennsylvania Public Utility Commission proposing treatment of the catch-up adjustment. On March 11, 2021, the Company and the statutory advocates filed a Joint Petition of Settlement ("Settlement") representing a settlement of the parties, and, on May 6, 2021, it was approved by the Pennsylvania Public Utility Commission. The Settlement stipulates, among other points, that the catch-up adjustment be provided to utility customers over a five-year period, and the Company can continue to use flow-through accounting for the current tax repair benefit until its next base rate case. The five-year customer surcredit for the catch-up adjustment was initiated in August 2021. In addition, the Company contributed \$500 to a customer-bill payment assistance program in July 2021 and in December 2021, provided \$5,000 in relief to past-due accounts for natural gas customers impacted by the COVID-19 pandemic through a rate credit fulfilling this requirement.

In connection with the completion of the Peoples Gas Acquisition, as the Company identified changes to acquired deferred tax asset or liabilities, including the impact of valuation allowances or liabilities related to uncertain tax positions during the one year measurement period that ended on March 15, 2021, and they were related to new information obtained about facts and circumstances that existed as of the acquisition date, those changes were considered a measurement-period adjustment, and resulted in an adjustment to goodwill. The Company records all other changes to deferred tax assets and liabilities in current-period income tax expense.

On November 15, 2021, President Biden signed into law the Infrastructure Investment and Jobs ("IIJ") Act. The IIJ contained several tax provisions, including the modification of the tax code to exclude from taxable income any contribution in aid of construction. This provision effectively restored the exclusion that existed prior to the enactment of TCJA and would generally apply to contributions made after December 31, 2020. The Company evaluated the tax provisions included in the IIJ, and their impact was incorporated in the calculation of the income tax provision.

Note 8 – Taxes Other than Income Taxes

The following table provides the components of taxes other than income taxes, including the expenses of Peoples for the period since the completion of the acquisition on March 16, 2020:

	Years Ended December 31,		
	2021	2020	2019
Property	\$ 33,946	\$ 32,054	\$ 27,735
Gross receipts, excise and franchise	15,777	14,462	13,500
Payroll	21,789	19,053	10,303
Regulatory assessments	6,968	3,130	2,916
Pumping fees	5,761	6,028	5,112
Other	2,400	1,870	389
Total taxes other than income taxes	\$ 86,641	\$ 76,597	\$ 59,955

Note 9 – Commitments and Contingencies

Commitments –

The Company maintains agreements with other water purveyors for the purchase of water to supplement its water supply, particularly during periods of peak demand. The agreements stipulate purchases of minimum quantities of water to the year 2029. The estimated annual commitments related to such purchases through 2026 are expected to average \$3,322 and the aggregate of the years remaining approximates \$331.

The Company has entered into purchase obligations, in the ordinary course of business, that include agreements for water treatment processes at some of its wells in a small number of its divisions. The 20 year term agreement provides for the use of treatment equipment and media used in the treatment process and are subject to adjustment based on changes in the Consumer Price Index. The future contractual cash obligations related to these agreements are as follows:

	2022	2023	2024	2025	2026	Thereafter
\$	3,120	\$ 1,038	\$ 1,055	\$ 1,078	\$ 1,102	\$ 3,261

The Company's natural gas supply is provided by sources on the interstate pipeline system and from local western Pennsylvania gas well production. The Company has various interstate pipeline service agreements that provide for firm transportation capacity, firm storage capacity, and other services and include capacity reservation charges based upon the maximum daily and annual contract quantities set forth in the agreements. Some of these agreements have minimum volume obligations and are transacted at applicable tariff and negotiated rates to the year 2034. The estimated annual commitments related to such purchases through 2026 are expected to average \$257,057 and the aggregate of the years remaining beyond 2026 approximates \$1,759,841.

The purchased water, water treatment, and purchased gas expenses under these agreements were as follows:

	Years Ended December 31,		
	2021	2020	2019
Purchased water under long-term agreements	\$ 5,867	\$ 5,931	\$ 6,577
Water treatment expense under contractual agreement	1,017	1,006	989
Purchased natural gas under long-term agreements	340,262	165,745	-

Contingencies – The Company is routinely involved in various disputes, claims, lawsuits and other regulatory and legal matters, including both asserted and unasserted legal claims, in the ordinary course of business. The status of each such matter, referred to herein as a loss contingency, is reviewed and assessed in accordance with applicable accounting rules regarding the nature of the matter, the likelihood that a loss will be incurred, and the amounts involved. As of December 31, 2021, the aggregate amount of \$17,215 is accrued for loss contingencies and is reported in the Company's consolidated balance sheet as other accrued liabilities and other liabilities. These accruals represent management's best estimate of probable loss (as defined in the accounting guidance) for loss contingencies or the low end of a range of losses if no single probable loss can be estimated. For some loss contingencies, the Company is unable to estimate the amount of the probable loss or range of probable losses. Further, Essential Utilities has insurance coverage for certain of these loss contingencies, and as of December 31, 2021, estimates that approximately \$2,458 of the amount accrued for these matters are probable of recovery through insurance, which amount is also reported in the Company's consolidated balance sheet as deferred charges and other assets, net.

During a portion of 2019, the Company initiated a do not consume advisory for some of its customers in one division served by the Company's Illinois subsidiary. During the second quarter of 2021, an immaterial amount was accrued for the portion of the fine or penalty that we determined to be probable and estimable of being incurred. In addition, on September 3, 2019, two individuals, on behalf of themselves and those similarly situated, commenced an action against the Company's Illinois subsidiary in the State court in Will County, Illinois related to this do not consume advisory. The complaint seeks class action certification, attorney's fees, and "damages, including, but not limited to, out of pocket damages, and discomfort, aggravation, and annoyance" based upon the water provided by the Company's subsidiary to a discrete service area in University Park Illinois. The complaint contains allegations of damages as a result of supplied water that exceeded the standards established by the federal Lead and Copper Rule. The complaint is in the discovery phase and class certification has not been granted. The Company is vigorously defending against this claim. A claim for the expenses incurred has been submitted to the Company's insurance carrier for potential recovery of a portion of these costs, and on August 3, 2020, the Company received \$2,874 in insurance proceeds. The Company continues to assess the potential loss contingency on this matter. While the final outcome of this claim cannot be predicted with certainty, and unfavorable outcomes could negatively impact the Company, at this time in the opinion of management, the final resolution of this matter is not expected to have a material adverse effect on the Company's financial position, results of operations or cash flows.

Although the results of legal proceedings cannot be predicted with certainty, other than disclosed above, there are no pending legal proceedings to which the Company or any of its subsidiaries is a party or to which any of its properties is the subject that are material or are expected to have a material effect on the Company's financial position, results of operations or cash flows.

In addition to the aforementioned loss contingencies, the Company self-insures a portion of its employee medical benefit program, and maintains stop-loss coverage to limit the exposure arising from these claims. The Company's reserve for these claims totaled \$2,470 and \$1,535 at December 31, 2021 and 2020 and represents a reserve for unpaid claim costs, including an estimate for the cost of incurred but not reported claims.

Associated with the approval of the Peoples Gas Acquisition from the Pennsylvania Public Utility Commission, the Company committed to addressing the replacement of gathering pipe over a seven year timeframe for an estimated cost of \$120,000, which will be recoverable through customer rates. Additionally, the Company committed to provide \$23,004 of one-time customer rate credits to its Pennsylvania natural gas utility customers and water and wastewater customers served by Aqua Pennsylvania, Inc. In 2020, the Company granted \$4,080 of customer rate credits to its Pennsylvania water and wastewater customers and \$18,924 to its Pennsylvania natural gas utility customers.

Note 10 – Leases

The Company leases land, office facilities, office equipment, and vehicles for use in its operations, which are accounted for as operating leases. Leases with a term of 12 months or less are not recorded on the balance sheet; rather, lease expense is recognized over the lease term. Our leases have remaining lives of 1 year to 73 years.

Some of the Company's leases can be extended on a month-to-month basis, which allow us to terminate the lease at any given month without penalty while others include options to extend the leases for up to 50 years. The renewal of a month-to-month lease is at our sole discretion.

The Company accounts for lease and non-lease components of lease arrangements separately. For calculating lease liabilities, we may deem lease terms to include options to extend or terminate the lease when it's reasonably certain that we will exercise that option. The Company's lease agreements do not contain significant residual value guarantees, restrictions or covenants.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

Lease liabilities and corresponding right-of-use assets are recorded based on the present value of the lease payments over the expected lease term, including leases with variable payments that are based on a market rate or an index and net of any impairment. All other variable payments are expensed as incurred. Since the Company's lease agreements do not provide an implicit interest rate, we utilize our incremental borrowing rate to determine the discount rate used to present value the lease payments.

During the fourth quarter of 2021, the Company determined that there were impairment indicators that required the Company to review a portion of office space that was not used in operations for impairment. Accordingly, the Company performed undiscounted cash flow analyses on the related right-of-use asset group and determined that such right-of-use asset was impaired. This resulted in a non-cash impairment charge of \$4,695, representing the excess of the right-of-use asset over its fair value, and is included within operations and maintenance expense in the consolidated statements of operations and comprehensive income. On March 16, 2020, the Company completed the Peoples Gas Acquisition and, upon application of the leasing standard and evaluation of acquired leases, it was determined that the market rental rate for one of its office spaces was lower than the contractual rental rate. Accordingly a fair market value adjustment of \$3,375 was recorded against the operating right-of-use assets in the consolidated balance sheets in 2020. The balance of the right-of-use asset group, after adjustments, is being amortized over the remaining life of the lease.

	Years Ended December 31,		
	2021	2020	2019
Components of lease expense were as follows:			
Operating lease cost	\$ 9,716	\$ 8,496	\$ 2,183

	Years Ended December 31,	
	2021	2020
Supplemental cash flow information related to leases was as follows:		
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	\$ 9,612	\$ 6,324

	December 31,	
	2021	2020
Supplemental balance sheet information related to leases was as follows:		
Operating leases:		
Operating lease right-of-use assets	\$ 48,930	\$ 60,334
Other accrued liabilities	\$ 7,841	\$ 7,666
Operating lease liabilities	48,230	55,642
Total operating lease liabilities	\$ 56,071	\$ 63,308

	December 31,	
	2021	2020
Weighted average remaining lease term:		
Operating leases	10 years	11 years
Weighted average discount rate:		
Operating leases	3.62%	3.62%

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

Maturities of operating lease liabilities and a reconciliation of the operating lease liabilities reported on our consolidated balance sheets as of December 31, 2021 are as follows:

	Operating Leases	
2022	\$	9,732
2023		9,294
2024		9,009
2025		9,028
2026		6,666
Thereafter		27,520
Total operating lease payments	\$	71,249
Total operating lease payments	\$	71,249
Less operating lease liabilities		56,071
Present value adjustment	\$	15,178

Note 11 – Long-term Debt and Loans Payable

Long-term Debt – The consolidated statements of capitalization provide a summary of long-term debt as of December 31, 2021 and 2020. The supplemental indentures with respect to specific issues of the first mortgage bonds restrict the ability of Aqua Pennsylvania and other operating subsidiaries of the Company to declare dividends, in cash or property, or repurchase or otherwise acquire the stock of these companies. Loan agreements for Aqua Pennsylvania and other operating subsidiaries of the Company have restrictions on minimum net assets. As of December 31, 2021, restrictions on the net assets of the Company were \$3,926,205 of the total \$5,184,450 in net assets. Included in this amount were restrictions on Aqua Pennsylvania’s net assets of \$1,523,351 of their total net assets of \$2,158,273. As of December 31, 2021, \$1,929,339 of Aqua Pennsylvania’s retained earnings of \$1,949,339 and \$244,809 of the retained earnings of \$397,547 of other subsidiaries were free of these restrictions. Some supplemental indentures also prohibit Aqua Pennsylvania and some other subsidiaries of the Company from making loans to, or purchasing the stock of, the Company.

Sinking fund payments are required by the terms of specific issues of long-term debt. Excluding amounts due under the Company’s revolving credit agreement, the future sinking fund payments and debt maturities of the Company’s long-term debt are as follows:

Interest Rate Range	2022	2023	2024	2025	2026	Thereafter
0.00% to 0.99%	\$ 466	\$ 463	\$ 256	\$ 195	\$ 182	\$ 779
1.00% to 1.99%	947	827	755	766	776	5,270
2.00% to 2.99%	101,964	2,870	1,619	1,427	1,305	1,103,566
3.00% to 3.99%	23,103	32,731	53,578	783	751	2,393,807
4.00% to 4.99%	1,644	157,518	1,658	124,592	1,562	1,499,050
5.00% to 5.99%	1,696	11,872	10,611	636	104	31,200
6.00% to 6.99%	1,364	111	-	-	5,000	26,000
7.00% to 7.99%	332	17	-	23,000	-	5,631
8.00% to 8.99%	630	853	841	449	-	-
9.00% to 9.99%	-	-	-	-	11,800	-
Total	\$ 132,146	\$ 207,262	\$ 69,318	\$ 151,848	\$ 21,480	\$ 5,065,303

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

On April 15, 2021, the Company's operating subsidiary, Aqua Ohio, Inc., issued \$100,000 of first mortgage bonds, of which \$50,000 is due in 2031 and \$50,000 is due in 2051, with interest rates of 2.37% and 3.35%, respectively. The proceeds from these bonds were used for general corporate purposes and to repay existing indebtedness. Further, on April 19, 2021, the Company issued \$400,000 of long-term debt, with expenses of \$4,010, which is due in 2031 with an interest rate of 2.40%. The Company used the proceeds from this issuance to repay \$50,000 of borrowings under the Aqua Pennsylvania revolving credit facility, and the balance was used to repay in full the borrowings under its existing five year unsecured revolving credit agreement.

In November 2020, Aqua Pennsylvania issued \$150,000 of first mortgage bonds, of which \$50,000 is due in 2053, \$50,000 is due in 2057, and \$50,000 is due in 2058 with interest rates of 2.85%, 2.89%, and 2.90%, respectively. In May 2020, Aqua Pennsylvania issued \$175,000 of first mortgage bonds, of which \$75,000 is due in 2051, \$50,000 is due in 2055, and \$50,000 is due in 2056 with interest rates of 3.49%, 3.54%, and 3.55%, respectively. The proceeds from these bonds were used to repay existing indebtedness and for general corporate purposes.

On April 3, 2020, the Company entered into a 364 day credit agreement that provided the Company with short-term borrowing capacity of up to \$500,000 in unsecured term loans (the "Term Loan Agreement"). The Company borrowed the full \$500,000 on April 3, 2020, which was used to strengthen its liquidity and cash position and maximize its financial flexibility in light of the uncertainty surrounding the impact of the COVID-19 pandemic. In May and June 2020, the Company repaid \$300,000 and \$200,000 of the term loans, respectively, and based on the Company's ability to access financial markets, we terminated the facility. The term loans bore interest at either the Adjusted LIBO Rate or the Alternate Base Rate, as each such term is defined in the Term Loan Agreement. Amounts under the term loan could not be re-borrowed upon repayment. Additionally, on April 13, 2020, the Company issued \$1,100,000 of long-term debt, less expenses of \$10,525, of which \$500,000 is due in 2030, and \$600,000 is due in 2050 with interest rates of 2.704% and 3.351%, respectively. The Company used the proceeds from this issuance to repay in full the borrowings of \$181,000 of short-term debt assumed in the Peoples Gas Acquisition, \$150,000 of short-term debt issued on March 13, 2020, and to repay borrowings under its existing five year unsecured revolving credit agreement.

On March 13, 2020, the Company entered into a 364 day \$150,000 credit agreement pursuant to which the Company borrowed \$150,000, which was used to fund a portion of the Peoples Gas Acquisition in lieu of additional borrowings under our revolving credit facility, which was subsequently repaid with the proceeds from the Company's April 2020 long-term debt issuance noted above.

The Company completed the Peoples Gas Acquisition on March 16, 2020, which resulted in the assumption of \$1,101,091 of indebtedness, which included \$920,091 of senior notes and \$181,000 of short-term debt. The senior notes have maturities ranging from 2020 to 2032 and interest rates that range from 2.90% to 6.42%. The short-term debt assumed at closing was repaid with the proceeds from the Company's April 2020 long-term debt issuance noted above.

In December 2019, Aqua Pennsylvania issued \$125,000 of first mortgage bonds, of which \$75,000 is due in 2052 and \$50,000 is due in 2053 with interest rates of 3.39% and 3.41%, respectively. In September 2019, Aqua Pennsylvania issued \$175,000 of first mortgage bonds, of which \$50,000 is due in 2054, \$75,000 is due in 2058, and \$50,000 is due in 2059 with interest rates of 4.09%, 4.13% and 4.14%, respectively. In May 2019, Aqua Pennsylvania issued \$125,000 of first mortgage bonds, of which \$75,000 is due in 2049, \$25,000 is due in 2054, and \$25,000 is due in 2059 with interest rates of 4.02%, 4.07%, and 4.12%, respectively. The proceeds from these bonds were used to repay existing indebtedness and for general corporate purposes.

On May 18, 2019, the Company redeemed \$313,500 of the Company's outstanding notes (the "Company Debt Refinancing") that had maturities ranging from 2019-2037 and interest rates ranging from 3.57% - 5.83%. Additionally, the Company Debt Refinancing was subject to a make whole payment of \$25,237, and \$18,528 of this payment was expensed, and is presented in the consolidated statements of operations on the line item "loss on debt extinguishment." The balance of the payment, or \$6,709, was deferred, as a regulatory asset, as it represents an amount by which the Company expects to receive prospective rate recovery. Further, in 2020 the Company recorded an additional regulatory asset for \$3,888, as it represents an amount on which the Company expects to receive prospective rate recovery. The recognition of this regulatory asset in 2020 has been presented in the consolidated statements of operations and comprehensive income within the line item "Other."

On April 26, 2019, the Company issued \$900,000 of long-term debt (the "Senior Notes"), less expenses of \$7,931, of which \$400,000 is due in 2029, and \$500,000 is due in 2049 with interest rates of 3.566% and 4.276%, respectively. The Company used the net proceeds from the issuance of Senior Notes to (1) secure \$436,000 of funding for the Peoples Gas Acquisition, (2) complete the redemption of \$313,500 aggregate principal amount of certain of the Company's outstanding notes associated with the Company Debt Refinancing, (3) pay related costs and expenses, and (4) for general corporate purposes.

The weighted average cost of long-term debt at December 31, 2021 and 2020 was 3.49% and 3.56%, respectively. The weighted average cost of fixed rate long-term debt at December 31, 2021 and 2020 was 3.61% and 3.73%, respectively. As of December 31, 2021, the Company has an amended \$1,000,000 five year unsecured revolving credit facility, which expires in December 2023. The Company's unsecured revolving credit facility is used for other general corporate purposes. The facility includes a \$50,000 sublimit for daily demand loans. Funds borrowed under this facility are classified as long-term debt and are used to provide working capital as well as support for letters of credit for insurance policies and other financing arrangements. As of December 31, 2021, the Company has the following sublimits and available capacity under the credit facility: \$50,000 letter of credit sublimit, \$29,078 of letters of credit available capacity, and \$300,000 of funds borrowed under the agreement. Interest under this facility is based at the Company's option, on the prime rate, an adjusted Euro-Rate, an adjusted federal funds rate or at rates offered by the banks. A facility fee is charged on the total commitment amount of the agreement. Under these facilities the average cost of borrowings was 1.31% and 1.62%, and the average borrowing was \$174,026 and \$221,230, during 2021 and 2020, respectively.

The Company is obligated to comply with covenants under some of its loan and debt agreements. These covenants contain a number of restrictive financial covenants, which among other things limit, subject to specific exceptions, the Company's ratio of consolidated total indebtedness to consolidated total capitalization, and require a minimum level of earnings coverage over interest expense. During 2021, the Company was in compliance with its debt covenants under its loan and debt agreements. Failure to comply with the Company's debt covenants could result in an event of default, which could result in the Company being required to repay or finance its borrowings before their due date, possibly limiting the Company's future borrowings, and increasing its borrowing costs.

Loans Payable – In November 2021, Aqua Pennsylvania renewed its \$100,000 364-day unsecured revolving credit facility with four banks. The funds borrowed under this agreement are classified as loans payable and used to provide working capital. As of December 31, 2021 and 2020, funds borrowed under the agreement were \$35,000 and \$49,198, respectively. Prior to November 2021, interest under this facility was based, at the borrower's option, on the prime rate, an adjusted federal funds rate, an adjusted London Interbank Offered Rate corresponding to the interest period selected, an adjusted Euro-Rate corresponding to the interest period selected or at rates offered by the banks. Effective November 2021, interest under this facility is based, at the borrower's option, on the prime rate, an adjusted overnight bank funding rate, or an adjusted Bloomberg Short-Term Bank Yield Index (BSBY) floating rate. This agreement restricts short-term borrowings of Aqua Pennsylvania. A commitment fee of 0.05% is charged on the total commitment amount of Aqua Pennsylvania's revolving credit agreement. The average cost of borrowing under the facility was 0.78% and 1.12%, and the average borrowing was \$40,312 and \$37,166, during 2021 and 2020, respectively. The maximum amount outstanding at the end of any one month was \$70,000 and \$54,669 in 2021 and 2020, respectively.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

In November 2021, Peoples Natural Gas Companies renewed its \$100,000 364-day secured revolving credit facility with two banks. As of December 31, 2021 and 2020, funds borrowed under the agreement were \$30,000 and \$29,000, respectively. The funds borrowed under this agreement are classified as loans payable and used to provide working capital. Prior to November 2021, interest under this facility was based, at the borrower's option, on the prime rate, an adjusted federal funds rate, an adjusted London Interbank Offered Rate corresponding to the interest period selected or at rates offered by the banks. Beginning November 2021, interest under this facility is based, at the borrower's option, at the prime rate, an adjusted overnight bank funding rate, or an adjusted BSBY floating rate. A commitment fee of 0.05% is charged on the total commitment amount of Peoples' revolving credit agreement. The average cost of borrowing under the facility was 1.02% and 0.96%, and the average borrowing was \$23,750 and \$2,417, during 2021 and 2020, respectively. The maximum amount outstanding at the end of any one month was \$30,000 and \$29,000 in 2021 and 2020, respectively.

At December 31, 2021 and 2020, the Company had other combined short-term lines of credit of \$35,500. Funds borrowed under these lines are classified as loans payable and are used to provide working capital. As of December 31, 2021 and 2020, funds borrowed under the short-term lines of credit were \$0. The average borrowing under the lines was \$0 and \$2,500 during 2021 and 2020, respectively. The maximum amount outstanding at the end of any one month was \$0 and \$7,500 in 2021 and 2020, respectively. Interest under the lines is based at the Company's option, depending on the line, on the prime rate, an adjusted Euro-Rate, an adjusted federal funds rate or at rates offered by the banks. The average cost of borrowings under all lines during 2021 and 2020 was 0% and 1.11%, respectively.

Interest Income and Expense— Interest income of \$2,384, \$5,363, and \$25,406 was recognized for the years ended December 31, 2021, 2020, and 2019, respectively. Interest expense was \$207,709, \$188,435, and \$125,383 in 2021, 2020, and 2019, including amounts capitalized for borrowed funds of \$4,510, \$4,434, and \$4,231, respectively.

Interest Rate Swap Agreements – In October 2018, the Company entered into interest rate swap agreements to mitigate interest rate risk associated with an anticipated \$850,000 of debt issuances to fund a portion of the Peoples Gas Acquisition and refinance a portion of the Company's borrowings. On April 24, 2019, the Company settled the interest rate swap agreements upon issuance of \$900,000 of long-term debt to be used to finance a portion of the purchase price of the Peoples Gas Acquisition and redeem \$313,500 of the Company's existing debt. The settlement resulted in a payment by the Company of \$83,520.

The interest rate swaps did not qualify for hedge accounting and any changes in the fair value of the swaps was included in our earnings. The interest rate swaps were classified as financial derivatives used for non-trading activities. The Company recorded the fair value of the interest rate swaps by discounting the future net cash flows associated with the debt issuance and recognized either an asset or liability at the balance sheet date.

The following table provides a summary of the amounts recognized in earnings for our interest rate swap agreements:

	Location of Loss Recognized	Amount of Loss Recognized in Income on Derivatives Years Ended December 31,		
		2021	2020	2019
Derivatives not designated as hedging instrument:				
Interest rate swaps	Other expense	\$ -	\$ -	\$ (23,742)

Note 12 – Fair Value of Financial Instruments

Financial instruments are recorded at carrying value in the financial statements and approximate fair value, with the exception of long-term debt, as of the dates presented. The fair value of these instruments is disclosed below in accordance with current accounting guidance related to financial instruments.

The fair value of loans payable is determined based on its carrying amount and utilizing Level 1 methods and assumptions. As of December 31, 2021 and 2020, the carrying amount of the Company's loans payable was \$65,000 and \$78,198, respectively, which equates to their estimated fair value. The fair value of cash and cash equivalents is determined based on Level 1 methods and assumptions. As of December 31, 2021 and 2020, the carrying amounts of the Company's cash and cash equivalents were \$10,567 and \$4,827, respectively, which equates to their fair value. The Company's assets underlying the deferred compensation and non-qualified pension plans are determined by the fair value of mutual funds, which are based on quoted market prices from active markets utilizing Level 1 methods and assumptions. As of December 31, 2021 and 2020, the carrying amount of these securities was \$28,576 and \$25,780, respectively, which equates to their fair value, and is reported in the consolidated balance sheet in deferred charges and other assets.

Unrealized gains and losses on equity securities held in conjunction with our non-qualified pension plan is as follows:

	Years ended December 31,		
	2021	2020	2019
Net gain recognized during the period on equity securities	\$ 607	\$ 492	\$ 293
Less: net gain / loss recognized during the period on equity securities sold during the period	-	-	-
Unrealized gain recognized during the reporting period on equity securities still held at the reporting date	<u>\$ 607</u>	<u>\$ 492</u>	<u>\$ 293</u>

The net gain (loss) recognized on equity securities is presented on the consolidated statements of operations and comprehensive income on the line item "Other."

The carrying amounts and estimated fair values of the Company's long-term debt is as follows:

	December 31,	
	2021	2020
Carrying amount	\$ 5,947,357	\$ 5,630,243
Estimated fair value	6,482,499	6,366,030

The fair value of long-term debt has been determined by discounting the future cash flows using current market interest rates for similar financial instruments of the same duration utilizing level 2 methods and assumptions. The Company's customers' advances for construction have a carrying value of \$103,619 and \$99,014 at December 31, 2021 and 2020, respectively. Their relative fair values cannot be accurately estimated because future refund payments depend on several variables, including new customer connections, customer consumption levels and future rates. Portions of these non-interest bearing instruments are payable annually through 2031 and amounts not paid by the respective contract expiration dates become non-refundable. The fair value of these amounts would, however, be less than their carrying value due to the non-interest bearing feature.

Note 13 – Stockholders’ Equity

At December 31, 2021, the Company had 600,000,000 shares of common stock authorized; par value \$0.50. Shares outstanding and treasury shares held were as follows:

	December 31,		
	2021	2020	2019
Shares outstanding	252,867,623	245,390,468	220,758,719
Treasury shares	3,234,765	3,180,887	3,112,565

Forward Equity Sale

In August 2020, the Company entered into a forward equity sale agreement for 6,700,000 shares of common stock with a third party (the “forward purchaser”). In connection with the forward equity sale agreement, the forward purchaser borrowed an equal number of shares of the Company’s common stock from stock lenders and sold the borrowed shares to the public. The Company did not receive any proceeds from the sale of its common stock by the forward purchaser until settlement of the shares underlying the forward equity sale agreement. The actual proceeds to be received by the Company would have varied depending upon the settlement date, the number of shares designated for settlement on that settlement date and the method of settlement. The forward equity sale agreement was accounted for as an equity instrument and was recorded at a fair value of \$0 at inception. The fair value was not adjusted as the Company continued to meet the accounting requirements for equity instruments.

On August 9, 2021, the Company settled the forward equity sale agreement in full by physical share settlement. The Company issued 6,700,000 shares and received cash proceeds of \$299,739 at a forward price of \$44.74 per share. Pursuant to the agreement, the forward price was computed based upon the initial forward price of \$46.00 per share, adjusted for a floating interest rate factor equal to a specified daily rate less a spread and scheduled dividends during the term of the agreement. The Company used the proceeds received upon settlement of the forward equity sale agreement to fund general corporate purposes, including for water and wastewater utility acquisitions, working capital and capital expenditures. The forward equity sale agreement has now been completely settled, and there are no additional shares subject to the forward equity sale agreement.

Private Placement

On March 29, 2019, the Company entered into a Stock Purchase Agreement (the “Stock Purchase Agreement”) with Canada Pension Plan Investment Board (the “Investor”), pursuant to which the Company agreed to issue and sell to the Investor in a private placement (the “Private Placement”) 21,661,095 newly issued shares of common stock, par value \$0.50 per share (the “Common Stock”). On March 16, 2020, in connection with the closing of the Peoples Gas Acquisition, the Company closed on the Private Placement and received gross proceeds of \$749,907, less expenses of \$20,606. In June 2021, the Company filed a registration statement on Form S-3 ASR registering the Private Placement shares for resale.

The shares issued and sold to the Investor pursuant to the Private Placement were to be priced at the lower of (1) \$34.62, which represents a 4.5% discount to the trailing 20 consecutive trading day volume weighted average price of the Common Stock ending on, and including, March 28, 2019, and (2) the volume weighted average price per share in the Company’ subsequent public offering of Common Stock to fund a portion of the Peoples Gas Acquisition. Based on the common stock offering noted below, the Private Placement was priced at \$34.62 per share.

The Stock Purchase Agreement contains customary representations, warranties and covenants of the Company and the Investor, and the parties have agreed to indemnify each other for losses related to breaches of their respective representations and warranties. At the closing of the Private Placement, the Company reimbursed the Investor for reasonable out-of-pocket diligence expenses of \$4,000.

Common Stock / Tangible Equity Unit Issuances

On April 23, 2019, the Company issued \$1,293,750, less expenses of \$30,651, of its common stock and \$690,000, less expenses of \$16,358, of its tangible equity units (the "Units"), with a stated amount of \$50 per unit. These issuances were part of the financing of the Peoples Gas Acquisition. The common stock was issued at \$34.62 per share and thus the Private Placement noted above was priced at \$34.62 per share.

Each Unit consists of a prepaid stock purchase contract and an amortizing note due April 30, 2022, each issued by the Company. Unless earlier settled or redeemed, each stock purchase contract will automatically settle on April 30, 2022 (subject to postponement in limited circumstances) for between 1.1790 and 1.4442 shares of the Company's common stock, subject to adjustment, based upon the applicable market value of the common stock, as described in the final prospectus supplement relating to the Units. As of December 31, 2021, 6,196,766 stock purchase contracts have been early settled by the holders of the contracts, resulting in the issuance of 7,310,004 shares of the Company's common stock. As of December 31, 2021, the balance of stock purchase contracts is 7,603,234. The amortizing notes have an initial principal amount of \$8.62909, or \$119,081 in aggregate, and bear interest at a rate of 3.00% per year, and pay equal quarterly cash installments of \$0.75000 per amortizing note (except for the July 30, 2019 installment payment, which was \$0.80833 per amortizing note), that will constitute a payment of interest and a partial repayment of principal, and which cash payment in the aggregate will be equivalent to 6.00% per year with respect to each \$50 stated amount of the Units. The amortizing notes represent unsecured senior obligations of the Company.

The issuance of the common stock and the Units (including the component stock purchase contracts and amortizing notes) were separate public issuances made by means of separate prospectus supplements pursuant to the Company's universal "pay as you go" shelf registration statement, which allows for the potential future offer and sale by us, from time to time, in one or more public offerings, of an indeterminate amount of the Company's common stock, preferred stock, debt securities, and other securities specified therein at indeterminate prices.

The Company recorded the issuance of the purchase contract portion of the Units as additional paid-in-capital of \$570,919, less allocable issuance costs of \$13,530, in our financial statements. The Company recorded the amortizing notes portion of the Units of \$119,081 as long-term debt and recorded allocable issuance costs of \$2,828 as debt issuance costs.

At December 31, 2021, the Company had 1,770,819 shares of authorized but unissued Series Preferred Stock, \$1.00 par value.

In April 2021, the Company filed a universal shelf registration, through a filing with the Securities and Exchange Commission ("SEC"), to allow for the potential future offer and sale by the Company, from time to time, in one or more public offerings, of an indeterminate amount of our common stock, preferred stock, debt securities and other securities specified therein at indeterminate prices.

The Company has an acquisition shelf registration statement on file with the SEC which permits the offering, from time to time, of an aggregate of \$500,000 in shares of common stock and shares of preferred stock in connection with acquisitions. The balance remaining available for use under the acquisition shelf registration as of December 31, 2021 is \$487,155.

The form and terms of any securities issued under the universal shelf registration statement and the acquisition shelf registration statement will be determined at the time of issuance.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

The Company has a Dividend Reinvestment and Direct Stock Purchase Plan (“Plan”) that allows reinvested dividends to be used to purchase shares of common stock at a five percent discount from the current market value. Under the direct stock purchase program, shares are issued throughout the year. The shares issued under the Plan are either shares purchased by the Company’s transfer agent in the open-market or original issue shares. In 2021, and 2020, the Company sold 374,824 and 388,978 original issue shares of common stock through the dividend reinvestment portion of the Plan, for net proceeds of \$16,799 and \$16,522, respectively. In 2019, 183,731 shares of the Company were purchased under the dividend reinvestment portion of the Plan by the Company’s transfer agent in the open-market for \$7,777.

The Company’s accumulated other comprehensive income is reported in the consolidated statements of equity. The Company recorded a regulatory asset for its underfunded status of its pension and other post-retirement benefit plans that would otherwise be charged to other comprehensive income, as it anticipates recovery of its costs through customer rates.

Note 14 – Net Income per Common Share and Equity per Common Share

Basic net income per share is based on the weighted average number of common shares outstanding and the minimum number of shares to be issued upon settlement of the stock purchase contracts issued under the tangible equity units. Diluted net income per share is based on the weighted average number of common shares outstanding and potentially dilutive shares, and the expected number of shares to be issued upon settlement of the stock purchase contracts issued under the tangible equity units, based on the applicable market value of our common stock. The dilutive effect of employee stock-based compensation and shares issuable under the forward equity sale agreement (from the date the Company entered into the forward equity sale agreement to the settlement date) are included in the computation of diluted net income per share. The dilutive effect of stock-based compensation and shares issuable under the forward equity sale agreement are calculated by using the treasury stock method and expected proceeds upon exercise or issuance of the stock-based compensation and settlement of the forward equity sale agreement. The treasury stock method assumes that the proceeds from stock-based compensation and settlement of the forward equity sale agreement are used to purchase the Company’s common stock at the average market price during the period. The following table summarizes the shares, in thousands, used in computing basic and diluted net income per share:

	Years ended December 31,		
	2021	2020	2019
Average common shares outstanding during the period for basic computation	257,487	249,768	215,550
Effect of dilutive securities:			
Forward equity sale agreement	189	-	-
Issuance of common stock from private placement	-	4,438	-
Tangible equity units	-	-	-
Employee stock-based compensation	504	423	381
Average common shares outstanding during the period for diluted computation	258,180	254,629	215,931

For the year ended December 31, 2020, the average common shares outstanding during the period for diluted computation reflects the impact of the issuance of common stock from the March 16, 2020 private placement as if the shares were issued on January 1, 2020.

For the years ended December 31, 2021, 2020 and 2019, all of the Company’s employee stock options were included in the calculation of diluted net income per share as the calculated cost to exercise the stock options was less than the average market price of the Company’s common stock during these periods. Additionally, the dilutive effect of performance share units and restricted share units granted are included in the Company’s calculation of diluted net income per share.

For the years ended December 31, 2021, 2020, and 2019, the average common shares outstanding during the period for basic computation includes the weighted-average impact of 9,041,687, 9,370,646 and 10,533,133 shares, respectively, based on the minimum number of shares of 8,963,964, 9,091,179 and 11,425,345, respectively, to be issued in April 2022 upon settlement of the stock purchase contracts issued in April 2019 under the tangible equity units.

Equity per common share was \$20.50 and \$19.09 at December 31, 2021 and 2020, respectively. These amounts were computed by dividing Essential Utilities stockholders' equity by the number of shares of common stock outstanding at the end of each year.

Note 15 – Employee Stock and Incentive Plan

Under the Company's Amended and Restated Equity Compensation Plan, (the "Plan") approved by the Company's shareholders on May 2, 2019, to replace the 2004 Equity Compensation Plan, stock options, stock units, stock awards, stock appreciation rights, dividend equivalents, and other stock-based awards may be granted to employees, non-employee directors, and consultants and advisors. The Plan authorizes 6,250,000 shares for issuance under the plan. A maximum of 3,125,000 shares under the Plan may be issued pursuant to stock award, stock units and other stock-based awards, subject to adjustment as provided in the Plan. During any calendar year, no individual may be granted (i) stock options and stock appreciation rights under the Plan for more than 500,000 shares of common stock in the aggregate or (ii) stock awards, stock units or other stock-based awards under the Plan for more than 500,000 shares of Company stock in the aggregate, subject to adjustment as provided in the Plan. Awards to employees and consultants under the Plan are made by a committee of the Board of Directors, except that with respect to awards to the Chief Executive Officer, the committee recommends those awards for approval by the non-employee directors of the Board of Directors. In the case of awards to non-employee directors, the Board of Directors makes such awards. At December 31, 2021, 2,099,761 shares were still available for issuance under the Plan. No further grants may be made under the Company's 2004 Equity Compensation Plan.

Performance Share Units – During 2021 and 2020, the Company granted performance share units. A performance share unit ("PSU") represents the right to receive a share of the Company's common stock if specified performance goals are met over the three year performance period specified in the grant, subject to exceptions through the respective vesting periods, which is generally three years. Each grantee is granted a target award of PSUs, and may earn between 0% and 200% of the target amount depending on the Company's performance against the performance goals.

The Company did not grant PSUs for the year ended December 31, 2019. The performance goals of the 2021 and 2020 PSU grants consisted of the following metrics:

	Performance Grant 2021 and 2020
Metric 1 – Company's total shareholder return ("TSR") compared to the TSR for a specific peer group of investor-owned utilities (a market-based condition)	38.46%
Metric 2 – Achievement of a targeted cumulative level of rate base growth as a result of acquisitions (a performance-based condition)	30.77%
Metric 3 – Achievement of targets for maintaining consolidated operations and maintenance expenses over the three year measurement period (a performance-based condition)	30.77%

The following table provides the compensation expense and income tax benefit for PSUs:

	Years ended December 31,		
	2021	2020	2019
Stock-based compensation within operations and maintenance expense	\$ 7,150	\$ 3,630	\$ 2,741
Income tax benefit	2,038	957	767

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

The following table summarizes nonvested PSU transactions for the year ended December 31, 2021:

	Number of Share Units	Weighted Average Fair Value
Nonvested share units at beginning of period	283,007	\$ 34.57
Granted	151,711	43.18
Performance criteria adjustment	70,783	49.41
Forfeited	(8,789)	46.34
Share units issued	(141,328)	31.36
Nonvested share units at end of period	<u>355,384</u>	42.19

A portion of the fair value of PSUs was estimated at the grant date based on the probability of satisfying the market-based conditions associated with the PSUs using the Monte Carlo valuation method, which assesses the probabilities of various outcomes of market conditions. The other portion of the fair value of the PSUs associated with performance-based conditions was based on the fair market value of the Company's stock at the grant date, regardless of whether the market-based condition is satisfied. The fair value of each PSU grant is amortized into compensation expense on a straight-line basis over their respective vesting periods, generally 36 months. The accrual of compensation costs is based on an estimate of the final expected value of the award and is adjusted as required for the portion based on the performance-based condition. The Company assumes that forfeitures will be minimal, and recognizes forfeitures as they occur, which results in a reduction in compensation expense. As the payout of the PSUs includes dividend equivalents, no separate dividend yield assumption is required in calculating the fair value of the PSUs. The recording of compensation expense for PSUs has no impact on net cash flows. The following table provides the assumptions used in the pricing model for the grant, the resulting grant date fair value of PSUs, and the intrinsic value and fair value of PSUs that vested during the year:

	Years ended December 31,		
	2021	2020	2019
Expected term (years)	3.0	3.0	-
Risk-free interest rate	0.24%	0.66%	-
Expected volatility	32.1%	24.2%	-
Weighted average fair value of PSUs granted	\$ 43.18	\$ 55.25	\$ -
Intrinsic value of vested PSUs	\$ 6,050	\$ 9,030	\$ 3,181
Fair value of vested PSUs	\$ 5,321	\$ 5,215	\$ 2,569

As of December 31, 2021, \$9,295 of unrecognized compensation costs related to PSUs is expected to be recognized over a weighted average period of approximately 1.77 years. The aggregate intrinsic value of PSUs as of December 31, 2021 was \$13,270. The aggregate intrinsic value of PSUs is based on the number of nonvested share units and the market value of the Company's common stock as of the period end date.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

Restricted Stock Units – A restricted stock unit (“RSU”) represents the right to receive a share of the Company’s common stock and is valued based on the fair market value of the Company’s stock on the date of grant. RSUs are eligible to be earned at the end of a specified restricted period, generally three years, beginning on the date of grant. In some cases, the right to receive the shares is subject to specific performance goals established at the time the grant is made. The Company assumes that forfeitures will be minimal, and recognizes forfeitures as they occur, which results in a reduction in compensation expense. As the payout of the RSUs includes dividend equivalents, no separate dividend yield assumption is required in calculating the fair value of the RSUs. The following table provides the compensation expense and income tax benefit for RSUs:

	Years ended December 31,		
	2021	2020	2019
Stock-based compensation within operations and maintenance expense	\$ 3,360	\$ 2,180	\$ 1,650
Income tax benefit	953	585	466

The following table summarizes nonvested RSU transactions for the year ended December 31, 2021:

	Number of Stock Units	Weighted Average Fair Value
Nonvested stock units at beginning of period	163,906	\$ 40.80
Granted	85,626	44.44
Stock units vested and issued	(50,406)	35.45
Forfeited	(5,439)	43.38
Nonvested stock units at end of period	<u>193,687</u>	43.76

The following table summarizes the value of RSUs:

	Years ended December 31,		
	2021	2020	2019
Weighted average fair value of RSUs granted	\$ 44.44	\$ 49.19	\$ 36.25
Intrinsic value of vested RSUs	2,108	2,130	1,456
Fair value of vested RSUs	1,726	1,203	1,341

As of December 31, 2021, \$3,851 of unrecognized compensation costs related to RSUs is expected to be recognized over a weighted average period of approximately 1.79 years. The aggregate intrinsic value of RSUs as of December 31, 2021 was \$10,399. The aggregate intrinsic value of RSUs is based on the number of nonvested stock units and the market value of the Company’s common stock as of the period end date.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

Stock Options – A stock option represents the option to purchase a number of shares of common stock of the Company as specified in the stock option grant agreement at the exercise price per share as determined by the closing market price of our common stock on the grant date. Stock options are exercisable in installments of 33% annually, starting one year from the grant date and expire ten years from the grant date. The vesting of stock options granted in 2019 and 2018 are subject to the achievement of the following performance goal: the Company achieves at least an adjusted return on equity equal to 150 basis points below the return on equity granted by the Pennsylvania Public Utility Commission during the Company’s Pennsylvania subsidiary’s last rate proceeding. The adjusted return on equity equals net income, excluding net income or loss from acquisitions which have not yet been incorporated into a rate application as of the last year end, divided by equity which excludes equity applicable to acquisitions which are not yet incorporated in a rate application during the award period.

The Company did not grant stock options for the years ended December 31, 2021 and 2020.

The fair value of each stock option is amortized into compensation expense using the graded vesting method, which results in the recognition of compensation costs over the requisite service period for each separately vesting tranche of the stock options as though the stock options were, in substance, multiple stock option grants. The following table provides compensation expense and income tax benefit for stock options:

	Years ended December 31,		
	2021	2020	2019
Stock-based compensation within operations and maintenance expenses	\$ 480	\$ 1,322	\$ 2,280
Income tax benefit	136	374	643

Options under the plans were issued at the closing market price of the stock on the day of the grant. The fair value of options was estimated at the grant date using the Black-Scholes option-pricing model, which relies on assumptions that require management’s judgment. The following table provides the assumptions used in the pricing model for grants and the resulting grant date fair value of stock options granted in the period reported:

	Year ended December 31, 2019
Expected term (years)	5.47
Risk-free interest rate	2.53%
Expected volatility	17.7%
Dividend yield	2.44%
Grant date fair value per option	\$ 5.25

Historical information was the principal basis for the selection of the expected term and dividend yield. The expected volatility is based on a weighted-average combination of historical and implied volatilities over a time period that approximates the expected term of the option. The risk-free interest rate was selected based upon the U.S. Treasury yield curve in effect at the time of grant for the expected term of the option. The Company assumes that forfeitures will be minimal, and recognizes forfeitures as they occur, which results in a reduction in compensation expense.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

The following table summarizes stock option transactions for the year ended December 31, 2021:

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Life (years)	Aggregate Intrinsic Value
Outstanding, beginning of year	947,680	\$ 35.22		
Granted	-	-		
Forfeited	(10,478)	35.92		
Expired / Cancelled	(1,413)	34.54		
Exercised	(122,297)	34.11		
Outstanding at end of year	<u>813,492</u>	<u>\$ 35.37</u>	6.9	<u>\$ 14,899</u>
Exercisable at end of year	<u>584,652</u>	<u>\$ 35.15</u>	6.8	<u>\$ 10,842</u>

The intrinsic value of stock options is the amount by which the market price of the stock on a given date, such as at the end of the period or on the day of exercise, exceeded the closing market price of stock on the date of grant. The following table summarizes the intrinsic value of stock options exercised and the fair value of stock options which vested:

	Years ended December 31,		
	2021	2020	2019
Intrinsic value of options exercised	\$ 1,709	\$ 1,849	\$ 2,552
Fair value of options vested	1,485	1,673	422

The following table summarizes information about the options outstanding and options exercisable as of December 31, 2021:

	Options Outstanding			Options Exercisable	
	Shares	Weighted Average Remaining Life (years)	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price
Range of prices:					
\$30.00 - 33.99	59,159	5.2	\$ 30.50	58,962	\$ 30.49
\$34.00 - 34.99	97,500	6.2	34.51	97,500	34.51
\$35.00 - 35.99	654,374	7.2	35.93	428,190	35.93
\$36.00 and above	2,459	7.2	37.80	-	-
	<u>813,492</u>	6.9	<u>\$ 35.37</u>	<u>584,652</u>	<u>\$ 35.15</u>

As of December 31, 2021, there was \$63 of total unrecognized compensation costs related to nonvested stock options granted under the plans. The cost is expected to be recognized over a weighted average period of approximately 0.16 years.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

Restricted Stock – Restricted stock awards provide the grantee with the rights of a shareholder, including the right to receive dividends and to vote such shares, but not the right to sell or otherwise transfer the shares during the restriction period. Restricted stock awards result in compensation expense that is equal to the fair market value of the stock on the date of the grant and is amortized ratably over the restriction period. The Company expects forfeitures of restricted stock to be de minimis. The Company did not grant restricted stock for the year ended December 31, 2019.

The following table provides the compensation cost and income tax benefit for stock-based compensation related to restricted stock:

	Year ended December 31,		
	2021	2020	2019
Stock-based compensation within operations and maintenance expense	\$ 130	\$ 333	\$ -
Income tax benefit	37	96	-

The following table summarizes restricted stock transactions for the year ended December 31, 2021:

	Number of Shares	Weighted Average Fair Value
Nonvested shares at beginning of period	13,228	\$ 34.02
Granted	1,068	46.83
Vested	(13,228)	34.02
Nonvested shares at end of period	<u>1,068</u>	<u>\$ 46.83</u>

Stock Awards – Stock awards represent the issuance of the Company’s common stock, without restriction. Stock awards are granted to the Company’s non-employee directors. The issuance of stock awards results in compensation expense which is equal to the fair market value of the stock on the grant date, and is expensed immediately upon grant. The following table provides compensation cost and income tax benefit for stock-based compensation related to stock awards:

	Years ended December 31,		
	2021	2020	2019
Stock-based compensation within operations and maintenance expense	\$ 700	\$ 695	\$ 698
Income tax benefit	202	201	202

The following table summarizes the value of stock awards:

	Years ended December 31,		
	2021	2020	2019
Intrinsic and fair value of stock awards vested	\$ 700	\$ 695	\$ 698
Weighted average fair value of stock awards granted	47.46	41.97	41.75

The following table summarizes stock award transactions for year ended December 31, 2021:

	Number of Stock Awards	Weighted Average Fair Value
Nonvested stock awards at beginning of period	-	\$ -
Granted	14,749	47.46
Vested	(14,749)	47.46
Nonvested stock awards at end of period	<u>-</u>	<u>-</u>

Note 16 – Pension Plans and Other Post-retirement Benefits

The Company maintains a qualified, defined benefit pension plan that covers its full-time employees who were hired prior to the date their respective pension plan was closed to new participants. Retirement benefits under the plan are generally based on the employee's total years of service and compensation during the last five years of employment. The Company's policy is to fund the plan annually at a level which is deductible for income tax purposes and which provides assets sufficient to meet its pension obligations over time. To offset some limitations imposed by the Internal Revenue Code with respect to payments under qualified plans, the Company has a non-qualified Supplemental Pension Benefit Plan for Salaried Employees in order to prevent some employees from being penalized by these limitations, and to provide certain retirement benefits based on employee's years of service and compensation. The net pension costs and obligations of the qualified and non-qualified plans are included in the tables which follow. Employees hired after their respective pension plan was closed, may participate in a defined contribution plan that provides a Company matching contribution on amounts contributed by participants and an annual profit-sharing contribution based upon a percentage of the eligible participants' compensation.

On March 16, 2020, the Company completed the Peoples Gas Acquisition and assumed the pension and other postretirement benefit plans for its employees. On April 1, 2020, the Company merged the pension plans acquired in the Peoples Gas Acquisition into the Company's Pension Plan.

Effective July 1, 2015, the Company added a permanent lump sum option to the form of benefit payments offered to participants of the qualified defined benefit pension plan upon retirement or termination. The plan paid \$11,069 and \$10,889 to participants who elected this option during 2021 and 2020, respectively.

In addition to providing pension benefits, the Company offers post-retirement benefits other than pensions to employees retiring with a minimum level of service and hired before their respective plan closed to new participants. These benefits include continuation of medical and prescription drug benefits, or a cash contribution toward such benefits, for eligible retirees and life insurance benefits for eligible retirees. The Company funds these benefits through various trust accounts. The benefits of retired officers and other eligible retirees are paid by the Company and not from plan assets due to limitations imposed by the Internal Revenue Code.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid in the years indicated:

Years:	Pension Benefits		Other Post-retirement Benefits	
2022	\$	31,670	\$	5,514
2023		32,165		5,703
2024		31,666		5,644
2025		32,154		5,786
2026		31,513		5,961
2027-2031		149,483		31,739

The changes in the benefit obligation and fair value of plan assets, the funded status of the plans and the assumptions used in the measurement of the company's benefit obligation are as follows:

	Pension Benefits		Other Post-retirement Benefits	
	2021	2020	2021	2020
Change in benefit obligation:				
Benefit obligation at January 1,	\$ 486,219	\$ 310,381	\$ 125,375	\$ 79,542
Service cost	3,503	3,775	2,793	2,276
Interest cost	13,018	13,710	3,358	3,687
Actuarial (gain) loss	(17,378)	37,632	(12,001)	5,181
Plan participants' contributions	-	-	36	795
Benefits paid	(32,415)	(28,150)	(4,910)	(6,287)
Acquisitions	-	148,871	-	40,181
Benefit obligation at December 31,	452,947	486,219	114,651	125,375
Change in plan assets:				
Fair value of plan assets at January 1,	426,801	266,461	98,995	54,011
Actual return on plan assets	23,901	54,732	12,484	11,910
Employer contributions	14,834	16,274	598	5,034
Participants' contributions	-	-	36	795
Benefits paid	(32,415)	(28,150)	(4,805)	(6,199)
Acquisitions	-	117,484	-	33,444
Fair value of plan assets at December 31,	433,121	426,801	107,308	98,995
Funded status of plan:				
Net liability recognized at December 31,	\$ 19,826	\$ 59,418	\$ 7,343	\$ 26,380

The following table provides the net liability recognized on the consolidated balance sheets at December 31,:

	Pension Benefits		Other Post-retirement Benefits	
	2021	2020	2021	2020
Non-current asset	\$ 2,474	\$ -	\$ 23,504	\$ 11,446
Current liability	(1,144)	(551)	(1,777)	(895)
Noncurrent liability	(21,156)	(58,867)	(29,070)	(36,931)
Net liability recognized	\$ (19,826)	\$ (59,418)	\$ (7,343)	\$ (26,380)

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

The following table provides selected information about plans with accumulated benefit obligation and projected benefit obligation in excess of plan assets:

	December 31, 2021		December 31, 2020	
	Pension Benefits	Other Post-retirement Benefits	Pension Benefits	Other Post-retirement Benefits
<i>Selected information for plans with projected benefit obligation in excess of plan assets:</i>				
Projected benefit obligation	\$ 23,601	\$ N/A	\$ 486,219	\$ N/A
Fair value of plan assets	-	N/A	426,801	N/A
<i>Selected information for plans with accumulated benefit obligation in excess of plan assets:</i>				
Accumulated benefit obligation	\$ 17,129	\$ 42,463	\$ 458,658	\$ 96,342
Fair value of plan assets	-	11,616	426,801	63,567

The following table provides the components of net periodic benefit costs for the years ended December 31,:

	Pension Benefits			Other Post-retirement Benefits		
	2021	2020	2019	2021	2020	2019
Service cost	\$ 3,503	\$ 3,775	\$ 2,718	\$ 2,793	\$ 2,276	\$ 819
Interest cost	13,018	13,710	11,817	3,358	3,687	2,999
Expected return on plan assets	(23,165)	(21,249)	(15,272)	(4,155)	(4,079)	(2,482)
Amortization of prior service cost (credit)	559	591	620	(432)	(464)	(464)
Amortization of actuarial loss	2,907	7,967	7,927	219	622	664
Net periodic benefit cost (credit)	<u>\$ (3,178)</u>	<u>\$ 4,794</u>	<u>\$ 7,810</u>	<u>\$ 1,783</u>	<u>\$ 2,042</u>	<u>\$ 1,536</u>

The Company records the underfunded/overfunded status of its pension and other post-retirement benefit plans on its consolidated balance sheets and records a regulatory asset/liability for these costs that would otherwise be charged to stockholders' equity, as the Company anticipates recoverability of the costs through customer rates to be probable. Changes in the plans' funded status will affect the assets and liabilities recorded on the balance sheet. Due to the Company's regulatory treatment, the recognition of the funded status is recorded as a regulatory asset pursuant to the FASB's accounting guidance for regulated operations.

The following table provides the amounts recognized in regulatory assets and regulatory liabilities that have not been recognized as components of net periodic benefit cost as of December 31:

	Pension Benefits		Other Post-retirement Benefits	
	2021	2020	2021	2020
Net actuarial loss (gain)	\$ 64,247	\$ 83,967	\$ (16,323)	\$ 7,224
Prior service cost (credit)	965	1,524	-	(432)
Total recognized in regulatory assets (liabilities)	<u>\$ 65,212</u>	<u>\$ 85,491</u>	<u>\$ (16,323)</u>	<u>\$ 6,792</u>

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

Accounting for pensions and other post-retirement benefits requires an extensive use of assumptions about the discount rate, expected return on plan assets, the rate of future compensation increases received by the Company's employees, mortality, turnover and medical costs. Each assumption is reviewed annually with assistance from the Company's actuarial consultant who provides guidance in establishing the assumptions. The assumptions are selected to represent the average expected experience over time and may differ in any one year from actual experience due to changes in capital markets and the overall economy. These differences will impact the amount of pension and other post-retirement benefit expense that the Company recognizes.

The significant assumptions related to the Company's benefit obligations are as follows:

	Pension Benefits		Other Post-retirement Benefits	
	2021	2020	2021	2020
Weighted Average Assumptions Used to Determine Benefit Obligations as of December 31,				
Discount rate	2.91%	2.57%	2.96%	2.68%
Rate of compensation increase	3.0-4.0%	3.0-4.0%	n/a	n/a
Assumed Health Care Cost Trend Rates Used to Determine Benefit Obligations as of December 31,				
Health care cost trend rate	n/a	n/a	6.25%	6.25%
Rate to which the cost trend is assumed to decline (the ultimate trend rate)	n/a	n/a	5.0%	5.0%
Year that the rate reaches the ultimate trend rate	n/a	n/a	2027	2025

n/a – Assumption is not applicable.

The significant assumptions related to the Company's net periodic benefit costs are as follows:

	Pension Benefits			Other Post-retirement Benefits		
	2021	2020	2019	2021	2020	2019
Weighted Average Assumptions Used to Determine Net Periodic Benefit Costs for Years Ended December 31,						
Discount rate	2.57%	3.35%	4.30%	2.68%	3.42%	4.34%
Expected return on plan assets	5.60%	6.00%	6.50%	5.60%	6.00%	4.1-6.5%
Rate of compensation increase	3.0-4.0%	3.0-4.0%	3.0-4.0%	n/a	n/a	n/a
Assumed Health Care Cost Trend Rates Used to Determine Net Periodic Benefit Costs for Years Ended December 31,						
Health care cost trend rate	n/a	n/a	n/a	6.3%	6.3%	6.6%
Rate to which the cost trend is assumed to decline (the ultimate trend rate)	n/a	n/a	n/a	5.0%	5.0%	5.0%
Year that the rate reaches the ultimate trend rate	n/a	n/a	n/a	2025	2025	2023

n/a – Assumption is not applicable.

The Company's discount rate assumption, which is utilized to calculate the present value of the projected benefit payments of our post-retirement benefits, was determined by selecting a hypothetical portfolio of high quality corporate bonds appropriate to match the projected benefit payments of the plans. The selected bond portfolio was derived from a universe of Aa-graded corporate bonds. The discount rate was then developed as the rate that equates the market value of the bonds purchased to the discounted value of the plan's benefit payments. The Company's pension expense and liability (benefit obligations) increases as the discount rate is reduced.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

The Company's expected return on plan assets is determined by evaluating the asset class return expectations with its advisors as well as actual, long-term, historical results of our asset returns. The Company's market related value of plan assets is equal to the fair value of the plan's assets as of the last day of its fiscal year, and is a determinant for the expected return on plan assets which is a component of post-retirement benefits expense. The Company's pension expense increases as the expected return on plan assets decreases. For 2021, the Company used a 5.6% expected return on plan assets assumption. The Company believes its actual long-term asset allocation on average will approximate the targeted allocation. The Company's investment strategy is to earn a reasonable rate of return while maintaining risk at acceptable levels. Risk is managed through fixed income investments to manage interest rate exposures that impact the valuation of liabilities and through the diversification of investments across and within various asset categories. Investment returns are compared to a total plan benchmark constructed by applying the plan's asset allocation target weightings to passive index returns representative of the respective asset classes in which the plan invests. The Retirement and Employee Benefits Committee meets quarterly to review plan investments and management monitors investment performance quarterly through a performance report prepared by an external consulting firm.

The Company's pension plan asset allocation and the target allocation by asset class are as follows:

	Target Allocation	Percentage of Plan Assets at December 31,	
		2021	2020
Return seeking assets	50 to 70%	53%	54%
Liability hedging assets	30 to 50%	47%	46%
Total	100%	100%	100%

The fair value of the Company's pension plans' assets at December 31, 2021 by asset class are as follows:

	Assets measured at NAV			Total
	Level 1	Level 2	Level 3	
Common stock	\$ 20,290	\$ -	\$ -	\$ 20,290
Return seeking assets:				
Global equities	-	-	-	134,394
Hedge / diversifying strategies	-	-	-	39,163
Credit	-	-	-	56,191
Liability hedging assets	-	-	-	177,574
Cash and cash equivalents	5,509	-	-	5,509
Total pension assets	\$ 25,799	\$ -	\$ -	\$ 407,322

(a) Assets that are measured at fair value using the NAV per share practical expedient have not been classified in the fair value hierarchy.

The fair value of the Company's pension plans' assets at December 31, 2020 by asset class are as follows:

	Assets measured at NAV (a)			Total
	Level 1	Level 2	Level 3	
Common stock	\$ 17,620	\$ -	\$ -	\$ 17,620
Return seeking assets:				
Global equities	-	-	-	120,220
Hedge / diversifying strategies	-	-	-	38,417
Credit	-	-	-	53,378
Liability hedging assets	-	-	-	140,891
Cash and cash equivalents	56,275	-	-	56,275
Total pension assets	\$ 73,895	\$ -	\$ -	\$ 352,906

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

Equity securities include our common stock in the amounts of \$20,290 or 4.7% and \$17,620 or 4.1% of total pension plans' assets as of December 31, 2021 and 2020, respectively.

The asset allocation for the Company's other post-retirement benefit plans and the target allocation by asset class are as follows:

	Target Allocation	Percentage of Plan Assets at December 31,	
		2021	2020
Return seeking assets	50 to 70%	68%	64%
Liability hedging assets	30 to 50%	32%	36%
Total	100%	100%	100%

The fair value of the Company's other post-retirement benefit plans' assets at December 31, 2021 by asset class are as follows:

	Level 1	Level 2	Level 3	Assets measured at NAV	Total
				(a)	
Return seeking assets:					
Global equities	\$ 36,753	\$ -	\$ -	\$ 22,544	\$ 59,297
Real estate securities	9,609	-	-	4,391	14,000
Liability hedging assets	17,241	-	-	12,364	29,605
Cash and cash equivalents	4,406	-	-	-	4,406
Total other post-retirement assets	\$ 68,009	\$ -	\$ -	\$ 39,299	\$ 107,308

(a) Assets that are measured at fair value using the NAV per share practical expedient have not been classified in the fair value hierarchy.

The fair value of the Company's other post-retirement benefit plans' assets at December 31, 2020 by asset class are as follows:

	Level 1	Level 2	Level 3	Assets measured at NAV	Total
				at NAV (a)	
Return seeking assets:					
Global equities	\$ 31,984	\$ -	\$ -	\$ 20,673	\$ 52,657
Real estate securities	6,761	-	-	3,453	10,214
Liability hedging assets	17,021	-	-	11,605	28,626
Cash and cash equivalents	7,498	-	-	-	7,498
Total other post-retirement assets	\$ 63,264	\$ -	\$ -	\$ 35,731	\$ 98,995

Valuation Techniques Used to Determine Fair Value

- *Common Stocks* - Investments in common stocks are valued using unadjusted quoted prices obtained from active markets.
- *Return Seeking Assets* – Investments in return seeking assets consists of the following:
 - Global equities, which consist of common and preferred shares of stock, traded on U.S. or foreign exchanges that are valued using unadjusted quoted prices obtained from active markets, or commingled fund vehicles, consisting of such securities valued using NAV, which are not classified within the fair value hierarchy.
 - Real estate securities, which consist of securities, traded on U.S. or foreign exchanges that are valued using unadjusted quoted prices obtained from active markets, or for real estate commingle fund vehicles that are not publicly quoted, the fund administrators value the funds using the NAV per fund share, derived from the quoted prices in active markets of the underlying securities and are not classified within the fair value hierarchy.
 - Hedge / diversifying strategies, which consist of a multi-manager fund vehicle having underlying exposures that collectively seek to provide low correlation of return to equity and fixed income markets, thereby offering diversification. As a multi-manager fund investment, NAV is derived from underlying manager NAVs, which are derived from the quoted prices in active markets of the underlying securities and are not classified within the fair value hierarchy.
 - Credit, which consist of certain opportunistic, return-oriented credits which primarily include below investment grade bonds (i.e. high yield bonds), bank loans, and securitized debt. Credits are valued using the NAV per fund share, derived from either quoted prices in active markets of the underlying securities, or less active markets, or quotes of similar assets, and are not classified within the fair value hierarchy.
- *Liability Hedging Assets* – Investments in liability hedging assets consist of funds investing in high-quality fixed income (i.e. U.S. Treasury securities and government bonds), and for funds for which market quotations are readily available, are valued at the last reported closing price on the primary market or exchange on which they are traded. Funds for which market quotations are not readily available, are valued using the NAV per fund share, derived from the quoted prices in active markets of the underlying securities and are not classified within the fair value hierarchy.
- *Cash and Cash Equivalents* – Investments in cash and cash equivalents are comprised of both uninvested cash and money market funds. The uninvested cash is valued based on its carrying value, and the money market funds are valued utilizing the net asset value per unit obtained from published market prices.

Funding requirements for qualified defined benefit pension plans are determined by government regulations and not by accounting pronouncements. In accordance with funding rules and the Company's funding policy, during 2022 our pension contribution is expected to be \$20,390.

The Company has a 401(k) savings plan, which is a defined contribution plan and covers substantially all employees. The Company makes matching contributions that are based on a percentage of an employee's contribution, subject to specific limitations, as well as, non-discretionary contributions based on eligible hourly wages for certain union employees, discretionary year-end contributions based on an employee's eligible compensation, and employer profit sharing contributions. Participants may diversify their Company matching account balances into other investments offered under the 401(k) savings plan. The Company's contributions, which are recorded as compensation expense, were \$19,569, \$15,445, and \$6,259, for the years ended December 31, 2021, 2020, and 2019, respectively.

Note 17 –Rate Activity

On August 20, 2021, Aqua Pennsylvania, filed an application with the Pennsylvania Public Utility Commission designed to increase water and wastewater rates by \$97,685 or 17.9% on an annual basis. The Company anticipates a final order to be issued by May 2022.

In May 2019, the Pennsylvania Public Utility Commission granted Aqua Pennsylvania a water and wastewater increase designed to increase total operating revenues by \$47,000 on an annual basis, and new rates went into effect on May 24, 2019. The rates in effect at the time of the filing also included \$29,493 in Distribution System Improvement Charges (“DSIC”), which was 7.5% above prior base rates. Consequently, the aggregate base rates increased by \$76,493 since the last base rate increase and the DSIC was reset to zero. Revenues from this rate increase realized in the year of grant were approximately \$28,396. Additionally, in the May 2019 Aqua Pennsylvania rate order, base rates were designed with \$158,865 of tax benefits to be flowed-through to income for qualifying utility asset improvement costs, subject to \$3,000 either above or below this target amount. To the extent actual tax benefits are outside this range, tax benefits will either be deferred or accrued, and settled in the next rate filing.

On October 26, 2020, the Company’s water and wastewater utility operating divisions in North Carolina received an order from the North Carolina Utilities Commission resulting in an increase of \$3,426 in annual revenue, and new rates went into effect on October 26, 2020.

In May 2019, the Company’s operating subsidiary in New Jersey received an order from the New Jersey Board of Public Utilities, resulting in an increase of \$5,000 in annual revenues, and new rates went into effect on June 1, 2019. Revenues from this rate increase realized in the year of grant were approximately \$2,917.

In addition to the Pennsylvania, North Carolina, and New Jersey rate awards noted above, the Company’s operating subsidiaries were allowed annualized rate increases of \$3,390 in 2021, \$4,480 in 2020, and \$974 in 2019, represented by six, five, and two rate decisions, respectively. Revenues from these rate increases realized in the year of grant were approximately \$2,995, \$1,594, and \$974 in 2021, 2020, and 2019, respectively. On January 3, 2022, the Company’s natural gas operating division in Kentucky received an order from the Kentucky Public Service Commission resulting in an increase of \$5,238 in annual revenues, and new rates went into effect on January 4, 2022.

Rate cases are also underway for certain of our water and wastewater utility operating divisions in Ohio.

Eight states in which the Company operates permit water and wastewater utilities to add a surcharge to their water or wastewater bills to offset the additional depreciation and capital costs related to infrastructure system replacement and rehabilitation projects completed and placed into service between base rate filings. Additionally, Pennsylvania and Kentucky allow for the use of an infrastructure rehabilitation surcharge for natural gas utility systems. The surcharge for infrastructure system replacements and rehabilitations is typically adjusted periodically based on additional qualified capital expenditures completed or anticipated in a future period, is capped as a percentage of base rates, generally at 5% to 12.75%, and is reset to zero when new base rates that reflect the costs of those additions become effective or when a utility’s earnings exceed a regulatory benchmark. The surcharge for infrastructure system replacements and rehabilitations provided revenues in 2021, 2020, and 2019 of \$33,771, \$13,039, and \$16,007, respectively.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

Note 18 – Segment Information

On March 16, 2020, the Company completed the Peoples Gas Acquisition, marking the Company's entrance into the regulated natural gas business. The operating results of Peoples are included in the consolidated financial statements for the period since the acquisition date. As a result, the Company now has twelve operating segments and two reportable segments. The Regulated Water segment is comprised of eight operating segments representing its water and wastewater regulated utility companies, which are organized by the states where the Company provides water and wastewater services. The eight water and wastewater utility operating segments are aggregated into one reportable segment, because each of these operating segments has the following similarities: economic characteristics, nature of services, production processes, customers, water distribution or wastewater collection methods, and the nature of the regulatory environment. The Regulated Natural Gas segment is comprised of one operating segment representing natural gas utility companies, acquired in the Peoples Gas Acquisition, for which the Company provides natural gas distribution services.

In addition to the Company's two reportable segments, we include three of our operating segments within the Other category below. These segments are not quantitatively significant and are comprised of our non-regulated natural gas operations, Aqua Infrastructure, and Aqua Resources. Our non-regulated natural gas operations consist of utility service line protection solutions and repair services to households and the operation of gas marketing and production entities. Prior to our October 30, 2020 sale of our investment in joint venture, Aqua Infrastructure provided non-utility raw water supply services for firms in the natural gas drilling industry. Aqua Resources offers, through a third party, water and sewer service line protection solutions and repair services to households. In addition to these segments, Other is comprised of business activities not included in the reportable segments, corporate costs that have not been allocated to the Regulated Water and Regulated Natural Gas segments, and intersegment eliminations. Corporate costs include general and administrative expenses, and interest expense. The Company reports these corporate costs within Other as they relate to corporate-focused responsibilities and decisions and are not included in internal measures of segment operating performance used by the Company to measure the underlying performance of the operating segments.

The following table presents information about the Company's reportable segments, including the operating results and capital expenditures of the Regulated Natural Gas segment for the period since the completion of the Peoples Gas Acquisition on March 16, 2020:

2021	Regulated Water	Regulated Natural Gas	Other and Eliminations	Consolidated
Operating revenues	\$ 980,203	\$ 859,902	\$ 38,039	\$ 1,878,144
Operations and maintenance expense	332,598	226,194	(8,212)	550,580
Purchased gas	-	313,390	26,872	340,262
Depreciation and amortization	182,074	113,238	2,640	297,952
Taxes other than income taxes	63,264	20,801	2,576	86,641
Operating income	402,267	186,279	14,163	602,709
Interest expense, net ^(a)	108,356	75,628	21,341	205,325
Allowance for funds used during construction	(19,258)	(1,534)	-	(20,792)
Other	(7,167)	4,005	(662)	(3,824)
Income before income taxes	320,336	108,180	(6,516)	422,000
Provision for income taxes (benefit)	26,633	(40,013)	3,768	(9,612)
Net income (loss)	\$ 293,703	\$ 148,193	\$ (10,284)	\$ 431,612
Capital expenditures	\$ 621,595	\$ 397,419	\$ 1,505	\$ 1,020,519
Total assets	\$ 8,403,586	\$ 5,960,602	294,090	\$ 14,658,278

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements (continued)
(In thousands of dollars, except per share amounts)

2020	Regulated Water	Regulated Natural Gas	Other and Eliminations	Consolidated
Operating revenues	\$ 938,540	\$ 506,564	\$ 17,594	\$ 1,462,698
Operations and maintenance expense	309,608	198,383	20,620	528,611
Purchased gas	-	154,103	11,642	165,745
Depreciation and amortization	171,152	84,201	1,706	257,059
Taxes other than income taxes	60,505	13,307	2,785	76,597
Operating income (loss)	397,275	56,570	(19,159)	434,686
Interest expense, net ^(a)	101,810	29,016	52,246	183,072
Allowance for funds used during construction	(11,231)	(1,456)	-	(12,687)
Equity loss in joint venture	-	-	3,374	3,374
Other	422	(2,308)	(2,158)	(4,044)
Income before income taxes	306,274	31,318	(72,621)	264,971
Provision for income taxes (benefit)	22,481	(25,133)	(17,226)	(19,878)
Net income (loss)	\$ 283,793	\$ 56,451	\$ (55,395)	\$ 284,849
Capital expenditures	\$ 542,199	\$ 292,121	\$ 1,322	\$ 835,642
Total assets	\$ 7,838,034	\$ 5,303,507	\$ 563,736	\$ 13,705,277

2019	Regulated Water	Other and Eliminations	Consolidated
Operating revenues	\$ 886,430	\$ 3,262	\$ 889,692
Operations and maintenance expense	315,052	18,050	333,102
Depreciation and amortization	155,898	578	156,476
Taxes other than income taxes	59,955	-	59,955
Operating income (loss)	355,525	(15,366)	340,159
Interest expense, net ^(a)	97,941	2,036	99,977
Allowance for funds used during construction	(16,172)	-	(16,172)
Change in fair value of interest rate swap agreements	-	23,742	23,742
Equity earnings in joint venture	-	(2,210)	(2,210)
Other	103	23,193	23,296
Income before income taxes	273,653	(62,127)	211,526
Income tax benefit	(1,267)	(11,750)	(13,017)
Net income (loss)	\$ 274,920	\$ (50,377)	\$ 224,543
Capital expenditures	\$ 550,273	\$ -	\$ 550,273
Total assets	\$ 7,269,404	\$ 2,092,581	\$ 9,361,985

^(a) The regulated water and regulated natural gas segments report interest expense that includes long-term debt that was pushed-down to the regulated operating subsidiaries from Essential Utilities, Inc.

Item 9. *Changes in and Disagreements with Accountants on Accounting and Financial Disclosure*

None.

Item 9A. *Controls and Procedures*

Evaluation of Disclosure Controls and Procedures – Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Annual Report. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures as of the end of the period covered by this Annual Report are effective to provide reasonable assurance that the information required to be disclosed by us in reports filed under the Securities Exchange Act of 1934 is (i) recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms and (ii) accumulated and communicated to our management, including the Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding disclosure. A controls system cannot provide absolute assurance, however, that the objectives of the controls system are met, and no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within a company have been detected.

Management’s Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Securities Exchange Act of 1934. The Company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. The Company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In assessing the effectiveness of internal control over financial reporting, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”) in *Internal Control-Integrated Framework* (2013). As a result of management’s assessment and based on the criteria in the framework, management has concluded that, as of December 31, 2021, the Company’s internal control over financial reporting was effective.

Attestation Report of the Registered Public Accounting Firm – The effectiveness of our internal control over financial reporting as of December 31, 2021 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included herein.

Changes in Internal Control Over Financial Reporting – No change in our internal control over financial reporting occurred during our last fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. *Other Information*

None.

Item 9C. *Disclosure Regarding Foreign Jurisdictions that Prevent Inspections*

Not applicable.

PART III

Item 10. *Directors, Executive Officers and Corporate Governance*

The information appearing in the sections captioned *Information Regarding Nominees, Corporate Governance – Code of Ethics, – Board and Board Committees*, and *Section 16(a) Beneficial Ownership Reporting Compliance* of the definitive Proxy Statement relating to our 2022 annual meeting of shareholders, to be filed within 120 days after the end of the fiscal year covered by this Annual Report is incorporated by reference herein.

We make available free of charge within the Corporate Governance portion of the investor relations section of our web site, at www.essential.co, our Corporate Governance Guidelines, the Charters of each Committee of our Board of Directors, and our Code of Ethical Business Conduct (the Code of Ethics). Amendments to the Code of Ethics, and any grant of a waiver from a provision of the Code requiring disclosure under applicable rules of the SEC, will be disclosed on our web site. The reference to our web site is intended to be an inactive textual reference only, and the contents of such web site are not incorporated by reference herein and should not be considered part of this or any other report that we file with or furnish to the SEC.

Information About Our Executive Officers

The following table and the notes thereto set forth information with respect to our executive officers, including their names, ages, positions with Essential Utilities and business experience during the last five years:

<u>Name</u>	<u>Age</u>	<u>Position with Essential Utilities (1)</u>
Christopher H. Franklin	56	Chairman (January 2018 to present); President and Chief Executive Officer (July 2015 to present); Executive Vice President and President and Chief Operating Officer, Regulated Operations (January 2012 to July 2015); Regional President – Midwest and Southern Operations and Senior Vice President, Corporate and Public Affairs (January 2010 to January 2012); Regional President – Southern Operations and Senior Vice President, Public Affairs and Customer Operations (February 2007 to January 2010); Vice President, Public Affairs and Customer Operations (May 2005 to February 2007); Vice President, Corporate and Public Affairs (February 1997 to May 2005); Manager Corporate and Public Affairs (December 1992 to February 1997)
Daniel J. Schuller	52	Executive Vice President and Chief Financial Officer (October 2018 to present); Executive Vice President, Strategy and Corporate Development (July 2015 to October 2018); Investment Principal – J.P. Morgan Asset Management – Infrastructure Investments Group (2007 to 2015)
Richard S. Fox	60	Executive Vice President and Chief Operating Officer (July 2015 to present); Regional President, Regulated Utilities (January 2012 to July 2015); President Aqua Utilities, Florida, Inc. (August 2011 to January 2012); Vice President, Customer Service (June 2002 to August 2011)
Christopher P. Luning	54	Executive Vice President, General Counsel, and Secretary (February 2019 to present); Senior Vice President, General Counsel, and Secretary (April 2012 to February 2019); Vice President Corporate Development and Corporate Counsel (June 2008 to April 2012); Vice President and Deputy General Counsel (May 2005 to June 2008); Assistant General Counsel (March 2003 to May 2005)
Matthew R. Rhodes	44	Executive Vice President, Strategy and Corporate Development (June 2018 to present); Managing Director - Goldman Sachs, Global Natural Resources (July 2007 to April 2018)
Robert A. Rubin	59	Senior Vice President, Controller and Chief Accounting Officer (January 2012 to present); Vice President, Controller and Chief Accounting Officer (May 2005 to January 2012); Controller and Chief Accounting Officer (March 2004 to May 2005); Controller (March 1999 to March 2004); Assistant Controller (June 1994 to March 1999); Accounting Manager (June 1989 to June 1994)

(1) In addition to the capacities indicated, the individuals named in the above table hold other offices or directorships with subsidiaries of the Company. Officers serve at the discretion of the Board of Directors.

Item 11. *Executive Compensation*

The information responsive to this item will be included in the definitive Proxy Statement relating to our 2022 annual meeting of shareholders, to be filed within 120 days after the end of the fiscal year covered by this Annual Report, is incorporated by reference herein.

Item 12. *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters*

Ownership of Common Stock - The information responsive to this item will be included in the definitive Proxy Statement relating to our 2022 annual meeting of shareholders, to be filed within 120 days after the end of the fiscal year covered by this Annual Report, and is incorporated by reference herein.

Securities Authorized for Issuance under Equity Compensation Plans - The following table provides information for our equity compensation plans as of December 31, 2021:

Equity Compensation Plan Information

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	1,362,564 (1)	\$ 35.37 (2)	2,099,761
Equity compensation plans not approved by security holders	-	-	-
Total	1,362,564	\$ 35.37	2,099,761

(1) Consists of 813,492 shares issuable upon exercise of outstanding options, 355,384 shares issuable upon conversion of outstanding performance share units, and 193,687 shares issuable upon conversion of outstanding restricted share units.

(2) Calculated based upon outstanding options of 813,492 shares to acquire our common stock.

Item 13. *Certain Relationships and Related Transactions, and Director Independence*

The information responsive to this item will be included in the definitive Proxy Statement relating to our 2022 annual meeting of shareholders, to be filed within 120 days after the end of the fiscal year covered by this Annual Report, and is incorporated by reference herein.

Item 14. *Principal Accountant Fees and Services*

The information responsive to this item will be included in the definitive Proxy Statement relating to our 2022 annual meeting of shareholders, to be filed within 120 days after the end of the fiscal year covered by this Annual Report, and is incorporated by reference herein.

PART IV

Item 15. *Exhibits and Financial Statement Schedules*

Financial Statements. The consolidated financial statements and supplementary data included in Part II, Item 8 are hereby incorporated by reference herein.

Financial Statement Schedules.

Schedule 1. – Condensed Parent Company Financial Statements. All other schedules are omitted because they are not applicable or not required, or because the required information is included in the consolidated financial statements or notes thereto.

Exhibits, Including Those Incorporated by Reference. A list of exhibits filed as part of this Annual Report is set forth in the Exhibit Index hereto which is incorporated by reference herein. Where so indicated, exhibits which were previously filed are incorporated by reference. For exhibits incorporated by reference, the location of the exhibit in the previous filing is indicated in the exhibit index.

Item 16. *Form 10-K Summary*

Registrants may voluntarily include a summary of information required by Form 10-K under this Item 16. The Company has elected not to include such summary information in this Annual Report.

EXHIBIT INDEX

Exhibit Number	Exhibit Description	Incorporated by Reference to			
		Form	File No.	Exhibit(s)	Filing Date
2.1	Purchase Agreement, dated October 22, 2018 by and between LDC Parent LLC, a Delaware limited liability company (“Seller”) and the Registrant, a Pennsylvania corporation	8-K	001-06659	2.1	October 23, 2018
3.1	Utilities, Inc. Amended and Restated Articles of Incorporation Essential as of May 12, 2020	8-K	001-06659	3.1	May 18, 2020
3.2	Amended and Restated Bylaws of Essential Utilities, Inc. dated February 16, 2022	8-K	001-06659	3.1	February 18, 2022
4.1	Description of Securities of Essential Utilities, Inc.	10-K	001-06659	4.1	March 1, 2021
4.2	Indenture of Mortgage dated as of January 1, 1941 between Aqua Pennsylvania, Inc. (f/k/a Philadelphia Suburban Water Company) and The Bank of New York Mellon Trust Company, as successor trustee to First Pennsylvania Bank, N.A. (f/k/a The Pennsylvania Company for Insurance on Lives and Granting Annuities)	10-K	001-06659	4.1.1	February 26, 2016
4.2.1	Twenty-sixth Supplemental Indenture dated as of November 1, 1991	10-K	001-06659	4.1.3	February 26, 2016
4.2.2	Twenty-ninth Supplemental Indenture dated as of March 30, 1995	10-Q	001-06659	4.17	May 10, 1995
4.2.3	Thirty-third Supplemental Indenture, dated as of November 15, 1999	10-K	001-06659	4.27	March 29, 2000
4.2.4	Thirty-fifth Supplemental Indenture, dated as of January 1, 2002	10-K	001-06659	4.22	March 20, 2002
4.2.5	Forty-seventh Supplemental Indenture, dated as of October 15, 2012	10-K	001-06659	4.24	February 28, 2013
4.2.6	Forty-eighth Supplemental Indenture, dated as of October 1, 2013	10-K	001-06659	4.1.17	March 3, 2014
4.2.7	Form of Supplemental Indenture during and after 2014	10-K	001-06659	4.1.15	February 26, 2016
4.2.7.1	Schedule of Outstanding Supplemental Indentures during and after 2014	10-K	001-06659	4.2.7.1	March 1, 2021
4.3	Bond Purchase Agreement, dated November 8, 2012, by and among Aqua Pennsylvania, Inc., Teachers Insurance and Annuity Association, John Hancock Life Insurance Company, John Hancock Life Insurance Company of New York, John Hancock Life & Health Insurance Company, The Lincoln National Life Insurance Company, Lincoln Life & Annuity Company of New York, New York Life Insurance Company, New York Life Insurance and Annuity Corporation, Minnesota Life Insurance Company, United Health Care Insurance Company, American Republic Insurance Company, Western Fraternal Life Association	10-K	001-06659	10.54	February 28, 2013
4.4	Bond Purchase Agreement, dated October 24, 2013, by and among Aqua Pennsylvania, Inc., John Hancock Life Insurance Company (U.S.A), John Hancock Life Insurance Company of New York, John Hancock Life & Health Insurance Company, The Lincoln National Life Insurance Company, Thrivent Financial for Lutherans, United Insurance Company of America, Equitable Life & Casualty Insurance Company, Catholic United Financial, and Great Western Insurance Company	10-K	001-06659	10.45	March 3, 2014

[Table of Contents](#)

4.5	Bond Purchase Agreement, dated December 29, 2014, by and among Aqua Pennsylvania, Inc., Thrivent Financial for Lutherans, State Farm Life Insurance Company, John Hancock Life Insurance Company (U.S.A), Phoenix Life Insurance Company, PHL Variable Insurance Company, United of Omaha Life Insurance Company, Mutual of Omaha Insurance Company, and Companion Life Insurance Company.	10-K	001-06659	10.58	February 27, 2015
4.6	Bond Purchase Agreement, dated December 3, 2015 by and among Aqua Pennsylvania, Inc., Thrivent Financial for Lutherans, State Farm Life Insurance Company, John Hancock Life Insurance Company (U.S.A), The Lincoln National Life Insurance Company, Teachers Insurance And Annuity Association Of America, CMFG Life Insurance Company, Genworth Life Insurance Company, Phoenix Life Insurance Company, PHL Variable Insurance Company, United Of Omaha Life Insurance Company, The State Life Insurance Company, Pioneer Mutual Life Insurance Company, MONY Life Insurance Company.	10-K	001-06659	4.12	February 26, 2016
4.7	Note Purchase Agreement, dated November 3, 2016, by and among the Registrant and the note purchasers thereto	10-K	001-06659	4.13	February 24, 2017
4.8	Bond Purchase Agreement, dated December 15, 2016 by and among Aqua Pennsylvania, Inc., Teachers Insurance and Annuity Association of America, New York Life Insurance Company, New York Life Insurance and Annuity Corporation, John Hancock Life Insurance Company, American Equity Investment Life Insurance Company, Genworth Life and Annuity Insurance Company, Phoenix Life Insurance Company, PHL Variable Insurance Company, American United Life Insurance Company, The State Life Insurance Company, and Pioneer Mutual Life Insurance Company.	10-K	001-06659	4.14	February 24, 2017
4.9	Bond Purchase Agreement, dated July 10, 2017 by and among Aqua Illinois, Inc., Teachers Insurance and Annuity Association of America	10-Q	001-06659	4.1	November 2, 2017
4.10	Bond Purchase Agreement, dated July 20, 2017 by and among Aqua Pennsylvania, Inc., New York Life Insurance Company, New York Life Insurance and Annuity Corporation, New York Life Insurance and Annuity Corporation Institutionally Owned Life Insurance Separate Account (BOLI 3), New York Life Insurance and Annuity Corporation Institutionally Owned Life Insurance Separate Account (BOLI 3-2)	10-Q	001-06659	4.2	November 2, 2017
4.11	Bond Purchase Agreement, dated June 29, 2018, by and among Aqua Pennsylvania, Inc., CMFG Life Insurance Company, Manufactures Life Reinsurance Limited, The Lincoln National Life Insurance Company, New York Life Insurance Company, The State Life Insurance Company, and Phoenix Life Insurance Company.	10-Q	001-06659	4.1	August 3, 2018
4.12	Bond Purchase Agreement, dated November 15, 2018, by and among Aqua Pennsylvania, Inc., Teachers Insurance and Annuity Associated of America, American United Life Insurance Company, Pioneer Mutual Life Insurance Company, The State Life Insurance Company, The Lincoln National Life Insurance Company, Lincoln Life & Annuity Company of New York, and United of Omaha Life Insurance Company.	10-K	001-06659	4.15	February 26, 2019

[Table of Contents](#)

4.13	Purchase Contract Agreement, dated April 23, 2019, between the Registrant, and U.S. Bank N.A, as purchase contract agent, as attorney-in-fact for the Holders from time to time as provided therein and as trustee under the indenture referred to therein	8-K	001-06659	4.1	April 23, 2019
4.13.1	Form of Unit (included in Exhibit 4.13 above)	8-K	001-06659	4.1	April 23, 2019
4.13.2	Form of Purchase Contract (included with Exhibit 4.13 above)	8-K	001-06659	4.1	April 23, 2019
4.14	Indenture, dated as of April 23, 2019, between the Registrant and U.S. Bank N.A., as trustee	8-K	001-06659	4.4	April 23, 2019
4.14.1	First Supplemental Indenture, dated as of April 23, 2019, between the Registrant and U.S. Bank N.A., as trustee	8-K	001-06659	4.5	April 23, 2019
4.14.2	Second Supplemental Indenture, dated as of April 23, 2019, between the Registrant and U.S. Bank N.A., as trustee	8-K	001-06659	4.6	April 23, 2019
4.14.3	Form of Amortizing Note (included with Exhibit 4.14.2 above)	8-K	001-06659	4.7	April 23, 2019
4.14.4	Third Supplemental Indenture, dated as of April 26, 2019, between the Registrant and U.S. Bank N.A., as trustee	8-K	001-06659	4.3	April 26, 2019
4.14.5	Form of Global Note for the 2029 Notes (included in Exhibit 4.14.4 above)	8-K	001-06659	4.4	April 26, 2019
4.14.6	Form of Global Note for the 2049 Notes (included in Exhibit 4.14.4 above)	8-K	001-06659	4.5	April 26, 2019
4.14.7	Fourth Supplemental Indenture, dated April 13, 2020, by and between Essential Utilities, Inc. and U.S. Bank N.A.	8-K	001-06659	4.3	April 15, 2020
4.15	Bond Purchase Agreement, dated May 31, 2019, by and among Aqua Pennsylvania, Inc., Athene Annuity and Life Company, Athene Annuity & Life Assurance Company, Genworth Life and Annuity Insurance Company, Genworth Life Insurance Company, John Hancock Life Insurance Company (U.S.A), John Hancock Life Insurance Company of New York, John Hancock Life & Health Insurance Company, Metropolitan Life Insurance Company, Metropolitan Tower Life Insurance Company, MetLife Insurance K.K., Brighthouse Life Insurance Company, United of Omaha Life Insurance Company, New York Life Insurance Company, New York Life Insurance and Annuity Corporation, New York Life Insurance and Annuity Corporation Institutionally Owned Life Insurance Separate Accounts (BOLI 30C, 30E, 3-2), The Northwestern Mutual Life Insurance Company, The Northwestern Mutual Life Insurance Company, and Life Insurance Company of the Southwest	10-Q	001-06659	4.11	August 8, 2019
4.16	Bond Purchase Agreement, dated December 20, 2019, by and among Aqua Pennsylvania, Inc., MetLife Insurance K.K, Metropolitan Life Insurance Company, The Ohio National Life Insurance Company, Ohio National Life Assurance Corporation, National Guardian Life Insurance Company, Country Life Insurance Company, Horizon Blue Cross Blue Shield of New Jersey, and Farm Bureau Life Insurance Company	10-K	001-06659	4.18	February 28, 2020
4.17	Bond Purchase Agreement, dated May 1, 2020, by and among Aqua Pennsylvania, Inc. and bond purchasers thereto	10-Q	001-06659	4.4	May 8, 2020

4.18	Bond Purchase Agreement, dated October 13, 2020, by and among Aqua Pennsylvania, Inc., American General Life Insurance Company, The Variable Life Insurance Company, The United States Life Insurance Company in the City of New York, MetLife Insurance K.K., Pacific Life Insurance Company, Equitable Financial Life Insurance Company, Transamerica Life Insurance Company, Transamerica Life (Bermuda) LTD, Principal Life Insurance Company, Ameritas Life Insurance Company, Ameritas Life Insurance Corp. of New York, The State Life Insurance Company, Nassau Life Insurance Company, Life Insurance Company of the Southwest, United Farm Family Life Insurance Company, and Farm Bureau Life Insurance Company	10-K	001-06659	4.18	March 1, 2021
4.19	Bond Purchase Agreement, dated April 15, 2021, by and among Aqua Ohio, Inc., Teachers Insurance and Annuity Association of America, State Farm Life Insurance Company, State Farm Life and Accident Assurance Company, and State Farm Insurance Companies Employee Retirement Trust	^	^	^	^
10.1	Revolving Credit Agreement, dated December 5, 2018, between the Registrant and PNC Bank, National Association, CoBank, ACB, Bank of America, N.A., Barclays Bank PLC, Citizens Bank, N.A., Morgan Stanley Bank, N.A., MUFG Bank, Ltd., Royal Bank of Canada, The Huntington National Bank, and Wells Fargo Bank, N.A.	10-K	001-06659	10.1	February 26, 2019
10.2.1	First Amendment to Revolving Credit Agreement, dated as of November 16, 2017, between Aqua Pennsylvania and PNC Bank, National Association, Citizens Bank of Pennsylvania, TD Bank, N.A., and Huntington National Bank	10-K	001-06659	10.1.5	February 28, 2018
10.2.2	Second Amendment to Revolving Credit Agreement, dated as of November 9, 2018, between Aqua Pennsylvania and PNC Bank, National Association, Citizens Bank of Pennsylvania, TD Bank, N.A., and Huntington National Bank	10-K	001-06659	10.2.2	February 26, 2019
10.2.3	Third Amendment to Credit Agreement, dated as of November 8, 2019, between Aqua Pennsylvania and PNC Bank, National Association, Citizens Bank of Pennsylvania, TD Bank, N.A., and Huntington National Bank	10-Q	001-06659	10.1	May 8, 2020
10.2.4	Fourth Amendment to Credit Agreement, dated as of November 6, 2020, between Aqua Pennsylvania and PNC Bank, National Association, Citizens Bank, N.A., TD Bank, N.A., and Huntington National Bank	^	^	^	^
10.2.5	Fifth Amendment to Credit Agreement, dated as of November 5, 2021, between Aqua Pennsylvania and PNC Bank, National Association, Citizens Bank, N.A., TD Bank, N.A., and Huntington National Bank	^	^	^	^
10.3	The Registrant's Deferred Compensation Plan Master Trust Agreement with PNC Bank, National Association, dated as of December 31, 1996*	10-K	001-06659	10.24	March 25, 1997
10.3.1	Amendment 2008-1 to the Registrant's Deferred Compensation Plan Master Trust Agreement, dated as of December 15, 2008*	10-K	001-06659	10.50	February 27, 2009
10.4	The Registrant's 2009 Executive Deferral Plan (as amended and restated effective January 1, 2009)*	S-8	333-156047	4.1	December 10, 2008

[Table of Contents](#)

10.5	The Registrant's Supplemental Pension Benefit Plan for Salaried Employees (as amended and restated effective January 1, 2011)*	10-K	001-06659	10.58	February 27, 2012
10.6	The Registrant's Dividend Reinvestment and Direct Stock Purchase Plan	S-3ASR	333-240088	N/A	July 24, 2020
10.7	Form of Incentive Stock Option and Dividend Equivalent Grant Agreement*	10-K	001-06659	10.49	February 27, 2009
10.7.1	Form of Amendment to Incentive Stock Option and Dividend Equivalent Grant Agreements for executive officers *	10-K	001-06659	10.8.2	February 26, 2016
10.8.1	Performance-Based Share Unit Grant Terms and Conditions*	10-Q	001-06659	10.1	May 4, 2017
10.8.2	Restricted Stock Unit Grant Terms and Conditions for Chief Executive Officer*	10-Q	001-06659	10.2	May 4, 2017
10.8.3	Restricted Stock Unit Grant Terms and Conditions for all other executive officers*	10-Q	001-06659	10.3	May 4, 2017
10.8.4	Stock Option Grant Terms and Conditions*	10-Q	001-06659	10.4	May 4, 2017
10.9	The Registrant's 2012 Employee Stock Purchase Plan*	10-K	001-06659	10.10	February 26, 2016
10.10	The Registrant's Annual Cash Incentive Compensation Plan (adopted February 26, 2013)*	10-K	001-06659	10.56	February 28, 2013
10.11	Form of Change in Control Agreement between the Company and executive officers*	10-Q	001-06659	10.1	November 6, 2015
10.11.1	Schedule of Change in Control Agreement between the Company and executive officers*	10-K	001-06659	10.11.1	February 26, 2019
10.12	Change in Control Agreement, dated December 31, 2008, between the Registrant and Christopher H. Franklin*	10-K	001-06659	10.46	February 27, 2009
10.13	Non-Employee Directors' Compensation effective January 1, 2022*	8-K	001-06659	10.1	December 8, 2021
10.14	Employment Agreement dated July 1, 2021, between the Registrant and Christopher Franklin*	8-K	001-06659	10.1	June 25, 2021
10.15	Stock Purchase Agreement, dated as of March 29, 2019, by and between the Registrant and Canada Pension Plan Investment Board	8-K	001-06659	10.1	March 29, 2019
10.16	The Registrant Amended and Restated Omnibus Equity Compensation Plan	8-K	001-06659	10.1	May 3, 2019
10.17	Essential Utilities, Inc. Stock Award Grant Instrument dated as of March 16, 2020*	10-Q	001-06659	10.4	May 8, 2020
10.18	Incremental Facility Amendment Agreement, dated March 13, 2020, by and among Essential Utilities, Inc., Incremental Lender, and the PNC Bank, National Association	8-K	001-06659	10.1	March 16, 2020
10.19	Credit Agreement, dated March 13, 2020, by and among Essential Utilities, Inc., Lenders, and the PNC Bank, National Association	8-K	001-06659	10.2	March 16, 2020
10.20	Credit Agreement, dated April 3, 2020, by and among Essential Utilities, Inc., Lenders, and the PNC Bank, National Association	8-K	001-06659	10.1	April 3, 2020
10.21	Note Purchase Agreement, dated February 26, 2010, by and between PNG Companies, LLC and the note purchasers thereto	8-K/A	001-06659	10.1	April 13, 2020
10.21.1	First Amendment to Note Purchase Agreement, dated August 10, 2011, by and between PNG Companies, LLC and the noteholders	8-K/A	001-06659	10.1.1	April 13, 2020
10.21.2	Second Amendment to Note Purchase Agreement, dated August 22, 2013, by and between PNG Companies, LLC and the noteholders	8-K/A	001-06659	10.1.2	April 13, 2020

[Table of Contents](#)

10.21.3	Third Amendment to Note Purchase Agreement, dated November 9, 2017, by and between PNG Companies, LLC and the noteholders	8-K/A 001-06659	10.1.3	April 13, 2020
10.21.4	First Supplement to Note Purchase Agreement, dated December 12, 2013, by and between PNG Companies, LLC and the note purchasers thereto	8-K/A 001-06659	10.1.4	April 13, 2020
10.21.5	Second Supplement to Note Purchase Agreement, dated July 14, 2017, by and between PNG Companies, LLC and the note purchasers thereto	8-K/A 001-06659	10.1.5	April 13, 2020
10.21.6	Third Supplement to Note Purchase Agreement, dated September 20, 2017, by and between PNG Companies, LLC and the note purchasers thereto	8-K/A 001-06659	10.1.6	April 13, 2020
10.21.7	Fourth Supplement to Note Purchase Agreement, dated November 9, 2017, by and between PNG Companies, LLC and the note purchasers thereto	8-K/A 001-06659	10.1.7	April 13, 2020
10.21.8	Fifth Supplement to Note Purchase Agreement, dated December 20, 2017, by and between PNG Companies, LLC and the note purchasers thereto	8-K/A 001-06659	10.1.8	April 13, 2020
10.21.9	Credit Agreement, dated November 25, 2020, by and between PNG Companies, LLC and PNC Bank, National Association and TD Bank, N.A.	^ ^	^	^
10.21.10	First Amendment to Credit Agreement, dated November 5, 2021, by and between PNG Companies, LLC and PNC Bank, National Association and TD Bank, N.A.	^ ^	^	^
21.1	Subsidiaries of Essential Utilities, Inc.	^ ^	^	^
23.1	Consent of Independent Registered Public Accounting Firm – PricewaterhouseCoopers LLP	^ ^	^	^
31.1	Certification of Chief Executive Officer, pursuant to Rule 13a-14(a) under the Securities and Exchange Act of 1934	^ ^	^	^
31.2	Certification of Chief Financial Officer, pursuant to Rule 13a-14(a) under the Securities and Exchange Act of 1934	^ ^	^	^
32.1	Certification of Chief Executive Officer, pursuant to 18 U.S.C. Section 1350	^^ ^^	^^	^^
32.2	Certification of Chief Financial Officer, pursuant to 18 U.S.C. Section 1350	^^ ^^	^^	^^
101.INS	Inline XBRL Instance Document	^ ^	^	^
101.SCH	Inline XBRL Taxonomy Extension Schema Document	^ ^	^	^
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document	^ ^	^	^
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	^ ^	^	^
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	^ ^	^	^
101.PRES	Inline XBRL Taxonomy Extension Presentation Linkbase Document	^ ^	^	^
104	The cover page from the Company's Annual Report on Form 10-K for the year ended December 31, 2021 formatted in Inline XBRL (included in Exhibit 101)	^ ^	^	^

In accordance with Item 601(b)(4)(iii)(A) of Regulation S-K, copies of specific instruments defining the rights of holders of long-term debt of the Company or its subsidiaries are not filed herewith. Pursuant to this regulation, we hereby agree to furnish a copy of any such instrument to the SEC upon request.

*Indicates management contract or compensatory plan or arrangement

^ Filed herewith

^^Furnished herewith

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ESSENTIAL UTILITIES, INC.

/s/ Christopher H. Franklin

Christopher H. Franklin

Chairman, President and Chief Executive Officer

Date: March 1, 2022

Pursuant to the requirements of the Securities and Exchange Act of 1934, this report on Form 10-K has been signed below by the following persons on behalf of the Registrant on March 1, 2022 in the capacities indicated below.

<u>Signature</u>	<u>Title</u>
<u>/s/ Christopher H. Franklin</u> Christopher H. Franklin	Chairman, President and Chief Executive Officer, Director (Principal Executive Officer)
<u>/s/ Daniel J. Schuller</u> Daniel J. Schuller	Executive Vice President and Chief Financial Officer (Principal Financial Officer)
<u>/s/ Robert A. Rubin</u> Robert A. Rubin	Senior Vice President, Controller and Chief Accounting Officer (Principal Accounting Officer)
<u>/s/ Elizabeth B. Amato</u> Elizabeth B. Amato	Director
<u>/s/ David Ciesinski</u> David Ciesinski	Director
<u>/s/ Daniel J. Hilferty</u> Daniel J. Hilferty	Director
<u>/s/ Francis O. Idehen</u> Francis O. Idehen	Director
<u>/s/ Edwina Kelly</u> Edwina Kelly	Director
<u>/s/ Ellen T. Ruff</u> Ellen T. Ruff	Director
<u>/s/ Lee C. Stewart</u> Lee C. Stewart	Director
<u>/s/ Christopher C. Womack</u> Christopher C. Womack	Director

Essential Utilities, Inc.
Schedule 1 – Condensed Parent Company Financial Statements
Condensed Balance Sheets
(In thousands of dollars)

	December 31,	
	2021	2020
Assets		
Current assets:		
Accounts receivable, net	\$ 122	\$ 29
Accounts receivable - affiliates	117,504	388,584
Prepayments and other current assets	12,754	11,076
Total current assets	<u>130,380</u>	<u>399,689</u>
Deferred charges and other assets, net	52,512	31,611
Notes receivable - affiliates	2,015,570	1,526,485
Deferred income tax asset	1,310	14,501
Investment in subsidiaries	6,005,927	5,463,446
Total assets	<u>\$ 8,205,699</u>	<u>\$ 7,435,732</u>
Liabilities and Equity		
Stockholders' equity	\$ 5,184,450	\$ 4,683,877
Long-term debt, excluding current portion, net of debt issuance costs	2,819,590	2,523,623
Current liabilities:		
Current portion of long-term debt	20,470	40,032
Accrued interest	15,550	14,194
Accounts payable - affiliates	58,962	38,461
Other accrued liabilities	16,109	16,260
Total current liabilities	<u>111,091</u>	<u>108,947</u>
Other liabilities	90,568	119,285
Total liabilities and equity	<u>\$ 8,205,699</u>	<u>\$ 7,435,732</u>

The accompanying condensed notes are an integral part of these condensed financial statements.

Essential Utilities, Inc.

Schedule 1 – Condensed Parent Company Financial Statements

Condensed Statements of Income and Comprehensive Income

(In thousands, except per share amounts)

	Years ended December 31,		
	2021	2020	2019
Other income	\$ 8,388	\$ 4,973	\$ 1,596
Operating expense and other expenses	5,821	29,483	23,760
Operating income (loss)	2,567	(24,510)	(22,164)
Interest expense	21,729	53,702	45,759
Interest income	(9)	(5,256)	(25,327)
Change in fair value of interest rate swap agreements	-	-	23,741
Other (income) expense	(609)	(494)	(294)
Loss before equity in earnings of subsidiaries and income taxes	(18,544)	(72,462)	(66,043)
Equity in earnings of subsidiaries	445,951	341,653	276,556
Income before income taxes	427,407	269,191	210,513
Income tax benefit	(4,205)	(15,658)	(14,030)
Net income	\$ 431,612	\$ 284,849	\$ 224,543
Comprehensive income	\$ 431,612	\$ 284,849	\$ 224,543
Net income per common share:			
Basic	\$ 1.68	\$ 1.14	\$ 1.04
Diluted	\$ 1.67	\$ 1.12	\$ 1.04
Average common shares outstanding during the period:			
Basic	257,487	249,768	215,550
Diluted	258,180	254,629	215,931

The accompanying condensed notes are an integral part of these condensed financial statements.

Essential Utilities, Inc.
Schedule 1 – Condensed Parent Company Financial Statements
Condensed Statements of Cash Flows
(In thousands of dollars)

	Years ended December 31,		
	2021	2020	2019
Net cash flows used in operating activities	\$ (239,320)	\$ (315,329)	\$ (54,496)
Cash flows from investing activities:			
Acquisitions of utility systems and other, net	(36,237)	(34,665)	(6,385)
Acquisition of natural gas system and other, net	-	(3,465,344)	-
Decrease (increase) in investment of subsidiary	(53,467)	6,085	6,068
Other	(987)	341	235
Net cash flows used in investing activities	(90,691)	(3,493,583)	(82)
Cash flows from financing activities:			
Net repayments of short-term debt	-	(881)	-
Proceeds from long-term debt	995,458	3,042,274	1,009,992
Repayments of long-term debt	(725,033)	(1,607,854)	(821,226)
Extinguishment of long-term debt	-	-	(25,237)
Proceeds from stock issued to finance acquisition	-	729,301	1,263,099
Proceeds from tangible equity unit issuance	-	-	673,642
Proceeds from issuance of common stock under dividend reinvestment plan	16,799	16,522	8,959
Proceeds from exercised stock options	4,172	1,589	1,898
Proceeds from issuance of common stock from forward equity sale agreement	299,739	-	-
Repurchase of common stock	(3,291)	(4,365)	(1,867)
Dividends paid on common stock	(258,650)	(232,571)	(188,512)
Other	817	(96)	(1,177)
Net cash flows from financing activities	330,011	1,943,919	1,919,571
Net change in cash and cash equivalents	-	(1,864,993)	1,864,993
Cash and cash equivalents at beginning of year	-	1,864,993	-
Cash and cash equivalents at end of year	\$ -	\$ -	\$ 1,864,993

See Note 1 - *Basis of Presentation*

The accompanying condensed notes are an integral part of these condensed financial statements.

Note 1 – Basis of Presentation – The accompanying condensed financial statements of Essential Utilities, Inc. (the “Parent”) should be read in conjunction with the consolidated financial statements and notes thereto of Essential Utilities, Inc. and subsidiaries (collectively, the “Registrant”) included in Part II, Item 8 of the Annual Report. The Parent’s significant accounting policies are consistent with those of the Registrant.

The Parent borrows from third parties and provides funds to its subsidiaries, in support of their operations. Amounts owed to the Parent for borrowings under this facility are reflected as inter-company receivables on the condensed balance sheets. The interest rate charged to the subsidiaries is sufficient to cover the Parent’s interest costs under its associated borrowings.

As of December 31, 2021 and 2020, the Parent had a current accounts receivable – affiliates balance of \$117,504 and \$388,584, respectively. As of December 31, 2021 and 2020, the Parent had a notes receivable – affiliates balance of \$2,015,570 and \$1,526,485, respectively. The changes in these balances represent non-cash adjustments that are recorded through the Parent’s investment in subsidiaries.

In the ordinary course of business, the Parent indemnifies a third-party for surety bonds issued on behalf of subsidiary companies, guarantees the performance of one of its regulated utilities in a jurisdiction that requires such guarantees, and guarantees several projects associated with the treatment of water in a jurisdiction.

Note 2 – Dividends from subsidiaries – Dividends in the amount of \$0, \$1,050,000, and \$101,625 were paid to the Parent by its wholly-owned subsidiaries during the years ended December 31, 2021, 2020, and 2019, respectively.

Note 3 – Long-term debt – the Parent has long-term debt under unsecured note purchase agreements with investors in addition to its \$1,000,000 revolving credit agreement. Excluding amounts due under the revolving credit agreement, the debt maturities of the Parent’s long-term debt are as follows:

Year	Debt Maturity
2022	\$ 20,470
2023	-
2024	-
2025	-
2026	-
Thereafter	2,525,000

Aqua Ohio, Inc.

\$50,000,000 First Mortgage Bonds, 2.37% Series due 2031

\$50,000,000 First Mortgage Bonds, 3.35% Series due 2051

Bond Purchase Agreement

Dated as of April 15, 2021

Table of Contents

SECTION	HEADING	PAGE
<u>SECTION 1.</u>	<u>AUTHORIZATION OF BONDS</u>	1
<u>SECTION 2.</u>	<u>SALE AND PURCHASE OF BONDS</u>	1
<u>SECTION 3.</u>	<u>CLOSING</u>	2
<u>SECTION 4.</u>	<u>CONDITIONS TO CLOSING</u>	2
	<u>Section 4.1. Representations and Warranties</u>	2
	<u>Section 4.2. Performance; No Default</u>	2
	<u>Section 4.3. Compliance Certificates</u>	2
	<u>Section 4.4. Opinions of Counsel</u>	3
	<u>Section 4.5. Purchase Permitted by Applicable Law, Etc</u>	3
	<u>Section 4.6. Sale of Bonds</u>	4
	<u>Section 4.7. Payment of Special Counsel Fees</u>	4
	<u>Section 4.8. Private Placement Number</u>	4
	<u>Section 4.9. Changes in Corporate Structure</u>	4
	<u>Section 4.10. Funding Instructions</u>	4
	<u>Section 4.11. Proceedings and Documents</u>	4
	<u>Section 4.12. Execution, Delivery, Filing, and Recording of the Supplement</u>	4
	<u>Section 4.13. Regulatory Approvals</u>	4
<u>SECTION 5.</u>	<u>REPRESENTATIONS AND WARRANTIES OF THE COMPANY</u>	5
	<u>Section 5.1. Organization; Power and Authority</u>	5
	<u>Section 5.2. Authorization, Etc</u>	5
	<u>Section 5.3. Disclosure</u>	5
	<u>Section 5.4. Organization and Ownership of Shares of Subsidiaries</u>	6
	<u>Section 5.5. Financial Statements; Material Liabilities</u>	6
	<u>Section 5.6. Compliance with Laws, Other Instruments, Etc</u>	6
	<u>Section 5.7. Governmental Authorizations, Etc</u>	7
	<u>Section 5.8. Litigation; Observance of Statutes and Orders</u>	7
	<u>Section 5.9. Taxes</u>	7
	<u>Section 5.10. Title to Property; Leases</u>	7
	<u>Section 5.11. Licenses, Permits, Etc</u>	8
	<u>Section 5.12. Compliance with Employee Benefit Plans</u>	8
	<u>Section 5.13. Private Offering by the Company</u>	9
	<u>Section 5.14. Use of Proceeds; Margin Regulations</u>	9
	<u>Section 5.15. Existing Debt</u>	9
	<u>Section 5.16. Foreign Assets Control Regulations, Etc</u>	10
	<u>Section 5.17. Status under Certain Statutes</u>	10
	<u>Section 5.18. Environmental Matters</u>	11
	<u>Section 5.19. Lien of Indenture</u>	11

	<u>Section 5.20. Filings</u>	11
<u>SECTION 6.</u>	<u>REPRESENTATIONS OF THE PURCHASERS</u>	12
	<u>Section 6.1. Purchase for Investment</u>	12
	<u>Section 6.2. Source of Funds</u>	12
<u>SECTION 7.</u>	<u>INFORMATION AS TO COMPANY</u>	14
	<u>Section 7.1. Financial and Business Information</u>	14
	<u>Section 7.2. Officer's Certificate</u>	17
	<u>Section 7.3. Visitation</u>	17
<u>SECTION 8.</u>	<u>PURCHASE OF BONDS</u>	17
<u>SECTION 9.</u>	<u>AFFIRMATIVE COVENANTS</u>	18
	<u>Section 9.1. Compliance with Indenture</u>	18
	<u>Section 9.2. Compliance with Law</u>	18
	<u>Section 9.3. Insurance</u>	18
	<u>Section 9.4. Maintenance of Properties</u>	18
	<u>Section 9.5. Payment of Taxes</u>	18
	<u>Section 9.6. Corporate Existence, Etc</u>	19
	<u>Section 9.7. Books and Records</u>	19
<u>SECTION 10.</u>	<u>NEGATIVE COVENANTS</u>	19
	<u>Section 10.1. Transactions with Affiliates</u>	19
	<u>Section 10.2. Merger, Consolidation, Etc</u>	19
	<u>Section 10.3. Line of Business</u>	20
	<u>Section 10.4. Economic Sanctions Etc</u>	20
<u>SECTION 11.</u>	<u>PAYMENTS ON BONDS</u>	20
	<u>Section 11.1. Payment by Wire Transfer</u>	20
	<u>Section 11.2. Payments Due on Non-Business Days</u>	21
	<u>Section 11.3. FATCA Information</u>	21
<u>SECTION 12.</u>	<u>REGISTRATION; EXCHANGE; EXPENSES, ETC</u>	21
	<u>Section 12.1. Registration of Bonds</u>	21
	<u>Section 12.2. Transaction Expenses</u>	21
	<u>Section 12.3. Survival</u>	22
	<u>Section 12.4. Tax Withholding</u>	22
	<u>Section 12.5. Certain Taxes</u>	22
<u>SECTION 13.</u>	<u>SURVIVAL OF REPRESENTATIONS AND WARRANTIES; ENTIRE AGREEMENT</u>	22

<u>SECTION 14.</u>	<u>AMENDMENT AND WAIVER</u>	23
	<u>Section 14.1. Requirements</u>	23
	<u>Section 14.2. Solicitation of Holders of Bonds</u>	23
	<u>Section 14.3. Binding Effect, Etc</u>	24
	<u>Section 14.4. Bonds Held by Company, Etc</u>	24
<u>SECTION 15.</u>	<u>NOTICES</u>	24
<u>SECTION 16.</u>	<u>INDEMNIFICATION</u>	25
<u>SECTION 17.</u>	<u>REPRODUCTION OF DOCUMENTS</u>	25
<u>SECTION 18.</u>	<u>CONFIDENTIAL INFORMATION</u>	25
<u>SECTION 19.</u>	<u>MISCELLANEOUS</u>	26
	<u>Section 19.1. Successors and Assigns</u>	26
	<u>Section 19.2. Accounting Terms</u>	27
	<u>Section 19.3. Severability</u>	27
	<u>Section 19.4. Construction, Etc</u>	27
	<u>Section 19.5. Counterparts</u>	27
	<u>Section 19.6. Governing Law</u>	27
	<u>Section 19.7. Jurisdiction and Process; Waiver of Jury Trial</u>	27

Schedule A	—	Information Relating to Purchasers
Schedule B	—	Defined Terms
Schedule 5.4	—	Subsidiaries of the Company and Ownership of Subsidiary Stock
Schedule 5.5	—	Financial Statements
Schedule 5.15(a)	—	Existing Debt
Schedule 5.15(b)	—	Debt Instruments
Exhibit A	—	Form of Eighteenth Supplemental Indenture
Exhibit B	—	Form of First Mortgage Bond
Exhibit 4.4(a)	—	Form of Opinion of Counsel for the Company
Exhibit 4.4(b)	—	Form of Opinion of Special Counsel for the Company
Exhibit 4.4 (c)	—	Form of Opinion of Special Counsel for the Purchasers
Exhibit 12.4	—	Form of U.S. Tax Compliance Certificate

Aqua Ohio, Inc.
6650 South Avenue
Boardman, Ohio 44512

Re: \$50,000,000 First Mortgage Bonds,
2.37% Series due May 15, 2031
\$50,000,000 First Mortgage Bonds, 3.35% Series due May 15, 2051

April 15, 2021

To Each of The Purchasers Listed in Schedule A Hereto:

Ladies and Gentlemen:

Aqua Ohio, Inc., a corporation organized under the laws of the State of Ohio (the “Company”), agrees with each of the purchasers whose names appear at the end hereof (each, a “Purchaser” and, collectively, the “Purchasers”) as follows:

SECTION 1. AUTHORIZATION OF BONDS

The Company will authorize the issue and sale of (i) \$50,000,000 aggregate principal amount of its First Mortgage Bonds, 2.37% Series due May 15, 2031 (the “*Bonds 2.37% Series*”) and (ii) \$50,000,000 aggregate principal amount of its First Mortgage Bonds, 3.35% Series due May 15, 2051 (the “*Bonds 3.35% Series*” and, together with the Bonds 2.37% Series, the “*Bonds*”) and such term includes any such bond issued in substitution therefor). The Bonds will be issued under and secured by that certain Indenture of Mortgage dated as of July 1, 1945, from the Company (as successor by merger to the Ohio Water Service Company), as grantor, to The Bank of New York Mellon Trust Company, N.A., as successor trustee (the “*Trustee*”) (the “*Original Indenture*”), as previously amended and supplemented by seventeen supplemental indentures and as further supplemented by the Eighteenth Supplemental Indenture, to be executed and submitted for filing before the Closing (such Eighteenth Supplemental indenture being referred to herein as the “*Supplement*”) which will be substantially in the form attached hereto as **Exhibit A**, with such changes therein, if any, as shall be approved by the Purchasers and the Company. The Original Indenture, as supplemented and amended by the aforementioned seventeen supplemental indentures and the Supplement, and as further supplemented or amended according to its terms, is hereinafter referred to as the “*Indenture*”. Certain capitalized and other terms used in this Agreement are defined in **Schedule B**; and references to a “*Schedule*” or an “*Exhibit*” are, unless otherwise specified, to a Schedule or an Exhibit attached to this Agreement. Terms used herein but not defined herein shall have the meanings set forth in the Indenture.

SECTION 2. SALE AND PURCHASE OF BONDS

Subject to the terms and conditions of this Agreement, the Company will issue and sell to each Purchaser and each Purchaser will purchase from the Company, at the Closing provided for in Section 3, Bonds in the principal amount and in the series specified opposite such Purchaser’s

name in **Schedule A** at the purchase price of 100% of the principal amount thereof. The Purchasers' obligations hereunder are several and not joint obligations and no Purchaser shall have any liability to any Person for the performance or non-performance of any obligation by any other Purchaser hereunder.

SECTION 3. CLOSING

The sale and purchase of the Bonds to be purchased by each Purchaser shall occur at the offices of Chapman and Cutler, LLP, 111 West Monroe Street, Chicago, Illinois 60603 at 10:00 a.m., Chicago time, at a closing (the "*Closing*") on April 15, 2021 or on such other Business Day thereafter on or prior to April 30, 2021 as may be agreed upon by the Company and the Purchasers. At the Closing the Company will deliver to each Purchaser the Bonds to be purchased by such Purchaser in the form of one or more Bonds in each series to be purchased by such Purchaser, as applicable, in such denominations as such Purchaser may request (with a minimum denomination of \$100,000 for each Bond), dated the date of the Closing and registered in such Purchaser's name (or in the name of its nominee), against delivery by such Purchaser to the Company or its order of immediately available funds in the amount of the purchase price therefor by wire transfer of immediately available funds for Account Number: 1130370426, Account Name: Aqua Ohio, at PNC Bank, N.A. If at the Closing the Company shall fail to tender such Bonds to any Purchaser as provided above in this Section 3, or any of the conditions specified in Section 4 shall not have been fulfilled to such Purchaser's satisfaction, such Purchaser shall, at its election, be relieved of all further obligations under this Agreement, without thereby waiving any rights such Purchaser may have by reason of such failure or such nonfulfillment.

SECTION 4. CONDITIONS TO CLOSING

Each Purchaser's obligation to execute and deliver this Agreement and to purchase and pay for the Bonds to be sold to such Purchaser prior to or at the Closing is subject to the fulfillment to such Purchaser's satisfaction, prior to or at the Closing of the following conditions:

Section 4.1. Representations and Warranties. The representations and warranties of the Company in this Agreement shall be correct when made and at the time of the Closing.

Section 4.2. Performance; No Default. The Company shall have performed and complied with all agreements and conditions contained in each Financing Agreement required to be performed or complied with by it prior to or at the Closing, and after giving effect to the issue and sale of the Bonds (and the application of the proceeds thereof as contemplated by **Section 5.14**), no Default or Event of Default shall have occurred and be continuing.

Section 4.3. Compliance Certificates. The Company shall have performed and complied with all agreements and conditions contained in the Indenture which are required to be performed or complied with by the Company for the issuance of the Bonds. In addition, the Company shall have delivered the following certificates:

- (a) *Officer's Certificate.* The Company shall have delivered to such Purchaser (i) an Officer's Certificate, dated the date of the Closing, certifying that the conditions

specified in **Section 4** of this Agreement have been fulfilled, and (ii) copies of all certificates and opinions required to be delivered to the Trustee under the Indenture in connection with the issuance of the Bonds under the Indenture, in each case, dated the date of the Closing.

(b) *Secretary's Certificate.* The Company shall have delivered to such Purchaser a certificate of its Secretary or Assistant Secretary, dated the date of the Closing, certifying as to the resolutions attached thereto and other corporate proceedings relating to the authorization, execution and delivery of this Agreement, the Bonds and the Supplement.

(c) *Certification of Indenture.* Each Purchaser shall have received a copy of the Indenture (together with all amendments and supplements thereto), certified by the Company as of the date of the Closing, exclusive of property exhibits, recording information and the like.

Section 4.4.Opinions of Counsel. Such Purchaser shall have received opinions in form and substance satisfactory to such Purchaser, dated the date of the Closing (a) from Christopher P. Luning, counsel for the Company, covering the matters set forth in **Exhibit 4.4(a)** and covering such other matters incident to the transactions contemplated hereby as such Purchaser or its counsel may reasonably request (and the Company hereby instructs its counsel to deliver such opinion to the Purchasers) and (b) from Harrington, Hoppe & Mitchell, Ltd., special counsel to the Company, covering the matters set forth in **Exhibit 4.4(b)** and covering such other matters incident to the transactions contemplated hereby as the Purchaser or the Purchaser's counsel may reasonably request (and the Company hereby instructs its counsel to deliver such opinion to the Purchasers), and (c) from Chapman and Cutler, LLP, the Purchasers' special counsel in connection with such transactions, substantially in the form set forth in **Exhibit 4.4(c)** and covering such other matters incident to such transactions as such Purchaser may reasonably request. The Company hereby directs its counsel to deliver the opinions required by this **Section 4.4** and understands and agrees that each Purchaser will and hereby is authorized to rely on such opinions.

Section 4.5.Purchase Permitted by Applicable Law, Etc. On the date of the Closing such Purchaser's purchase of Bonds shall (a) be permitted by the laws and regulations of each jurisdiction to which such Purchaser is subject, without recourse to provisions (such as section 1405(a)(8) of the New York Insurance Law) permitting limited investments by insurance companies without restriction as to the character of the particular investment, (b) not violate any applicable law or regulation (including, without limitation, Regulation T, U or X of the Board of Governors of the Federal Reserve System) and (c) not subject such Purchaser to any tax, penalty or liability under or pursuant to any applicable law or regulation, which law or regulation was not in effect on the date of the Closing. If requested by such Purchaser, such Purchaser shall have received an Officer's Certificate certifying as to such matters of fact as such Purchaser may reasonably specify to enable such Purchaser to determine whether such purchase is so permitted.

Section 4.6.Sale of Bonds. Contemporaneously with the Closing, the Company shall sell to each Purchaser and each Purchaser shall purchase the Bonds to be purchased by it at the Closing as specified in **Schedule A**.

Section 4.7.Payment of Special Counsel Fees. Without limiting the provisions of **Section 12.2**, the Company shall have paid on or before the Closing the reasonable fees, reasonable charges and reasonable disbursements of the Purchasers' special counsel referred to in **Section 4.4(c)** to the extent reflected in a statement of such counsel rendered to the Company at least one Business Day prior to the Closing.

Section 4.8.Private Placement Number. A private placement number issued by Standard & Poor's CUSIP Service Bureau (in cooperation with the SVO) shall have been obtained for each series of Bonds.

Section 4.9.Changes in Corporate Structure. The Company shall not have changed its jurisdiction of incorporation or organization, as applicable, or been a party to any merger or consolidation or succeeded to all or any substantial part of the liabilities of any other entity, at any time following the date of the most recent financial statements referred to in **Schedule 5.5**.

Section 4.10.Funding Instructions. At least three Business Days prior to the date of the Closing, each Purchaser shall have received written instructions signed by a Responsible Officer on letterhead of the Company confirming the information specified in **Section 3** including (a) the name and address of the transferee bank, (b) such transferee bank's ABA number and (c) the account name and number into which the Purchasers are to deposit the purchase price for the Bonds.

Section 4.11.Proceedings and Documents. All corporate and other proceedings in connection with the transactions contemplated by this Agreement and all documents and instruments incident to such transactions shall be reasonably satisfactory to such Purchaser and its special counsel, and such Purchaser and its special counsel shall have received all such counterpart originals or certified or other copies of such documents as such Purchaser or such special counsel may reasonably request.

Section 4.12.Execution, Delivery, Filing, and Recording of the Supplement. The Supplement shall have been duly executed and delivered by the Company, and the Company shall have filed, or delivered for recordation, the Supplement in all locations in Ohio and West Virginia (and financing statements in respect thereof shall have been filed, if necessary) in such manner and in such places as is required by law (and no other instruments are required to be filed) to establish, preserve, perfect and protect the direct security interest and mortgage Lien of the Trust Estate created by the Indenture on all mortgaged and pledged property of the Company referred to in the Indenture as subject to the direct mortgage Lien thereof and the Company shall have delivered satisfactory evidence of such filings, recording, or delivery for recording.

Section 4.13.Regulatory Approvals. The issue and sale of the Bonds shall have been duly authorized by an order of The Public Utilities Commission of Ohio and such order shall be in full force and effect on the Closing Date and all appeal periods, if any, applicable to such order shall have expired. The Company shall deliver satisfactory evidence that orders have been obtained approving the issuance of the Bonds from The Public Utilities Commission of Ohio or that The Public Utilities Commission of Ohio shall have waived jurisdiction thereof and such approval or

waiver shall not be contested or subject to review, or that The Public Utilities Commission of Ohio does not have jurisdiction.

SECTION 5. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

The Company represents and warrants to each Purchaser that:

Section 5.1.Organization; Power and Authority. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Ohio, and is duly qualified as a foreign corporation and is in good standing in each jurisdiction in which such qualification is required by law, other than those jurisdictions as to which the failure to be so qualified or in good standing would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. The Company has the corporate power and authority to own or hold under lease the properties it purports to own or hold under lease, to transact the business it transacts and proposes to transact, to execute and deliver this Agreement, the Bonds and the Supplement (and had the corporate power and authority to execute and deliver the Indenture at the time of execution and delivery thereof) and to perform the provisions of the Financing Agreements.

Section 5.2.Authorization, Etc. Each Financing Agreement has been duly authorized by all necessary corporate action on the part of the Company, and each Financing Agreement (other than the Supplement and the Bonds) constitutes, and when the Supplement is executed and delivered by the Company and the Trustee and when the Bonds are executed, issued and delivered by the Company, authenticated by the Trustee and paid for by the Purchasers, the Supplement and each Bond will constitute, a legal, valid and binding obligation of the Company enforceable against the Company in accordance with its respective terms, except as such enforceability may be limited by (a) applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights generally and (b) general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

Section 5.3.Disclosure. This Agreement and the documents, certificates or other writings delivered to the Purchasers by or on behalf of the Company in connection with the transactions contemplated hereby, including the investor presentation (including the documents incorporated therein by reference) dated March 2, 2021, and the financial statements listed in **Schedule 5.5** (collectively, the "*Disclosure Documents*"), taken as a whole, do not contain any untrue statement of a material fact or omit to state any material fact necessary to make the statements therein not misleading in light of the circumstances under which they were made. Since December 31, 2020, there has been no change in the financial condition, operations, business or properties of the Company or any of its Subsidiaries except changes that individually or in the aggregate would not reasonably be expected to have a Material Adverse Effect. There is no fact known to management of the Company that, in the reasonable judgment of management of the Company, could be expected to have a Material Adverse Effect that has not been set forth herein or in the other documents, certificates and other writings delivered to the Purchaser by the Company specifically for use in connection with the transactions contemplated hereby.

Section 5.4. Organization and Ownership of Shares of Subsidiaries.

(a) **Schedule 5.4** contains a complete and correct list of the Company's Subsidiaries, showing, as to each Subsidiary, the correct name thereof, the jurisdiction of its organization, and the percentage of shares of each class of its capital stock or similar equity interests outstanding owned by the Company and each other Subsidiary.

(b) All of the outstanding shares of capital stock or similar equity interests of each Subsidiary shown in **Schedule 5.4** as being owned by the Company and its Subsidiaries have been validly issued, are fully paid and nonassessable and are owned by the Company or another Subsidiary free and clear of any Lien.

(c) Each Subsidiary identified in **Schedule 5.4** is duly incorporated and is validly subsisting as a corporation under the laws of the State of Ohio, and is duly qualified as a foreign corporation or other legal entity and is in good standing in each jurisdiction in which such qualification is required by law, other than those jurisdictions as to which the failure to be so qualified or in good standing could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. Each such Subsidiary has the corporate or other power and authority to own or hold under lease the properties it purports to own or hold under lease and to transact the business it transacts and proposes to transact.

Section 5.5. Financial Statements; Material Liabilities. The Company has delivered to each Purchaser copies of the financial statements of the Company and its Subsidiaries listed on **Schedule 5.5**. All of said financial statements (including in each case the related schedules and notes) fairly present in all material respects the consolidated financial position of the Company and its Subsidiaries as of the respective dates specified in such financial statements and the consolidated results of their operations and cash flows for the respective periods so specified and have been prepared in accordance with GAAP consistently applied throughout the periods involved except as set forth in the notes thereto (subject, in the case of any interim financial statements, to normal year-end adjustments). The Company and its Subsidiaries do not have any Material liabilities that are not disclosed on such financial statements or otherwise disclosed in the Disclosure Documents.

Section 5.6. Compliance with Laws, Other Instruments, Etc. The execution, delivery and performance by the Company of each Financing Agreement (including the prior execution and delivery of the Indenture), will not (a) contravene, result in any breach of, or constitute a default under, or result in the creation of any Lien, other than the Lien created under the Indenture, in respect of any property of the Company or any Subsidiary under, any indenture, mortgage, deed of trust, loan, purchase or credit agreement, lease, corporate charter or by-laws, or any other Material agreement or instrument to which the Company or any Subsidiary is bound or by which the Company or any Subsidiary or any of their respective properties may be bound or affected, (b) conflict with or result in a breach of any of the terms, conditions or provisions of any order, judgment, decree, or ruling of any court, arbitrator or Governmental Authority applicable to the Company or any Subsidiary or (c) violate any provision of any statute or other rule or regulation of any Governmental Authority applicable to the Company or any Subsidiary, except for any such

default, breach, contravention or violation which would not reasonably be expected to have a Material Adverse Effect.

Section 5.7. Governmental Authorizations, Etc. No consent, approval or authorization of, or registration, filing or declaration with, any Governmental Authority is required in connection with the execution, delivery or performance by the Company of this Agreement, the Bonds and the Supplement, other than approval of The Public Utilities Commission of Ohio, which has been obtained and is in full force and effect and final and is non-appealable.

Section 5.8. Litigation; Observance of Statutes and Orders. (a) There are no actions, suits, investigations or proceedings pending or, to the knowledge of the Company, threatened against or affecting the Company or any Subsidiary or any property of the Company or any Subsidiary in any court or before any arbitrator of any kind or before or by any Governmental Authority that, individually or in the aggregate, would reasonably be expected to have a Material Adverse Effect.

(b) Neither the Company nor any Subsidiary is (i) in default under any term of any agreement or instrument to which it is a party or by which it is bound, (ii) in violation of any order, judgment, decree or ruling of any court, arbitrator or Governmental Authority naming or referring to the Company or any Subsidiary or (iii) in violation of any applicable law, or, to the knowledge of the Company, any ordinance, rule or regulation of any Governmental Authority (including, without limitation, Environmental Laws, the USA Patriot Act or any of the other laws and regulations that are referred to in **Section 5.16**), which default or violation, individually or in the aggregate, could reasonably be expected to have a Material Adverse Effect.

Section 5.9. Taxes. The Company and its Subsidiaries have filed all income tax returns that are required to have been filed in any jurisdiction, and have paid all taxes shown to be due and payable on such returns and all other taxes and assessments payable by them, to the extent such taxes and assessments have become due and payable and before they have become delinquent, except for any taxes and assessments (i) the amount of which is not individually or in the aggregate Material or (ii) the amount, applicability or validity of which is currently being contested in good faith by appropriate proceedings and with respect to which the Company or a Subsidiary, as the case may be, has established adequate reserves in accordance with GAAP. The charges, accruals, and reserves on the books of the Company and its Subsidiaries in respect of federal, state or other taxes for all fiscal periods are adequate. The federal income tax liabilities of the Company and its Subsidiaries have been finally determined (whether by reason of completed audits or the statute of limitations having run) for all fiscal years up to and including the fiscal year ended December 31, 2011 and all amounts owing in respect of such audit have been paid.

Section 5.10. Title to Property; Leases. The Company and its Subsidiaries have good and sufficient title to their respective properties that, individually or in the aggregate, are Material, including all such properties reflected in the most recent audited balance sheet referred to in **Section 5.5** or purported to have been acquired by the Company or any Subsidiary after such date (except as sold or otherwise disposed of in the ordinary course of business), in each case free and clear of Liens prohibited by this Agreement or the Indenture, except for those defects in title and

Liens that, individually or in the aggregate, would not have a Material Adverse Effect. All leases that, individually or in the aggregate, are Material are valid and subsisting and are in full force and effect in all material respects.

Section 5.11.Licenses, Permits, Etc. The Company and its Subsidiaries own or possess all licenses, permits, franchises, certificates of conveyance and necessity, authorizations, patents, copyrights, proprietary software, service marks, trademarks and trade names, or rights thereto, that are Material, without known conflict with the rights of others, except for those conflicts that, individually or in the aggregate, would not have a Material Adverse Effect.

Section 5.12.Compliance with Employee Benefit Plans. (a) The Company and each ERISA Affiliate have operated and administered each Plan in compliance with all applicable laws except for such instances of noncompliance as have not resulted in and could not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect. Neither the Company nor any ERISA Affiliate has incurred any liability pursuant to Title I or IV of ERISA or the penalty or excise tax provisions of the Code relating to employee benefit plans (as defined in section 3 of ERISA), and no event, transaction or condition has occurred or exists that could, individually or in the aggregate, reasonably be expected to result in the incurrence of any such liability by the Company or any ERISA Affiliate, or in the imposition of any Lien on any of the rights, properties or assets of the Company or any ERISA Affiliate, in either case pursuant to Title I or IV of ERISA or to such penalty or excise tax provisions under section 401(a)(29) or 412 of the Code or section 4068 of ERISA, other than such liabilities or Liens as would not be individually or in the aggregate Material.

(b) The present value of the aggregate benefit liabilities under each of the Plans (other than Multiemployer Plans), determined as of January 1, 2020 based on such Plan's actuarial assumptions as of that date for funding purposes as documented in such Plan's actuarial valuation report dated September 2020, did not exceed the aggregate current value of the assets of such Plan allocable to such benefit liabilities by more than \$5,000,000 in the aggregate for all Plans. The term "*benefit liabilities*" has the meaning specified in section 4001 of ERISA and the terms "*current value*" and "*present value*" have the meaning specified in section 3 of ERISA.

(c) The Company and its ERISA Affiliates have not incurred withdrawal liabilities (and are not subject to contingent withdrawal liabilities) under section 4201 or 4204 of ERISA in respect of Multiemployer Plans that individually or in the aggregate are Material.

(d) The expected postretirement benefit obligation (determined as of the last day of the Company's most recently ended fiscal year in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 715-60, without regard to liabilities attributable to continuation coverage mandated by section 4980B of the Code) of the Company and its Subsidiaries is not Material.

(e) The execution and delivery of this Agreement and the issuance and sale of the Bonds hereunder will not involve any transaction that is subject to the prohibitions of

section 406 of ERISA or in connection with which a tax could be imposed pursuant to section 4975(c)(1)(A)-(D) of the Code. The representation by the Company to each Purchaser in the first sentence of this **Section 5.12(e)** is made in reliance upon and subject to the accuracy of such Purchaser's representation in **Section 6.2** as to the sources of the funds used to pay the purchase price of the Bonds to be purchased by such Purchaser.

(f) The Company and its Subsidiaries do not have any Non-U.S. Plans.

Section 5.13.Private Offering by the Company. Neither the Company nor anyone acting on the Company's behalf has offered the Bonds or any similar securities for sale to, or solicited any offer to buy any of the same from, or otherwise approached or negotiated in respect thereof with, any Person other than the Purchasers and not more than five (5) other Institutional Investors, each of which has been offered the Bonds in connection with a private sale for investment. Neither the Company nor anyone acting on its behalf has taken, or will take, any action that would subject the issuance or sale of the Bonds to the registration requirements of section 5 of the Securities Act or to the registration requirements of any securities or blue sky laws of any applicable jurisdiction.

Section 5.14.Use of Proceeds; Margin Regulations. The Company will apply the proceeds of the sale of the Bonds to repay existing indebtedness, the cost of issuance of the Bonds, and for general corporate purposes and in compliance with all laws referenced in **Section 5.16**. No part of the proceeds from the sale of the Bonds hereunder will be used, directly or indirectly, for the purpose of buying or carrying any margin stock within the meaning of Regulation U of the Board of Governors of the Federal Reserve System (12 CFR 221), or for the purpose of buying or carrying or trading in any securities under such circumstances as to involve the Company in a violation of Regulation X of said Board (12 CFR 224) or to involve any broker or dealer in a violation of Regulation T of said Board (12 CFR 220). Margin stock does not constitute more than 2% of the value of the consolidated assets of the Company and its Subsidiaries and the Company does not have any present intention that margin stock will constitute more than 2% of the value of such assets. As used in this **Section**, the terms "margin stock" and "purpose of buying or carrying" shall have the meanings assigned to them in said Regulation U.

Section 5.15.Existing Debt. (a) Except as described therein, **Schedule 5.15(a)** sets forth a complete and correct list of all outstanding Debt of the Company and its Subsidiaries as of December 31, 2020, since which date except as described therein there has been no Material change in the amounts, interest rates, sinking funds, installment payments or maturities of the Debt of the Company or its Subsidiaries. Neither the Company nor any Subsidiary is in default and no waiver of default is currently in effect, in the payment of any principal or interest on any Debt of the Company or any Subsidiary and no event or condition exists with respect to any Debt of the Company or any Subsidiary, the outstanding principal amount of which exceeds \$5,000,000 that would permit (or that with notice or the lapse of time, or both, would permit) one or more Persons to cause such Debt to become due and payable before its stated maturity or before its regularly scheduled dates of payment.

(b) Without limiting the representation in **Section 5.6**, neither the Company nor any Subsidiary is a party to, or otherwise subject to any provision contained in, any instrument evidencing Debt of the Company or any Subsidiary, any agreement relating

thereto or any other agreement (including, but not limited to, its charter or other organizational document) which limits the amount of, or otherwise imposes restrictions on the incurring of, Debt evidenced by the Bonds, except as specifically indicated in **Schedule 5.15(b)**.

Section 5.16.Foreign Assets Control Regulations, Etc. (a) Neither the Company nor any Controlled Entity (i) is a Blocked Person, (ii) has been notified that its name appears or may in the future appear on a State Sanctions List or (iii) is a target of sanctions that have been imposed by the United Nations or the European Union.

(b) Neither the Company nor any Controlled Entity (i) has violated, been found in violation of, or been charged or convicted under, any applicable U.S. Economic Sanctions Laws, Anti-Money Laundering Laws, or Anti-Corruption Laws or (ii) to the Company's knowledge, is under investigation by any Governmental Authority for possible violation of any U.S. Economic Sanctions Laws, Anti-Money Laundering Laws or Anti-Corruption Laws.

(c) No part of the proceeds from the sale of the Bonds hereunder:

(i) constitutes or will constitute funds obtained on behalf of any Blocked Person or will otherwise be used by the Company or any Controlled Entity, directly or indirectly, (A) in connection with any investment in, or any transactions or dealings with, any Blocked Person, (B) for any purpose that would cause any Purchaser to be in violation of any U.S. Economic Sanctions Laws, or (C) otherwise in violation of any U.S. Economic Sanctions Laws;

(ii) will be used, directly or indirectly, in violation of, or cause any Purchaser to be in violation of, any applicable Anti-Money Laundering Laws; or

(iii) will be used, directly or indirectly, for the purpose of making any improper payments, including bribes, to any Governmental Official or commercial counterparty in order to obtain, retain or direct business or obtain any improper advantage, in each case which would be in violation of, or cause any Purchaser to be in violation of, any applicable Anti-Corruption Laws.

(d) The Company has established procedures and controls which it reasonably believes are adequate (and otherwise comply with applicable law) to ensure that the Company and each Controlled Entity is and will continue to be in compliance with all applicable U.S. Economic Sanctions Laws, Anti-Money Laundering Laws and Anti-Corruption Laws.

Section 5.17.Status under Certain Statutes. Neither the Company nor any Subsidiary is subject to regulation under the Investment Company Act of 1940, as amended, the Public Utility Holding Company Act of 2005, as amended, the ICC Termination Act of 1995, as amended, or subject to rate regulation under the Federal Power Act, as amended.

Section 5.18.Environmental Matters. (a) Neither the Company nor any Subsidiary has knowledge of any claim or has received any notice of any claim, and no proceeding has been instituted of which it has received notice, raising any claim against the Company or any of its Subsidiaries or any of their respective real properties now or formerly owned, leased or operated by any of them, or other assets, alleging damage to the environment or any violation of any Environmental Laws, except, in each case, such as could not reasonably be expected to result in a Material Adverse Effect.

(b) (i) neither the Company nor any Subsidiary has knowledge of any facts which would give rise to any claim, public or private, for violation of Environmental Laws or damage to the environment emanating from, occurring on or in any way related to real properties or to other assets now or formerly owned, leased or operated by any of them or their use, except, in each case, such as could not, individually or on the aggregate, reasonably be expected to result in a Material Adverse Effect;

(ii) neither the Company nor any of its Subsidiaries has stored any Hazardous Materials on real properties now or formerly owned, leased or operated by any of them or has disposed of any Hazardous Materials in each case in a manner contrary to any Environmental Laws and in any manner that could, individually or on the aggregate, reasonably be expected to result in a Material Adverse Effect; and

(iii) all buildings on all real properties now owned, leased or operated by the Company or any of its Subsidiaries are in compliance with applicable Environmental Laws, except where failure to comply could not reasonably be expected to result in a Material Adverse Effect.

Section 5.19.Lien of Indenture. The Indenture (and for avoidance of doubt including the Supplement) constitutes a direct and valid Lien upon the Trust Estate, subject only to the exceptions found in the Indenture and defined therein as “*permissible encumbrances*”, and will create a similar Lien upon all properties and assets acquired by the Company after the date hereof which are required to be subjected to the Lien of the Indenture, when acquired by the Company, subject only to the permissible encumbrances in the Indenture, and subject, further, as to real property interests, to the recordation of a supplement to the Indenture describing such after-acquired property; the descriptions of all such properties and assets contained in the granting clauses of the Indenture are correct and adequate for the purposes of the Indenture; the Indenture has been duly recorded as a mortgage and deed of trust of real estate, and any required filings with respect to personal property and fixtures subject to the Lien of the Indenture have been duly made in each place in which such recording or filing is required to protect, preserve and perfect the Lien of the Indenture; and all taxes and recording and filing fees required to be paid with respect to the execution, recording or filing of the Indenture, the filing of financing statements related thereto and similar documents and the issuance of the Bonds have been paid.

Section 5.20.Filings. No action, including any filings, registration or notice, is necessary or advisable in Ohio, West Virginia or any other jurisdictions to ensure the legality, validity and enforceability of the Financing Agreements, except such action as has been previously taken, which action remains in full force and effect. No action, including any filing, registration or notice,

is necessary or advisable in Ohio, West Virginia or any other jurisdiction to establish or protect for the benefit of the Trustee and the holders of Bonds, the security interest and Liens purported to be created under the Indenture and the priority and perfection thereof and the other Financing Agreements, except such action as has been previously taken, which action remains in full force and effect.

SECTION 6. REPRESENTATIONS OF THE PURCHASERS.

Section 6.1. Purchase for Investment. Each Purchaser severally represents that it is purchasing the Bonds for its own account or for one or more separate accounts maintained by such Purchaser or for the account of one or more pension or trust funds and not with a view to the distribution thereof, provided that the disposition of such Purchaser's or their property shall at all times be within such Purchaser's or their control. Each Purchaser understands that the Bonds have not been registered under the Securities Act and may be resold only if registered pursuant to the provisions of the Securities Act or if an exemption from registration is available, except under circumstances where neither such registration nor such an exemption is required by law, and that the Company is not required to register the Bonds.

Section 6.2. Source of Funds. Each Purchaser severally represents that at least one of the following statements is an accurate representation as to each source of funds (a "Source") to be used by such Purchaser to pay the purchase price of the Bonds to be purchased by such Purchaser hereunder:

(a) the Source is an "insurance company general account" (as the term is defined in the United States Department of Labor's Prohibited Transaction Exemption ("PTE") 95-60) in respect of which the reserves and liabilities (as defined by the annual statement for life insurance companies approved by the National Association of Insurance Commissioners (the "NAIC Annual Statement")) for the general account contract(s) held by or on behalf of any employee benefit plan together with the amount of the reserves and liabilities for the general account contract(s) held by or on behalf of any other employee benefit plans maintained by the same employer (or affiliate thereof as defined in PTE 95-60) or by the same employee organization in the general account do not exceed 10% of the total reserves and liabilities of the general account (exclusive of separate account liabilities) plus surplus as set forth in the NAIC Annual Statement filed with such Purchaser's state of domicile; or

(b) the Source is a separate account that is maintained solely in connection with such Purchaser's fixed contractual obligations under which the amounts payable, or credited, to any employee benefit plan (or its related trust) that has any interest in such separate account (or to any participant or beneficiary of such plan (including any annuitant)) are not affected in any manner by the investment performance of the separate account; or

(c) the Source is either (i) an "insurance company pooled separate account," (within the meaning of PTE 90-1) or (ii) a "bank collective investment fund" (within the meaning of the PTE 91-38) and, except as disclosed by such Purchaser to the Company in

writing pursuant to this clause (c), no employee benefit plan or group of plans maintained by the same employer or employee organization beneficially owns more than 10% of all assets allocated to such pooled separate account or collective investment fund; or

(d) the Source constitutes assets of an “*investment fund*” (within the meaning of Part VI of PTE 84-14 (the “*QPAM Exemption*”)) managed by a “*qualified professional asset manager*” or “*QPAM*” (within the meaning of Part VI of the QPAM Exemption), no employee benefit plan’s assets that are managed by the QPAM in such investment fund, when combined with the assets of all other employee benefit plans established or maintained by the same employer or by an affiliate (within the meaning of Part VI(c)(1) of the QPAM Exemption) of such employer or by the same employee organization and managed by such QPAM, represent more than 20% of the total client assets managed by such QPAM, the conditions of Part I(c) and (g) of the QPAM Exemption are satisfied, neither the QPAM nor a person controlling or controlled by the QPAM maintains an ownership interest in the Company that would cause the QPAM and the Company to be “*related*” within the meaning of Part VI(h) of the QPAM Exemption and (i) the identity of such QPAM and (ii) the names of any employee benefit plans whose assets in the investment fund, when combined with the assets of all other employee benefit plans established or maintained by the same employer or by an affiliate (within the meaning of Part VI(c)(1) of the QPAM Exemption) of such employer or by the same employee organization, represent 10% or more of the assets of such investment fund, have been disclosed to the Company in writing pursuant to this clause (d); or

(e) the Source constitutes assets of a “*plan(s)*” (within the meaning of Part IV(h) of PTE 96-23 (the “*INHAM Exemption*”)) managed by an “*in-house asset manager*” or “*INHAM*” (within the meaning of Part IV(a) of the INHAM Exemption), the conditions of Part I(a), (g) and (h) of the INHAM Exemption are satisfied, neither the INHAM nor a person controlling or controlled by the INHAM (applying the definition of “*control*” in Part IV(d)(3) of the INHAM Exemption) owns a 10% or more interest in the Company and (i) the identity of such INHAM and (ii) the name(s) of the employee benefit plan(s) whose assets constitute the Source have been disclosed to the Company in writing pursuant to this clause (e); or

(f) the Source is a governmental plan; or

(g) the Source is one or more employee benefit plans, or a separate account or trust fund comprised of one or more employee benefit plans, each of which has been identified to the Company in writing pursuant to this clause (g); or

(h) the Source does not include “*plan assets*” of any employee benefit plan, other than a plan exempt from the coverage of Title I of ERISA.

As used in this **Section 6.2**, the terms “*employee benefit plan*,” “*governmental plan*,” and “*separate account*” shall have the respective meanings assigned to such terms in section 3 of ERISA.

SECTION 7. INFORMATION AS TO COMPANY.

Section 7.1. Financial and Business Information. The Company shall deliver to each holder of Bonds that is an Institutional Investor:

(a) *Quarterly Statements* — within 60 days after the end of each quarterly fiscal period in each fiscal year of the Company (other than the last quarterly fiscal period of each such fiscal year), duplicate copies of:

(i) a consolidated balance sheet of the Company and its Subsidiaries as at the end of such quarter, and

(ii) consolidated statements of income, changes in shareholders' equity and cash flows of the Company and its Subsidiaries, for such quarter and (in the case of the second and third quarters) for the portion of the fiscal year ending with such quarter, setting forth in each case in comparative form the figures for the corresponding periods in the previous fiscal year, all in reasonable detail, prepared in accordance with GAAP applicable to quarterly financial statements generally, and certified by a Senior Financial Officer as fairly presenting, in all material respects, the financial position of the companies being reported on and their results of operations and cash flows, subject to changes resulting from year-end adjustments; provided that the delivery within the time period specified above of the Company's said financial statements, prepared in accordance with the requirements therefor and filed with the Municipal Securities Rulemaking Board on the Electronic Municipal Market Access ("EMMA") database shall be deemed to satisfy the requirements of this Section 7.1(a); provided however, that the Company shall have given each Purchaser or holder of a Bond prior written notice, which may be by e-mail or in accordance with Section 15, of delivery for filing in connection with each delivery, and provided further, that upon request of any holder of a Bond to receive paper copies of such, financial statements, the Company will promptly e-mail them or deliver such paper copies, as the case may be, to such holder;

(b) *Annual Statements* — within 120 days after the end of each fiscal year of the Company, duplicate copies of:

(i) a consolidated balance sheet of the Company and its Subsidiaries, as at the end of such year, and

(ii) consolidated statements of income, changes in shareholders' equity and cash flows of the Company and its Subsidiaries for such year, setting forth in each case in comparative form the figures for the previous fiscal year, all in reasonable detail, prepared in accordance with GAAP, and accompanied by an opinion thereon (without a "going concern" or similar qualification or exception and without any qualification or exception as to the scope of the audit on which such opinion is based) of independent public accountants of recognized national

standing, which opinion shall state that such financial statements present fairly, in all material respects, the financial position of the companies being reported upon and their results of operations and cash flows and have been prepared in conformity with GAAP, and that the examination of such accountants in connection with such financial statements has been made in accordance with generally accepted auditing standards, and that such audit provides a reasonable basis for such opinion in the circumstances, provided that the delivery within the time period specified above of the Company's said financial statements, prepared in accordance with the requirements therefor and containing the above described audit opinion and filed with the Municipal Securities Rulemaking Board on the EMMA database shall be deemed to satisfy the requirements of this **Section 7.1(b)**; provided however, that the Company shall have given each holder of a Bond prior written notice, which may be by e-mail or in accordance with Section 15, of delivery for filing in connection with each delivery, and provided further, that upon request of any holder of a Bond to receive paper copies of such, financial statements, the Company will promptly e-mail them or deliver such paper copies, as the case may be, to such holder;

(c) *SEC and Other Reports* — promptly upon their becoming available, one copy of (i) each financial statement, report, notice or proxy statement sent by the Company or any Subsidiary to its public securities holders generally, (ii) each regular or periodic report, each registration statement that shall have become effective (without exhibits except as expressly requested by such holder), and each final prospectus and all amendments thereto filed by the Company or any Subsidiary with the SEC, and (iii) any other report submitted to the Company by an independent accountant, provided that the delivery within the time period specified above of the Company's said financial statements, prepared in accordance with the requirements therefor and filed with the Municipal Securities Rulemaking Board on the EMMA database shall be deemed to satisfy the requirements of this **Section 7.1(c)**; provided however, that the Company shall have given each holder of a Bond prior written notice, which may be by e-mail or in accordance with Section 15, of delivery for filing in connection with each delivery, and provided further, that upon request of any holder of a Bond to receive paper copies of such, financial statements, the Company will promptly e-mail them or deliver such paper copies, as the case may be, to such holder;

(d) *Notice of Default or Event of Default* — promptly, and in any event within five days after a Responsible Officer becomes aware of the existence of any Default or Event of Default, a written notice specifying the nature and period of existence thereof and what action the Company is taking or proposes to take with respect thereto;

(e) *Employee Benefits Matters* — promptly, and in any event within five days after a Responsible Officer becomes aware of any of the following, a written notice setting forth the nature thereof and the action, if any, that the Company or an ERISA Affiliate proposes to take with respect thereto:

(i) with respect to any Plan (other than any Multiemployer Plan) that is subject to Title IV of ERISA, any reportable event, as defined in section 4043(c) of

ERISA and the regulations thereunder, for which notice thereof has not been waived pursuant to such regulations as in effect on the date hereof; or

(ii) the taking by the PBGC of steps to institute, or the threatening by the PBGC of the institution of, proceedings under section 4042 of ERISA for the termination of, or the appointment of a trustee to administer, any such Plan, or the receipt by the Company or any ERISA Affiliate of a notice from a Multiemployer Plan that such action has been taken by the PBGC with respect to such Multiemployer Plan; or

(iii) any event, transaction or condition that could result in the incurrence of any liability by the Company or any ERISA Affiliate pursuant to Title I or IV of ERISA or the penalty or excise tax provisions of the Code relating to employee benefit plans, or in the imposition of any Lien on any of the rights, properties or assets of the Company or any ERISA Affiliate pursuant to Title I or IV of ERISA or such penalty or excise tax provisions, if such liability or Lien, taken together with any other such liabilities or Liens then existing, would reasonably be expected to have a Material Adverse Effect;

(f) *Notices from Governmental Authority* — promptly, and in any event within 30 days of receipt thereof, copies of any notice to the Company or any Subsidiary from any federal or state Governmental Authority relating to any order, ruling, statute or other law or regulation that could reasonably be expected to have a Material Adverse Effect;

(g) *Requested Information* — with reasonable promptness, following the receipt by the Company of a written request by such holder of Bonds, the names and contact information of holders of the outstanding bonds issued under the Indenture (i.e. the bonds in which the Company or a trustee is required to keep in a register and that are not publicly traded) of which the Company has knowledge and the principal amount of the outstanding bonds issued under the Indenture owed to each holder (unless disclosure of such names, contact information or holdings is prohibited by law), and such data and information relating to the business, operations, affairs, financial condition, assets or properties of the Company or any of its Subsidiaries or relating to the ability of the Company to perform its obligations under any Financing Agreement as from time to time may be reasonably requested by such holder of Bonds, provided however, the Company will not be required to provide management letters to the Purchasers; and

(h) *Deliveries to Trustee* – promptly, and in any event within five days after delivery to the Trustee, a copy of any deliveries made by the Company to the Trustee pursuant the Indenture.

Section 7.2. Officer's Certificate. Each set of financial statements delivered to a holder of Bonds pursuant to **Section 7.1(a)** or **Section 7.1(b)** shall be accompanied by a certificate of a Senior Financial Officer (which, in the case of financial statements filed with the Municipal Securities Rulemaking Board on the EMMA database, shall be by separate concurrent delivery of such certificate to each holder of Bonds) setting forth a statement that such Senior Financial Officer

has reviewed the relevant terms hereof and of the Indenture and has made, or caused to be made, under his or her supervision, a review of the transactions and conditions of the Company and its Subsidiaries from the beginning of the quarterly or annual period covered by the statements then being furnished to the date of the certificate and that such review shall not have disclosed the existence during such period of any condition or event that constitutes a Default or an Event of Default or, if any such condition or event existed or exists (including, without limitation, any such event or condition resulting from the failure of the Company or any Subsidiary to comply with any Environmental Law), specifying the nature and period of existence thereof and what action the Company shall have taken or proposes to take with respect thereto.

Section 7.3. Visitation. The Company shall permit the representatives of each holder of Bonds that is an Institutional Investor:

(a) *No Default* — if no Default or Event of Default then exists, at the expense of such Purchaser or such holder and upon reasonable prior notice to the Company, to visit the principal executive office of the Company, to discuss the affairs, finances and accounts of the Company and its Subsidiaries with the Company's officers, and, with the consent of the Company (which consent will not be unreasonably withheld), to visit the other offices and properties of the Company and each Subsidiary, all at such reasonable times during normal business hours and as often as may be reasonably requested in writing; and

(b) *Default* — if a Default or Event of Default then exists, at the expense of the Company to visit and inspect any of the offices or properties of the Company or any Subsidiary, to examine all their respective books of account, records, reports and other papers, to make copies and extracts therefrom, and to discuss their respective affairs, finances and accounts with their respective officers and independent public accountants (and by this provision the Company authorizes said accountants to discuss the affairs, finances and accounts of the Company and its Subsidiaries), all at such reasonable times and as often as may be requested.

SECTION 8. PURCHASE OF BONDS.

The Company will not and will not permit any Affiliate to purchase, redeem, prepay or otherwise acquire, directly or indirectly, any of the outstanding Bonds except (a) upon the payment or prepayment of the Bonds in accordance with the terms of this Agreement and the Bonds or (b) pursuant to a written offer to purchase any outstanding Bonds made by the Company or an Affiliate pro rata to the holders of the Bonds upon the same terms and conditions. Any such offer shall provide each holder with sufficient information to enable it to make an informed decision with respect to such offer, and shall remain open for at least 15 Business Days. If the holders of more than 10% of the principal amount of the Bonds then outstanding accept such offer, the Company shall promptly notify the remaining holders of such fact and the expiration date for the acceptance by holders of Bonds of such offer shall be extended by the number of days necessary to give each such remaining holder at least 10 Business Days from its receipt of such notice to accept such offer. The Company will promptly cancel all Bonds acquired by it or any Affiliate pursuant to any payment, prepayment or purchase

of Bonds pursuant to any provision of this Agreement and no Bonds may be issued in substitution or exchange for any such Bonds.

SECTION 9. AFFIRMATIVE COVENANTS.

The Company covenants that, so long as any of the Bonds are outstanding:

Section 9.1. *Compliance with Indenture.* The Company will comply with all covenants found in the Indenture.

Section 9.2. *Compliance with Law.* Without limiting **Section 10.4**, the Company will, and will cause each of its Subsidiaries to, comply with all laws, ordinances or governmental rules or regulations to which each of them is subject, including, without limitation, ERISA, Environmental Laws, the USA Patriot Act and the other laws and regulations that are referred to in **Section 5.16**, and will obtain and maintain in effect all licenses, certificates, permits, franchises and other governmental authorizations necessary to the ownership of their respective properties or to the conduct of their respective businesses, in each case to the extent necessary to ensure that non-compliance with such laws, ordinances or governmental rules or regulations or failures to obtain or maintain in effect such licenses, certificates, permits, franchises and other governmental authorizations could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

Section 9.3. *Insurance.* The Company will cause each of its Subsidiaries to maintain, with financially sound and reputable insurers, insurance with respect to their respective properties and businesses against such casualties and contingencies, of such types, on such terms and in such amounts (including deductibles, co-insurance and self-insurance, if adequate reserves are maintained with respect thereto) as is customary in the case of entities of established reputations engaged in the same or a similar business and similarly situated.

Section 9.4. *Maintenance of Properties.* The Company will cause each of its Subsidiaries to maintain and keep, or cause to be maintained and kept, their respective properties in good repair, working order and condition (other than ordinary wear and tear), so that the business carried on in connection therewith may be properly conducted at all times, provided that this **Section 9.4** shall not prevent any Subsidiary from discontinuing the operation and the maintenance of any of its properties if such discontinuance is desirable in the conduct of its business and the Company and such Subsidiary has concluded that such discontinuance would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

Section 9.5. *Payment of Taxes.* The Company will cause each of its Subsidiaries to file all income tax or similar tax returns required to be filed in any jurisdiction and to pay and discharge all taxes shown to be due and payable on such returns and all other taxes, assessments, governmental charges, or levies payable by any of them, to the extent the same have become due and payable and before they have become delinquent, provided that any Subsidiary does not need to pay any such tax, assessment, charge or levy if (a) the amount, applicability or validity thereof is contested by the Company or such Subsidiary on a timely basis in good faith and in appropriate proceedings, and the Subsidiary has established adequate reserves therefor in accordance with

GAAP on the books of such Subsidiary or (b) the nonpayment of all such taxes, assessments, charges and levies in the aggregate would not reasonably be expected to have a Material Adverse Effect.

Section 9.6. Corporate Existence, Etc. Subject to **Section 10.3**, the Company will at all times preserve and keep in full force and effect its corporate existence. Subject to **Section 10.3**, the Company will at all times preserve and keep in full force and effect the corporate existence of each of its Subsidiaries (unless merged into the Company or a wholly-owned Subsidiary) and all rights and franchises of its Subsidiaries unless, in the good faith judgment of the Company or such Subsidiary, the termination of or failure to preserve and keep in full force and effect such corporate existence, right or franchise would not, individually or in the aggregate, have a Material Adverse Effect.

Section 9.7. Books and Records. The Company will, and will cause each of its Subsidiaries to, maintain proper books of record and account in conformity with GAAP and all applicable requirements of any Governmental Authority having legal or regulatory jurisdiction over the Company or such Subsidiary.

SECTION 10. NEGATIVE COVENANTS.

The Company covenants that, so long as any of the Bonds are outstanding:

Section 10.1. Transactions with Affiliates. The Company will not and will not permit any Subsidiary to enter into directly or indirectly any transaction or group of related transactions (including without limitation the purchase, lease, sale or exchange of properties of any kind or the rendering of any service) with any Affiliate (other than the Company or another Subsidiary), except in the ordinary course and pursuant to the reasonable requirements of the Company's or such Subsidiary's business, and upon fair and reasonable terms no less favorable to the Company or such Subsidiary than would be obtainable in a comparable arm's length transaction with a Person not an Affiliate.

Section 10.2. Merger, Consolidation, Etc. The Company will not consolidate with or merge with any other Person or convey, transfer or lease all or substantially all of its assets in a single transaction or series of transactions to any Person unless:

- (a) the successor formed by such consolidation or the survivor of such merger or the Person that acquires by conveyance, transfer or lease all or substantially all of the assets of the Company as an entirety, as the case may be, shall be a solvent corporation or limited liability company organized and existing under the laws of the United States or any State thereof (including the District of Columbia), and, if the Company is not such corporation or limited liability company, such corporation or limited liability company shall have executed and delivered to each holder of any Bonds its assumption of the due and punctual performance and observance of each covenant and condition of the Financing Agreements (pursuant to such agreements and instruments as shall be reasonably satisfactory to the Required Holders), and the Company shall have caused to be delivered to each holder of Bonds an opinion of nationally recognized independent counsel, to the

effect that all agreements or instruments effecting such assumption are enforceable in accordance with their terms and comply with the terms hereof; and

(b) immediately before and immediately after giving effect to such transaction, no Default or Event of Default shall have occurred and be continuing.

No such conveyance, transfer or lease of substantially all of the assets of the Company shall have the effect of releasing the Company or any successor corporation or limited liability company that shall theretofore have become such in the manner prescribed in this Section 10.2 from its liability under the Financing Agreements.

Section 10.3. Line of Business. The Company will not engage in any business if, as a result, the general nature of the business in which the Company and its Subsidiaries, taken as a whole, would then be engaged would be substantially changed from the general nature of the business in which the Company and its Subsidiaries, taken as whole, is engaged on the date of this Agreement.

Section 10.4. Economic Sanctions Etc. The Company will not, and will not permit any Controlled Entity to (a) become (including by virtue of being owned or controlled by a Blocked Person), own or control a Blocked Person or (b) directly or indirectly have any investment in or engage in any dealings or transactions (including any investment, dealing or transaction involving the proceeds of the Bonds) with any Person if such investment, dealing or transaction (i) would cause any holder or any affiliate of such holder to be in violation of, or subject to sanctions under, any law or regulation applicable to such holder, or (ii) is prohibited by or subject to sanctions under any U.S. Economic Sanctions Laws.

SECTION 11. PAYMENTS ON BONDS.

Section 11.1. Payment by Wire Transfer. So long as any Purchaser or its nominee shall be the holder of any Bond, and notwithstanding anything contained in the Indenture or in such Bond to the contrary, the Company will pay, or cause to be paid by a paying agent, a trustee or other similar party, all sums becoming due on such Bond for principal, Make-Whole Premium or premium, if any, and interest by the method and at the address specified for such purpose below such Purchaser's name in **Schedule A**, or by such other method or at such other address as such Purchaser shall have from time to time specified to the Company in writing for such purpose, without the presentation or surrender of such Bond or the making of any notation thereon, except that upon written request of the Company or any paying agent made concurrently with or reasonably promptly after payment or prepayment in full of any Bond, such Purchaser shall surrender such Bond for cancellation, reasonably promptly after any such request, to the Company at its principal executive office or at the place of payment most recently designated by the Company pursuant to Article I of the Indenture. Prior to any sale or other disposition of any Bond held by a Purchaser or its nominee, such Purchaser will, at its election, either endorse thereon the amount of principal paid thereon and the last date to which interest has been paid thereon or surrender such Bond to the Company in exchange for a new Bond or Bonds pursuant to Article I of the Indenture. The Company will afford the benefits of this **Section 11.1** to any Institutional Investor that is the direct or indirect transferee of any Bond purchased by a Purchaser under this

Agreement and that has made the same agreement relating to such Bond as the Purchasers have made in this **Section 11.1**.

Section 11.2. Payments Due on Non-Business Days. Anything in this Agreement or the Bonds to the contrary notwithstanding, any payment of principal of or Make-Whole Premium or interest on any Bond that is due on a date other than a Business Day shall be made on the next succeeding Business Day without including the additional days elapsed in the computation of the interest payable on such next succeeding Business Day; provided that if the maturity date of any Bond is a date other than a Business Day, the payment otherwise due on such maturity date shall be made on the next succeeding Business Day and shall include the additional days elapsed in the computation of interest payable on such next succeeding Business Day.

Section 11.3. FATCA Information. By acceptance of any Bond, the holder of such Bond agrees that such holder will with reasonable promptness duly complete and deliver to the Company, or to such other Person as may be reasonably requested by the Company, from time to time (a) in the case of any such holder that is a United States Person, such holder's United States tax identification number or other Forms reasonably requested by the Company necessary to establish such holder's status as a United States Person under FATCA and as may otherwise be necessary for the Company to comply with its obligations under FATCA and (b) in the case of any such holder that is not a United States Person, such documentation prescribed by applicable law (including as prescribed by section 1471(b)(3)(C)(i) of the Code) and such additional documentation as may be necessary for the Company to comply with its obligations under FATCA and to determine that such holder has complied with such holder's obligations under FATCA or to determine the amount (if any) to deduct and withhold from any such payment made to such holder. Nothing in this Section 11.3 shall require any holder to provide information that is confidential or proprietary to such holder unless the Company is required to obtain such information under FATCA and, in such event, the Company shall treat any such information it receives as confidential.

SECTION 12. REGISTRATION; EXCHANGE; EXPENSES, ETC.

Section 12.1. Registration of Bonds. The Company shall keep a register for the registration and registration of transfers of Bonds in accordance with Article III, Section 3 of the Indenture.

Section 12.2. Transaction Expenses. Whether or not the transactions contemplated hereby are consummated, the Company will pay all reasonable costs and expenses (including reasonable attorneys' fees of a special counsel and, if reasonably required by the Required Holders, (actual or as contemplated if transactions are not consummated) local or other counsel) incurred by the Purchasers and each other holder of a Bond in connection with such transactions and in connection with any amendments, waivers or consents under or in respect of any Financing Agreement (whether or not such amendment, waiver or consent becomes effective), including, without limitation: (a) the costs and expenses incurred in enforcing or defending (or determining whether or how to enforce or defend) any rights under any Financing Agreement or in responding to any subpoena or other legal process or informal investigative demand issued in connection with any Financing Agreement, or by reason of being a holder of any Bond, (b) the costs and expenses,

including financial advisors' fees, incurred in connection with the insolvency or bankruptcy of the Company or any Subsidiary or in connection with any work-out or restructuring of the transactions contemplated by any Financing Agreement and (c) the costs and expenses incurred in connection with the initial filing of any Financing Agreement and all related documents and financial information with the SVO, provided that such costs and expenses under this clause (c) shall not exceed \$5,000 for the Bonds. The Company will pay, and will save each Purchaser and each other holder of a Bond harmless from, all claims in respect of any fees, costs or expenses if any, of brokers and finders (other than those, if any, retained by a Purchaser or other holder in connection with its purchase of the Bonds).

Section 12.3.Survival. The obligations of the Company under this **Section 12** will survive the payment or transfer of any Bond, the enforcement, amendment or waiver of any provision of any Financing Agreement, and the termination of any Financing Agreement.

Section 12.4.Tax Withholding. Except as otherwise required by applicable law, the Company agrees that it will not withhold from any applicable payment to be made to a holder of a Bond that is not a United States Person any tax so long as such holder shall have delivered to the Company (in such number of copies as shall be requested) on or about the date on which such holder becomes a holder under this Agreement (and from time to time thereafter upon the reasonable request of the Company), executed copies of IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable, as well as the applicable "U.S. Tax Compliance Certificate" substantially in the form attached as **Exhibit 12.4**, in both cases correctly completed and executed.

Section 12.5. Certain Taxes. The Company agrees to pay all stamp, documentary or similar taxes or fees which may be payable in respect of the execution and delivery or the enforcement of this Agreement or the execution and delivery (but not the transfer) or the enforcement of any of the Bonds in the United States or any other jurisdiction where the Company has assets or of any amendment of, or waiver or consent under or with respect to, this Agreement or of any of the Bonds, and to pay any value added tax due and payable in respect of reimbursement of costs and expenses by the Company pursuant to this Section 12, and will save each holder of a Bond to the extent permitted by applicable law harmless against any loss or liability resulting from nonpayment or delay in payment of any such tax or fee required to be paid by the Company hereunder.

SECTION 13. SURVIVAL OF REPRESENTATIONS AND WARRANTIES; ENTIRE AGREEMENT.

All representations and warranties contained herein shall survive the execution and delivery of this Agreement, the purchase or transfer by any Purchaser of any Bond or portion thereof or interest therein and the payment of any Bond, and may be relied upon by any subsequent holder of a Bond, regardless of any investigation made at any time by or on behalf of such Purchaser or any other holder of a Bond. All statements contained in any certificate or other instrument delivered by or on behalf of the Company pursuant to this Agreement shall be deemed representations and warranties of the Company under this Agreement. Subject to the preceding sentence, the Financing Agreements embody the entire agreement and understanding between each

Purchaser and the Company and supersede all prior agreements and understandings relating to the subject matter hereof.

SECTION 14. AMENDMENT AND WAIVER.

Section 14.1.Requirements. This Agreement and the Bonds may be amended, and the observance of any term hereof or of the Bonds may be waived (either retroactively or prospectively) with (and only with) the written consent of the Company and the Required Holders, except that (i) no amendment or waiver of any of the provisions of **Sections 1, 2, 3, 4, 5, 6, or 19** hereof, or any defined term, will be effective as to any holder of Bonds unless consented to by such holder of Bonds in writing, and (ii) no such amendment or waiver may, without the written consent of all of the holders of Bonds at the time outstanding affected thereby, (A) subject to the provisions of the Indenture relating to acceleration, change the amount or time of any prepayment or payment of principal of, or reduce the rate or change the time of payment or method of computation of interest (if such change results in a decrease in the interest rate) or of the Make-Whole Premium on, the Bonds, (B) change the percentage of the principal amount of the Bonds the holders of which are required to consent to any such amendment or waiver or principal amount of the Bonds that the Purchasers are to purchase pursuant to **Section 2**, or (C) amend any of **Sections 8, 14, or 18**.

Section 14.2.Solicitation of Holders of Bonds.

(a) *Solicitation.* The Company will provide each holder of the Bonds (irrespective of the amount of Bonds then owned by it) with sufficient information, sufficiently far in advance of the date a decision is required, to enable such Purchaser or such holder to make an informed and considered decision with respect to any proposed amendment, waiver or consent in respect of any of the provisions hereof or of the Bonds. Such notice shall include a description of the proposed amendment, waiver or consent. A Purchaser or holder of the Bonds may request, in writing, additional information from the Company in order to enable such holder to make its decision and the Company agrees to use its best efforts to provide such information. The Company will deliver executed or true and correct copies of each amendment, waiver or consent effected pursuant to the provisions of this **Section 14** to each Purchaser and each holder of outstanding Bonds promptly following the date on which it is executed and delivered by, or receives the consent or approval of, the requisite holders of Bonds.

(b) *Payment.* The Company will not directly or indirectly pay or cause to be paid any remuneration, whether by way of supplemental or additional interest, fee or otherwise (other than legal fees or other related expenses), or grant any security or provide other credit support, to any Purchaser or holder of Bonds as consideration for or as an inducement to the entering into by any Purchaser or holder of Bonds or any waiver or amendment of any of the terms and provisions hereof unless such remuneration is concurrently paid, or security is concurrently granted or other credit support concurrently provided, on the same terms, ratably to each Purchaser or holder of Bonds then outstanding even if such holder did not consent to such waiver or amendment.

(c) *Consent in Contemplation of Transfer.* Any consent made pursuant to this **Section 14** by a holder of Bonds that has transferred or has agreed to transfer its Bond to (i) the Company, (ii) any Subsidiary or any Affiliate, or (iii) any other Person in connection

with, or in anticipation of, such other Person acquiring, making a tender offer for or merging with the Company and/or any of its Affiliates, and has provided or has agreed to provide such written consent as a condition to such transfer shall be void and of no force and effect except solely as to such holder, and any amendments effected or waivers granted or to be effected or granted that would not have been or would not be so effected or granted but for such consent (and the consents of all holders of Bonds that were acquired under the same or similar conditions) shall be void and of no force or effect except solely as to such holder.

Section 14.3.Binding Effect, Etc. Any amendment or waiver consented to as provided in this **Section 14** applies equally to all holders of Bonds and is binding upon them and upon each future holder of any Bond and upon the Company without regard to whether such Bond has been marked to indicate such amendment or waiver. No such amendment or waiver will extend to or affect any obligation, covenant, agreement, Default or Event of Default not expressly amended or waived or impair any right consequent thereon. No course of dealing between the Company and any holder of any Bond nor any delay in exercising any rights hereunder or under any Bond shall operate as a waiver of any rights of any holder of such Bond.

Section 14.4.Bonds Held by Company, Etc. Solely for the purpose of determining whether the holders of the requisite percentage of the aggregate principal amount of Bonds then outstanding approved or consented to any amendment, waiver or consent to be given under this Agreement or the Bonds, or have directed the taking of any action provided herein or in the Bonds to be taken upon the direction of the holders of a specified percentage of the aggregate principal amount of Bonds then outstanding, Bonds directly or indirectly owned by the Company or any of its Affiliates shall be deemed not to be outstanding.

SECTION 15. NOTICES.

All notices and communications provided for hereunder shall be in writing and sent (a) by telecopy if the sender on the same day sends a confirming copy of such notice by a recognized overnight delivery service (charges prepaid), or (b) by registered or certified mail with return receipt requested (postage prepaid), or (c) by a recognized overnight delivery service (with charges prepaid). Any such notice must be sent:

(a) if to any Purchaser or its nominee, to such Purchaser or nominee at the address specified for such communications in **Schedule A**, or at such other address as such Purchaser or nominee shall have specified to the Company in writing,

(b) if to any other holder of any Bond, to such holder at such address as such other holder shall have specified to the Company in writing, or

(c) if to the Company, to the Company at its address set forth at the beginning hereof to the attention of 6650 South Avenue, Boardman, Ohio 44512, or at such other address as the Company shall have specified to the holder of each Bond in writing, or

(d) if to the Trustee, to BNY Mellon Trust Company, N.A., as Trustee at 500 Ross Street, 12th Floor, Pittsburgh, PA 15262, or at such other address as the Trustee shall have specified to the Company and each other party hereto in writing.

Notices under this **Section 15** will be deemed given only when actually received.

SECTION 16. INDEMNIFICATION.

The Company hereby agrees to indemnify and hold the holders of the Bonds harmless from, against and in respect of any and all loss, liability and expense (including reasonable attorneys' fees) arising from any misrepresentation or nonfulfillment of any undertaking on the part of the Company under this Agreement. The indemnification obligations of the Company under this Section 16 shall survive the execution and delivery of this Agreement, the delivery of the Bonds to the Purchasers and the consummation of the transactions contemplated herein.

SECTION 17. REPRODUCTION OF DOCUMENTS.

This Agreement and all documents relating thereto, including, without limitation, (a) consents, waivers and modifications that may hereafter be executed, (b) documents received by any Purchaser at the Closing (except the Bonds themselves), and (c) financial statements, certificates and other information previously or hereafter furnished to any Purchaser, may be reproduced by such Purchaser by any photographic, photostatic, electronic, digital, or other similar process and such Purchaser may destroy any original document so reproduced. The Company agrees and stipulates that, to the extent permitted by applicable law, any such reproduction shall be admissible in evidence as the original itself in any judicial or administrative proceeding (whether or not the original is in existence and whether or not such reproduction was made by such Purchaser in the regular course of business) and any enlargement, facsimile or further reproduction of such reproduction shall likewise be admissible in evidence. This Section 17 shall not prohibit the Company or any other holder of Bonds from contesting any such reproduction to the same extent that it could contest the original, or from introducing evidence to demonstrate the inaccuracy of any such reproduction.

SECTION 18. CONFIDENTIAL INFORMATION.

For the purposes of this **Section 18**, "*Confidential Information*" means information delivered to any Purchaser by or on behalf of the Company or any Subsidiary in connection with the transactions contemplated by or otherwise pursuant to this Agreement that is proprietary in nature and that was clearly marked or labeled or otherwise adequately identified when received by such Purchaser as being confidential information of the Company or such Subsidiary, provided that such term does not include information that (a) was publicly known or otherwise known to such Purchaser prior to the time of such disclosure, (b) subsequently becomes publicly known through no act or omission by such Purchaser or any person acting on such Purchaser's behalf, (c) otherwise becomes known to such Purchaser other than through disclosure by the Company or any Subsidiary or (d) constitutes financial statements delivered to such Purchaser under **Section 7.1** of this Agreement or under the Indenture that are otherwise publicly available. Each

Purchaser will maintain the confidentiality of such Confidential Information in accordance with procedures adopted by such Purchaser in good faith to protect confidential information of third parties delivered to such Purchaser, provided that such Purchaser may deliver or disclose Confidential Information to (i) its directors, trustees, officers, employees, agents, attorneys and affiliates (to the extent such disclosure reasonably relates to the administration of the investment represented by Bonds), (ii) its financial advisors and other professional advisors who agree to hold confidential the Confidential Information substantially in accordance with the terms of this Section 18, (iii) the Trustee or any other holder of any Bond, (iv) any Institutional Investor to which it sells or offers to sell such Bond or any part thereof or any participation therein (if such Person has agreed in writing prior to its receipt of such Confidential Information to be bound by the provisions of this **Section 18**), (v) any Person from which it offers to purchase any security of the Company (if such Person has agreed in writing prior to its receipt of such Confidential Information to be bound by the provisions of this **Section 18**), (vi) any federal or state or provincial regulatory authority having jurisdiction over such Purchaser, (vii) the NAIC or the SVO or, in each case, any similar organization, or any nationally recognized rating agency that requires access to information about such Purchaser's investment portfolio, or (viii) any other Person to which such delivery or disclosure may be necessary or appropriate (w) to effect compliance with any law, rule, regulation or order applicable to such Purchaser, (x) in response to any subpoena or other legal process, (y) in connection with any litigation to which such Purchaser is a party or (z) if an Event of Default has occurred and is continuing, to the extent such Purchaser may reasonably determine such delivery and disclosure to be necessary or appropriate in the enforcement or for the protection of the rights and remedies under any Financing Agreement. Each holder of a Bond, by its acceptance of a Bond, will be deemed to have agreed to be bound by and to be entitled to the benefits of this **Section 18** as though it were a party to this Agreement. On reasonable request by the Company in connection with the delivery to any holder of a Bond of information required to be delivered to such holder under this Agreement or requested by such holder (other than a holder that is a party to this Agreement or its nominee), such holder will enter into an agreement with the Company embodying the provisions of this Section 18.

In the event that as a condition to receiving access to information relating to the Company or its Subsidiaries in connection with the transactions contemplated by or otherwise pursuant to this Agreement, any Purchaser or holder of a Bond is required to agree to a confidentiality undertaking (whether through EMMA, another secure website, a secure virtual workspace or otherwise) which is different from this **Section 18**, this **Section 18** shall not be amended thereby and, as between such Purchaser or such holder and the Company, this **Section 18** shall supersede any such other confidentiality undertaking.

SECTION 19. MISCELLANEOUS.

Section 19.1. Successors and Assigns. All covenants and other agreements contained in this Agreement by or on behalf of any of the parties hereto bind and inure to the benefit of their respective successors and assigns (including, without limitation, any subsequent holder of a Bond) whether so expressed or not, except that, subject to **Section 10.2**, the Company may not assign or otherwise transfer any of its rights or obligations hereunder or under the Bonds without the prior written consent of each holder. Nothing in this Agreement, expressed or implied, shall be construed to confer upon any Person (other than the parties hereto and their respective successors and assigns

permitted hereby) any legal or equitable right, remedy or claim under or by reason of this Agreement.

Section 19.2.Accounting Terms. All accounting terms used herein which are not expressly defined in this Agreement have the meanings respectively given to them in accordance with GAAP. Except as otherwise specifically provided herein, (a) all computations made pursuant to this Agreement shall be made in accordance with GAAP, and (b) all financial statements shall be prepared in accordance with GAAP. For purposes of determining compliance with the financial covenants contained in the Financing Agreements, if any, any election by the Company to measure Debt using fair value (as permitted by Financial Accounting Standards Board Accounting Standards Codification Topic No. 825-10-25 - Fair Value Option, International Accounting Standard 39 - Financial Instruments: Recognition and Measurement or any similar accounting standard) shall be disregarded and such determination shall be made as if such election had not been made and such Debt shall be valued at not less than 100% of the principal amount thereof.

Section 19.3.Severability. Any provision of this Agreement that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall (to the full extent permitted by law) not invalidate or render unenforceable such provision in any other jurisdiction.

Section 19.4.Construction, Etc. Each covenant contained herein shall be construed (absent express provision to the contrary) as being independent of each other covenant contained herein, so that compliance with any one covenant shall not (absent such an express contrary provision) be deemed to excuse compliance with any other covenant. Where any provision herein refers to action to be taken by any Person, or which such Person is prohibited from taking, such provision shall be applicable whether such action is taken directly or indirectly by such Person.

For the avoidance of doubt, all Schedules and Exhibits attached to this Agreement shall be deemed to be a part hereof.

Section 19.5.Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be an original but all of which together shall constitute one instrument. Each counterpart may consist of a number of copies hereof, each signed by less than all, but together signed by all, of the parties hereto.

Section 19.6.Governing Law. This Agreement shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the law of the State of Ohio excluding choice-of-law principles of the law of such State that would permit the application of the laws of a jurisdiction other than such State.

Section 19.7.Jurisdiction and Process; Waiver of Jury Trial. (a) The Company irrevocably submits to the non-exclusive jurisdiction of any Ohio State or federal court sitting in the Northern District, Eastern Division of Ohio, over any suit, action or proceeding arising out of or relating to this Agreement or the Bonds. To the fullest extent permitted by applicable law, the Company irrevocably waives and agrees not to assert, by way of motion, as a defense or otherwise,

any claim that it is not subject to the jurisdiction of any such court, any objection that it may now or hereafter have to the laying of the venue of any such suit, action or proceeding brought in any such court and any claim that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum.

(b) The Company consents to process being served by or on behalf of any holder of Bonds in any suit, action or proceeding of the nature referred to in **Section 19.7(a)** by mailing a copy thereof by registered or certified mail (or any substantially similar form of mail), postage prepaid, return receipt requested, to it at its address specified in Section 15 or at such other address of which such holder shall then have been notified pursuant to said Section. The Company agrees that such service upon receipt (i) shall be deemed in every respect effective service of process upon it in any such suit, action or proceeding and (ii) shall, to the fullest extent permitted by applicable law, be taken and held to be valid personal service upon and personal delivery to it. Notices hereunder shall be conclusively presumed received as evidenced by a delivery receipt furnished by the United States Postal Service or any reputable commercial delivery service.

(c) Nothing in this **Section 19.7** shall affect the right of any holder of a Bond to serve process in any manner permitted by law, or limit any right that the holders of any of the Bonds may have to bring proceedings against the Company in the courts of any appropriate jurisdiction or to enforce in any lawful manner a judgment obtained in one jurisdiction in any other jurisdiction.

(d) The parties hereto hereby waive trial by jury in any action brought on or with respect to this Agreement, the Bonds or any other document executed in connection herewith or therewith.

If you are in agreement with the foregoing, please sign the form of agreement on a counterpart of this Agreement and return it to the Company, whereupon this Agreement shall become a binding agreement between you and the Company.

Very truly yours,
AQUA OHIO, INC.

By: /s/ Stan Szczygiel
Name: Stan Szczygiel
Title: Sr. Vice President Finance and
Treasurer

Accepted as of the date first written above.

TEACHERS INSURANCE AND ANNUITY
ASSOCIATION OF AMERICA

By: Nuveen Alternatives Advisors LLC,
its investment manager

By: /s/ Elena Unger
Name: Elena Unger
Title: Director

Accepted as of the date first written above.

STATE FARM LIFE INSURANCE COMPANY

By: /s/ Jeffrey Attwood

Name: Jeffrey Attwood

Title: Investment Professional

By: /s/ Rebekah L. Holt

Name: Rebekah L. Holt

Title: Investment Professional

STATE FARM LIFE AND ACCIDENT
ASSURANCE COMPANY

By: /s/ Jeffrey Attwood

Name: Jeffrey Attwood

Title: Investment Professional

By: /s/ Rebekah L. Holt

Name: Rebekah L. Holt

Title: Investment Professional

STATE FARM INSURANCE COMPANIES
EMPLOYEE RETIREMENT TRUST

By: /s/ Jeffrey Attwood

Name: Jeffrey Attwood

Title: Investment Professional

By: /s/ Rebekah L. Holt

Name: Rebekah L. Holt

Title: Investment Professional

Schedule B

Defined Terms

As used herein, the following terms have the respective meanings set forth below or set forth in the Section hereof following such term:

“*Affiliate*” means, at any time, and with respect to any Person, any other Person that at such time directly or indirectly through one or more intermediaries Controls, or is Controlled by, or is under common Control with, such first Person. As used in this definition, “*Control*” means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of voting securities, by contract or otherwise. Unless the context otherwise clearly requires, any reference to an “*Affiliate*” is a reference to an Affiliate of the Company.

“*Agreement*” means this Bond Purchase Agreement, including all Schedules and Exhibits attached to this Agreement.

“*Anti-Corruption Laws*” means any law or regulation in a U.S. or any non-U.S. jurisdiction regarding bribery or any other corrupt activity, including the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act 2010.

“*Anti-Money Laundering Laws*” means any law or regulation in a U.S. or any non-U.S. jurisdiction regarding money laundering, drug trafficking, terrorist-related activities or other money laundering predicate crimes, including the Currency and Foreign Transactions Reporting Act of 1970 (otherwise known as the Bank Secrecy Act) and the USA Patriot Act.

“*Blocked Person*” means (a) a Person whose name appears on the list of Specially Designated Nationals and Blocked Persons published by OFAC, (b) a Person, entity, organization, country or regime that is blocked or a target of sanctions that have been imposed under U.S. Economic Sanctions Laws, or (c) a Person that is an agent, department or instrumentality of, or is otherwise beneficially owned by, controlled by or acting on behalf of, directly or indirectly, any Person, entity, organization, country or regime described in clause (a) or (b).

“*Bonds*” is defined in **Section 1**.

“*Business Day*” means for the purposes of any provision of this Agreement, any day other than a Saturday, a Sunday or a day on which commercial banks in New York, New York or Cleveland, Ohio are required or authorized to be closed.

“*Capital Lease*” means, at any time, a lease with respect to which the lessee is required concurrently to recognize the acquisition of an asset and the incurrence of a liability in accordance with GAAP.

Schedule B
(to Bond Purchase Agreement)

“*Capital Lease Obligation*” means, with respect to any Person and a Capital Lease, the amount of the obligation of such Person as the lessee under such Capital Lease which would, in accordance with GAAP, appear as a liability on a balance sheet of such Person.

“*Closing*” is defined in Section 3.

“*Closing Date*” is the date of the Closing.

“*Code*” means the Internal Revenue Code of 1986, as amended from time to time, and the rules and regulations promulgated thereunder from time to time.

“*Company*” means Aqua Ohio, Inc., a corporation existing under the laws of the State of Ohio.

“*Confidential Information*” is defined in **Section 18**.

“*Controlled Entity*” means any of the Subsidiaries of the Company and any of their or the Company’s respective Controlled Affiliates. As used in this definition, “*Control*” means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of voting securities, by contract or otherwise.

“*Debt*” means, with respect to any Person, without duplication,

- (a) its liabilities for borrowed money;
- (b) its liabilities for the deferred purchase price of property acquired by such Person (excluding accounts payable and other accrued liabilities arising in the ordinary course of business but including, without limitation, all liabilities created or arising under any conditional sale or other title retention agreement with respect to any such property);
- (c) its Capital Lease Obligations;
- (d) all liabilities for borrowed money secured by any Lien with respect to any property owned by such Person (whether or not it has assumed or otherwise become liable for such liabilities);
- (e) all non-contingent liabilities in respect of reimbursement agreements or similar agreements in respect of letters of credit or instruments serving a similar function issued or accepted for its account by banks and other financial institutions;
- (f) Swaps of such Person; and
- (g) Guaranties of such Person with respect to liabilities of a type described in any of clauses (a) through (f) hereof.

Debt of any Person shall include all obligations of such Person of the character described in clauses (a) through (g) to the extent such Person remains legally liable in respect thereof notwithstanding that any such obligation is deemed to be extinguished under GAAP.

“*Default*” means an event or condition the occurrence or existence of which would, with the lapse of time or the giving of notice or both, become an Event of Default.

“*Disclosure Documents*” is defined in **Section 5.3**.

“*EMMA*” is defined in **Section 7.1(a)**.

“*Environmental Laws*” means any and all Federal, state, local, and foreign statutes, laws, regulations, ordinances, rules, judgments, orders, decrees, permits, concessions, grants, franchises, licenses, agreements or governmental restrictions relating to pollution and the protection of the environment or the release of any materials into the environment, including but not limited to those related to Hazardous Materials.

“*ERISA*” means the Employee Retirement Income Security Act of 1974, as amended from time to time, and the rules and regulations promulgated thereunder from time to time in effect.

“*ERISA Affiliate*” means any trade or business (whether or not incorporated) that is treated as a single employer together with the Company under section 414 of the Code.

“*Event of Default*” is defined in Article VII of the Indenture.

“*FATCA*” means (a) sections 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), together with any current or future regulations or official interpretations thereof, (b) any treaty, law or regulation of any other jurisdiction, or relating to an intergovernmental agreement between the United States of America and any other jurisdiction, which (in either case) facilitates the implementation of the foregoing clause (a), and (c) any agreements entered into pursuant to section 1471(b)(1) of the Code.

“*Financing Agreements*” means this Agreement, the Indenture (including without limitation the Supplement), and the Bonds.

“*GAAP*” means generally accepted accounting principles as in effect from time to time in the United States of America.

“*Governmental Authority*” means:

(a) the government of

(i) the United States of America or any State or other political subdivision thereof, or

(ii) any other jurisdiction in which the Company or any Subsidiary conducts all or any part of its business, or which asserts jurisdiction over any properties of the Company or any Subsidiary, or

(b) any entity exercising executive, legislative, judicial, regulatory or administrative functions of, or pertaining to, any such government.

“*Governmental Official*” means any governmental official or employee, employee of any government-owned or government-controlled entity, political party, any official of a political party, candidate for political office, official of any public international organization or anyone else acting in an official capacity.

“*Guaranty*” means, with respect to any Person, any obligation (except the endorsement in the ordinary course of business of negotiable instruments for deposit or collection) of such Person guaranteeing or in effect guaranteeing any Debt, dividend or other obligation of any other Person in any manner, whether directly or indirectly, including (without limitation) obligations incurred through an agreement, contingent or otherwise, by such Person:

(a) to purchase such Debt or obligation or any property constituting security therefor primarily for the purpose of assuring the owner of such Debt or obligation of the ability of any other Person to make payment of the Debt or obligation;

(b) to advance or supply funds (i) for the purchase or payment of such Debt or obligation, or (ii) to maintain any working capital or other balance sheet condition or any income statement condition of any other Person or otherwise to advance or make available funds for the purchase or payment of such Debt or obligation;

(c) to lease properties or to purchase properties or services primarily for the purpose of assuring the owner of such Debt or obligation of the ability of any other Person to make payment of the Debt or obligation; or

(d) otherwise to assure the owner of such Debt or obligation against loss in respect thereof.

In any computation of the Debt or other liabilities of the obligor under any Guaranty, the Debt or other obligations that are the subject of such Guaranty shall be assumed to be direct obligations of such obligor, provided that the amount of such Debt outstanding for purposes of this Agreement shall not exceed the maximum amount of Debt that is the subject of such Guaranty.

“*Hazardous Material*” means any and all pollutants, toxic or hazardous wastes or other substances that might pose a hazard to health and safety, the removal of which may be required or the generation, manufacture, refining, production, processing, treatment, storage, handling, transportation, transfer, use, disposal, release, discharge, spillage, seepage or filtration of which is or shall be restricted, prohibited or penalized by any applicable law including, but not limited to, asbestos, urea formaldehyde foam insulation, polychlorinated biphenyls, petroleum, petroleum products, lead based paint, radon gas or similar restricted, prohibited or penalized substances.

“*holder*” is defined in the Indenture.

“*Indenture*” is defined in **Section 1**.

“*INHAM Exemption*” is defined in **Section 6.2(e)**.

“*Institutional Investor*” means (a) any Purchaser of a Bond, (b) any holder of a Bond holding (together with one or more of its affiliates) more than 5% of the aggregate principal amount of the Bonds then outstanding, (c) any bank, trust company, savings and loan association or other financial institution, any pension plan, any investment company, any insurance company, any broker or dealer, or any other similar financial institution or entity, regardless of legal form, and (d) any Related Fund of any holder of any Bond.

“*Lien*” means, with respect to any Person, any mortgage, lien, pledge, charge, security interest or other encumbrance, or any interest or title of any vendor, lessor, lender or other secured party to or of such Person under any conditional sale or other title retention agreement or Capital Lease, upon or with respect to any property or asset of such Person (including in the case of stock, stockholder agreements, voting trust agreements and all similar arrangements).

“*Make-Whole Premium*” is defined in the Supplement.

“*Material*” means material in relation to the business, operations, affairs, financial condition, assets or properties of the Company and its Subsidiaries taken as a whole.

“*Material Adverse Effect*” means a material adverse effect on (a) the business, operations, affairs, financial condition, assets or properties of the Company and its Subsidiaries taken as a whole, (b) the ability of the Company to perform its obligations under this Agreement, the Bonds or the Indenture or (c) the validity or enforceability of any Financing Agreement.

“*Multiemployer Plan*” means any Plan that is a “*multiemployer plan*” (as such term is defined in section 4001(a)(3) of ERISA).

“*NAIC*” means the National Association of Insurance Commissioners or any successor thereof.

“*Non-U.S. Plan*” means any plan, fund or other similar program that (a) is established or maintained outside the United States of America by the Company or any Subsidiary primarily for the benefit of employees of the Company or one or more Subsidiaries residing outside the United States of America, which plan, fund or other similar program provides, or results in, retirement income, a deferral of income in contemplation of retirement or payments to be made upon termination of employment, and (b) is not subject to ERISA or the Code.

“*OFAC*” means the Office of Foreign Assets Control of the United States Department of the Treasury.

“*OFAC Sanctions Program*” means any economic or trade sanction that OFAC is responsible for administering and enforcing. A list of OFAC Sanctions Programs may be found at <http://www.treasury.gov/resource-center/sanctions/Programs/Pages/Programs.aspx>.

“*Officer’s Certificate*” means a certificate of a Senior Financial Officer or of any other officer of the Company whose responsibilities extend to the subject matter of such certificate.

“*Original Indenture*” is defined in **Section 1**.

“*PBGC*” means the Pension Benefit Guaranty Corporation referred to and defined in ERISA or any successor thereto.

“*permissible encumbrances*” shall have the meaning assigned to such term in the Indenture.

“*Person*” means an individual, partnership, corporation, limited liability company, association, trust, unincorporated organization, business entity or Governmental Authority.

“*Plan*” means an “*employee benefit plan*” (as defined in section 3(2) of ERISA) subject to Title I of ERISA that is or, within the preceding five years, has been established or maintained, or to which contributions are or, within the preceding five years, have been made or required to be made, by the Company or any ERISA Affiliate or with respect to which the Company or any ERISA Affiliate may have any liability.

“*property*” or “*properties*” means, unless otherwise specifically limited, real or personal property of any kind, tangible or intangible, choate or inchoate.

“*PTE*” is defined in **Section 6.2(a)**.

“*Purchaser*” is defined in the first paragraph of this Agreement.

“*QPAM Exception*” is defined in **Section 6.2(d)**.

“*Related Fund*” means, with respect to any holder of any Bond, any fund or entity that (i) invests in Securities or bank loans, and (ii) is advised or managed by such holder, the same investment advisor as such holder or by an affiliate of such holder or such investment advisor.

“*Required Holders*” means the holders of at least 51% in principal amount of the Bonds at the time outstanding (exclusive of Bonds then owned by the Company or any of its Affiliates).

“*Responsible Officer*” means any Senior Financial Officer and any other officer of the Company with responsibility for the administration of the relevant portion of this Agreement.

“*SEC*” means the Securities and Exchange Commission of the United States, or any successor thereto.

“*Securities*” or “*Security*” shall have the meaning specified in section 2(1) of the Securities Act.

“*Securities Act*” means the Securities Act of 1933, as amended from time to time, and the rules and regulations promulgated thereunder from time to time in effect.

“*Senior Financial Officer*” means the chief financial officer, vice president, finance, chief accounting officer, or treasurer of the Company.

“*Source*” is defined in **Section 6.2**.

“*State Sanctions List*” means a list that is adopted by any state Governmental Authority within the United States of America pertaining to Persons that engage in investment or other commercial activities in Iran or any other country that is a target of economic sanctions imposed under U.S. Economic Sanctions Laws.

“*Subsidiary*” means, as to any Person, any other Person in which such first Person or one or more of its Subsidiaries or such first Person and one or more of its Subsidiaries owns sufficient equity or voting interests to enable it or them (as a group) ordinarily, in the absence of contingencies, to elect a majority of the directors (or Persons performing similar functions) of such second Person, and any partnership or joint venture if more than a 50% interest in the profits or capital thereof is owned by such first Person or one or more of its Subsidiaries or such first Person and one or more of its Subsidiaries (unless such partnership or joint venture can and does ordinarily take major business actions without the prior approval of such Person or one or more of its Subsidiaries. Unless the context otherwise clearly requires, any reference to a “*Subsidiary*” is a reference to a Subsidiary of the Company.

“*Supplement*” is defined in **Section 1**.

“*SVO*” means the Securities Valuation Office of the NAIC or any successor to such office.

“*Swaps*” means, with respect to any Person, payment obligations with respect to interest rate swaps, currency swaps and similar obligations obligating such Person to make payments, whether periodically or upon the happening of a contingency. For the purposes of this Agreement, the amount of the obligation under any Swap shall be the amount determined in respect thereof as of the end of the then most recently ended fiscal quarter of such Person, based on the assumption that such Swap had terminated at the end of such fiscal quarter, and in making such determination, if any agreement relating to such Swap provides for the netting of amounts payable by and to such Person thereunder or if any such agreement provides for the simultaneous payment of amounts by and to such Person, then in each such case, the amount of such obligation shall be the net amount so determined.

“*Trust Estate*” is defined in the Indenture.

“*Trustee*” is defined in **Section 1**.

“*U.S. Economic Sanctions Laws*” means those laws, executive orders, enabling legislation or regulations administered and enforced by the United States pursuant to which economic sanctions have been imposed on any Person, entity, organization, country or regime, including the Trading with the Enemy Act, the International Emergency Economic Powers Act, the Iran Sanctions Act, the Sudan Accountability and Divestment Act, each as amended from time to time, and any other OFAC Sanctions Program.

“*USA Patriot Act*” means United States Public Law 107-56, Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOT ACT) Act of 2001, as amended from time to time, and the rules and regulations promulgated thereunder from time to time in effect.

Schedule 5.4

**Aqua Ohio, Inc.
Subsidiary of the Company
Ownership of Subsidiary Stock**

Company Name	State of Incorporation	% of Ownership (Direct or Indirect)
Aqua Ohio Wastewater, Inc.	Ohio	100%

Schedule 5.4
(to Bond Purchase Agreement)

Schedule 5.5

Financial Statements

1. Aqua Ohio, Inc. Consolidated Financial Statements as of and for the year ended December 31, (2015, 2016, 2017, 2018, and 2019) (audited)
2. Aqua Ohio, Inc. Report for Quarter Ended September 30, 2020 (unaudited)

Schedule 5.4
(to Bond Purchase Agreement)

Schedule 5.15(a)

Aqua Ohio, Inc. and Subsidiaries
Existing Debt as of December 31, 2020

	<u>Interest Rate</u>	<u>Outstanding Balance</u>
Tax Exempt	4.90%	\$5,225,000
Tax Exempt	5.00%	5,460,000
Total Tax Exempt		\$10,685,000
OWDA Drinking Water Loan	3.00%	\$724,972
First Mortgage Bond	6.95%	\$5,000,000
First Mortgage Bond	7.18%	4,500,000
First Mortgage Bond	3.75%	35,000,000
First Mortgage Bond	4.18%	30,000,000
First Mortgage Bond	4.43%	20,000,000
Total First Mortgage Bond		\$94,500,000
Total Long Term Debt		\$105,909,972
CoBank Line of Credit		-0-
Total Outstanding Debt		\$105,909,962

Schedule 5.15(a)
(to Bond Purchase Agreement)

Schedule 5.15(b)

**Aqua Ohio, Inc. and Subsidiaries
Debt Issuance Limitations**

1. Indenture of Mortgage dated as of July 1, 1945 of Aqua Ohio, Inc. as Supplemented and Amended
 2. Aqua Ohio, Inc. \$5,000,000 General Mortgage Bonds, 6.95% Series Due 2026, date April 1, 1996
 3. Aqua Ohio, Inc. \$4,500,000 General Mortgage Bonds, 7.18% Series Due 2027, dated February 1, 1997
 4. Aqua Ohio, Inc. \$35,000,000 First Mortgage Bonds, 3.75% Series Due 2033, dated May 28, 2013
 5. Aqua Ohio, Inc. \$30,000,000 First Mortgage Bonds, 4.18% Series Due 2044, dated May 28, 2013
 6. Aqua Ohio, Inc. \$20,000,000 First Mortgage Bonds, 4.43% Series Due 2048, dated May 28, 2013
-

FOURTH AMENDMENT TO CREDIT AGREEMENT

THIS FOURTH AMENDMENT TO CREDIT AGREEMENT is made as of this 6th day of November, 2020, by and among AQUA PENNSYLVANIA, INC., a Pennsylvania corporation (“Borrower”), the several banks which are parties to this Agreement (each a “Bank” and collectively, the “Banks”) and PNC BANK, NATIONAL ASSOCIATION in its capacity as agent for the Banks (in such capacity, the “Agent”).

BACKGROUND

A. The Borrower, the Agent and the Banks are parties to an Amended and Restated Credit Agreement, dated as of November 17, 2016 (as heretofore amended, supplemented, modified, or restated, the “Credit Agreement”), pursuant to which the Banks have made available to the Borrower a revolving credit facility in an aggregate amount of \$100,000,000 (the “Facility”). The loans under the Facility are evidenced by the Borrower’s Notes to the Banks in the aggregate principal amount of \$100,000,000.

B. The Borrower, the Agent and the Banks desire to extend the Termination Date of the Facility and modify certain other provisions of the Credit Agreement, all on the terms and subject to the conditions herein set forth.

NOW THEREFORE, the parties hereto, intending to be legally bound hereby, agree as follows:

AGREEMENT

1. **Terms.** Capitalized terms used herein and not otherwise defined herein shall have the meanings given to such terms in the Credit Agreement.

2. **Amendment to Credit Agreement.** Effective on November 6, 2020 (the “Effective Date”), the Credit Agreement is hereby amended as follows:

(a) The definition of “Termination Date” in Section 1.1 of the Credit Agreement is hereby amended and restated to read in full as follows:

“**Termination Date**”: the earlier of (a) November 5, 2021 or any later date to which the Termination Date shall have been extended pursuant to subsection 2.8(d) hereof and (b) the date the Commitments are terminated as provided herein.

3. **Loan Documents.** Except where the context clearly requires otherwise, all references to the Credit Agreement in any of the Loan Documents or any other document delivered to the Banks or the Agent in connection therewith shall be to the Credit Agreement as amended by this Agreement.

4. Borrower's Ratification. The Borrower agrees that it has no defenses or set-offs against the Banks or the Agent or their respective officers, directors, employees, agents or attorneys, with respect to the Loan Documents, all of which are in full force and effect, and that all of the terms and conditions of the Loan Documents not inconsistent herewith shall remain in full force and effect unless and until modified or amended in writing in accordance with their terms. The Borrower hereby ratifies and confirms its obligations under the Loan Documents as amended hereby and agrees that the execution and delivery of this Agreement does not in any way diminish or invalidate any of its obligations thereunder.

5. Representations and Warranties. The Borrower hereby represents and warrants to the Agent and the Banks that:

(a) The representations and warranties made in the Credit Agreement are true and correct in all material respects as of the date hereof; provided, however, that for purposes of the representations in Section 3.1 thereof, the annual and quarterly financial information referred to in such Section shall be deemed to be the most recent such information furnished to each Bank;

(b) No Default or Event of Default under the Credit Agreement exists on the date hereof; and

(c) This Agreement has been duly authorized, executed and delivered so as to constitute the legal, valid and binding obligation of the Borrower, enforceable in accordance with its terms.

All of the above representations and warranties shall survive the making of this Agreement.

6. Conditions Precedent. The effectiveness of the amendments set forth herein is subject to the fulfillment, to the satisfaction of the Agent and its counsel, of the following conditions precedent on or before the Effective Date:

(a) The Agent shall have received, with copies or counterparts for each Bank as appropriate, the following, all of which shall be in form and substance satisfactory to the Agent and shall be duly completed and executed by the Borrower, the Agent and the Banks, as applicable:

- (i) This Agreement;
- (ii) Copies, certified by the Secretary or an Assistant Secretary of the Borrower as of a recent date, of resolutions of the board of directors of the Borrower in effect on the date hereof authorizing the execution, delivery and performance of this Agreement and the other documents and transactions contemplated hereby;

- (iii) Copies, certified by its corporate secretary as of a recent date, of the articles of incorporation, certificate of formation, and by-laws of the Borrower as in effect, or a certificate stating that there have been no changes to any such documents since the most recent date, true and correct copies thereof were delivered to the Agent;
- (iv) If the Borrower qualifies as a legal entity customer under the Beneficial Ownership Regulations, an executed Certificate of Beneficial Ownership for the Borrower and such other documentation and other information requested by the Agent and the Banks in connection with applicable “know your customer” and anti-money laundering rules and regulations, including the USA Patriot Act; and
- (v) Such additional documents, certificates and information as the Agent or the Banks may require pursuant to the terms hereof or otherwise reasonably request.

(b) After giving effect to this Agreement, the representations and warranties set forth in the Credit Agreement shall be true and correct in all material respects on and as of the date hereof; provided, however, that for purposes of the representations in Section 3.1 thereof, the annual and quarterly financial information referred to in such Section shall be deemed to be the most recent such information furnished to each Bank.

(c) No Default or Event of Default shall have occurred and be continuing as of the date hereof.

7. Miscellaneous.

(a) All terms, conditions, provisions and covenants in the Loan Documents and all other documents delivered to the Agent and the Banks in connection therewith shall remain unaltered and in full force and effect except as modified or amended hereby. To the extent that any term or provision of this Agreement is or may be deemed expressly inconsistent with any term or provision in any Loan Document or any other document executed in connection therewith, the terms and provisions hereof shall control.

(b) The execution, delivery and effectiveness of this Agreement shall neither operate as a waiver of any right, power or remedy of the Agent or the Banks under any of the Loan Documents nor constitute a waiver of any Default or Event of Default thereunder.

(c) In consideration of the Agent’s and the Banks’ agreement to amend the existing revolving credit facility, the Borrower hereby waives and releases the Agent and the Banks and their respective officers, attorneys, agents and employees from any liability, suit,

damage, claim, loss or expense of any kind or failure whatsoever and howsoever arising that it ever had up until, or has as of, the date of this Agreement.

(d) This Agreement constitutes the entire agreement of the parties with respect to the subject matter hereof and supersedes all prior and contemporaneous understandings and agreements.

(e) In the event any provisions of this Agreement shall be held invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision hereof.

(f) This Agreement shall be governed by and construed according to the laws of the Commonwealth of Pennsylvania.

(g) This Agreement shall inure to the benefit of, and be binding upon, the parties hereto and their respective successors and assigns and may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

(h) The headings used in this Agreement are for convenience of reference only, do not form a part of this Agreement and shall not affect in any way the meaning or interpretation of this Agreement.

(i) This Agreement may be executed in one or more counterparts, each of which counterparts when executed and delivered shall be deemed to be an original, and all of which shall constitute one and the same instrument. Delivery of an executed counterpart of a signature page to this Agreement by facsimile or other electronic transmission will be effective as delivery of a manually executed counterpart hereof.

IN WITNESS WHEREOF, the Borrower, the Agent and the Banks have caused this Agreement to be executed by their duly authorized officers as of the date first above written.

AQUA PENNSYLVANIA, INC.

By: /s/ Daniel J. Schuller

Name: Daniel J. Schuller

Title: EVP and Chief Financial Officer

PNC BANK, NATIONAL ASSOCIATION,
as Agent and as a Bank

By: /s/ Domenic D’Ginto

Name: Domenic D’Ginto

Title: Managing Director

CITIZENS BANK, N.A., successor by merger to
Citizens Bank of Pennsylvania, as a Bank

By: /s/ Carl S. Tabacjar Jr.

Name: Carl S. Tabacjar Jr.

Title: Senior Vice President

TD BANK, N.A., as a Bank

By: /s/ Jennifer L. Suspenski

Name: Jennifer L. Suspenski

Title: Vice President

THE HUNTINGTON NATIONAL BANK,
as a Bank

By: /s/ Marcel Fournier

Name: Marcel Fournier

Title: Vice President

FIFTH AMENDMENT TO CREDIT AGREEMENT

THIS FIFTH AMENDMENT TO CREDIT AGREEMENT (this "Agreement") is made as of this 5th day of November, 2021, by and among AQUA PENNSYLVANIA, INC., a Pennsylvania corporation ("Borrower"), the several banks and financial institutions parties to this Agreement (each a "Bank" and collectively, the "Banks") and PNC BANK, NATIONAL ASSOCIATION in its capacity as agent for the Banks (in such capacity, the "Agent").

BACKGROUND

A. The Borrower, the Agent and the Banks are parties to an Amended and Restated Credit Agreement, dated as of November 17, 2016 (as heretofore amended, supplemented, modified, or restated, the "Existing Credit Agreement"; the Existing Credit Agreement, as amended by this Agreement and as may be further amended, supplemented, modified or restated from time to time, the "Amended Credit Agreement"), pursuant to which the Banks have made available to the Borrower a revolving credit facility in an aggregate amount of \$100,000,000 (the "Facility"). The loans under the Facility are evidenced by the Borrower's Notes to the Banks in the aggregate principal amount of \$100,000,000.

B. The Borrower, the Agent and the Banks desire to extend the Termination Date of the Facility and modify certain other provisions of the Existing Credit Agreement, all on the terms and subject to the conditions herein set forth.

NOW THEREFORE, the parties hereto, intending to be legally bound hereby, agree as follows:

AGREEMENT

1. Terms. Capitalized terms used herein and not otherwise defined herein shall have the meanings given to such terms in the Amended Credit Agreement.

2. Amendment to Existing Credit Agreement. Effective on November 5, 2021 (the "Effective Date"), the text of each of the Existing Credit Agreement and each of the Schedules and Exhibits thereto are hereby amended to delete the bold, stricken text (indicated textually in the same manner as the following example: ~~stricken text~~) and to add the bold, double-underlined text (indicated textually in the same manner as the following example: underlined text) as set forth in the pages of the Amended Credit Agreement, Schedules and Exhibits attached as Annex A hereto.

3. No Novation; Transitional Arrangements. This Agreement shall not constitute a termination of the Existing Credit Agreement nor a novation of any indebtedness or other obligations owing to the Agent or any Bank under the Existing Credit Agreement. On the Effective Date, the credit facilities described in the Existing Credit Agreement shall be amended, supplemented and modified in their entirety by the facilities described in the Amended Credit Agreement, and all loans and other obligations of the Borrower outstanding as of the Effective Date under the Existing Credit Agreement shall be deemed to be loans and obligations outstanding

under the corresponding facilities described in the Amended Credit Agreement, without any further action by any Person; provided, however, that any Eurodollar Loan (as defined in the Existing Credit Agreement) outstanding immediately before giving effect to this Agreement shall continue to bear interest after the Effective Date at the applicable Eurodollar Rate (as defined in the Existing Credit Agreement) for the Interest Period (as defined in the Existing Credit Agreement) in effect for such outstanding Eurodollar Loan immediately before giving effect to this Agreement plus sixty-five (65) basis points (0.65%) until the end of such Interest Period. At the end of the applicable Interest Period for any such outstanding Eurodollar Loan, the Borrower shall either (a) convert such Loan to a Base Rate Loan or a BSBY Rate Loan in accordance with the terms of the Amended Credit Agreement or (b) repay such Loan in full in accordance with the terms of the Amended Credit Agreement.

4. Borrower's Ratification. The Borrower agrees that it has no defenses, set-offs, counterclaim or challenge against the Banks or the Agent or their respective officers, directors, employees, agents or attorneys, with respect to the Loan Documents, all of which are in full force and effect, and that all of the terms and conditions of the Loan Documents not inconsistent herewith shall remain in full force and effect unless and until modified or amended in writing in accordance with their terms. The Borrower hereby ratifies and confirms its obligations under the Loan Documents as amended hereby and agrees that the execution and delivery of this Agreement does not in any way diminish or invalidate any of its obligations thereunder.

5. Representations and Warranties. The Borrower hereby represents and warrants to the Agent and the Banks that:

(a) Immediately before giving effect to this Agreement, the representations and warranties of the Borrower set forth in the Existing Credit Agreement, and immediately after giving effect to this Agreement, the representations and warranties of the Borrower set forth in the Amended Credit Agreement and the other Loan Documents, are in each case true and correct in all material respects as of the Effective Date; provided, however, that for purposes of the representations in Section 3.1 thereof, the annual and quarterly financial information referred to in such Section shall be deemed to be the most recent such information furnished to each Bank;

(b) Immediately before giving effect to this Agreement, there exists no Default or Event of Default under the Existing Credit Agreement, and immediately after giving effect to this Agreement there exists no Default or Event of Default under the Amended Credit Agreement;

(c) This Agreement (including the Amended Credit Agreement) has been duly authorized, executed and delivered and constitutes the legal, valid and binding obligation of the Borrower, enforceable in accordance with its terms; and

(d) No consent, approval or authorization of, filing, registration or recording with, notice to or other act by or in respect of, any Governmental Authority or any other Person is required in connection with the execution, delivery or performance by the Borrower of

this Agreement or the Amended Credit Agreement (except for those which have been obtained on or prior to the date hereof).

All of the above representations and warranties shall survive the making of this Agreement.

6. Conditions Precedent. The effectiveness of the amendments set forth herein is subject to the fulfillment, to the satisfaction of the Agent and its counsel, of the following conditions precedent on or before the Effective Date:

(a) The Agent shall have received the following, all of which shall be in form and substance satisfactory to the Agent and shall be duly completed and executed by the Borrower, the Agent and the Banks, as applicable:

- (i) This Agreement;
- (ii) Copies, certified by the Secretary or an Assistant Secretary of the Borrower as of a recent date, of resolutions of the board of directors of the Borrower in effect on the date hereof authorizing the execution, delivery and performance of this Agreement and the other documents and transactions contemplated hereby and the performance of the Amended Credit Agreement;
- (iii) Copies, certified by its corporate secretary as of a recent date, of the articles of incorporation, certificate of formation, and by-laws of the Borrower as in effect on the Effective Date, or a certificate stating that there have been no changes to any such documents since the most recent date true and correct copies thereof were delivered to the Agent;
- (iv) A good standing certificate for the Borrower in the State of its formation dated as of a recent date;
- (v) If the Borrower qualifies as a legal entity customer under the Beneficial Ownership Regulations, an executed Certificate of Beneficial Ownership for the Borrower and, in any case, such other documentation and other information requested by the Agent and the Banks in connection with applicable “know your customer” and anti-money laundering rules and regulations, including the USA Patriot Act; and
- (vi) Such additional documents, certificates and information as the Agent or the Banks may require pursuant to the terms hereof or otherwise reasonably request.

(b) The Agent shall have received such fees as shall have been agreed.

(c) The Agent shall have received, to the extent invoiced, reimbursement of all fees and expenses of counsel to the Agent required to be paid or reimbursed by the Borrower hereunder.

All of the foregoing fees shall be in all respects, fully earned, due and payable on the Effective Date and non-refundable and non- creditable thereafter.

7. Integration. This Agreement constitutes the sole agreement of the parties hereto with respect to the transactions contemplated hereby and shall supersede all oral negotiations and the terms of prior writings with respect thereto. From and after the Effective Date, all references in the Amended Credit Agreement and each of the other Loan Documents to the Credit Agreement or the other Loan Documents modified hereby shall be deemed to be references to the Amended Credit Agreement and such other Loan Documents as modified hereby. This Agreement shall constitute a Loan Document for all purposes under the Amended Credit Agreement and each of the other Loan Documents.

8. Severability. Any provision of this Agreement which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.

9. Miscellaneous.

(a) The Borrower agrees to pay all of the Agent's reasonable out-of-pocket fees and expenses incurred in connection with this Agreement and the transactions contemplated hereby, including, without limitation, the reasonable fees and expenses of counsel to the Agent.

(b) All terms, conditions, provisions and covenants in the Loan Documents and all other documents delivered to the Agent and the Banks in connection therewith shall remain unaltered and in full force and effect except as expressly modified or amended hereby. To the extent that any term or provision of this Agreement is or may be deemed expressly inconsistent with any term or provision in any Loan Document or any other document executed in connection therewith, the terms and provisions hereof shall control.

(c) The execution, delivery and effectiveness of this Agreement shall neither operate as a waiver of any right, power or remedy of the Agent or the Banks under any of the Loan Documents nor constitute a waiver of any Default or Event of Default thereunder.

(d) In consideration of the Agent's and the Banks' agreement to amend the existing revolving credit facility, the Borrower hereby waives and releases the Agent and the Banks and their respective officers, attorneys, agents and employees from any liability, suit,

damage, claim, loss or expense of any kind or failure whatsoever and howsoever arising that it ever had up until, or has as of, the date of this Agreement.

(e) This Agreement constitutes the entire agreement of the parties with respect to the subject matter hereof and supersedes all prior and contemporaneous understandings and agreements.

(f) This Agreement shall be governed by and construed according to the laws of the Commonwealth of Pennsylvania.

(g) This Agreement shall inure to the benefit of, and be binding upon, the parties hereto and their respective successors and assigns.

(h) The headings used in this Agreement are for convenience of reference only, do not form a part of this Agreement and shall not affect in any way the meaning or interpretation of this Agreement.

(i) This Agreement may be executed in one or more counterparts, each of which counterparts when executed and delivered shall be deemed to be an original, and all of which shall constitute one and the same instrument. Delivery of an executed counterpart of a signature page to this Agreement by facsimile or other electronic transmission will be effective as delivery of a manually executed counterpart hereof.

(j) No modification hereof or any agreement referred to herein shall be binding or enforceable unless in writing and signed on behalf of the party against whom enforcement is sought.

IN WITNESS WHEREOF, the Borrower, the Agent and the Banks have caused this Agreement to be executed by their duly authorized officers as of the date first above written.

AQUA PENNSYLVANIA, INC.

By: /s/ Daniel J. Schuller

Name: Daniel J. Schuller

Title: EVP and Chief Financial Officer

PNC BANK, NATIONAL ASSOCIATION,
as Agent and as a Bank

By: /s/ Domenic D’Ginto

Name: Domenic D’Ginto

Title: Managing Director

CITIZENS BANK, N.A., successor by merger to
Citizens Bank of Pennsylvania, as a Bank

By: /s/ A. Paul Dawley

Name: A. Paul Dawley

Title: Senior Vice President

TD BANK, N.A., as a Bank

By: /s/ Jennifer L. Suspenski

Name: Jennifer L. Suspenski

Title: Vice President

THE HUNTINGTON NATIONAL BANK,
as a Bank

By: /s/ Marcel Fournier

Name: Marcel Fournier

Title: Vice President

FIRST AMENDMENT TO CREDIT AGREEMENT

THIS FIRST AMENDMENT TO CREDIT AGREEMENT (this "Agreement") is made as of this 5th day of November, 2021, by and among PNG COMPANIES LLC, a Delaware limited liability company ("Borrower"), the several banks and other financial institutions or entities parties to this Agreement (each a "Lender" and collectively, the "Lenders") and PNC BANK, NATIONAL ASSOCIATION in its capacity as administrative agent for the Lenders (in such capacity, the "Administrative Agent").

BACKGROUND

A. The Borrower, the Administrative Agent and the Lenders are parties to a Credit Agreement, dated as of November 25, 2020 (as heretofore amended, supplemented, modified, or restated, the "Existing Credit Agreement"; the Existing Credit Agreement, as amended by this Agreement and as may be further amended, supplemented, modified or restated from time to time, the "Amended Credit Agreement"), pursuant to which the Lenders have made available to the Borrower a revolving credit facility in an aggregate amount of \$100,000,000 (the "Facility"). The loans under the Facility are evidenced by the Borrower's Notes to the Lenders in the aggregate principal amount of \$100,000,000.

B. The Borrower, the Administrative Agent and the Lenders desire to extend the Revolving Commitment Termination Date of the Facility and modify certain other provisions of the Existing Credit Agreement, all on the terms and subject to the conditions herein set forth.

NOW THEREFORE, the parties hereto, intending to be legally bound hereby, agree as follows:

AGREEMENT

1. Terms. Capitalized terms used herein and not otherwise defined herein shall have the meanings given to such terms in the Amended Credit Agreement.

2. Amendment to Existing Credit Agreement. Effective on November 5, 2021 (the "Effective Date"), the text of each of the Existing Credit Agreement and each of the Schedules and Exhibits thereto are hereby amended to delete the bold, stricken text (indicated textually in the same manner as the following example: ~~stricken text~~) and to add the bold, double-underlined text (indicated textually in the same manner as the following example: underlined text) as set forth in the pages of the Amended Credit Agreement, Schedules and Exhibits attached as Annex A hereto.

3. No Novation; Transitional Arrangements. This Agreement shall not constitute a termination of the Existing Credit Agreement nor a novation of any indebtedness or other obligations owing to the Administrative Agent or any Lender under the Existing Credit Agreement. On the Effective Date, the credit facilities described in the Existing Credit Agreement shall be amended, supplemented and modified in their entirety by the facilities described in the Amended Credit Agreement, and all loans and other obligations of the Borrower outstanding as of

the Effective Date under the Existing Credit Agreement shall be deemed to be loans and obligations outstanding under the corresponding facilities described in the Amended Credit Agreement, without any further action by any Person; provided, however, that any Eurodollar Loan (as defined in the Existing Credit Agreement) outstanding immediately before giving effect to this Agreement shall continue to bear interest after the Effective Date at the applicable Eurodollar Rate (as defined in the Existing Credit Agreement) for the Interest Period (as defined in the Existing Credit Agreement) in effect for such outstanding Eurodollar Loan immediately before giving effect to this Agreement plus eighty (80) basis points (0.80%) until the end of such Interest Period. At the end of the applicable Interest Period for any such outstanding Eurodollar Loan, the Borrower shall either (a) convert such Loan to an ABR Loan or a BSBY Rate Loan in accordance with the terms of the Amended Credit Agreement or (b) repay such Loan in full in accordance with the terms of the Amended Credit Agreement.

4. Borrower's Ratification. The Borrower agrees that it has no defenses, set-offs, counterclaim or challenge against the Lenders or the Administrative Agent or their respective officers, directors, employees, agents or attorneys, with respect to the Loan Documents, all of which are in full force and effect, and that all of the terms and conditions of the Loan Documents not inconsistent herewith shall remain in full force and effect unless and until modified or amended in writing in accordance with their terms. The Borrower hereby ratifies and confirms its obligations under the Loan Documents as amended hereby and agrees that the execution and delivery of this Agreement does not in any way diminish or invalidate any of its obligations thereunder.

5. Representations and Warranties. The Borrower hereby represents and warrants to the Administrative Agent and the Lenders that:

(a) Immediately before giving effect to this Agreement, the representations and warranties of the Borrower set forth in the Existing Credit Agreement, and immediately after giving effect to this Agreement, the representations and warranties of the Borrower set forth in the Amended Credit Agreement and the other Loan Documents, are in each case true and correct in all material respects (it being understood that the materiality qualifier shall not be applicable with respect to any clause of any representation or warranty which itself contains a materiality qualification) as of the Effective Date (except representations and warranties which relate solely to an earlier date or time, which representations and warranties shall be true and correct in all material respects (or all respects, as applicable) on and as of the specific dates or times referred to therein);

(b) Immediately before giving effect to this Agreement, there exists no Default or Event of Default under the Existing Credit Agreement, and immediately after giving effect to this Agreement there exists no Default or Event of Default under the Amended Credit Agreement;

(c) This Agreement (including the Amended Credit Agreement) has been duly authorized, executed and delivered and constitutes the legal, valid and binding obligation of the Borrower, enforceable in accordance with its terms; and

(d) No consent, approval or authorization of, filing, registration or recording with, notice to or other act by or in respect of, any Governmental Authority or any other Person is required in connection with the execution, delivery or performance by the Borrower of this Agreement or the Amended Credit Agreement (except for those which have been obtained on or prior to the date hereof).

All of the above representations and warranties shall survive the making of this Agreement.

6. Conditions Precedent. The effectiveness of the amendments set forth herein is subject to the fulfillment, to the satisfaction of the Administrative Agent and its counsel, of the following conditions precedent on or before the Effective Date:

(a) The Administrative Agent shall have received the following, all of which shall be in form and substance satisfactory to the Administrative Agent and shall be duly completed and executed by the Borrower, the Administrative Agent and the Lenders, as applicable:

- (i) This Agreement;
- (ii) Copies, certified by an officer of the Borrower as of a recent date, of resolutions of the board of directors of the Borrower in effect on the date hereof authorizing the execution, delivery and performance of this Agreement and the other documents and transactions contemplated hereby and the performance of the Amended Credit Agreement;
- (iii) Copies, certified by an officer of the Borrower as of a recent date, of the certificate of formation and limited liability company agreement of the Borrower as in effect on the Effective Date, or a certificate stating that there have been no changes to any such documents since the most recent date true and correct copies thereof were delivered to the Administrative Agent;
- (iv) A good standing certificate for the Borrower in the State of its formation dated as of a recent date;
- (v) An executed legal opinion of counsel to the Borrower, reasonably satisfactory in form and substance to the Administrative Agent and its counsel;
- (vi) If the Borrower qualifies as a legal entity customer under the Beneficial Ownership Regulations, an executed Certificate of Beneficial Ownership for the Borrower and, in any case, such other documentation and other information requested by the Administrative Agent and the Lenders in connection

with applicable “know your customer” and anti-money laundering rules and regulations, including the USA Patriot Act; and

- (vii) Such additional documents, certificates and information as the Administrative Agent or the Lenders may require pursuant to the terms hereof or otherwise reasonably request.

(b) The Administrative Agent shall have received such fees as shall have been agreed.

(c) The Administrative Agent shall have received, to the extent invoiced, reimbursement of all fees and expenses of counsel to the Administrative Agent required to be paid or reimbursed by the Borrower hereunder.

All of the foregoing fees shall be in all respects, fully earned, due and payable on the Effective Date and non-refundable and non- creditable thereafter.

7. Integration. This Agreement constitutes the sole agreement of the parties hereto with respect to the transactions contemplated hereby and shall supersede all oral negotiations and the terms of prior writings with respect thereto. From and after the Effective Date, all references in the Amended Credit Agreement and each of the other Loan Documents to the Credit Agreement or the other Loan Documents modified hereby shall be deemed to be references to the Amended Credit Agreement and such other Loan Documents as modified hereby. This Agreement shall constitute a Loan Document for all purposes under the Amended Credit Agreement and each of the other Loan Documents.

8. Severability. Any provision of this Agreement which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.

9. Miscellaneous.

(a) The Borrower agrees to pay all of the Administrative Agent’s reasonable out-of-pocket fees and expenses incurred in connection with this Agreement and the transactions contemplated hereby, including, without limitation, the reasonable fees and expenses of counsel to the Administrative Agent.

(b) All terms, conditions, provisions and covenants in the Loan Documents and all other documents delivered to the Administrative Agent and the Lenders in connection therewith shall remain unaltered and in full force and effect except as expressly modified or amended hereby. To the extent that any term or provision of this Agreement is or may be deemed expressly inconsistent with any term or provision in any Loan Document or any other document executed in connection therewith, the terms and provisions hereof shall control.

(c) The execution, delivery and effectiveness of this Agreement shall neither operate as a waiver of any right, power or remedy of the Administrative Agent or the Lenders under any of the Loan Documents nor constitute a waiver of any Default or Event of Default thereunder.

(d) In consideration of the Administrative Agent's and the Lenders' agreement to amend the existing revolving credit facility, the Borrower hereby waives and releases the Administrative Agent and the Lenders and their respective officers, attorneys, agents and employees from any liability, suit, damage, claim, loss or expense of any kind or failure whatsoever and howsoever arising that it ever had up until, or has as of, the date of this Agreement.

(e) This Agreement constitutes the entire agreement of the parties with respect to the subject matter hereof and supersedes all prior and contemporaneous understandings and agreements.

(f) This Agreement shall be governed by and construed according to the laws of the State of New York.

(g) This Agreement shall inure to the benefit of, and be binding upon, the parties hereto and their respective successors and assigns.

(h) The headings used in this Agreement are for convenience of reference only, do not form a part of this Agreement and shall not affect in any way the meaning or interpretation of this Agreement.

(i) This Agreement may be executed in one or more counterparts, each of which counterparts when executed and delivered shall be deemed to be an original, and all of which shall constitute one and the same instrument. Delivery of an executed counterpart of a signature page to this Agreement by facsimile or other electronic transmission will be effective as delivery of a manually executed counterpart hereof.

(j) No modification hereof or any agreement referred to herein shall be binding or enforceable unless in writing and signed on behalf of the party against whom enforcement is sought.

IN WITNESS WHEREOF, the Borrower, the Administrative Agent and the Lenders have caused this Agreement to be executed by their duly authorized officers as of the date first above written.

PNG COMPANIES LLC

By: /s/ Stan Szczygiel

Name: Stanley F. Szczygiel

Title: Senior Vice President Finance and
Treasurer

PNC BANK, NATIONAL ASSOCIATION,
as Administrative Agent, Swing Line Lender and as a
Lender

By: /s/ Domenic D’Ginto

Name: Domenic D’Ginto

Title: Managing Director

TD BANK, N.A., as a Lender

By: /s/ Jennifer L. Suspenski

Name: Jennifer L. Suspenski

Title: Vice President

CREDIT AGREEMENT

among

PNG COMPANIES LLC,
as Borrower,

The Several Lenders from Time to Time Parties Hereto,

PNC BANK, NATIONAL ASSOCIATION,
as Administrative Agent,

and

PNC CAPITAL MARKETS LLC,
as Lead Arranger and Sole Bookrunner

Dated as of November 25, 2020

TABLE OF CONTENTS

Page

		1
<u>SECTION 1.</u>	<u>DEFINITIONS</u>	1
1.1	<u>Defined Terms</u>	1
1.2	<u>Other Definitional Provisions</u>	23
1.3	<u>Successor Eurodollar Rate Index</u>	24
1.4	<u>Divisions</u>	24
1.5	<u>Negative Covenant Compliance</u>	24
1.6	<u>Timing of Payment or Performance</u>	24
1.7	<u>Rounding</u>	24
1.8	<u>Certifications</u>	25
<u>SECTION 2.</u>	<u>AMOUNT AND TERMS OF COMMITMENTS</u>	25
2.1	<u>Revolving Commitments; Payments</u>	25
2.2	<u>Procedure for Revolving Loan Borrowing</u>	25
2.3	<u>Additional Fees</u>	26
2.4 ^v	<u>Termination or Reduction of Total Revolving Commitments</u>	26
2.5	<u>Optional Prepayments</u>	26
2.6	<u>Mandatory Prepayments</u>	27
2.7	<u>Conversion and Continuation Options</u>	27
2.8	<u>Limitations on Eurodollar Tranches</u>	28
2.9	<u>Interest Rates and Payment Dates</u>	28
2.10	<u>Computation of Interest and Fees</u>	28
2.11	<u>Inability to Determine Interest Rate</u>	29
2.12	<u>Pro Rata Treatment and Payments</u>	29
2.13	<u>Requirements of Law</u>	30
2.14	<u>Taxes</u>	32
2.15	<u>Indemnity</u>	35
2.16	<u>Change of Lending Office</u>	35
2.17	<u>Replacement of Lenders</u>	36
2.18	<u>Successor Eurodollar Rate Index</u>	36
2.19	<u>Defaulting Lender</u>	39
2.20	<u>Swing Line Loans</u>	40
<u>SECTION 3.</u> ^v	<u>[RESERVED]</u>	43
<u>SECTION 4.</u>	<u>REPRESENTATIONS AND WARRANTIES</u>	43
4.1	<u>Financial Condition</u>	43
4.2	<u>No Change</u>	44
4.3	<u>Existence; Compliance with Law</u>	44
4.4	<u>Power; Authorization; Enforceable Obligations</u>	44
4.5	<u>No Legal Bar</u>	44
4.6	<u>Litigation</u>	45
4.7	<u>No Default</u>	45

TABLE OF CONTENTS

	Page		
4.8v		Ownership of Property; Liens	45
4.9		[Reserved]	45
4.10		Taxes	45
4.11		Federal Regulations	45
4.12		[Reserved]	45
4.13		ERISA	45
4.14		Investment Company Act	46
4.15		Subsidiaries	46
4.16		Environmental Matters	46
4.17		Accuracy of Information, etc	47
4.18		Security Documents	47
4.19		Solvency	48
4.20		[Reserved]	48
4.21		Patriot Act; Anti-Corruption Laws; Sanctions	48
4.22		Pari Passu Obligations	49
4.23		Regulation	49
4.24		Affected Financial Institutions	49
4.25		Beneficial Ownership Certification	49
 SECTION 5. <u>CONDITIONS PRECEDENT</u>			 50
5.1		Conditions to Initial Extension of Credit	50
5.2		Conditions to Each Extension of Credit	52
 SECTION 6. <u>AFFIRMATIVE COVENANTS</u>			 52
6.1v		Financial Statements	52
6.2		Certificates; Other Information	54
6.3		Payment of Taxes	55
6.4		Maintenance of Existence; Compliance	55
6.5		Maintenance of Property; Insurance	55
6.6		Inspection of Property; Books and Records; Discussions	55
6.7		Notices	56
6.8		Environmental Laws	56
6.9		Use of Proceeds	57
6.10		Further Assurances	57
6.11		[Reserved]	57
6.12		Intercompany Loans	57
6.13		First Priority Security Interest	57
6.14		Direct Ownership	57
6.15		Sanctions; Anti-Terrorism Laws; Anti-Corruption Laws	57
 SECTION 7. <u>NEGATIVE COVENANTS</u>			 58
7.1		Financial Covenants	58

TABLE OF CONTENTS

Page

7.2	Liens	58
7.3	Fundamental Changes	59
7.4	Disposition of Property	60
7.5	Restricted Payments	60
7.6	Transactions with Affiliates	61
7.7	Indebtedness	61
7.8	Swap Agreements	61
7.9	Changes in Fiscal Periods	61
7.10	Clauses Restricting Distributions	61
7.11	Amendments to Indebtedness Documents	62
7.12	New Subsidiaries	62
7.13	Lines of Business	62
7.14	[Reserved]	62
7.15	Use of Proceeds	62
SECTION 8. EVENTS OF DEFAULT		62
SECTION 9. THE AGENTS		64
9.1	Appointment	64
9.2	Delegation of Duties	65
9.3	Exculpatory Provisions	65
9.4	Reliance by Administrative Agent	65
9.5	Notice of Default	66
9.6	Non-Reliance on Agents and Other Lenders	66
9.7	Indemnification	66
9.8	Agent in Its Individual Capacity	67
9.9	Successor Administrative Agent	67
9.10	Lead Arranger	67
9.11	Certain ERISA Matters	68
SECTION 10. MISCELLANEOUS		69
10.1	Amendments and Waivers	69
10.2	Notices	70
10.3	No Waiver; Cumulative Remedies	72
10.4	Survival of Representations and Warranties	72
10.5	Payment of Expenses	72
10.6	Successors and Assigns; Participations and Assignments	74
10.7	Adjustments; Set-off	77
10.8	Counterparts	78
10.9	Severability	78
10.10	Integration	78
10.11	Governing Law	78
10.12	Submission To Jurisdiction; Waivers	78

TABLE OF CONTENTS

	Page	
<u>10.13</u>	<u>Acknowledgements</u>	79
<u>10.14</u>	<u>Releases of Liens</u>	80
<u>10.15</u>	<u>Confidentiality</u>	80
<u>10.16</u>	<u>Waivers Of Jury Trial</u>	81
<u>10.17</u>	<u>USA Patriot Act</u>	81
<u>10.18</u>	<u>Intercreditor Agreement</u>	81
<u>10.19</u>	<u>Acknowledgment Regarding any Supported QFCs</u>	82
<u>10.20</u>	<u>Acknowledgment and Consent to Bail-In of Affected Financial Institutions</u>	83

SCHEDULES:

- 1.1A Commitments
- 4.4 Consents, Authorizations, Filings and Notices
- 4.15 Subsidiaries
- 4.18 UCC Filing Jurisdictions
- 7.2 Existing Liens

EXHIBITS:

- A Form of Compliance Certificate
- B Form of Closing Certificate
- C Form of Assignment and Assumption
- D-1 Form of Legal Opinion of Simpson Thacher & Bartlett LLP
- D-2 Form of Legal Opinion of Post & Schell P.C.
- E-1 Form of U.S. Tax Certificate (For Non-U.S. Lenders That Are Not Partnerships For U.S. Federal Income Tax Purposes)
- E-2 Form of U.S. Tax Certificate (For Non-U.S. Lenders That Are Partnerships For U.S. Federal Income Tax Purposes)
- E-3 Form of U.S. Tax Certificate (For Non-U.S. Participants That Are Not Partnerships For U.S. Federal Income Tax Purposes)
- E-4 Form of U.S. Tax Certificate (For Non-U.S. Participants That Are Partnerships For U.S. Federal Income Tax Purposes)
- F Form of Borrowing Request
- G Form of Note
- H Form of Conversion Notice

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CREDIT AGREEMENT (this “Agreement”), dated as of November 25, 2020, among PNG Companies LLC, a Delaware limited liability company (the “Borrower”), the several banks and other financial institutions or entities from time to time parties to this Agreement (the “Lenders”), PNC Capital Markets LLC, as lead arranger and sole bookrunner (in such capacity, the “Lead Arranger”), and PNC Bank, National Association, as administrative agent (in such capacity, the “Administrative Agent”).

WITNESSETH:

WHEREAS, the Borrower has requested, and the Lenders have agreed, to make available a revolving facility in an aggregate amount of \$100,000,000, the proceeds of which shall be used for working capital needs and for other general corporate purposes of the Borrower and its Subsidiaries.

NOW, THEREFORE, in consideration of the premises and agreements hereinafter set forth, the parties hereto agree as follows:

Section 1. DEFINITIONS

1.1 Defined Terms. As used in this Agreement (including the preamble and recitals hereof), the terms listed in this Section 1.1 shall have the respective meanings set forth in this Section 1.1.

“ABR”: for any day, a fluctuating per annum rate of interest equal to the highest of (a) the Overnight Bank Funding Rate, plus 0.5%, (b) the Prime Rate, and (c) the Daily Eurodollar Rate, plus 1.00%, so long as Daily Eurodollar Rate is offered, ascertainable and not unlawful. Any change in the ABR (or any component thereof) shall take effect at the opening of business on the day such change occurs.

“ABR Loans”: Loans the rate of interest applicable to which is based upon the ABR.

“ABR Option”: the option of the Borrower to have Loans bear interest at the ABR and under the terms specified in Section 2.1(b) or Section 2.7, as applicable.

“Administrative Agent”: PNC Bank, National Association, together with its affiliates, as the administrative agent for the Lenders under this Agreement and the other Loan Documents, together with any of its successors.

“Affected Financial Institution”: (a) any EEA Financial Institution or (b) any UK Financial Institution.

“Affiliate”: as to any Person, any other Person that, directly or indirectly, is in control of, is controlled by, or is under common control with, such Person. For purposes of this definition, “control” of a Person means the power, directly or indirectly, either to (a) vote 10% or more of the securities having ordinary voting power for the election of directors (or persons performing similar functions) of such Person or (b) direct or cause the direction of the management and policies of such Person, whether by contract or otherwise.

“Agent Indemnitee”: as defined in Section 9.7.

“Agents”: the Administrative Agent and the Collateral Agent.

“Agreement”: as defined in the preamble hereto.

“Alternate Source”: as is defined in the definition of Eurodollar Rate.

“Anti-Corruption Laws”: all laws, rules and regulations of any jurisdiction applicable to the Borrower or its Subsidiaries from time to time concerning or relating to bribery or corruption.

“Anti-Terrorism Laws”: as defined in Section 4.21(a).

“Applicable Margin”: the rate per annum equal to the rates set forth in the table below:

Applicable Margin for Eurodollar Loans	Applicable Margin for ABR Loans
0.80%	0.00%

“Approved Fund”: as defined in Section 10.6(b)(ii).

“Assignee”: as defined in Section 10.6(b)(i).

“Assignment and Assumption”: an Assignment and Assumption, substantially in the form of Exhibit C or such other form approved by the Administrative Agent.

“Available Revolving Commitments”: with respect to any Lender at any time, an amount equal to the excess, if any, of (a) such Lender’s Revolving Commitment then in effect over (b) such Lender’s Revolving Extensions of Credit then outstanding.

“Bail-In Action”: the exercise of any Write-Down and Conversion Powers by the applicable Resolution Authority in respect of any liability of an Affected Financial Institution.

“Bail-In Legislation”: (a) with respect to any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law, regulation rule or requirement for such EEA Member Country from time to time which is described in the EU Bail-In Legislation Schedule and (b) with respect to the United Kingdom, Part I of the United Kingdom Banking Act 2009 (as amended from time to time) and any other law, regulation or rule applicable in the United Kingdom relating to the resolution of unsound or failing banks, investment firms or other financial institutions or their affiliates (other than through liquidation, administration or other insolvency proceedings).

“Bankruptcy Event”: with respect to any Person, such Person becomes the subject of a bankruptcy or insolvency proceeding, or has had a receiver, conservator, trustee, administrator, custodian, assignee for the benefit of creditors or similar Person charged with the reorganization or liquidation of its business appointed for it, or, in the good faith determination of

the Administrative Agent, has taken any action in furtherance of, or indicating its consent to, approval of, or acquiescence in, any such proceeding or appointment, provided that a Bankruptcy Event shall not result solely by virtue of any ownership interest, or the acquisition of any ownership interest, in such Person by a Governmental Authority or instrumentality thereof, provided, further, that such ownership interest does not result in or provide such Person with immunity from the jurisdiction of courts within the United States or from the enforcement of judgments or writs of attachment on its assets or permit such Person (or such Governmental Authority or instrumentality) to reject, repudiate, disavow or disaffirm any contracts or agreements made by such Person.

“Beneficial Ownership Certification”: a certification regarding beneficial ownership as required by the Beneficial Ownership Regulation.

“Beneficial Ownership Regulation”: 31 C.F.R. § 1010.230.

“Benefit Plan”: any of (a) an “employee benefit plan” (as defined in ERISA) that is subject to Title I of ERISA, (b) a “plan” as defined in and subject to Section 4975 of the Code or (c) any Person whose assets include (for purposes of ERISA Section 3(42) or otherwise for purposes of Title I of ERISA or Section 4975 of the Code) the assets of any such “employee benefit plan” or “plan”.

“Benefitted Lender”: as defined in Section 10.7(a).

“Board”: the Board of Governors of the Federal Reserve System of the United States (or any successor).

“Borrower”: as defined in the preamble hereto.

“Borrowing Date”: any Business Day specified by the Borrower as a date on which the Borrower requests the relevant Lenders to make Loans hereunder.

“Borrowing Request”: with respect to any request for borrowing of Revolving Loans hereunder, a notice from the Borrower, substantially in the form of, and containing the information prescribed by, Exhibit F (or such other form approved by the Administrative Agent) delivered to the Administrative Agent.

“Business”: as defined in Section 4.16(b).

“Business Day”: a day other than a Saturday, Sunday or other day on which commercial banks in New York City are authorized or required by law to close, provided, that with respect to notices and determinations in connection with, and payments of principal and interest on, Eurodollar Loans, such day is also a day for trading by and between banks in Dollar deposits in the interbank eurodollar market.

“Capital Stock”: any and all shares, interests, participations or other equivalents (however designated) of capital stock of a corporation, any and all equivalent ownership interests in a Person (other than a corporation) and any and all warrants, rights or options to purchase any of the foregoing.

“Cash Equivalents”: (a) marketable direct obligations issued by, or unconditionally guaranteed by, the United States Government or issued by any agency thereof and backed by the full faith and credit of the United States, in each case maturing within one year from the date of acquisition; (b) certificates of deposit, time deposits, eurodollar time deposits or overnight bank deposits having maturities of six months or less from the date of acquisition issued by any Lender or by any commercial bank organized under the laws of the United States or any state thereof having combined capital and surplus of not less than \$500,000,000 and which are rated at least AA- by S&P or Aa3 by Moody’s; (c) commercial paper of an issuer rated at least AA- by S&P or P-1 by Moody’s, or carrying an equivalent rating by a nationally recognized rating agency, if both of the two named rating agencies cease publishing ratings of commercial paper issuers generally, and maturing within 270 days from the date of acquisition; (d) repurchase obligations of any Lender or of any commercial bank satisfying the requirements of clause (b) of this definition, having a term of not more than 30 days, with respect to securities issued or fully guaranteed or insured by the United States government; (e) securities with maturities of one year or less from the date of acquisition issued or fully guaranteed by any state, commonwealth or territory of the United States, by any political subdivision or taxing authority of any such state, commonwealth or territory or by any foreign government, the securities of which state, commonwealth, territory, political subdivision, taxing authority or foreign government (as the case may be) are rated at least AA- by S&P or Aa3 by Moody’s; (f) securities with maturities of six months or less from the date of acquisition backed by standby letters of credit issued by any Lender or any commercial bank satisfying the requirements of clause (b) of this definition; (g) money market mutual or similar funds that invest exclusively in assets satisfying the requirements of clauses (a) through (f) of this definition; or (h) money market funds that (i) comply with the criteria set forth in SEC Rule 2a-7 under the Investment Company Act of 1940, as amended, (ii) are rated AAA by S&P and Aaa by Moody’s and (iii) have portfolio assets of at least \$5,000,000,000.

“Cash Management Agreements”: as defined in Section 2.20(d).

“Closing Date”: the date on which the conditions precedent set forth in Section 5.1 shall have been satisfied, which date is November 25, 2020.

“Code”: the Internal Revenue Code of 1986, as amended from time to time.

“Collateral”: all real and personal property of the Borrower, now owned or hereafter acquired, upon which a Lien is purported to be created by any Security Document (including without limitation, all Pledged Stock).

“Collateral Agent”: Wilmington Trust, National Association, as collateral agent and its successors and permitted assigns under the Intercreditor Agreement.

“Compliance Certificate”: a certificate duly executed by a Responsible Officer substantially in the form of Exhibit A.

“Connection Income Taxes”: Other Connection Taxes that are imposed on or measured by net income (however denominated) or that are franchise Taxes or branch profits Taxes.

“Consolidated Capitalization” at any date, the sum of (a) Consolidated Total Net Worth as at the end of the most recently ended fiscal quarter of the Borrower and (b) Consolidated Debt at such date.

“Consolidated Debt”: at any date, the aggregate principal amount of all Indebtedness of the Borrower and its Subsidiaries at such date, determined on a consolidated basis in accordance with GAAP.

“Consolidated EBITDA”: for any period, Consolidated Net Income for such period plus, without duplication and to the extent reflected as a charge in the statement of such Consolidated Net Income for such period, the sum of (a) income tax expense, (b) interest expense, amortization or writeoff of debt discount, debt issuance costs and commissions, discounts and other fees and charges associated with Indebtedness, (c) depreciation and amortization expense, (d) amortization of intangibles (including, but not limited to, goodwill) and organization costs and (e) any extraordinary or non-recurring non-cash expenses or losses (including, whether or not otherwise includable as a separate item in the statement of such Consolidated Net Income for such period, non-cash losses on sales of assets outside of the ordinary course of business), provided, that the amounts referred to in this clause (e) shall not, in the aggregate, exceed \$15,000,000 for any fiscal year of the Borrower, and minus, (1) to the extent included in the statement of such Consolidated Net Income for such period, the sum of (i) any extraordinary, unusual or non-recurring income or gains (including, whether or not otherwise includable as a separate item in the statement of such Consolidated Net Income for such period, gains on the sales of assets outside of the ordinary course of business), (ii) income tax credits (to the extent not netted from income tax expense) and (iii) any other non-cash income and (2) any cash payments made during such period in respect of items described in clause (e) above subsequent to the fiscal quarter in which the relevant non-cash expenses or losses were reflected as a charge in the statement of Consolidated Net Income, all as determined on a consolidated basis.

“Consolidated Interest Expense”: for any period, total cash interest expense (including that attributable to Finance Lease Obligations and capitalized interest) of the Borrower and its Subsidiaries for such period with respect to all outstanding Indebtedness of the Borrower and its Subsidiaries (including all commissions, discounts and other fees and charges owed with respect to letters of credit and bankers’ acceptance financing and net costs under Swap Agreements in respect of interest rates to the extent such net costs are allocable to such period in accordance with GAAP).

“Consolidated Net Income”: for any period, the consolidated net income (or loss) of the Borrower and its Subsidiaries determined on a consolidated basis in accordance with GAAP.

“Consolidated Total Assets”: as of the date of any determination thereof, the total assets of the Borrower and its Subsidiaries that would be shown as assets on a consolidated balance sheet of the Borrower and its Subsidiaries as of such date prepared in accordance with GAAP.

“Consolidated Total Net Worth”: at any date, all amounts that would, in conformity with GAAP, be included on a consolidated balance sheet of the Borrower and its Subsidiaries under stockholders’ equity at such date.

“Contractual Obligation”: as to any Person, any provision of any security issued by such Person or of any agreement, instrument or other undertaking to which such Person is a party or by which it or any of its property is bound.

“Credit Party”: the Administrative Agent or any Lender.

“Daily Eurodollar Rate”: for any day, the rate per annum determined by the Administrative Agent by dividing (x) the Published Rate by (y) a number equal to 1.00 minus the Eurodollar Reserve Percentage on such day. Notwithstanding the foregoing, if the Daily Eurodollar Rate as determined above would be less than zero percent (0.00%), such rate shall be deemed to be zero percent (0.00%) for purposes of this Agreement.

“Default”: any of the events specified in Section 8, whether or not any requirement for the giving of notice, the lapse of time, or both, hereunder has been satisfied.

“Defaulting Lender”: any Lender, as determined by the Administrative Agent, that (a) has failed, within three (3) Business Days of the date required to be funded or paid, to (i) fund any portion of its Loans, (ii) fund any portion of its participations in Swing Line Loans or (iii) pay over to any Credit Party any other amount required to be paid by it hereunder, unless, in the case of clause (i) above, such Lender notifies the Administrative Agent in writing that such failure is the result of such Lender’s good faith determination that a condition precedent to funding (specifically identified and including the condition precedent, together with any applicable default) has not been satisfied, (b) has notified the Borrower or any Credit Party in writing, or has made a public statement to the effect, that it does not intend or expect to comply with any of its funding obligations under this Agreement (unless such writing or public statement indicates that such position is based on such Lender’s good faith determination that a condition precedent (specifically identified and including the condition precedent, together with any applicable default) to funding a loan under this Agreement cannot be satisfied) or generally under other agreements in which it commits to extend credit, (c) has failed, within three (3) Business Days after written request by a Credit Party, acting in good faith, to provide a certification in writing from an authorized officer of such Lender that it will comply with its obligations to fund prospective Loans and participations in Swing Line Loans under this Agreement, provided that such Lender shall cease to be a Defaulting Lender pursuant to this clause (c) upon such Credit Party’s receipt of such certification in form and substance satisfactory to it and the Administrative Agent, (d) has become, or has a Parent that has become, the subject of a Bankruptcy Event, or (e) has become the subject of a Bail-In Action.

“Delta”: Delta Natural Gas Company, Inc., a Kentucky corporation.

“Disposition”: with respect to any property, any sale, lease, sale and leaseback, assignment, conveyance, transfer or other disposition thereof. The terms “Dispose” and “Disposed of” shall have correlative meanings.

“Dollars” and “\$”: dollars in lawful currency of the United States.

“EEA Financial Institution”: (a) any credit institution or investment firm established in any EEA Member Country which is subject to the supervision of an EEA Resolution Authority, (b) any entity established in an EEA Member Country which is a parent of an institution

described in clause (a) of this definition, or (c) any financial institution established in an EEA Member Country which is a subsidiary of an institution described in clauses (a) or (b) of this definition and is subject to consolidated supervision with its parent.

“EEA Member Country”: any of the member states of the European Union, Iceland, Liechtenstein, and Norway.

“EEA Resolution Authority”: any public administrative authority or any person entrusted with public administrative authority of any EEA Member Country (including any delegee) having responsibility for the resolution of any EEA Financial Institution.

“Environmental Laws”: any and all foreign, federal, state, local or municipal laws, rules, orders, regulations, statutes, ordinances, codes, decrees, requirements of any Governmental Authority or other Requirements of Law (including common law) regulating, relating to or imposing liability or standards of conduct concerning protection of human health (with respect to exposure to Materials of Environmental Concern) or the environment.

“ERISA”: the Employee Retirement Income Security Act of 1974, as amended from time to time, and the rules and regulations promulgated thereunder.

“ERISA Affiliate”: any trade or business, whether or not incorporated, that together with any Group Member is treated as a single employer within the meaning of Section 414(b) or Section 414(c) of the Code or, solely for purposes of provisions relating to Section 302 of ERISA or Section 412 of the Code, is treated as a single employer with any Group Member under Section 414(m) or Section (o) of the Code.

“ERISA Event”: (a) any Reportable Event; (b) the existence with respect to any Plan of a non-exempt Prohibited Transaction; (c) any failure by any Plan to satisfy the minimum funding standards (within the meaning of Section 412 of the Code or Section 302 of ERISA) applicable to such Plan, whether or not waived in accordance with Section 412(c) of the Code or Section 302(c) of ERISA; (d) the filing pursuant to Section 412 of the Code or Section 302 of ERISA of an application for a waiver of the minimum funding standard with respect to any Plan, the failure to make by its due date a required installment under Section 430(j) of the Code with respect to any Plan or the failure by any Group Member or any ERISA Affiliate to make any required contribution to a Multiemployer Plan pursuant to Sections 431 or 432 of the Code; (e) the occurrence of any event or condition which constitutes grounds under ERISA for the termination of, or the appointment of a trustee to administer, any Plan or the incurrence by any Group Member or any ERISA Affiliate of any liability under Title IV of ERISA with respect to the termination of any Plan, including but not limited to the imposition of any Lien in favor of the PBGC or any Plan; (f) a determination that any Plan is, or is expected to be, in “at risk” status (within the meaning of Section 430 of the Code or Section 303 of ERISA); (g) the incurrence by any Group Member or any ERISA Affiliate of any liability under Title IV of ERISA other than a liability to the PBGC for premiums under Section 4007 of ERISA that are not past due; (h) the receipt by any Group Member or any ERISA Affiliate from the PBGC or a plan administrator of any notice relating to an intention to terminate any Plan or to appoint a trustee to administer any Plan under Section 4042 of ERISA; (i) the incurrence by any Group Member or any ERISA Affiliate of any liability with respect to the withdrawal or partial withdrawal (within the meaning of Sections 4203 and 4205 of

ERISA) from any Plan or Multiemployer Plan; (j) the receipt by any Group Member or any ERISA Affiliate of any notice, or the receipt by any Multiemployer Plan from a Group Member or any ERISA Affiliate of any notice, concerning the imposition of Withdrawal Liability or a determination that a Multiemployer Plan is, or is expected to be, Insolvent or in “endangered” or “critical” status (within the meaning of Sections 431 or 432 of the Code or Sections 304 or 305 of ERISA) or terminated (within the meaning of Section 4041A of ERISA) or that it intends to terminate or has terminated under Section 4041A or 4042 of ERISA; (k) the failure by any Group Member or any of its ERISA Affiliates to pay when due (after expiration of any applicable grace period) any installment payment with respect to Withdrawal Liability under Section 4201 of ERISA; (l) the withdrawal by any Group Member or any of their respective ERISA Affiliates from any Plan with two or more contributing sponsors or the termination of any such Plan resulting in liability to any Group Member or any of their respective Affiliates pursuant to Section 4063 or 4064 of ERISA; or (m) any failure by any Group Member or any ERISA Affiliate to make any contribution or payment to any Plan or Multiemployer Plan, or any amendment to any Plan that has resulted or could result in the imposition of a Lien or the posting of a bond or other security under ERISA or the Code.

“Essential”: Essential Utilities, Inc., a Pennsylvania corporation.

“Essential Group”: the collective reference to Essential and its Subsidiaries.

“EU Bail-In Legislation Schedule”: the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor Person), as in effect from time to time.

“Eurodollar Loans”: Loans the rate of interest applicable to which is based upon the Eurodollar Rate.

“Eurodollar Rate”: with respect to the Loans to which the Eurodollar Rate Option applies for any Interest Period, the interest rate per annum determined by the Administrative Agent by dividing (the resulting quotient rounded upwards to the nearest 1/100 of 1% (i.e., the second digit after the decimal)) (a) the rate which appears on the Bloomberg Page BBAM1 (or on such other substitute Bloomberg page that displays rates at which US dollar deposits are offered by leading banks in the London interbank deposit market), or the rate which is quoted by another source selected by the Administrative Agent as an authorized information vendor for the purpose of displaying rates at which U.S. dollar deposits are offered by leading banks in the London interbank deposit market (an “Alternate Source”), at approximately 11:00 A.M., London time, two (2) Business Days prior to the commencement of such Interest Period as the London interbank offered rate for U.S. Dollars for an amount comparable to such Loans and having a borrowing date and a maturity comparable to such Interest Period (or if there shall at any time, for any reason, no longer exist a Bloomberg Page BBAM1 (or any substitute page) or any Alternate Source, a comparable replacement rate determined by the Administrative Agent at such time (which determination shall be conclusive absent manifest error)), by (b) a number equal to 1.00 minus the Eurodollar Reserve Percentage. Notwithstanding the foregoing, if the Eurodollar Rate as determined under any method above would be less than zero percent (0.00%), such rate shall be deemed to be zero percent (0.00%) for purposes of this Agreement.

The Eurodollar Rate shall be adjusted with respect to any Loan to which the Eurodollar Rate Option applies that is outstanding on the effective date of any change in the Eurodollar Reserve Percentage as of such effective date. The Administrative Agent shall give prompt notice to the Borrower of the Eurodollar Rate as determined or adjusted in accordance herewith, which determination shall be conclusive absent manifest error.

“Eurodollar Rate Option”: the option of the Borrower to have Loans bear interest at the Eurodollar Rate and under the terms specified in Section 2.1(b) or Section 2.7, as applicable.

“Eurodollar Reserve Percentage”: as of any day the maximum effective percentage in effect on such day, as prescribed by the Board of Governors of the Federal Reserve System (or any successor) for determining the reserve requirements (including supplemental, marginal and emergency reserve requirements) with respect to eurocurrency funding or in respect of eurocurrency liabilities or any similar category of liabilities for a member bank of the Federal Reserve System in New York City.

“Eurodollar Tranche”: the collective reference to Eurodollar Loans and the then current Interest Periods with respect to all of which begin on the same date and end on the same later date (whether or not such Loans shall originally have been made on the same day).

“Event of Default”: any of the events specified in Section 8, provided that any requirement for the giving of notice, the lapse of time, or both, has been satisfied.

“Exchange Act”: the United States Securities Exchange Act of 1934.

“Excluded Affiliate”: as to any Person, any other Person that, directly or indirectly, is under common control with such Person.

“Excluded Taxes”: any of the following Taxes imposed on or with respect to a Recipient or required to be withheld or deducted from a payment to a Recipient, (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes, and branch profits Taxes, in each case, (i) imposed as a result of such Recipient being organized under the laws of, or having its principal office or, in the case of any Lender, its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (ii) that are Other Connection Taxes, (b) in the case of a Lender, U.S. federal withholding Taxes imposed on amounts payable to or for the account of such Lender on the date (i) such Lender acquires an interest in the Loan or Revolving Commitment (other than pursuant to an assignment request by the Borrower under Section 2.17) or (ii) such Lender changes its lending office, except in each case to the extent that, pursuant to Section 2.14, amounts with respect to such Taxes were payable either to such Lender’s assignor immediately before such Lender became a party hereto or to such Lender immediately before it changed its lending office, (c) Taxes attributable to such Recipient’s failure to comply with paragraph (d), (e) or (i) of Section 2.14, and (d) any U.S. federal withholding Taxes imposed under FATCA.

“Executive Order”: as defined in Section 4.21(a).

“FATCA”: Sections 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor provisions that are substantively comparable and not

materially more onerous to comply with), any current or future regulations or official interpretations thereof and any agreements entered into pursuant to Section 1471(b)(1) of the Code or any intergovernmental agreements entered into pursuant to the foregoing, and any fiscal or regulatory legislation, rules or official practices, in each case, adopted pursuant to any such intergovernmental agreement.

“Finance Lease Obligations”: as to any Person, the obligations of such Person and its Subsidiaries to pay rent or other amounts under any lease of (or other arrangement conveying the right to use) real or personal property, or a combination thereof, which obligations are required to be classified and accounted for as finance leases on a consolidated balance sheet of such Person and its Subsidiaries under GAAP and, for the purposes of this Agreement, the amount of such obligations at any time shall be the capitalized amount thereof at such time determined in accordance with GAAP.

“Financial Officer”: the chief financial officer, principal financial officer, principal accounting officer, senior vice president-finance, vice president-finance, vice president-treasury, treasurer, assistant treasurer or controller of the Borrower.

“Financials”: as defined in Section 4.1.

“Foreign Plan”: each Plan, whether or not subject to ERISA, that is not subject to U.S. law.

“Funding Office”: the office of the Administrative Agent specified in Section 10.2 or such other office as may be specified from time to time by the Administrative Agent as its funding office by written notice to the Borrower and the Lenders.

“GAAP”: generally accepted accounting principles in the United States as in effect from time to time, except that for purposes of Section 7.1, GAAP shall be determined on the basis of such principles in effect on the date hereof and consistent with those used in the preparation of the most recent audited financial statements referred to in Section 4.1. In the event that any “Accounting Change” (as defined below) shall occur and such change results in a change in the method of calculation of financial covenants, standards or terms in this Agreement, then the Borrower and the Administrative Agent agree to enter into negotiations in order to amend such provisions of this Agreement so as to reflect equitably such Accounting Changes with the desired result that the criteria for evaluating the Borrower’s financial condition shall be the same after such Accounting Changes as if such Accounting Changes had not been made. Until such time as such an amendment shall have been executed and delivered by the Borrower, the Administrative Agent and the Required Lenders, all financial covenants, standards and terms in this Agreement shall continue to be calculated or construed as if such Accounting Changes had not occurred. “Accounting Changes” refers to changes in accounting principles required by the promulgation of any rule, regulation, pronouncement or opinion by the Financial Accounting Standards Board of the American Institute of Certified Public Accountants or, if applicable, the SEC. Notwithstanding any other provision contained herein, all terms of an accounting or financial nature used herein shall be construed, and all computations of amounts and ratios referred to herein shall be made (i) without giving effect to any election under Accounting Standards Codification 825-10-25 (previously referred to as Statement of Financial Accounting Standards 159) (or any other

Accounting Standards Codification or Financial Accounting Standard having a similar result or effect) to value any Indebtedness or other liabilities of the Borrower or any Subsidiary at “fair value”, as defined therein, (ii) without giving effect to any treatment of Indebtedness in respect of convertible debt instruments under Accounting Standards Codification 470-20 to value any such Indebtedness in a reduced or bifurcated manner as described therein, and such Indebtedness shall at all times be valued at the full stated principal amount thereof and (iii) without giving effect to any change in accounting for leases resulting from the implementation of Financial Accounting Standards Board ASU No. 2016-02, Leases (Topic 842), to the extent any lease (or similar arrangement conveying the right to use) would be required to be treated as a finance lease where such lease (or similar arrangement) would not have been required to be so treated under GAAP as in effect on December 31, 2016, and all calculations and deliverables under this Agreement or any other Loan Document shall be made or delivered, as applicable, in accordance therewith.

“Governmental Authority”: any nation or government, any state or other political subdivision thereof, any agency, authority, instrumentality, regulatory body, court, central bank or other entity (including any supra-national bodies such as the European Union or the European Central Bank) exercising executive, legislative, judicial, taxing, regulatory or administrative functions of or pertaining to government, any securities exchange, any self-regulatory organization (including the National Association of Insurance Commissioners), and any group or body charged with setting financial accounting or regulatory capital rules or standards (including, without limitation, the Bank for International Settlements or the Basel Committee on Banking Supervision or any successor or similar authority to any of the foregoing).

“Group Members”: the collective reference to the Borrower and its Subsidiaries.

“Guarantee Obligation”: as to any Person (the “guaranteeing person”), any obligation, including a reimbursement, counterindemnity or similar obligation, of the guaranteeing Person that guarantees or in effect guarantees, or which is given to induce the creation of a separate obligation by another Person (including any bank under any letter of credit) that guarantees or in effect guarantees, any Indebtedness, leases, dividends or other obligations (the “primary obligations”) of any other third Person (the “primary obligor”) in any manner, whether directly or indirectly, including any obligation of the guaranteeing person, whether or not contingent, (i) to purchase any such primary obligation or any property constituting direct or indirect security therefor, (ii) to advance or supply funds (A) for the purchase or payment of any such primary obligation or (B) to maintain working capital or equity capital of the primary obligor or otherwise to maintain the net worth or solvency of the primary obligor, (iii) to purchase property, securities or services primarily for the purpose of assuring the owner of any such primary obligation of the ability of the primary obligor to make payment of such primary obligation or (iv) otherwise to assure or hold harmless the owner of any such primary obligation against loss in respect thereof; provided, however, that the term Guarantee Obligation shall not include endorsements of instruments for deposit or collection in the ordinary course of business. The amount of any Guarantee Obligation of any guaranteeing person shall be deemed to be the lower of (a) an amount equal to the stated or determinable amount of the primary obligation in respect of which such Guarantee Obligation is made and (b) the maximum amount for which such guaranteeing person may be liable pursuant to the terms of the instrument embodying such Guarantee Obligation, unless such primary obligation and the maximum amount for which such guaranteeing person may be liable are not stated or determinable, in which case the amount of such Guarantee Obligation shall

be such guaranteeing person's maximum reasonably anticipated liability in respect thereof as determined by the Borrower in good faith.

"Indebtedness": of any Person at any date, without duplication, (a) all indebtedness of such Person for borrowed money, (b) all obligations of such Person for the deferred purchase price of property or services (other than current trade payables incurred in the ordinary course of such Person's business), (c) all obligations of such Person evidenced by notes, bonds, debentures or other similar instruments, (d) all indebtedness created or arising under any conditional sale or other title retention agreement with respect to property acquired by such Person (even though the rights and remedies of the seller or lender under such agreement in the event of default are limited to repossession or sale of such property), (e) all Finance Lease Obligations of such Person, (f) all obligations of such Person, contingent or otherwise, as an account party or applicant under or in respect of acceptances, letters of credit, surety bonds or similar arrangements, (g) the liquidation value of all redeemable preferred Capital Stock of such Person, (h) all Guarantee Obligations of such Person in respect of obligations of the kind referred to in clauses (a) through (g) above, (i) all obligations of the kind referred to in clauses (a) through (h) above secured by (or for which the holder of such obligation has an existing right, contingent or otherwise, to be secured by) any Lien on property (including accounts and contract rights) owned by such Person, whether or not such Person has assumed or become liable for the payment of such obligation, and (j) for the purposes of Section 8(e) only, all obligations of such Person in respect of Swap Agreements. The Indebtedness of any Person shall include the Indebtedness of any other entity (including any partnership in which such Person is a general partner) to the extent such Person is liable therefor as a result of such Person's ownership interest in or other relationship with such entity, except to the extent the terms of such Indebtedness expressly provide that such Person is not liable therefor.

"Indemnified Liabilities": as defined in Section 10.5.

"Indemnified Taxes": (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of any Loan Party under any Loan Document and (b) to the extent not otherwise described in (a), Other Taxes.

"Indemnitee": as defined in Section 10.5.

"Information": as defined in Section 10.15.

"Insolvent": with respect to any Multiemployer Plan, the condition that such Plan is insolvent within the meaning of Section 4245 of ERISA.

"Intercreditor Agreement": the Intercreditor and Collateral Agency Agreement, originally dated as of February 26, 2010, as amended by Amendment No. 1, dated as of August 10, 2011, as further amended by Amendment No. 2, dated as of August 22, 2013, as further amended by Amendment No. 3, dated as of October 20, 2020, and as further supplemented by the Joinder to Intercreditor Agreement, among the Collateral Agent, Administrative Agent, holders of the Senior Notes and other holders of pari passu Indebtedness of the Borrower, which may become party to the agreement from time to time.

"Interest Payment Date": (a) as to any ABR Loan or any Swing Line Loan, the first Business Day following the last day of each March, June, September and December to occur while

such Loan is outstanding and the final maturity date of such Loan, (b) as to any Eurodollar Loan having an Interest Period of three months or less, the last day of such Interest Period, (c) as to any Eurodollar Loan having an Interest Period longer than three months, each day that is three months, or a whole multiple thereof, after the first day of such Interest Period and the last day of such Interest Period and (d) as to any Loan, the date of any repayment or prepayment made in respect thereof.

“Interest Period”: as to any Eurodollar Loan, (a) initially, the period commencing on the borrowing or conversion date, as the case may be, with respect to such Eurodollar Loan and ending one, two, three or six months thereafter (or such shorter or longer period as shall have been consented to by each Lender participating in such Eurodollar Loan), as selected by the Borrower in its notice of borrowing or notice of conversion, as the case may be, given with respect thereto; and (b) thereafter, each period commencing on the last day of the next preceding Interest Period applicable to such Eurodollar Loan and ending one, two, three or six months (or other applicable period) thereafter, as selected by the Borrower by irrevocable notice to the Administrative Agent not later than 11:00 A.M., New York City time, on the date that is three Business Days prior to the last day of the then current Interest Period with respect thereto; provided that, all of the foregoing provisions relating to Interest Periods are subject to the following:

(i) if any Interest Period would otherwise end on a day that is not a Business Day, such Interest Period shall be extended to the next succeeding Business Day unless the result of such extension would be to carry such Interest Period into another calendar month in which event such Interest Period shall end on the immediately preceding Business Day;

(ii) the Borrower may not select an Interest Period that would extend beyond the Revolving Commitment Termination Date; and

(iii) any Interest Period that begins on the last Business Day of a calendar month (or on a day for which there is no numerically corresponding day in the calendar month at the end of such Interest Period) shall end on the last Business Day of a calendar month.

“IRS”: the United States Internal Revenue Service.

“Joinder to Intercreditor Agreement”: that certain Joinder to Intercreditor Agreement (Administrative Agent), dated as of the date hereof, by the Administrative Agent.

“LDC Holdings”: LDC Holdings LLC, a Delaware limited liability company.

“Lead Arranger”: as defined in the preamble hereto.

“Lenders”: as defined in the preamble hereto. Unless the context otherwise requires, the term “Lenders” includes the Swing Line Lender.

“Lien”: any mortgage, pledge, hypothecation, assignment, deposit arrangement, encumbrance, lien (statutory or other), charge or other security interest or any preference, priority or other security agreement or preferential arrangement of any kind or nature whatsoever (including any conditional sale or other title retention agreement and any finance lease having substantially the same economic effect as any of the foregoing).

“Loan”: any loan by any Lender pursuant to this Agreement, including Revolving Loans and Swing Line Loans.

“Loan Documents”: this Agreement, the Security Documents, the Notes and any amendment, waiver, supplement or other modification to any of the foregoing.

“Loan Party”: each Group Member that is a party to a Loan Document.

“Material Adverse Effect”: any event, development or circumstance that has had or could reasonably be expected to have a material adverse effect on (a) the business, property, operations or financial condition of the Group Members, taken as a whole, or any of the Loan Parties, (b) the ability of the Group Members, taken as a whole, or any of the Loan Parties, to perform any of their respective obligations under the Loan Documents or (c) the validity or enforceability of any of the Loan Documents or the rights and remedies of the Administrative Agent or the Lenders thereunder.

“Materials of Environmental Concern”: any gasoline or petroleum (including crude oil or any fraction thereof) or petroleum products or any hazardous or toxic substances, materials or wastes, defined or regulated as such in or under any applicable Environmental Law, including asbestos, polychlorinated biphenyls and urea-formaldehyde insulation.

“MNPI”: material information concerning the Borrower, any Subsidiary or any Affiliate of any of the foregoing, or any of their securities, that has not been disseminated in a manner making it available to investors generally, within the meaning of Regulation FD under the Exchange Act. For purposes of this definition, “material information” means information concerning the Borrower, any Subsidiary or other Affiliate of the Borrower, or any of their securities, that could reasonably be expected to be material for purposes of the United States federal and state securities laws.

“Moody’s”: Moody’s Investor Services, Inc., or any successor thereto.

“Multiemployer Plan”: a multiemployer plan as defined in Section 4001(a)(3) of ERISA.

“Non-U.S. Lender”: as defined in Section 2.14(d).

“Note Purchase Agreement”: that certain Note Purchase Agreement, originally dated as of February 26, 2010, as amended by Amendment No. 1, dated as of August 10, 2011, as further amended by Amendment No. 2, dated as of August 22, 2013, and as further amended by Amendment No. 3, dated as of November 9, 2017, between the Borrower and the purchasers of the Senior Notes party thereto.

“Notes”: the collective reference to any promissory note evidencing the Loans, each of which shall be substantially in the form of Exhibit G.

“NYFRB”: the Federal Reserve Bank of New York.

“Obligations”: the unpaid principal of and interest on (including interest accruing after the maturity of the Loans and interest accruing after the filing of any petition in bankruptcy, or the commencement of any insolvency, reorganization or like proceeding, relating to the Borrower, whether or not a claim for post-filing or post-petition interest is allowed in such proceeding) the Loans and all other obligations and liabilities of the Borrower to the Administrative Agent or to any Lender, whether direct or indirect, absolute or contingent, due or to become due, or now existing or hereafter incurred, which may arise under, out of, or in connection with, this Agreement, any other Loan Document or any other document made, delivered or given in connection herewith or therewith, whether on account of principal, interest, reimbursement obligations, fees, indemnities, costs, expenses (including all fees, charges and disbursements of counsel to the Administrative Agent or to any Lender that are required to be paid by the Borrower pursuant hereto) or otherwise.

“OFAC”: as defined in Section 4.21(b)(v).

“Other Connection Taxes”: with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising from such Recipient having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Loan or Loan Document).

“Other Taxes”: all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment (other than an assignment made pursuant to Section 2.17).

“Overnight Bank Funding Rate”: for any day, the rate comprised of both overnight federal funds and overnight eurocurrency borrowings by U.S.-managed banking offices of depository institutions, as such composite rate shall be determined by the NYFRB as set forth on its public website from time to time, and as published on the next succeeding Business Day as the overnight bank funding rate by the NYFRB (or by such other recognized electronic source (such as Bloomberg) selected by the Administrative Agent for the purpose of displaying such rate); provided, that if such day is not a Business Day, the Overnight Bank Funding Rate for such day shall be such rate on the immediately preceding Business Day; provided, further, that if such rate shall at any time, for any reason, no longer exist, a comparable replacement rate determined by the Administrative Agent at such time (which determination shall be conclusive absent manifest error). If the Overnight Bank Funding Rate determined as above would be less than zero percent (0.00%), such rate shall be deemed to be zero percent (0.00%) for purposes of this Agreement. The rate of interest charged shall be adjusted as of each Business Day based on changes in the Overnight Bank Funding Rate without notice to the Borrower.

“Parent”: with respect to any Lender, any Person as to which such Lender is, directly or indirectly, a subsidiary.

“Participant”: as defined in Section 10.6(c)(i).

“Participant Register”: as defined in Section 10.6(c)(ii).

“Patriot Act”: as defined in Section 10.17.

“PBGC”: the Pension Benefit Guaranty Corporation established under Section 4002 of ERISA or any successor entity performing similar functions.

“Peoples”: Peoples Natural Gas Company LLC, a Pennsylvania limited liability company.

“Peoples Gas”: Peoples Gas Company LLC (f/k/a Peoples TWP LLC), a Pennsylvania limited liability company.

“Peoples KY”: Peoples Gas KY LLC, a Kentucky limited liability company.

“Peoples WV”: Peoples Gas WV LLC, a West Virginia limited liability company.

“Person”: an individual, partnership, corporation, limited liability company, business trust, joint stock company, trust, unincorporated association, joint venture, Governmental Authority or other entity of whatever nature.

“Plan”: other than any Multiemployer Plan, any employee pension benefit plan as defined in Section 3(2) of ERISA, that is subject to the provisions of Title IV of ERISA or Section 412 of the Code or Section 302 of ERISA, and in respect of which any Group Member or any ERISA Affiliate is (or, if such Plan were terminated, would under Section 4069 of ERISA be deemed to be) an “employer” as defined in Section 3(5) of ERISA.

“Platform”: as defined in Section 6.1.

“Pledged Stock”: all of the Capital Stock of each of the Borrower’s existing and future direct or indirect subsidiaries (including without limitation, all of the Capital Stock of each Significant Subsidiary and all other Subsidiaries directly or indirectly owned by the Borrower, in each case, except to the extent no longer owned, directly or indirectly, by the Borrower as a result of a transaction expressly permitted by this Agreement).

“PNC”: PNC Bank, National Association.

“Prime Rate”: the interest rate per annum announced from time to time by the Administrative Agent at its Principal Office as its then prime rate, which rate may not be the lowest or most favorable rate then being charged to commercial borrowers or others by the Administrative Agent and may not be tied to any external rate of interest or index. Any change in the Prime Rate shall take effect at the opening of business on the day such change is announced.

“Principal Office”: the main banking office of the Administrative Agent in Pittsburgh, Pennsylvania.

“Private Side Lender Representatives”: with respect to any Lender, representatives of such Lender that are not Public Side Lender Representatives.

“Prohibited Transaction”: as defined in Section 406 of ERISA and Section 4975(c) of the Code.

“Properties”: as defined in Section 4.16(a).

“PTE”: a prohibited transaction class exemption issued by the U.S. Department of Labor, as any such exemption may be amended from time to time.

“Public Side Lender Representatives”: with respect to any Lender, representatives of such Lender that do not wish to receive MNPI.

“Published Rate”: the rate of interest published each Business Day in The Wall Street Journal “Money Rates” listing under the caption “London Interbank Offered Rates” for a one month period: provided that if no such rate is published therein for any reason, then the Published Rate shall be the rate at which U.S. dollar deposits are offered by leading banks in the London interbank deposit market for a one month period either (a) as published in another publication selected by the Administrative Agent or (b) in an Alternate Source (or if there shall at any time, for any reason, no longer exist any such reference or any Alternate Source, a comparable replacement rate determined by the Administrative Agent at such time (which determination shall be conclusive absent manifest error).

“Rating Agencies”: Fitch Ratings, Ltd., Moody’s and S&P and, in each case, any successors thereto.

“Recipient”: (a) the Administrative Agent or (b) any Lender, as applicable.

“Register”: as defined in Section 10.6(b)(iv).

“Regulation U”: Regulation U of the Board as in effect from time to time.

“Regulation X”: Regulation X of the Board as in effect from time to time.

“Reportable Compliance Event”: shall mean that any Loan Party or Subsidiary of any Loan Party becomes a Sanctioned Person, or is charged by indictment, criminal complaint or similar charging instrument, arraigned, or custodially detained in connection with any Anti-Terrorism Law or any predicate crime to any Anti-Terrorism Law.

“Reportable Event”: any of the events set forth in Section 4043(c) of ERISA or the regulations issued thereunder, with respect to a Plan, other than those events as to which notice is waived pursuant to DOL Reg. Section 4043 as in effect on the date hereof (no matter how such notice requirement may be changed in the future).

“Required Lenders”: (a) if there exists two (2) or fewer unaffiliated Lenders, all Lenders, and (b) if there exists three (3) or more unaffiliated Lenders, the holders of more than

50% of the Total Revolving Commitments then in effect or, if the Revolving Commitments have been terminated, the Total Revolving Extensions of Credit then outstanding.

“Requirement of Law”: as to any Person, the Certificate of Incorporation and By-Laws or other organizational or governing documents of such Person, and any law, treaty, rule or regulation or determination of an arbitrator or a court or other Governmental Authority, in each case applicable to or binding upon such Person or any of its property or to which such Person or any of its property is subject; provided however, that notwithstanding anything herein to the contrary, (a) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines, requirements and directives thereunder, issued in connection therewith or in implementation thereof, and (b) all requests, rules, guidelines, requirements and directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to a “Requirement of Law” regardless of the date enacted, adopted, issued or implemented.

“Resolution Authority”: an EEA Resolution Authority or, with respect to any UK Financial Institution, a UK Resolution Authority.

“Responsible Officer”: a Financial Officer or the chief executive officer, president, chief administrative officer, general counsel, secretary, any executive vice president, any senior vice president, any vice president or another executive officer of the Borrower, but in any event, with respect to (a) any certificates delivered pursuant to Sections 6.2(a), (b) and (c), and (b) clause (ii) of the definition of Specified Indebtedness, “Responsible Officer” shall mean a Financial Officer.

“Restricted Payments”: as defined in Section 7.5.

“Revolving Commitment”: (a) as to any Lender, the obligation of such Lender, if any, to make Revolving Loans and participate in Swing Line Loans in an aggregate principal amount not to exceed the amount set forth under the heading “Revolving Commitment” opposite such Lender’s name on Schedule 1.1A or in the Assignment and Assumption pursuant to which such Lender became a party hereto, as the same may be changed from time to time pursuant to the terms hereof and (b) in the case of PNC (in its capacity as the Swing Line Lender), its Swingline Commitment (but not the aggregate of its Revolving Commitment and its Swingline Commitment).

“Revolving Commitment Period”: the period from and including the Closing Date until the Revolving Commitment Termination Date.

“Revolving Commitment Termination Date”: November 24, 2021.

“Revolving Extensions of Credit”: as to any Lender at any time, an amount equal to the sum of (a) the aggregate principal amount of all Revolving Loans held by such Lender then outstanding and (b) such Lender’s Swingline Exposure.

“Revolving Loans”: as defined in Section 2.1(a).

“Revolving Percentage”: as to any Lender at any time, the percentage which such Lender’s Revolving Commitment then constitutes of the Total Revolving Commitments or, at any time after the Revolving Commitments shall have expired or terminated, the percentage which the aggregate principal amount of such Lender’s Revolving Extensions of Credit then outstanding constitutes of the aggregate principal amount of the Revolving Extensions of Credit then outstanding.

“S&P”: S&P Global Ratings, a business unit of Standard & Poor’s Financial Services, LLC, or any successor thereto.

“Sanctioned Country”: at any time, a country or territory which is itself the subject or target of any Sanctions (at the time of this Agreement, the Crimea region of Ukraine, Cuba, Iran, North Korea and Syria).

“Sanctioned Person”: at any time, (a) any Person listed in any Sanctions-related list of designated Persons maintained by the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State, (b) any Person operating, organized or resident in a Sanctioned Country or (c) any Person owned or controlled by any such Person or Persons described in the foregoing clauses (a) or (b).

“Sanctions”: economic or financial sanctions or trade embargoes imposed, administered or enforced from time to time by (a) the U.S. government, including those administered by the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State, or (b) the United Nations Security Council, the European Union, any European Union member state or Her Majesty’s Treasury of the United Kingdom.

“SEC”: the Securities and Exchange Commission, any successor thereto and any analogous Governmental Authority.

“Securities Act”: the Securities Act of 1933, as amended.

“Security Agreement”: the Security and Pledge Agreement, originally dated as of February 26, 2010, as amended by Amendment No. 1, dated as of August 10, 2011, between the Borrower and the Collateral Agent.

“Security Documents”: the collective reference to the Security Agreement, the Intercreditor Agreement and all other security documents hereafter delivered to the Administrative Agent or the Collateral Agent granting a Lien on any property of any Person to secure the obligations and liabilities of any Loan Party under any Loan Document.

“Senior Notes”: the Borrower’s (a) 4.10% Series 2013-A Senior Secured Notes due December 19, 2023, (b) 4.25% Series 2013-A Senior Secured Notes due December 19, 2025, (c) 3.58% Series 2017-A Senior Secured Notes due July 14, 2024, (d) 4.26% Series 2017-B Senior Secured Notes due December 20, 2031, (e) 2.90% Series 2017-C Senior Secured Notes due December 18, 2022, (f) 3.38% Series 2017-C Senior Secured Notes due December 18, 2027, (g) 3.63% Series 2017-C Senior Secured Notes due December 18, 2032, (h) 4.50% Series 2017-D Senior Secured Notes due November 17, 2021, (i) 6.42% Series 2017-D Senior Secured Notes due December 28, 2022, (j) 5.66% Series 2017-D Senior Secured Notes due October 31, 2020, (k)

5.99% Series 2017-D Senior Secured Notes due October 31, 2023 and (l) 3.53% Series 2017-D Senior Secured Notes due August 23, 2023, each as issued pursuant to the Note Purchase Agreement and any additional senior secured notes of the Borrower issued after the date hereof pursuant to the Note Purchase Agreement.

“Senior Notes Documentation”: the Note Purchase Agreement, together with all instruments and other agreements entered into by the Borrower in connection therewith.

“Significant Subsidiary”: (a) Peoples, (b) Peoples Gas and (c) any other Subsidiary of the Borrower whose revenues or assets are equal to 10% or more of the consolidated revenues or assets, as applicable, of the Borrower and its Subsidiaries as at the last day of any period of four consecutive fiscal quarters of the Borrower ending with the most recent fiscal quarter for which the Borrower is obligated to provide financial statements pursuant to Section 6.1 (giving effect to any time periods for delivery of such financial statements as set forth therein).

“Solvent”: when used with respect to any Person, means that, as of any date of determination, (a) the amount of the “present fair saleable value” of the assets of such Person will, as of such date, exceed the amount of all “liabilities of such Person, contingent or otherwise”, as of such date, as such quoted terms are determined in accordance with applicable federal and state laws governing determinations of the insolvency of debtors, (b) the present fair saleable value of the assets of such Person will, as of such date, be greater than the amount that will be required to pay the liability of such Person on its debts as such debts become absolute and matured, (c) such Person will not have, as of such date, an unreasonably small amount of capital with which to conduct its business, and (d) such Person will be able to pay its debts as they mature. For purposes of this definition, (i) “debt” means liability on a “claim”, and (ii) “claim” means any (x) right to payment, whether or not such a right is reduced to judgment, liquidated, unliquidated, fixed, contingent, matured, unmatured, disputed, undisputed, legal, equitable, secured or unsecured or (y) right to an equitable remedy for breach of performance if such breach gives rise to a right to payment, whether or not such right to an equitable remedy is reduced to judgment, fixed, contingent, matured or unmatured, disputed, undisputed, secured or unsecured. The amount of contingent liabilities (such as litigation, guaranties and pension plan liabilities) at any time shall be computed as the amount that, in light of all the facts and circumstances existing at the time, represents the amount that can be reasonably be expected to become an actual or matured liability.

“Specified Indebtedness”: any of the following types of Indebtedness:

(i) Indebtedness of the Borrower in respect of the Senior Notes (together with any replacement, refinancing or amendment and restatement thereof), so long as after giving effect thereto the holders of such Indebtedness or their agent shall be a party to the Intercreditor Agreement;

(ii) additional Indebtedness of the Borrower (other than revolving loans) together with any replacement, refinancing or amendment and restatement thereof; provided that (a) immediately after giving effect to any such Indebtedness, the ratio of Consolidated Debt to Consolidated Capitalization shall not exceed 0.60 to 1.00, (b) at the time of such incurrence, no Default or Event of Default then exists or would arise therefrom, (c) the holders of such Indebtedness or their agent shall have become a party to the Intercreditor Agreement, (d) the

Administrative Agent shall have received any documents or information, including resolutions and opinions of counsel, it reasonably requests in connection with the Borrower entering into such Indebtedness, and (e) the Administrative Agent shall have received a certificate of a Responsible Officer of the Borrower at least five Business Days (or such shorter period as the Administrative Agent may agree) prior to the incurrence of such Indebtedness stating that the Borrower has determined in good faith that such terms and conditions satisfy the foregoing requirements set forth in clauses (a) through (d) above;

(iii) [reserved];

(iv) [reserved];

(v) [reserved]; and

(vi) additional Indebtedness of the Borrower, Peoples, Peoples Gas or any other Significant Subsidiary in an aggregate principal amount not to exceed \$25,000,000 at any one time outstanding.

“Subsidiary”: as to any Person, a corporation, partnership, limited liability company or other entity of which shares of stock or other ownership interests having ordinary voting power (other than stock or such other ownership interests having such power only by reason of the happening of a contingency) to elect a majority of the board of directors or other managers of such corporation, partnership or other entity are at the time owned, or the management of which is otherwise controlled, directly or indirectly through one or more intermediaries, or both, by such Person. Unless otherwise qualified, all references to a “Subsidiary” or to “Subsidiaries” in this Agreement shall refer to a Subsidiary or Subsidiaries of the Borrower.

“Subsidiary Debt”: without duplication, as of the date of any determination thereof, the sum of all Indebtedness of Subsidiaries (including all Guarantee Obligations of Indebtedness of the Borrower) but excluding (i) Indebtedness owing to the Borrower or any wholly-owned Subsidiary, (ii) Guarantee Obligations (other than Guarantee Obligations of Indebtedness of the Borrower) incurred in the ordinary course of business by Peoples, Peoples Gas or any other Significant Subsidiary, and (iii) surety bonds (and similar arrangements) incurred in the ordinary course of business by Peoples, Peoples Gas or any other Significant Subsidiary.

“Swap Agreement”: any agreement with respect to any swap, forward, future or derivative transaction or option or similar agreement involving, or settled by reference to, one or more rates, currencies, commodities, equity or debt instruments or securities, or economic, financial or pricing indices or measures of economic, financial or pricing risk or value or any similar transaction or any combination of these transactions; provided that no phantom stock or similar plan providing for payments only on account of services provided by current or former directors, officers, employees or consultants of the Borrower or any of its Subsidiaries shall be a “Swap Agreement”.

“Swingline Borrowing Request”: a request by the Borrower for a Swing Line Loan in accordance with Section 2.20, which shall be in any form approved by the Swing Line Lender and the Administrative Agent.

“Swingline Commitment”: the commitment of the Swing Line Lender to make Swing Line Loans hereunder.

“Swingline Exposure”: at any time, the aggregate principal amount of all Swing Line Loans outstanding at such time. The Swingline Exposure of any Lender at any time shall be its Revolving Percentage of the total Swingline Exposure at such time.

“Swing Line Lender”: PNC, in its capacity as a lender of Swing Line Loans hereunder.

“Swing Line Loan”: a Loan made pursuant to Section 2.20.

“Swingline Sublimit”: \$10,000,000.

“Taxes”: all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any Governmental Authority, including any interest, additions to tax or penalties applicable thereto.

“Total Revolving Commitments”: at any time, the aggregate amount of the Revolving Commitments then in effect. The original amount of the Total Revolving Commitments is \$100,000,000.

“Total Revolving Extensions of Credit”: at any time, the aggregate amount of the Revolving Extensions of Credit of the Lenders outstanding at such time.

“Transferee”: any Assignee or Participant.

“Type”: as to any Loan, its nature as an ABR Loan or a Eurodollar Loan.

“UK Financial Institution”: any BRRD Undertaking (as such term is defined under the PRA Rulebook (as amended from time to time) promulgated by the United Kingdom Prudential Regulation Authority) or any person falling within IFPRU 11.6 of the FCA Handbook (as amended from time to time) promulgated by the United Kingdom Financial Conduct Authority, which includes certain credit institutions and investment firms, and certain affiliates of such credit institutions or investment firms.

“UK Resolution Authority”: the Bank of England or any other public administrative authority having responsibility for the resolution of any UK Financial Institution.

“United States”: the United States of America.

“Withdrawal Liability”: any liability to a Multiemployer Plan as a result of a complete or partial withdrawal from such Multiemployer Plan, as such terms are used in Sections 4203 and 4205, respectively, of ERISA.

“Withholding Agent”: the Borrower and the Administrative Agent.

“Write-Down and Conversion Powers”: (a) with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule, and (b) with respect to the United Kingdom, any powers of the applicable Resolution Authority under the Bail-In Legislation to cancel, reduce, modify or change the form of a liability of any UK Financial Institution or any contract or instrument under which that liability arises, to convert all or part of that liability into shares, securities or obligations of that person or any other person, to provide that any such contract or instrument is to have effect as if a right had been exercised under it or to suspend any obligation in respect of that liability or any of the powers under that Bail-In Legislation that are related to or ancillary to any of those powers.

1.2 Other Definitional Provisions.

(a) Unless otherwise specified therein, all terms defined in this Agreement shall have the defined meanings when used in the other Loan Documents or any certificate or other document made or delivered pursuant hereto or thereto.

(b) The definitions of terms herein shall apply equally to the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. As used herein and in the other Loan Documents, and any certificate or other document made or delivered pursuant hereto or thereto, (i) accounting terms not defined in Section 1.1 and accounting terms partly defined in Section 1.1 to the extent not defined, shall have the respective meanings given to them under GAAP, (ii) the words “include”, “includes” and “including” shall be deemed to be followed by the phrase “without limitation”, (iii) the word “incur” shall be construed to mean incur, create, issue, assume, become liable in respect of or suffer to exist (and the words “incurred” and “incurrence” shall have correlative meanings), (iv) the word “will” shall be construed to have the same meaning and effect as the word “shall”, (v) the word “law” shall be construed as referring to all statutes, rules, regulations, codes and other laws (including official rulings and interpretations thereunder having the force of law or with which affected Persons customarily comply), and all judgments, orders and decrees, of all Governmental Authorities, (vi) the words “asset” and “property” shall be construed to have the same meaning and effect and to refer to any and all tangible and intangible assets and properties, including cash, Capital Stock, securities, revenues, accounts, leasehold interests and contract rights, (vii) references to agreements or other Contractual Obligations shall, unless otherwise expressly specified, be deemed to refer to such agreements or Contractual Obligations as amended, supplemented, restated, replaced or otherwise modified from time to time (subject to any restrictions on such amendments, restatements, replacements, supplements or modifications set forth herein), (viii) any definition of or reference to any statute, rule or regulation shall be construed as referring thereto as from time to time amended, supplemented or otherwise modified (including by succession of comparable successor laws), (ix) any reference herein to any Person shall be construed to include such Person’s successors and assigns (subject to any restrictions on assignment set forth herein) and, in the case of any Governmental Authority, any other Governmental Authority that shall have succeeded to any or all functions thereof, (x) the words “herein”, “hereof and “hereunder”, and words of similar import, shall be construed to refer to this Agreement in its entirety and not to any particular provision hereof, (xi) all references herein to Articles, Sections, Exhibits and Schedules shall be construed to refer to Articles and Sections

of, and Exhibits and Schedules to, this Agreement and (xii) the words ‘rate’, ‘rated’ or ‘rating’ shall be deemed to refer to a Rating Agency providing a rating (and not a credit assessment, indicative rating or other preliminary rating from a Rating Agency unless specifically indicated).

1.3 Successor Eurodollar Rate Index. Section 2.18 of this Agreement provides a mechanism for determining an alternative rate of interest in the event that the London interbank offered rate is no longer available or in certain other circumstances. The Administrative Agent does not warrant or accept any responsibility for and shall not have any liability with respect to, the administration, submission or any other matter related to the London interbank offered rate or other rates in the definition of “Eurodollar Rate” or with respect to any alternative or successor rate thereto, or replacement rate therefor.

1.4 Divisions. For all purposes under the Loan Documents, in connection with any division or plan of division under Delaware law (or any comparable event under a different jurisdiction’s laws): (a) if any asset, right, obligation or liability of any Person becomes the asset, right, obligation or liability of a different Person, then it shall be deemed to have been transferred from the original Person to the subsequent Person, and (b) if any new Person comes into existence, such new Person shall be deemed to have been organized on the first date of its existence by the holders of its Capital Stock at such time.

1.5 Negative Covenant Compliance. For purposes of determining whether the Borrower complies with any exception to Section 7 (other than the financial covenants set forth in Section 7.1) or the incurrence of any Specified Indebtedness under clause (ii) of the definition thereof, it is understood that (a) compliance shall be measured at the time when the relevant event is undertaken, and, for the avoidance of doubt, any financial ratios and metrics therein are intended to be “incurrence” tests and not “maintenance” tests and (b) correspondingly, no change in any financial ratio or metric occurring after the date such compliance is measured shall result in any previously permitted transaction ceasing to be permitted hereunder. For the avoidance of doubt, with respect to determining whether the Borrower and its Subsidiaries comply with any covenant in Section 7 (other than the financial covenants set forth in Section 7.1) or the incurrence of any Specified Indebtedness under clause (ii) of the definition thereof, to the extent that any obligation, transaction or action could be attributable to more than one exception to any such covenant, the Borrower may categorize or re-categorize all or any portion of such obligation, transaction or action to any one or more exceptions to such covenant that permit such obligation, transaction or action.

1.6 Timing of Payment or Performance. When the payment of any obligation or the performance of any covenant, duty or obligation is stated to be due or performance required on a day which is not a Business Day, the date of such payment (other than as specifically provided herein, including in the definition of the term “Interest Period”) or performance shall extend to the immediately succeeding Business Day (it being understood that the foregoing shall cause any grace period associated with any such payment obligation or performance of any covenant, duty or obligation to extend to the immediately succeeding Business Day as well) and, in the case of any payment accruing interest, interest thereon shall be payable for the period of such extension.

1.7 Rounding. Any financial ratios required to be maintained by the Borrower pursuant to this Agreement (or required to be satisfied in order for a specific action to be permitted

under this Agreement) shall be calculated by dividing the appropriate component by the other component, carrying the result to one place more than the number of places by which such ratio is expressed herein and rounding the result up or down to the nearest number.

1.8 Certifications. All certifications to be made hereunder by a Responsible Officer shall be made by such Person in his or her capacity solely as an officer or a representative of the Borrower, on the Borrower's behalf and not in such Person's individual capacity.

SECTION 2.AMOUNT AND TERMS OF COMMITMENTS

2.1 Revolving Commitments; Payments.

(a) Subject to the terms and conditions hereof, and relying upon the representations and warranties herein specified, each Lender severally agrees to make revolving loans ("Revolving Loans") under the Revolving Commitments to the Borrower from time to time during the Revolving Commitment Period in an aggregate principal amount at any one time outstanding which, when added to such Lender's Swingline Exposure then outstanding, does not exceed the amount of such Lender's Revolving Commitment. During the Revolving Commitment Period the Borrower may use the Revolving Commitments by borrowing, prepaying the Revolving Loans in whole or in part, and reborrowing, all in accordance with the terms and conditions hereof.

(b) The Revolving Loans may from time to time be Eurodollar Loans or ABR Loans, as determined by the Borrower and notified to the Administrative Agent in accordance with Sections 2.2 and 2.7.

(c) The Borrower shall repay to the applicable Lenders the aggregate principal amount of all Revolving Loans outstanding on the Revolving Commitment Termination Date.

2.2 Procedure for Revolving Loan Borrowing. The Borrower may borrow Revolving Loans under the Revolving Commitments during the Revolving Commitment Period on any Business Day, provided that the Borrower shall deliver to the Administrative Agent an irrevocable Borrowing Request (which notice must be received by the Administrative Agent prior to 11:00 A.M., New York City time, (a) three Business Days prior to the requested Borrowing Date, in the case of Eurodollar Loans, or (b) on the day of the requested Borrowing Date, in the case of ABR Loans), specifying (i) the amount and Type of Revolving Loans to be borrowed, (ii) the requested Borrowing Date and (iii) in the case of Eurodollar Loans, the respective amounts of each such Type of Loan and the respective lengths of the initial Interest Period therefor. Each borrowing of Revolving Loans under the Revolving Commitments shall be in an amount equal to (x) in the case of ABR Loans, \$250,000 or a whole number multiple of \$50,000 in excess thereof (or, if the then aggregate Available Revolving Commitments are less than \$250,000, such lesser amount) and (y) in the case of Eurodollar Loans, \$1,000,000 or a whole number multiple of \$100,000 in excess thereof; provided, that a Eurodollar Loan that results from a continuation of an outstanding Eurodollar Loan may be in an aggregate amount that is equal to such outstanding Eurodollar Loan. Upon receipt of any such notice from the Borrower, the Administrative Agent shall promptly notify each Lender thereof. Each Lender will make the amount of its Revolving Percentage of each borrowing available to the Administrative Agent for the account of the Borrower at the Funding Office prior to 1:00 P.M., New York City time, on the Borrowing Date

requested by the Borrower in funds immediately available to the Administrative Agent. Such borrowing will then be made available to the Borrower by the Administrative Agent crediting the account of the Borrower on the books of such office with the aggregate of the amounts made available to the Administrative Agent by such Lenders and in like funds as received by the Administrative Agent.

2.3 Additional Fees. The Borrower agrees to pay to the Administrative Agent and Lead Arranger the fees in the amounts and on the dates as set forth in any fee agreements with the Administrative Agent and Lead Arranger, as applicable, and to perform any other obligations contained therein.

2.4 Termination or Reduction of Total Revolving Commitments. The Borrower shall have the right, upon not less than three Business Days' irrevocable (subject to the second proviso below) notice to the Administrative Agent, to terminate the Revolving Commitments or, from time to time, to reduce the amount of the Revolving Commitments, in each case, without premium or penalty; provided that no such termination or reduction of the Revolving Commitments shall be permitted if, after giving effect thereto and to any prepayments of the Loans made on the effective date thereof, the Total Revolving Extensions of Credit would exceed the Total Revolving Commitments; provided, further, that a notice of termination or reduction of the Revolving Commitments may state that such notice is conditioned upon the occurrence of one or more events specified therein, in which case such notice may be revoked by the Borrower (by notice to the Administrative Agent on or prior to the specified effective date) if such condition is not, or is not expected to be, satisfied. Any such reduction shall be in minimum amounts of \$2,000,000 and in integral multiples of \$1,000,000, and shall reduce permanently and ratably among the Lenders the Revolving Commitments then in effect.

2.5 Optional Prepayments.

(a) The Borrower may at any time and from time to time prepay the Revolving Loans, in whole or in part, without premium or penalty (subject to Eurodollar breakage fees, if applicable), upon irrevocable (subject to the second proviso below) notice delivered to the Administrative Agent no later than 11:00 A.M., New York City time, one Business Day prior thereto (or such shorter period as may be agreed to by the Administrative Agent in writing), in the case of Eurodollar Loans, and no later than 11:00 A.M., New York City time on the date of such prepayment, in the case of ABR Loans, which notice shall specify the date and amount of prepayment and whether the prepayment is of Eurodollar Loans or ABR Loans; provided that if a Eurodollar Loan is prepaid on any day other than the last day of the Interest Period applicable thereto, the Borrower shall also pay any amounts owing pursuant to Section 2.15; provided, further, that, such notice may be conditioned upon the occurrence of one or more events specified therein, in which case such notice may be revoked by the Borrower (by notice to the Administrative Agent on or prior to the specified effective date) if such condition is not, or is not expected to be, satisfied. Upon receipt of any such notice the Administrative Agent shall promptly notify each relevant Lender thereof. If any such notice is given, the amount specified in such notice shall be due and payable on the date specified therein, together with accrued interest to such date on the amount prepaid. Partial prepayments of Revolving Loans shall be in minimum principal amounts of (i) in the case of Eurodollar Loans, \$1,000,000 and in integral multiples of \$100,000 and (ii) in

the case of ABR Loans, \$250,000 and in integral multiples of \$50,000 (or, if less, the outstanding principal amount of the Revolving Loans).

(b) Any optional repayment of the Revolving Loans under this Section 2.5 shall be deemed to be applied, first, to repay ABR Loans in full, and second, the balance, if any, shall be used to repay Eurodollar Loans.

2.6 Mandatory Prepayments.

(a) If at any time, the Revolving Extensions of Credit exceed the Revolving Commitments, the Borrower shall prepay the Revolving Extensions of Credit in accordance with this Agreement in an amount equal to such excess.

(b) The application of any prepayment pursuant to this Section 2.6 shall be made, first, to repay ABR Loans in full and, second, the balance, if any, to repay Eurodollar Loans. Each prepayment of the Loans under this Section 2.6 shall be accompanied by accrued interest to the date of such prepayment on the amount prepaid.

2.7 Conversion and Continuation Options.

(a) The Borrower may elect from time to time to convert Eurodollar Loans to ABR Loans by giving the Administrative Agent prior irrevocable notice, substantially in the form of Exhibit H, of such election no later than the time that a Borrowing Request would be required under Section 2.2 if the Borrower were requesting a borrowing of the Type resulting from such election to be made on the effective date of such election; provided that any such conversion of Eurodollar Loans other than on the last day of an Interest Period with respect thereto shall be subject to Section 2.15. The Borrower may elect from time to time to convert ABR Loans to Eurodollar Loans by giving the Administrative Agent prior irrevocable notice, substantially in the form of Exhibit H, of such election no later than the time that a Borrowing Request would be required under Section 2.2 if the Borrower were requesting a borrowing of the Type resulting from such election to be made on the effective date of such election (which notice shall specify the length of the initial Interest Period therefor), provided that no ABR Loan may be converted into a Eurodollar Loan when any Event of Default has occurred and is continuing and the Administrative Agent or the Required Lenders have determined in its or their sole discretion (by prior written notice to the Borrower) not to permit such conversions. Upon receipt of any such notice the Administrative Agent shall promptly notify each relevant Lender thereof.

(b) Subject to Section 2.11, any Eurodollar Loan may be continued as such upon the expiration of the then current Interest Period with respect thereto by the Borrower giving irrevocable notice, substantially in the form of Exhibit H, to the Administrative Agent, in accordance with the applicable provisions of the term "Interest Period" set forth in Section 1.1, of the length of the next Interest Period to be applicable to such Loan, provided that no Eurodollar Loan may be continued as such when any Event of Default has occurred and is continuing and the Administrative Agent has or the Required Lenders have determined in its or their sole discretion (by prior written notice to the Borrower) not to permit such continuations, and provided, further, that if the Borrower shall fail to give any required notice as described above in this paragraph or if such continuation is not permitted pursuant to the preceding proviso such Loans shall be

automatically converted to ABR Loans on the last day of such then expiring Interest Period. Upon receipt of any such notice the Administrative Agent shall promptly notify each relevant Lender thereof.

2.8 Limitations on Eurodollar Tranches. Notwithstanding anything to the contrary in this Agreement, all borrowings, conversions and continuations of Eurodollar Loans and all selections of Interest Periods shall be in such amounts and be made pursuant to such elections so that, (a) after giving effect thereto, the aggregate principal amount of the Eurodollar Loans comprising each Eurodollar Tranche shall be equal to \$1,000,000 or a whole multiple of \$100,000 in excess thereof and (b) no more than six (6) Eurodollar Tranches shall be outstanding at any one time.

2.9 Interest Rates and Payment Dates.

(a) Each Eurodollar Loan shall bear interest for each day during each Interest Period with respect thereto at a rate per annum equal to the Eurodollar Rate determined for such day plus the Applicable Margin with respect to Eurodollar Loans.

(b) Each ABR Loan shall bear interest at a rate per annum equal to the ABR plus the Applicable Margin with respect to ABR Loans.

(c) If any principal of or interest on any Loan or any fee or other amount payable by the Borrower hereunder is not paid when due, whether at stated maturity, upon acceleration or otherwise, such overdue amount shall bear interest, after as well as before judgment, at a rate per annum equal to (i) in the case of overdue principal of any Loans, the rate that would otherwise be applicable thereto plus 2%, or (ii) in the case of any other amount owed hereunder (including interest of any Loan), the rate then applicable to ABR Loans plus 2%.

(d) Interest shall be payable in arrears on each Interest Payment Date, provided that interest accruing pursuant to paragraph (c) of this Section shall be payable from time to time on demand.

2.10 Computation of Interest and Fees.

(a) Interest and fees payable pursuant hereto shall be calculated on the basis of a 360-day year for the actual days elapsed, except that, with respect to ABR Loans, the interest thereon shall be calculated on the basis of a 365- (or 366-, as the case may be) day year for the actual days elapsed; provided that, unless the Swing Line Lender shall have provided any notice pursuant to Section 2.20(c), interest on Swing Line Loans shall be computed in accordance with the foregoing or as otherwise provided in the applicable Cash Management Agreement, and in each case shall be payable for the actual number of days elapsed (including the first day but excluding the last day). The Administrative Agent shall as soon as practicable notify the Borrower and the relevant Lenders of each determination of a Eurodollar Rate. Any change in the interest rate on a Loan resulting from a change in the ABR or the Eurodollar Reserve Percentage shall become effective as of the opening of business on the day on which such change becomes effective. The Administrative Agent shall as soon as practicable notify the Borrower and the relevant Lenders of the effective date and the amount of each such change in interest rate.

(b) Each determination of an interest rate by the Administrative Agent pursuant to any provision of this Agreement shall be conclusive and binding on the Borrower and the Lenders in the absence of manifest error. The Administrative Agent shall, at the request of the Borrower, deliver to the Borrower a statement showing the quotations used by the Administrative Agent in determining any interest rate pursuant to Section 2.9(a).

2.11 Inability to Determine Interest Rate. Except in connection with a Benchmark Transition Event or an Early Opt-In Event, which are addressed by Section 2.18, if prior to the first day of any Interest Period:

(a) the Administrative Agent shall have determined (which determination shall be conclusive and binding upon the Borrower) that, by reason of circumstances affecting the relevant market, adequate and reasonable means do not exist for ascertaining the Eurodollar Rate for such Interest Period, or

(b) the Administrative Agent shall have received notice from the Required Lenders that the Eurodollar Rate determined or to be determined for such Interest Period will not adequately and fairly reflect the cost to such Lenders (as conclusively certified by such Lenders) of making or maintaining their affected Loans during such Interest Period, the Administrative Agent shall give email or telephonic notice thereof to the Borrower and the relevant Lenders as soon as practicable thereafter. If such notice is given (x) any Eurodollar Loans requested to be made on the first day of such Interest Period shall be made as ABR Loans, (y) any Loans that were to have been converted on the first day of such Interest Period to Eurodollar Loans shall be continued as ABR Loans and (z) any outstanding Eurodollar Loans shall be converted, on the last day of the then-current Interest Period, to ABR Loans. Until such notice has been withdrawn by the Administrative Agent, no further Eurodollar Loans shall be made or continued as such, nor shall the Borrower have the right to convert Loans to Eurodollar Loans.

2.12 Pro Rata Treatment and Payments.

(a) Each borrowing of Revolving Loans by the Borrower from the Lenders hereunder and any reduction of the Revolving Commitments of the Lenders shall be made pro rata according to the respective Revolving Percentage of the relevant Lenders.

(b) Each payment (including each prepayment) by the Borrower on account of principal of and interest on the Revolving Loans shall be made pro rata according to the respective outstanding principal amounts of the Revolving Loans then held by the Lenders.

(c) All payments (including prepayments) to be made by the Borrower hereunder, whether on account of principal, interest, fees or otherwise, shall be made without setoff or counterclaim and shall be made prior to the time required hereunder for such payment (or, if no such time is expressly required, prior to 1:00 P.M., New York City time), on the due date thereof to the Administrative Agent, for the account of the Lenders, at the Funding Office, in Dollars and in immediately available funds. The Administrative Agent shall distribute such payments to each relevant Lender promptly upon receipt in like funds as received, net of any amounts owing by such Lender pursuant to Section 9.7. If any payment hereunder (other than payments on the Eurodollar Loans) becomes due and payable on a day other than a Business Day, such payment shall be

extended to the next succeeding Business Day. If any payment on a Eurodollar Loan becomes due and payable on a day other than a Business Day, the maturity thereof shall be extended to the next succeeding Business Day unless the result of such extension would be to extend such payment into another calendar month, in which event such payment shall be made on the immediately preceding Business Day. In the case of any extension of any payment of principal pursuant to the preceding two sentences, interest thereon shall be payable at the then applicable rate during such extension.

(d) Unless the Administrative Agent shall have been notified in writing by any Lender prior to a borrowing that such Lender will not make the amount that would constitute its share of such borrowing available to the Administrative Agent, the Administrative Agent may assume that such Lender is making such amount available to the Administrative Agent, and the Administrative Agent may, in reliance upon such assumption, make available to the Borrower a corresponding amount. If such amount is not made available to the Administrative Agent by the required time on the Borrowing Date therefor, such Lender shall pay to the Administrative Agent, on demand, such amount with interest thereon, at a rate equal to the greater of (i) the Overnight Bank Funding Rate and (ii) a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation, for the period until such Lender makes such amount immediately available to the Administrative Agent. A certificate of the Administrative Agent submitted to any Lender with respect to any amounts owing under this paragraph shall be conclusive in the absence of manifest error. If such Lender's share of such borrowing is not made available to the Administrative Agent by such Lender within three Business Days after such Borrowing Date, the Administrative Agent shall also be entitled to recover such amount with interest thereon at the rate per annum applicable to ABR Loans, on demand, from the Borrower (which payment shall not constitute a prepayment for purposes of Section 2.15 nor shall it constitute a waiver of, or otherwise adversely affect, the Borrower's rights against such Lender).

(e) Unless the Administrative Agent shall have been notified in writing by the Borrower prior to the date of any payment due to be made by the Borrower hereunder that the Borrower will not make such payment to the Administrative Agent, the Administrative Agent may assume that the Borrower is making such payment, and the Administrative Agent may, but shall not be required to, in reliance upon such assumption, make available to the Lenders their respective pro rata shares of a corresponding amount. If such payment is not made to the Administrative Agent by the Borrower within three Business Days after such due date, the Administrative Agent shall be entitled to recover, on demand, from each Lender to which any amount which was made available pursuant to the preceding sentence, such amount with interest thereon at the rate per annum equal to the daily average Overnight Bank Funding Rate. Nothing herein shall be deemed to limit the rights of the Administrative Agent or any Lender against the Borrower.

2.13 Requirements of Law.

(a) If the adoption of or any change in any Requirement of Law or in the interpretation or application thereof or compliance by any Lender with any request or directive (whether or not having the force of law) from any central bank or other Governmental Authority made subsequent to the date hereof:

(i) shall subject any Recipient to any Taxes (other than (A) Indemnified Taxes, (B) Taxes described in clauses (b) through (d) of the definition of Excluded Taxes

and (C) Connection Income Taxes) on its loans, loan principal, letters of credit, commitments, or other obligations, or its deposits, reserves, other liabilities or capital attributable thereto;

(ii) shall impose, modify or hold applicable any reserve, special deposit, compulsory loan, insurance charge or similar requirement against assets held by, deposits or other liabilities in or for the account of, advances, loans or other extensions of credit (or participations therein) by, or any other acquisition of funds by, any office of such Person that is not otherwise included in the determination of the Eurodollar Rate; or

(iii) shall impose on such Person any other condition (other than any Taxes);

and the result of any of the foregoing is to increase the cost to such Person, by an amount that such Person deems to be material, of making, converting into, continuing or maintaining Loans or participating in Swing Line Loans, or to reduce any amount receivable hereunder in respect thereof, then, in any such case, the Borrower shall pay such Person, within thirty (30) days of its request, any additional amounts necessary to compensate such Person for such increased cost or reduced amount receivable. If such Person becomes entitled to claim any additional amounts pursuant to this paragraph, such Person shall promptly notify the Borrower (with a copy to the Administrative Agent) of the event by reason of which such Person has become so entitled.

(b) If any Lender shall have determined that the adoption of or any change in any Requirement of Law regarding capital adequacy or liquidity requirement or in the interpretation or application thereof or compliance by such Lender or any corporation controlling such Lender with any request or directive regarding capital adequacy or liquidity requirement (whether or not having the force of law) from any Governmental Authority made subsequent to the date hereof shall have the effect of reducing the rate of return on such Lender's or such corporation's capital as a consequence of its obligations hereunder to a level below that which such Lender or such corporation could have achieved but for such adoption, change or compliance (taking into consideration such Lender's or such corporation's policies with respect to capital adequacy or liquidity requirement) by an amount deemed by such Lender to be material, then from time to time, after submission by such Lender to the Borrower (with a copy to the Administrative Agent) of a written request therefor, the Borrower shall pay to such Lender, within thirty (30) days of such request, such additional amount or amounts as will compensate such Lender or such corporation for such reduction.

(c) Any such request by a Person shall be accompanied with a certificate as to any additional amounts payable pursuant to this Section submitted by any Lender to the Borrower (with a copy to the Administrative Agent) setting forth in reasonable detail the basis and calculation of such amount which certificate shall be conclusive in the absence of manifest error. Notwithstanding anything to the contrary in this Section, the Borrower shall not be required to compensate any Person pursuant to this Section for any amounts incurred more than 180 days prior to the date that such Person notifies the Borrower of such Person's intention to claim compensation therefor; provided that, if the circumstances giving rise to such claim have a retroactive effect, then such 180 day period shall be extended to include the period of such retroactive effect. The

obligations of the Borrower pursuant to this Section shall survive the termination of this Agreement and the payment of the Loans and all other amounts payable hereunder.

2.14 Taxes.

(a) All payments made by or on account of any obligation of any Loan Party with respect to any obligation under this Agreement or any other Loan Document shall, unless required by applicable law, be made free and clear of, and without deduction or withholding for or on account of, any Taxes. If any applicable law (as determined in the good faith discretion of an applicable Withholding Agent) requires the deduction or withholding of any Tax from any such payment by a Withholding Agent, then the applicable Withholding Agent shall be entitled to make such deduction or withholding and shall timely pay the full amount deducted or withheld to the relevant Governmental Authority in accordance with applicable law and, if such Tax is an Indemnified Tax, then the amounts so payable by the Borrower to the applicable Recipient shall be increased as necessary so that after such deduction or withholding has been made (including such deductions and withholdings applicable to additional sums payable under this Section 2.14) the applicable Recipient receives an amount equal to the sum it would have received had no such deduction or withholding been made.

(b) In addition, the Borrower shall timely pay any Other Taxes to the relevant Governmental Authority in accordance with applicable law, or, at the option of the Administrative Agent, timely reimburse it for any Other Taxes.

(c) Whenever any Taxes are payable by the Borrower to a Governmental Authority pursuant to this Section 2.14, as promptly as practicable thereafter the Borrower shall send to the Administrative Agent for its own account or for the account of the relevant Lender, as the case may be, a certified copy of an original official receipt received by the Borrower showing payment thereof or other evidence of such payment reasonably satisfactory to the Administrative Agent.

(d) Without limiting the generality of paragraph (e) of this Section, each Lender (or Transferee) that is not a "United States person" as defined in Section 7701(a)(30) of the Code (a "Non-U.S. Lender") shall deliver to the Borrower and the Administrative Agent (or, in the case of a Participant, to the Lender from which the related participation shall have been purchased), on or before it becomes a party hereto or a Transferee hereunder, and from time to time thereafter as required by applicable law or as reasonably requested by the Borrower or the Administrative Agent, (i) two properly completed and duly executed copies of whichever of the following forms are relevant, IRS Form W-8BEN, Form W-8BEN-E, Form W-8IMY or Form W-8ECI (or any successor form), (ii) in the case of a Non-U.S. Lender claiming exemption from U.S. federal withholding Tax under Section 871(h) or 881(c) of the Code with respect to payments of "portfolio interest", a statement substantially in the form of Exhibit E-1, Exhibit E-2, Exhibit E-3 or Exhibit E-4, as applicable, and the applicable IRS Form W-8, or any subsequent versions thereof or successors thereto, properly completed and duly executed by such Non-U.S. Lender claiming complete exemption from, or a reduced rate of, U.S. federal withholding Tax on all payments under this Agreement and the other Loan Documents, or (iii) any other form prescribed by applicable requirements of U.S. federal income Tax law as a basis for claiming exemption from or a reduction in U.S. federal withholding Tax duly completed together with such supplementary

documentation as may be prescribed by applicable requirements of law to permit the Borrower and the Administrative Agent to determine the withholding or deduction required to be made. Such forms shall be delivered by each Non-U.S. Lender on or before the date it becomes a party to this Agreement (or, in the case of any Participant, on or before the date such Participant purchases the related participation). Notwithstanding anything to the contrary in the preceding sentence, the completion, execution and submission of such documentation described in clause (iii) above shall not be required if in the Non-U.S. Lender's reasonable judgment such completion, execution or submission would subject such Non-U.S. Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Non-U.S. Lender. In addition, each Non-U.S. Lender shall deliver such forms promptly upon the obsolescence or invalidity of any form previously delivered by such Non-U.S. Lender. Each Non-U.S. Lender shall promptly notify the Borrower at any time it determines that it is no longer in a position to provide any previously delivered certificate to the Borrower (or any other form of certification adopted by the U.S. taxing authorities for such purpose). Notwithstanding any other provision of this paragraph, a Non-U.S. Lender shall not be required to deliver any form pursuant to this paragraph that such Non-U.S. Lender is not legally able to deliver. Each Lender that is a "United States person," as defined in Section 7701(a)(30) of the Code, shall deliver to the Borrower and the Administrative Agent on or before it becomes a party hereto or a Transferee hereunder, and from time to time thereafter as prescribed by applicable law or reasonably requested by the Borrower or the Administrative Agent, two accurate, complete, and signed originals of IRS Form W-9 certifying that such Lender is exempt from U.S. federal backup withholding Tax, and such Lender shall promptly notify the Borrower and the Administrative Agent at any time such Lender determines that it is no longer in a position to provide such form and certification.

(e) Any Lender that is entitled to an exemption from or reduction of withholding Tax under the law of any applicable jurisdiction with respect to payments under any Loan Document shall deliver to the Borrower (with a copy to the Administrative Agent), at the time or times prescribed by applicable law or reasonably requested by the Borrower or the Administrative Agent, such properly completed and executed documentation prescribed by applicable law or reasonably requested by the Borrower or Administrative Agent as will permit such payments to be made without withholding or at a reduced rate, provided that such Lender is legally entitled to complete, execute and deliver such documentation and in such Lender's reasonable judgment such completion, execution or submission would not materially prejudice the legal or commercial position of such Lender. Each Lender agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it shall update such form or certification or promptly notify the Borrower and the Administrative Agent in writing of its legal inability to do so.

(f) If any party determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified pursuant to this Section 2.14 (including by payment of additional amounts pursuant to this Section 2.14), it shall pay over such refund to the indemnifying party within thirty (30) days of receipt of such refund (but only to the extent of indemnity payments made, or additional amounts paid, under this Section 2.14 with respect to such Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) of such indemnified party and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund); provided, that such indemnifying party, upon the request of such indemnified party, agrees to repay to such indemnified party within thirty

(30) days of such request, the amount paid over pursuant to this paragraph (f) (plus any penalties, interest or other charges imposed by the relevant Governmental Authority) in the event such indemnified party is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this paragraph (f), in no event will the indemnified party be required to pay any amount to an indemnifying party pursuant to this paragraph (f) the payment of which would place the indemnified party in a less favorable net after-Tax position than the indemnified party would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts with respect to such Tax had never been paid. This paragraph shall not be construed to require any indemnified party to make available its tax returns (or any other information relating to its Taxes which it deems confidential) to the indemnifying party or any other Person.

(g) The Borrower shall indemnify each Recipient, within thirty (30) days after written demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section 2.14) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to the Borrower by a Lender (with a copy to the Administrative Agent), or by the Administrative Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error. The Borrower shall not be obligated to make an indemnity payment under this Section 2.14(g) in respect of penalties, interest, and other additions to tax attributable to any Indemnified Taxes if such penalties, interest, or additions to tax are attributable to the gross negligence or willful misconduct of the Administrative Agent or such Lender, as the case may be. In the case of any Lender making a claim under this Section 2.14(g) on behalf of any Participant who is the beneficial owner of such claim, an indemnity payment under this Section 2.14(g) shall be due only to the extent that such Lender is able to establish that, with respect to the applicable Indemnified Taxes, such beneficial owner supplied to the applicable Persons such properly completed and executed documentation as necessary to claim any applicable exemption from, or reduction of, such Indemnified Taxes.

(h) Each Lender shall severally indemnify the Administrative Agent, within ten (10) days after demand therefor, for (i) any Taxes attributable to such Lender (but only to the extent that the Borrower has not already indemnified the Administrative Agent for such Taxes and without limiting the obligation of the Borrower to do so) and (ii) any Taxes attributable to such Lender's failure to comply with the provisions of Section 10.6(c) relating to the maintenance of a Participant Register, in either case, that are payable or paid by the Administrative Agent in connection with any Loan Document, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to any Lender by the Administrative Agent shall be conclusive absent manifest error. Each Lender hereby authorizes the Administrative Agent to set off and apply any and all amounts at any time owing to such Lender under any Loan Document or otherwise payable by the Administrative Agent to the Lender from any other source against any amount due to the Administrative Agent under this paragraph (h).

(i) If a payment made to a Lender under any Loan Document would be subject to U.S. federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to the Borrower and the Administrative Agent, at the time or times prescribed by law and at such time or times reasonably requested by the Borrower or the Administrative Agent, such documentation prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the Code) and such additional documentation reasonably requested by the Borrower or the Administrative Agent as may be necessary for the Borrower and the Administrative Agent to comply with their obligations under FATCA, to determine that such Lender has or has not complied with such Lender's obligations under FATCA and, as necessary, to determine the amount to deduct and withhold from such payment. Solely for purposes of this paragraph, "FATCA" shall include any amendments made to FATCA after the date of this Agreement.

(j) [reserved].

(k) The agreements in this Section shall survive the termination of this Agreement and the payment of the Loans and all other amounts payable hereunder.

(l) For the purposes of this Section 2.14, the term "applicable law" includes FATCA.

2.15 Indemnity. The Borrower agrees to indemnify each Lender for, and to hold each Lender harmless from, any loss (other than loss of Applicable Margin) or expense that such Lender may sustain or incur as a consequence of (a) default by the Borrower in making a borrowing of, conversion into or continuation of Eurodollar Loans after the Borrower has given a notice requesting the same in accordance with the provisions of this Agreement, (b) default by the Borrower in making any prepayment of or conversion from Eurodollar Loans after the Borrower has given a notice thereof in accordance with the provisions of this Agreement or (c) the making of a prepayment of Eurodollar Loans on a day that is not the last day of an Interest Period with respect thereto. Such indemnification may include an amount equal to the excess, if any, of (i) the amount of interest that would have accrued on the amount so prepaid, or not so borrowed, converted or continued, for the period from the date of such prepayment or of such failure to borrow, convert or continue to the last day of such Interest Period (or, in the case of a failure to borrow, convert or continue, the Interest Period that would have commenced on the date of such failure) in each case at the applicable rate of interest for such Loans provided for herein (excluding, however, the Applicable Margin included therein, if any) over (ii) the amount of interest (as reasonably determined by such Lender) that would have accrued to such Lender on such amount by placing such amount on deposit for a comparable period with leading banks in the interbank eurodollar market. A certificate as to any amounts payable pursuant to this Section submitted to the Borrower by any Lender shall be conclusive in the absence of manifest error. This covenant shall survive the termination of this Agreement and the payment of the Loans and all other amounts payable hereunder.

2.16 Change of Lending Office. Each Lender agrees that, upon the occurrence of any event giving rise to the operation of Section 2.13 or 2.14(a) with respect to such Lender, it will, if requested by the Borrower, use reasonable efforts (subject to overall policy considerations

of such Lender) to designate another lending office for any Loans affected by such event with the object of avoiding the consequences of such event; provided, that such designation (a) would eliminate or reduce the consequences of any event giving rise to the operation of Section 2.13 or 2.14(a) and (b) is made on terms that, in the sole judgment of such Lender, would not cause such Lender or its lending office(s) to suffer any unreimbursed cost or expense and would not otherwise be disadvantageous to such Lender, and provided, further, that nothing in this Section shall affect or postpone any of the obligations of the Borrower or the rights of any Lender pursuant to Section 2.13 or 2.14(a). The Borrower hereby agrees to pay all reasonable costs and expenses incurred by any Lender in connection with any such designation within ten (10) days following the written request of such Lender (accompanied by reasonable (to the extent practicable) back-up documentation relating thereto).

2.17 Replacement of Lenders. The Borrower shall be permitted to replace any Lender that (a) requests, or any Person by or through such Lender requests, reimbursement for amounts owing pursuant to Section 2.13 or 2.14(a), (b) is a Defaulting Lender or (c) fails to give consent to any amendment, waiver or modification requiring the consent of all Lenders or all affected Lenders and as to which Lenders constituting the Required Lenders have so consented; provided that (i) such replacement does not conflict with any Requirement of Law, (ii) no Event of Default shall have occurred and be continuing at the time of such replacement, (iii) prior to any such replacement, such Lender shall have taken no action under Section 2.16 so as to eliminate the continued need for payment of amounts owing pursuant to Section 2.13 or 2.14(a), (iv) the replacement financial institution shall purchase, at par, all Loans and, if applicable, participations in Swing Line Loans and other amounts owing to such replaced Lender on or prior to the date of replacement, (v) the Borrower shall be liable to such replaced Lender under Section 2.15 if any Eurodollar Loan owing to such replaced Lender shall be purchased other than on the last day of the Interest Period relating thereto, (vi) the replacement financial institution shall be reasonably satisfactory to the Administrative Agent and the Swing Line Lender, (vii) the replaced Lender shall be obligated to make such replacement in accordance with the provisions of Section 10.6 (provided that the Borrower shall be obligated to pay the registration and processing fee referred to therein), (viii) until such time as such replacement shall be consummated, the Borrower shall pay all additional amounts (if any) required pursuant to Section 2.13 or 2.14(a), as the case may be, and (ix) any such replacement shall not be deemed to be a waiver of any rights that the Borrower, the Administrative Agent or any Lender shall have against the replaced Lender.

2.18 Successor Eurodollar Rate Index.

(a) Benchmark Replacement. Notwithstanding anything to the contrary herein or in any other Loan Document, if the Administrative Agent determines that a Benchmark Transition Event or an Early Opt-in Event has occurred, the Administrative Agent and the Borrower may amend this Agreement to replace the Eurodollar Rate with a Benchmark Replacement; and any such amendment will become effective at 5:00 P.M. New York City time on the fifth (5th) Business Day after the Administrative Agent has provided such proposed amendment to all Lenders, so long as the Administrative Agent has not received, by such time, written notice of objection to such amendment from Lenders comprising the Required Lenders. Until the Benchmark Replacement is effective, each advance, conversion and renewal of a Loan under the Eurodollar Rate Option will continue to bear interest with reference to the Eurodollar Rate; provided however, during a Benchmark Unavailability Period (i) any pending selection of,

conversion to or renewal of a Loan bearing interest under the Eurodollar Rate Option that has not yet gone into effect shall be deemed to be a selection of, conversion to or renewal of the ABR Option with respect to such Loan, (ii) all outstanding Loans bearing interest under the Eurodollar Rate Option shall automatically be converted to the ABR Option at the expiration of the existing Interest Period (or sooner, if Administrative Agent cannot continue to lawfully maintain such affected Loan under the Eurodollar Rate Option) and (iii) the component of the ABR based upon the Eurodollar Rate will not be used in any determination of the ABR.

(b) Benchmark Replacement Conforming Changes. In connection with the implementation of a Benchmark Replacement, the Administrative Agent will have the right to make Benchmark Replacement Conforming Changes from time to time and, notwithstanding anything to the contrary herein or in any other Loan Document, any amendments implementing such Benchmark Replacement Conforming Changes will become effective without any further action or consent of any other party to this Agreement.

(c) Notices; Standards for Decisions and Determinations. The Administrative Agent will promptly notify the Borrower and the Lenders of (i) the implementation of any Benchmark Replacement, (ii) the effectiveness of any Benchmark Replacement Conforming Changes and (iii) the commencement of any Benchmark Unavailability Period. Any determination, decision or election that may be made by the Administrative Agent or the Lenders pursuant to this Section 2.18 including any determination with respect to a tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action, will be conclusive and binding absent manifest error and may be made in its or their sole discretion and without consent from any other party hereto, except, in each case, as expressly required pursuant to this Section 2.18.

(d) Certain Defined Terms. As used in this Section 2.18:

“Benchmark Replacement”: the sum of: (a) the alternate benchmark rate that has been selected by the Administrative Agent and the Borrower giving due consideration to (i) any selection or recommendation of a replacement rate or the mechanism for determining such a rate by the Relevant Governmental Body or (ii) any evolving or then-prevailing market convention for determining a rate of interest as a replacement to the Eurodollar Rate for U.S. dollar-denominated credit facilities and (b) the Benchmark Replacement Adjustment; provided that, if the Benchmark Replacement as so determined would be less than the Benchmark Replacement Floor, the Benchmark Replacement will be deemed to be the Benchmark Replacement Floor for the purposes of this Agreement.

“Benchmark Replacement Adjustment”: with respect to any replacement of the Eurodollar Rate with an alternate benchmark rate for each applicable Interest Period, the spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) that has been selected by the Administrative Agent and the Borrower (a) giving due consideration to (i) any selection or recommendation of a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the Eurodollar Rate with the applicable Benchmark Replacement (excluding such

spread adjustment) by the Relevant Governmental Body or (ii) any evolving or then-prevailing market convention for determining a spread adjustment, or method for calculating or determining such spread adjustment, for such replacement of the Eurodollar Rate for U.S. dollar-denominated credit facilities at such time and (b) which may also reflect adjustments to account for (i) the effects of the transition from the Eurodollar Rate to the Benchmark Replacement and (ii) yield- or risk-based differences between the Eurodollar Rate and the Benchmark Replacement.

“Benchmark Replacement Conforming Changes”: with respect to any Benchmark Replacement, any technical, administrative or operational changes (including changes to the definition of “ABR,” the definition of “Interest Period,” timing and frequency of determining rates and making payments of interest and other administrative matters) that the Administrative Agent decides may be appropriate to reflect the adoption and implementation of such Benchmark Replacement and to permit the administration thereof by the Administrative Agent in a manner substantially consistent with market practice (or, if the Administrative Agent decides that adoption of any portion of such market practice is not administratively feasible or if the Administrative Agent determines that no market practice for the administration of the Benchmark Replacement exists, in such other manner of administration as the Administrative Agent decides is reasonably necessary in connection with the administration of this Agreement.

“Benchmark Replacement Date”: the earlier to occur of the following events with respect to the Eurodollar Rate:

(1) in the case of clause (1) or (2) of the definition of “Benchmark Transition Event,” the later of (a) the date of the public statement or publication of information referenced therein and (b) the date on which the administrator of the Eurodollar Rate permanently or indefinitely ceases to provide the Eurodollar Rate; or

(2) in the case of clause (3) of the definition of “Benchmark Transition Event,” the date of the public statement or publication of information referenced therein.

“Benchmark Replacement Floor”: the minimum rate of interest, if any, specified for the Eurodollar Rate or, if no minimum rate of interest is specified, zero.

“Benchmark Transition Event”: the occurrence of one or more of the following events with respect to the Eurodollar Rate:

(1) a public statement or publication of information by or on behalf of the administrator of the Eurodollar Rate announcing that such administrator has ceased or will cease to provide the Eurodollar Rate, permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Eurodollar Rate;

(2) a public statement or publication of information by a Governmental Authority having jurisdiction over the Administrative Agent, the regulatory supervisor for the administrator of the Eurodollar Rate, the U.S. Federal Reserve System, an insolvency official with jurisdiction over the administrator for the Eurodollar Rate, a resolution authority with jurisdiction over the administrator for the Eurodollar Rate or a court or an entity with similar insolvency or resolution authority over the administrator for the Eurodollar Rate, which states that the administrator of the Eurodollar Rate has ceased or will cease to provide the Eurodollar Rate permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Eurodollar Rate; or

(3) a public statement or publication of information by the regulatory supervisor for the administrator of the Eurodollar Rate or a Governmental Authority having jurisdiction over the Administrative Agent announcing that the Eurodollar Rate is no longer representative.

“Benchmark Unavailability Period”: if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to the Eurodollar Rate and solely to the extent that the Eurodollar Rate has not been replaced with a Benchmark Replacement, the period (x) beginning at the time that such Benchmark Replacement Date has occurred if, at such time, no Benchmark Replacement has replaced the Eurodollar Rate for all purposes hereunder in accordance with Section 2.18 and (y) ending at the time that a Benchmark Replacement has replaced the Eurodollar Rate for all purposes hereunder pursuant to Section 2.18.

“Early Opt-in Event”: a determination by the Administrative Agent that U.S. dollar-denominated credit facilities being executed at such time, or that include language similar to that contained in this Section 2.18, are being executed or amended, as applicable, to incorporate or adopt a new benchmark interest rate to replace the Eurodollar Rate.

“Relevant Governmental Body”: the Federal Reserve Board and/or the NYFRB, or a committee officially endorsed or convened by the Federal Reserve Board and/or the NYFRB or any successor thereto.

2.19 Defaulting Lender. Notwithstanding any provision of this Agreement to the contrary, if any Lender becomes a Defaulting Lender, then the following provisions shall apply for so long as such Lender is a Defaulting Lender:

(a) fees shall cease to accrue on the unfunded portion of the Revolving Commitment of such Defaulting Lender pursuant to Section 2.3;

(b) the Revolving Commitment and Revolving Extensions of Credit of such Defaulting Lender shall not be included in determining whether all Lenders or the Required Lenders have taken or may take any action hereunder (including any consent to any amendment, modification, waiver or supplement pursuant to Section 10.1); provided, that this clause (b) shall

not apply to the vote of a Defaulting Lender in the case of an amendment, modification, waiver or supplement requiring the consent of such Lender or each Lender affected thereby;

(c) if any Swingline Exposure exists at the time such Lender becomes a Defaulting Lender, then:

(i) the Swingline Exposure (other than any portion thereof with respect to which such Defaulting Lender shall have funded its participation as contemplated by Section 2.20(c)) of such Defaulting Lender shall be reallocated among the non-Defaulting Lenders in accordance with their respective Revolving Percentages but only to the extent the sum of all non-Defaulting Lenders' Revolving Extensions of Credit do not exceed the total of all non-Defaulting Lenders' Revolving Commitments; and

(ii) if the reallocation described in clause (i) above cannot, or can only partially, be effected, the Borrower shall within one (1) Business Day following written notice by the Administrative Agent prepay the portion of such Defaulting Lender's Swingline Exposure (other than any portion thereof referred to in the parenthetical in such clause (i)) that has not been reallocated as set forth in such clause;

(d) so long as such Lender is a Defaulting Lender, the Swing Line Lender shall not be required to fund any Swing Line Loan unless it is satisfied that the related exposure and such Defaulting Lender's then outstanding Swing Line Exposure will be fully covered by the Revolving Commitments of the non-Defaulting Lenders, and participating interests in any such funded Swing Line Loan will be allocated among the non-Defaulting Lenders in a manner consistent with clause (c)(i) above (and such Defaulting Lender shall not participate therein); and

(e) in the event that the Administrative Agent, the Borrower and the Swing Line Lender agree in writing that a Defaulting Lender has adequately remedied all matters that caused such Lender to be a Defaulting Lender, then the Swingline Exposure of the Lenders shall be readjusted to reflect the inclusion of such Lender's Revolving Commitment and on such date such Lender shall purchase at par such of the Revolving Loans and participations in Swing Line Loans of the other Lenders as the Administrative Agent shall determine may be necessary in order for such Lender to hold such Revolving Loans and participations in Swing Line Loans in accordance with its Revolving Percentage, whereupon such Lender shall cease to be a Defaulting Lender.

2.20 Swing Line Loans.

(a) Subject to the terms and conditions set forth herein, the Swing Line Lender may, in its sole discretion, make Swing Line Loans to the Borrower from time to time during the Revolving Commitment Period; provided that, after giving effect thereto, (i) the aggregate principal amount of the Swing Line Loans of the Swing Line Lender will not exceed its Swingline Commitment, (ii) the Swingline Exposure will not exceed the Swingline Sublimit, (iii) no Lender's Revolving Extensions of Credit will exceed its Revolving Commitment and (iv) the Total Revolving Extensions of Credit will not exceed the Total Revolving Commitments. Within the foregoing limits and subject to the terms and conditions set forth herein, the Borrower may borrow, prepay and reborrow Swing Line Loans. For the avoidance of doubt, any reference in this Agreement to the Swing Line Lender's "Swingline Commitment", the obligation of the Swing

Line Lender to make a Swing Line Loan being subject to the satisfaction of certain conditions or to the Swing Line Lender not being required to fund any Swing Line Loan absent the occurrence of certain events (or words of similar import) shall not be deemed to create any obligation of the Swing Line Lender to make or fund any Swing Line Loan other than in its sole discretion.

(b) To request a Swing Line Loan from the Swing Line Lender, the Borrower shall notify the Administrative Agent and the Swing Line Lender of such request by telephone or in writing not later than 1:00 P.M., New York City time, on the day of the proposed Swing Line Loan. Each such telephonic and written Swingline Borrowing Request shall be irrevocable and shall be made (or, if telephonic, confirmed promptly) by hand delivery or fax to the Administrative Agent and the Swing Line Lender of an executed written Swingline Borrowing Request. Each such telephonic and written Swingline Borrowing Request shall specify the requested date (which shall be a Business Day) and the amount of the requested Swing Line Loan and the location and number of the account of the Borrower to which funds are to be disbursed. Promptly following the receipt of a Swingline Borrowing Request in accordance with this Section, the Administrative Agent shall advise the Swing Line Lender of the details thereof. If the Swing Line Lender shall have determined, in its sole discretion, to make the Swing Line Loan so requested of it, then the Swing Line Lender shall make such Swing Line Loan available to the Borrower by means of a wire transfer to the account specified in such Swingline Borrowing Request by 4:00 P.M., New York City time, on the requested date of such Swing Line Loan. Each Swing Line Loan shall be in an aggregate amount that is an integral multiple of \$50,000 and not less than \$100,000. The Borrower shall repay to the Swing Line Lender the aggregate principal amount of all Swing Line Loans outstanding on the Revolving Commitment Termination Date or, if any Cash Management Agreement is in effect, on such other date (but in no event later than the Revolving Commitment Termination Date) as provided in Section 2.20(d).

(c) The Swing Line Lender may by written notice given to the Administrative Agent not later than 11:00 A.M., New York City time, on any Business Day require the Lenders to acquire participations on such Business Day in all or a portion of the outstanding Swing Line Loans. Such notice shall specify the aggregate amount of the Swing Line Loans in which the Lenders will be required to participate. Promptly upon receipt of such notice, the Administrative Agent will give notice thereof to each Lender, specifying in such notice such Lender's Revolving Percentage of such Swing Line Loan or Loans. Each Lender hereby absolutely and unconditionally agrees to pay, promptly upon receipt of notice as provided above, to the Administrative Agent, for the account of the Swing Line Lender, such Lender's Revolving Percentage of such Swing Line Loan or Loans. Each Lender acknowledges and agrees that, in making any Swing Line Loan, the Swing Line Lender shall be entitled to rely, and shall not incur any liability for relying, upon the representation and warranty of the Borrower deemed made pursuant to Section 5.2; unless, at least two (2) Business Days prior to the time such Swing Line Loan is made, the Required Lenders shall have notified the Swing Line Lender (with a copy to the Administrative Agent) in writing that, as a result of one or more events or circumstances described in such notice, one or more of the conditions precedent set forth in Section 5.2 would not be satisfied if such Swing Line Loan were then made (it being understood and agreed that, in the event the Swing Line Lender shall have received any such notice, the Swing Line Lender shall not have any obligation to make any Swing Line Loan until and unless it shall be satisfied that the events and circumstances described in such notice shall have been cured or otherwise shall have ceased to exist). Each Lender further acknowledges and agrees that its obligation to acquire

participations in Swing Line Loans pursuant to this paragraph is absolute and unconditional and shall not be affected by any circumstance whatsoever, including the occurrence and continuance of a Default or any reduction or termination of the Revolving Commitments, and that each such payment shall be made without any offset, abatement, withholding or reduction whatsoever. Each Lender shall comply with its obligation under this paragraph by wire transfer of immediately available funds, in the same manner as provided in Section 2.12 with respect to Loans made by such Lender (and Section 2.12 shall apply, mutatis mutandis, to the payment obligations of the Lenders pursuant to this paragraph), and the Administrative Agent shall promptly remit to the Swing Line Lender the amounts so received by it from the Lenders. The Administrative Agent shall notify the Borrower of any participations in any Swing Line Loan acquired pursuant to this paragraph, and thereafter payments in respect of such Swing Line Loan shall be made to the Administrative Agent and not to the Swing Line Lender. Any amounts received by the Swing Line Lender from the Borrower (or other Persons on behalf of the Borrower) in respect of a Swing Line Loan after receipt by the Swing Line Lender of the proceeds of a sale of participations therein shall be promptly remitted to the Administrative Agent; any such amounts received by the Administrative Agent shall be promptly remitted by the Administrative Agent to the Lenders that shall have made their payments pursuant to this paragraph and to the Swing Line Lender, as their interests may appear; provided that any such payment so remitted shall be repaid to the Swing Line Lender or to the Administrative Agent, as applicable, if and to the extent such payment is required to be refunded to the Borrower for any reason. The purchase of participations in a Swing Line Loan pursuant to this paragraph shall not constitute a Loan and shall not relieve the Borrower of its obligations to repay such Swing Line Loan.

(d) In addition to making Swing Line Loans pursuant to the foregoing provisions of this Section 2.20, without the requirement for a specific request from the Borrower pursuant to Section 2.20(b), the Swing Line Lender may make Swing Line Loans to the Borrower in accordance with the provisions of any agreements between the Borrower and the Swing Line Lender relating to the Borrower's deposit, sweep and other accounts at the Swing Line Lender and related arrangements and agreements regarding the management and investment of the Borrower's cash assets as in effect from time to time (the "Cash Management Agreements") to the extent of the daily aggregate net negative balance in the Borrower's accounts which are subject to the provisions of the applicable Cash Management Agreements. Swing Line Loans made pursuant to this Section 2.20(d) in accordance with the provisions of the applicable Cash Management Agreements shall (i) be subject to the limitations as to maximum amount set forth in Section 2.20(a), (ii) not be subject to the limitations as to minimum amount and integral multiples set forth in Section 2.20(a), (iii) be payable by the Borrower, both as to principal and interest, at the times set forth in the applicable Cash Management Agreements (but in no event later than the Revolving Commitment Termination Date), (iv) not be made at any time if the Required Lenders shall have notified the Swing Line Lender (with a copy to the Administrative Agent) in writing that, as a result of one or more events or circumstances described in such notice, one or more of the conditions precedent set forth in Section 5.2 would not be satisfied if such Swing Line Loan were then made (it being understood and agreed that, in the event the Swing Line Lender shall have received any such notice, the Swing Line Lender shall not have any obligation to make any Swing Line Loan until and unless it shall be satisfied that the events and circumstances described in such notice shall have been cured or otherwise shall have ceased to exist), (v) if not repaid by the Borrower in accordance with the provisions of the applicable Cash Management Agreements, be subject to each Lender's obligation to purchase participating interests therein pursuant to Section

2.20(c), and (vi) except as provided in the foregoing clauses (i) through (v), be subject to all of the terms and conditions of this Section 2.20. The Swing Line Lender shall report in writing to the Administrative Agent on the Business Day following the date any Swing Line Loan is made pursuant to this Section 2.20(d), the date and principal amount of such Swing Line Loan, the interest rate applicable thereto and such other information as the Administrative Agent shall reasonably request as to such Swing Line Loan.

(e) Each Swing Line Loan shall bear interest, for any day, (i) at the rate per annum that is mutually agreed to by the Borrower and the Swing Line Lender at the time such Swing Line Loan is made or (ii) if there are Cash Management Agreements in place, at the Daily Eurodollar Rate (as shall be provided for in such Cash Management Agreements or as otherwise agreed by the Borrower and such Swing Line Lender in writing) plus the applicable rate (determined in accordance with such Cash Management Agreements); provided that if the Swing Line Lender shall have provided any notice pursuant to Section 2.20(c), then from and after the date of such notice (and until the Lenders shall hold no participations in the applicable Swing Line Loans) each Swing Line Loan subject to such notice shall bear interest at a rate per annum equal to the ABR plus the Applicable Margin with respect to ABR Loans. Interest shall be payable in arrears on each Interest Payment Date; provided that if any Cash Management Agreement is in effect, accrued interest on each applicable Swing Line Loan shall be payable as provided in Section 2.20(d).

(f) The Borrower shall notify the Administrative Agent and the Swing Line Lender by telephone (confirmed by hand delivery or fax) or in writing of any prepayment of Swing Line Loans hereunder not later than 12:00 P.M., New York City time, on the date of prepayment (or such later time as may be agreed to by the Swing Line Lender and the Administrative Agent in writing). Each such notice shall be irrevocable and shall specify the prepayment date, the Swing Line Loans to be prepaid, and the principal amount of each such Swing Line Loan or portion thereof to be prepaid; provided, that, such notice may be conditioned upon the occurrence of one or more events specified therein, in which case such notice may be revoked by the Borrower (by notice to the Administrative Agent and the Swing Line Lender on or prior to the specified effective date) if such condition is not, or is not expected to be, satisfied. Each partial prepayment of any Swing Line Loan shall be in an amount that would be permitted in the case of an advance of a Swing Line Loan as provided in Section 2.20(a) (or, if less, the outstanding principal amount of the Swing Line Loans). Prepayments shall be accompanied by accrued interest. For the avoidance of doubt, Swing Line Loans may not be continued or converted.

SECTION 3. [RESERVED]

SECTION 4. REPRESENTATIONS AND WARRANTIES

To induce the Administrative Agent and the Lenders to enter into this Agreement and to make the Loans, the Borrower hereby represents and warrants to the Administrative Agent and each Lender on each Borrowing Date that:

4.1 Financial Condition. The audited balance sheet and statements of income and cash flows, on a consolidated basis, of the Borrower as at the end of the 2018 and 2019 fiscal years (the "Financials"), reported on by, and accompanied by, an unqualified report from Deloitte

& Touche LLP or other independent certified public accountants reasonably acceptable to the Administrative Agent, present fairly in all material respects the financial condition of the Borrower and the results of its operations and cash flows for each fiscal year then ended. All such Financials, including the related schedules and notes thereto, have been prepared in accordance with GAAP applied consistently throughout the periods involved (except as approved by the aforementioned firm of accountants and disclosed therein).

4.2 No Change. Since December 31, 2019, there has been no development or event that has had or could reasonably be expected to have a Material Adverse Effect.

4.3 Existence; Compliance with Law. Each Group Member (a) is duly organized, validly existing and in good standing under the laws of the jurisdiction of its organization, (b) has the power and authority, and the legal right, to own and operate its property, to lease the property it operates as lessee and to conduct the business in which it is currently engaged, (c) is duly qualified as a foreign corporation or other organization and in good standing under the laws of each jurisdiction where its ownership, lease or operation of property or the conduct of its business requires such qualification and (d) is in compliance with all Requirements of Law, except in the case of clauses (b), (c) and (d) to the extent failure to comply therewith could not, in the aggregate, reasonably be expected to have a Material Adverse Effect.

4.4 Power; Authorization; Enforceable Obligations. Each Loan Party has the power and authority, and the legal right, to make, deliver and perform the Loan Documents to which it is a party and, in the case of the Borrower, to obtain extensions of credit hereunder. Each Loan Party has taken all necessary organizational action to authorize the execution, delivery and performance of the Loan Documents to which it is a party and, in the case of the Borrower, to authorize the extensions of credit on the terms and conditions of this Agreement. No consent or authorization of, filing with, notice to or other act by or in respect of, any Governmental Authority or any other Person is required to be obtained by any Loan Party in connection with the extensions of credit hereunder or with the execution, delivery or performance by such Loan Party or the validity or enforceability against such Loan Party of this Agreement or any of the Loan Documents, except consents, authorizations, filings and notices (i) described in Schedule 4.4, which consents, authorizations, filings and notices have been obtained or made and are in full force and effect, (ii) referred to in Section 4.18, and (iii) as may be necessary in connection with the exercise of foreclosure remedies including the sale of Collateral. Each Loan Document has been duly executed and delivered on behalf of each Loan Party thereto. This Agreement constitutes, and each other Loan Document upon execution will constitute, a legal, valid and binding obligation of each Loan Party thereto, enforceable against each such Loan Party in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the enforcement of creditors' rights generally and by general equitable principles (whether enforcement is sought by proceedings in equity or at law).

4.5 No Legal Bar. The execution, delivery and performance by the Loan Parties of this Agreement and the other Loan Documents, the borrowings hereunder and the use of the proceeds thereof by the Loan Parties will not violate any Requirement of Law applicable to any Loan Party or any Contractual Obligation of any Loan Party and will not result in, or require, the creation or imposition of any Lien on any of their respective properties or revenues pursuant to any Requirement of Law or any such Contractual Obligation (other than the Liens created by the

Security Documents). No Requirement of Law or Contractual Obligation applicable to any Loan Party could reasonably be expected to have a Material Adverse Effect.

4.6 Litigation. No litigation, investigation or proceeding of or before any arbitrator or Governmental Authority is pending or, to the knowledge of the Borrower, threatened by or against any Group Member or against any of their respective properties or revenues that could reasonably be expected to have a Material Adverse Effect.

4.7 No Default. No Default or Event of Default has occurred and is continuing.

4.8 Ownership of Property; Liens. Each Group Member has title in fee simple to, or a valid leasehold interest in, or a valid easement or right of way with respect to, all its material real property, and good title to, or a valid leasehold interest in, all its other material property except as could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, and none of such property of the Borrower is subject to any Lien except as permitted by Section 7.2.

4.9 [Reserved].

4.10 Taxes. Each Group Member has filed or caused to be filed all federal, state and other material Tax returns that are required to be filed and has paid all Taxes shown to be due and payable on said returns or on any assessments made against it or any of its property and all other Taxes, fees or other charges imposed on it or any of its property by any Governmental Authority (other than (a) any such Taxes, fees or other charges the amount or validity of which are currently being contested in good faith by appropriate proceedings and with respect to which reserves in conformity with GAAP have been provided on the books of the relevant Group Member or (b) to the extent that the failure to do so could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect); no Tax Lien has been filed, and, to the knowledge of the Borrower, no claim is being asserted, with respect to any such Tax, fee or other charge which could, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

4.11 Federal Regulations. Neither the Borrower nor any Subsidiary is engaged or will engage, principally or as one of its important activities, in the business of purchasing or carrying margin stock (within the meaning of Regulation U of the Board), or extending credit for the purpose of purchasing or carrying margin stock. No part of the proceeds of the Loans will be used, directly or indirectly, to purchase or carry margin stock, to extend credit for others to purchase or carry margin stock or for any purpose that entails, and no other action will be taken by the Borrower and the Subsidiaries that would result in, a violation of Regulations T, U and X of the Board.

4.12 [Reserved].

4.13 ERISA. Except as could not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect: (i) each Group Member and each of their respective ERISA Affiliates is in compliance with the applicable provisions and requirements of ERISA and the Code with respect to each Plan; (ii) no ERISA Event has occurred and neither the Borrower nor any ERISA Affiliate is aware of any fact, event or circumstance that could reasonably be expected to constitute or result in an ERISA Event; and (iii) the present value of all accumulated

benefit obligations under all Plans and the benefit obligations of retiree welfare benefit arrangements (in each case based on the assumptions used for purposes of Accounting Standards Codification Topic 715) did not, as of the date of the most recent financial statements reflecting such amounts, exceed by more than an immaterial amount the fair market value of the assets of such Plan or arrangement. The Borrower is not holding and will not hold “plan assets” as such term is defined in Section 3(42) of ERISA.

4.14 Investment Company Act. No Loan Party is an “investment company”, or a company “controlled” by an “investment company”, within the meaning of the Investment Company Act of 1940, as amended.

4.15 Subsidiaries. As of the Closing Date, Schedule 4.15 sets forth (a) each Subsidiary’s legal name and jurisdiction of organization and (b) for each Subsidiary, whether such Subsidiary is a Significant Subsidiary. There are no outstanding subscriptions, options, warrants, calls, rights or other agreements or commitments of any nature relating to any Capital Stock of the Borrower.

4.16 Environmental Matters. Except as, in the aggregate, could not reasonably be expected to have a Material Adverse Effect:

(a) the facilities and properties owned, leased or operated by any Group Member (the “Properties”) do not contain, and have not previously contained, any Materials of Environmental Concern in amounts or concentrations or under circumstances that constitute or constituted a violation of any Environmental Law;

(b) no Group Member has received any written notice of violation, alleged violation, non-compliance, liability or potential liability with respect to Environmental Laws with regard to any of the Properties or the business operated by any Group Member (the “Business”), and to the knowledge of the Borrower no notice is threatened;

(c) Materials of Environmental Concern have not been transported or disposed of from the Properties in violation of any Environmental Law, nor have any Materials of Environmental Concern been generated, treated, stored or disposed of at, on or under any of the Properties in violation of any applicable Environmental Law;

(d) no judicial proceeding or governmental or administrative action is pending or, to the knowledge of the Borrower, threatened, under any Environmental Law to which any Group Member is, or to the knowledge of the Borrower, will be named as a party with respect to the Properties or the Business, nor are there any consent decrees or other decrees, consent orders or other judgments or agreements in any administrative or judicial forum outstanding under any Environmental Law with respect to the Properties or the Business;

(e) there has been no release or threat of release or arranging of disposal of Materials of Environmental Concern at or from the Properties, or arising from or related to the operations of any Group Member in connection with the Properties or otherwise in connection with the Business, in violation of or in amounts or in a manner that could give rise to liability under Environmental Laws;

(f) the Business, Properties and all operations at the Properties are in compliance, and have in the last five (5) years been in compliance, with all applicable Environmental Laws; and

(g) no Group Member has assumed any liability of any other Person under Environmental Laws.

4.17 Accuracy of Information, etc. The written reports, financial statements, certificates and other written information (other than financial projections and other forward-looking information and information of a general economic or industry-specific nature) furnished by or on behalf of the Borrower or any Subsidiary to the Administrative Agent or any Lender in connection with this Agreement or any other Loan Document is and will be, when furnished and taken as a whole, complete and correct in all material respects and does not and will not, when furnished and taken as a whole, contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements contained therein not materially misleading in light of the circumstances under which such statements are made (in each case after giving effect to all supplements and updates provided thereto). The financial projections and other forward-looking information that have been furnished by or on behalf of the Borrower or any Subsidiary to the Administrative Agent or any Lender in connection with this Agreement or any other Loan Document have been prepared in good faith based upon assumptions that are believed by the Borrower to be reasonable at the time such financial projections or other forward-looking information are furnished to the Administrative Agent or any Lender, it being understood and agreed that financial projections and other forward-looking information are as to future events and are not to be viewed as facts, are subject to significant uncertainties and contingencies, many of which are out of the Borrower's or the Subsidiaries' control, that no assurance can be given that any particular projections will be realized, that the financial projections or other forward-looking information is not a guarantee of financial performance and that actual results during the period or periods covered by such projections may differ significantly from the projected results and such differences may be material.

4.18 Security Documents. The Security Agreement is effective to create in favor of the Collateral Agent, for the benefit of the Lenders, a legal, valid and enforceable security interest in the Collateral described therein and proceeds thereof. In the case of the Pledged Stock described in the Security Agreement, in addition to filing the financing statements specified on Schedule 4.18 in the appropriate form in the offices specified on Schedule 4.18, when the stock certificates representing such Pledged Stock are delivered to the Collateral Agent, in each case duly endorsed or accompanied by duly executed instruments of assignment or transfer in blank, the Security Agreement shall constitute a fully perfected Lien on, and security interest in, all right, title and interest of the Borrower in such Collateral and the proceeds thereof, as security for the Obligations (as defined in the Security Agreement), in each case prior and superior in right to any other Person (except non-consensual Liens arising by operation of any Requirement of Law) to the extent the creation, perfection and priority thereof is governed by the Uniform Commercial Code as from time to time in effect in the State of New York. In the case of the other Collateral described in the Security Agreement, when financing statements and other filings specified on Schedule 4.18 in appropriate form are filed in the offices specified on Schedule 4.18, the Security Agreement shall constitute a fully perfected Lien on, and security interest in, all right, title and interest of the Borrower in such Collateral and the proceeds thereof, as security for the Obligations

(as defined in the Security Agreement), in each case prior and superior in right to any other Person (except Liens permitted by Section 7.2) to the extent any such security interest may be perfected by the filing of a financing statement.

4.19 Solvency. Each Loan Party is, and after giving effect to the Loans and the incurrence of all Indebtedness and obligations being incurred in connection herewith will be and will continue to be, Solvent.

4.20 [Reserved].

4.21 Patriot Act; Anti-Corruption Laws; Sanctions.

(a) No Loan Party and none of its Affiliates (other than Excluded Affiliates) and, to the knowledge of the Loan Parties, none of its Excluded Affiliates is in violation in any material respect of any Requirements of Law relating to terrorism or money laundering, trade sanctions programs and embargoes, import/export licensing, bribery, and any regulation, order, or directive promulgated, issued or enforced pursuant to such Requirements of Law, all as amended, supplemented or replaced from time to time ("Anti-Terrorism Laws"), including Anti-Corruption Laws, Executive Order No. 13224 on Terrorist Financing, effective September 24, 2001 (the "Executive Order"), and the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, Public Law 107-56.

(b) No Loan Party and no Affiliate (other than an Excluded Affiliate) or broker or other agent of any Loan Party acting or benefiting in any capacity in connection with the Revolving Extensions of Credit and, to the knowledge of the Loan Parties, no Excluded Affiliate is any of the following:

(i) a person that is listed in the annex to, or is otherwise subject to the provisions of, the Executive Order;

(ii) a person owned or controlled by, or acting for or on behalf of, any person that is listed in the annex to, or is otherwise subject to the provisions of, the Executive Order;

(iii) a person with which any Lender is prohibited from dealing or otherwise engaging in any transaction by any Anti-Terrorism Law;

(iv) to the knowledge of the Loan Parties, a person that commits, threatens or conspires to commit or supports "terrorism" as defined in the Executive Order; or

(v) a person that is named as a "specially designated national and blocked person" on the most current list published by the U.S. Treasury Department Office of Foreign Assets Control ("OFAC") at its official website or any replacement website or other replacement official publication of such list.

(c) No Loan Party, and, to the knowledge of the Loan Parties, no broker or other agent of any Loan Party acting in any capacity in connection with the Loans (i) conducts any

business or engages in making or receiving any contribution of funds, goods or services to or for the benefit of any person described in paragraph (b) above, (ii) deals in, or otherwise engages in any transaction relating to, any property or interests in property blocked pursuant to the Executive Order, or (iii) engages in or conspires to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding, or attempts to violate, any of the prohibitions set forth in any Anti-Terrorism Law.

(d) The Borrower has implemented and maintains in effect policies and procedures reasonably designed to ensure compliance by the Borrower, its Subsidiaries and their respective directors, officers, employees and agents with Anti-Corruption Laws and applicable Sanctions, and the Borrower and its Subsidiaries, and to the knowledge of the Borrower, their respective officers, employees, directors and agents, are in compliance with Anti-Corruption Laws and applicable Sanctions in all material respects and are not knowingly engaged in any activity that would reasonably be expected to result in the Borrower being designated as a Sanctioned Person. None of (a) the Borrower, any Subsidiary or to the knowledge of the Borrower or such Subsidiary any of their respective directors, officers or employees, or (b) to the knowledge of the Borrower, any agent of the Borrower or any Subsidiary that will act in any capacity in connection with or benefit from the credit facility established hereby, is a Sanctioned Person. No Loan, use of proceeds or other transaction contemplated by this Agreement will violate Anti-Corruption Laws or applicable Sanctions.

4.22 Pari Passu Obligations. The Loans rank pari passu in right of payment with all other senior Indebtedness of the Borrower and at least pari passu as against the assets of the Borrower with all other secured Indebtedness of the Borrower.

4.23 Regulation. No Group Member is subject to regulation under federal or state law as a public utility except that (a) each of Peoples and Peoples Gas is subject to regulation under Pennsylvania law and by the Pennsylvania Public Utility Commission, (b) Peoples KY and Delta are subject to regulation by the Kentucky Public Service Commission, (c) Peoples WV is subject to regulation by the Public Service Commission of West Virginia and (d) other Subsidiaries may be subject to regulation as public utilities under other federal or state laws disclosed by the Borrower to the Administrative Agent in writing from time to time pursuant to Section 6.7(d). The Borrower and its Subsidiaries have complied and are in compliance with (i) all applicable state utility laws, regulations and orders, and (ii) any other federal or state laws, regulations and orders applicable to them as public utilities or gas utilities, except in each case for instances of noncompliance that, individually and in the aggregate, have not had, and are not reasonably likely to have, a Material Adverse Effect.

4.24 Affected Financial Institutions. No Loan Party is an Affected Financial Institution.

4.25 Beneficial Ownership Certification. If a Beneficial Ownership Certification is required to be delivered pursuant to Section 5.1(g), then, as of the Closing Date, to the best of the Borrower's knowledge, the information set forth in such Beneficial Ownership Certification is true and correct in all respects. If a Beneficial Ownership Certification is required to be delivered pursuant to Section 6.2(h), then, as of the date of the delivery thereof, to the best of the Borrower's

knowledge, the information set forth in such Beneficial Ownership Certification is true and correct in all respects.

SECTION 5. CONDITIONS PRECEDENT

5.1 Conditions to Initial Extension of Credit. The effectiveness of this Agreement and the agreement of each Lender to make extensions of credit on the Closing Date is subject to the satisfaction or waiver, prior to or on the Closing Date, of the following conditions precedent:

(a) Executed Agreements. The Administrative Agent shall have received executed copies of (i) the Security Agreement, (ii) the Intercreditor Agreement, (iii) the Joinder to Intercreditor Agreement and (iv) Notes, if any, requested by the Lenders two days prior to the Closing Date.

(b) Fees. The Lenders, Administrative Agent and Lead Arranger shall have received from the Borrower all fees required to be paid, and all expenses for which invoices have been received at least two Business Days prior to the Closing Date (including the reasonable fees and expenses of legal counsel), on or before the Closing Date. All such amounts will be paid on or prior to the Closing Date.

(c) Governmental and Third Party Approvals. All governmental and third party approvals necessary in connection with the financing contemplated hereby and the continuing operations of the Borrower and its Subsidiaries shall have been obtained and be in full force and effect.

(d) Financial Statements. The Lenders and the Administrative Agent shall have received the Financials referenced in Section 4.1.

(e) Officer's Certificate; Certified Certificate of Incorporation; Good Standing Certificates. The Administrative Agent shall have received (i) a certificate of the Borrower, dated the Closing Date, substantially in the form of Exhibit B, with appropriate insertions and attachments, including the certificate of formation of the Borrower certified by the relevant authority of the jurisdiction of organization of the Borrower and (ii) a long form good standing certificate for each of the Borrower and each Significant Subsidiary from its jurisdiction of organization.

(f) Legal Opinion. The Administrative Agent shall have received the following executed legal opinions, each in form and substance reasonably satisfactory to the Administrative Agent:

(i) the executed legal opinion of Simpson Thacher & Bartlett LLP, counsel to the Borrower, substantially in the form of Exhibit D-1; and

(ii) the executed legal opinion of Post & Schell, P.C., local counsel in Pennsylvania, substantially in the form of Exhibit D-2.

(g) Other Documentation. The Administrative Agent and each Lender shall have received, to the extent the Borrower qualifies as a “legal entity customer” under the Beneficial Ownership Regulation, an executed Beneficial Ownership Certification, and such other documentation and other information reasonably requested to comply with Anti-Terrorism and Anti-Corruption Laws (including any “know your customer” and anti-money laundering documentation).

(h) Compliance Certificate. The Administrative Agent shall have received a Compliance Certificate, dated as of the Closing Date, demonstrating compliance, on a pro forma basis, with each of the financial covenants set forth in Section 7.1.

(i) Lien Searches. The Administrative Agent shall have received state-level lien searches with respect to the Borrower in its jurisdiction of organization and with results reasonably acceptable to the Administrative Agent.

(j) First Priority Security Interest. All documents and instruments, including Uniform Commercial Code financing statements, required by law or reasonably requested by the Collateral Agent to be filed, registered or recorded to create the Liens intended to be created by the Security Documents and to perfect such Liens to the extent required by, and with the priority required by, the Security Documents, shall have been executed or authorized, as applicable, and be in proper form for filing.

(k) Pledged Items. To the extent not previously delivered, the Collateral Agent shall have received (i) the certificates or other instruments representing the issued and outstanding Capital Stock of each Subsidiary directly owned by the Borrower or any other Loan Party pledged pursuant to the Security Agreement, together with stock powers or other instruments of transfer with respect thereto endorsed in blank and (ii) each promissory note pledged and required to be delivered to the Collateral Agent pursuant to the Security Agreement, together with note powers or other instruments of transfer with respect thereto endorsed in blank, in each case, subject to the terms of the Intercreditor Agreement.

(l) Insurance. The Administrative Agent shall have received insurance certificates satisfying the requirements of Section 4.2 of the Security Agreement and evidencing that all necessary insurance is in place or will be in effect by the Closing Date, so long as such insurance is reasonably available in the commercial insurance market and typically maintained by similarly situated companies in the same industry.

(m) Representations and Warranties. Each of the representations and warranties made by any Loan Party in or pursuant to the Loan Documents shall be true and correct in all material respects (it being understood that the materiality qualifier shall not be applicable with respect to any clause of any representation or warranty which itself contains a materiality qualification) on and as of such date as if made on and as of such date (except representations and warranties which relate solely to an earlier date or time, which representations and warranties shall be true and correct in all material respects (or all respects, as applicable) on and as of the specific dates or times referred to therein).

(n) No Default. No Default or Event of Default shall have occurred and be continuing.

For the purpose of determining compliance with the conditions specified in this Section 5.1, each Lender that has signed this Agreement shall be deemed to have accepted, and to be satisfied with, each document or other matter required under this Section 5.1 unless the Administrative Agent shall have received written notice from such Lender prior to the proposed Closing Date specifying its objection thereto.

5.2 Conditions to Each Extension of Credit. The agreement of each Lender to make any extension of credit in respect of Loans, other than conversions and continuations of Loans, requested to be made by it on any date (including its initial extension of credit) is subject to the satisfaction of the following conditions precedent:

(a) Representations and Warranties. Each of the representations and warranties made by any Loan Party in or pursuant to the Loan Documents shall be true and correct in all material respects (it being understood that the materiality qualifier shall not be applicable with respect to any clause of any representation or warranty which itself contains a materiality qualification) on and as of such date as if made on and as of such date (except representations and warranties which relate solely to an earlier date or time, which representations and warranties shall be true and correct in all material respects (or all respects, as applicable) on and as of the specific dates or times referred to therein).

(b) No Default. No Default or Event of Default shall have occurred and be continuing on such date or immediately after giving effect to the extensions of credit requested to be made on such date.

Each borrowing by the Borrower hereunder shall constitute a representation and warranty by the Borrower as of the date of such extension of credit that the conditions contained in this Section 5.2 have been satisfied.

SECTION 6. AFFIRMATIVE COVENANTS

The Borrower hereby agrees that, until all Obligations have been paid in full (other than contingent indemnification obligations that are not yet due and payable) and the Revolving Commitments have been terminated, the Borrower shall and shall cause each of its Subsidiaries to:

6.1 Financial Statements. Furnish to the Administrative Agent and each Lender:

(a) as soon as available, but in any event within 120 days after the end of each fiscal year of the Borrower, its audited consolidated balance sheet and related consolidated statements of net income, comprehensive income, equity and cash flows as of the end of and for such fiscal year, setting forth in each case in comparative form the figures for the prior fiscal year, all audited by and accompanied by the opinion of PricewaterhouseCoopers LLP or another independent registered public accounting firm of recognized national standing (without a “going concern” or like qualification, exception or emphasis (other than any qualification, exception or

emphasis with respect to or resulting from an upcoming scheduled final maturity of any Indebtedness or associated with a financial covenant) and without any qualification, exception or emphasis as to the scope of such audit) to the effect that such financial statements present fairly, in all material respects, the financial position, results of operations and cash flows of the Borrower and its consolidated Subsidiaries on a consolidated basis as of the end of and for such year in accordance with GAAP; and

(b) as soon as available, but in any event not later than 60 days after the end of each of the first three quarterly periods of each fiscal year of the Borrower (commencing with the fiscal quarter ending September 30, 2020), its unaudited consolidated balance sheet as of the end of such fiscal quarter, the related unaudited consolidated statements of net income, comprehensive income and equity for such fiscal quarter and the then elapsed portion of the fiscal year and the related statements of cash flows for the then elapsed portion of the fiscal year, in each case setting forth in comparative form the figures for (or, in the case of the balance sheet, as of the end of) the corresponding period or periods of the prior fiscal year, all certified by a Responsible Officer of the Borrower as presenting fairly, in all material respects, the financial position, results of operations and cash flows of the Borrower and its consolidated Subsidiaries on a consolidated basis as of the end of and for such fiscal quarter and such portion of the fiscal year in accordance with GAAP, subject to normal year-end audit adjustments and the absence of certain footnotes.

All such financial statements shall be complete and correct in all material respects and shall be prepared in reasonable detail and in accordance with GAAP (in the case of quarterly financial statements, subject to normal year-end audit adjustments and the absence of footnotes) applied (except as approved by such accountants or officer, as the case may be, and disclosed in reasonable detail therein) consistently throughout the periods reflected therein and with prior periods.

Each Lender acknowledges that all information, including requests for waivers and amendments, furnished by the Borrower or the Administrative Agent pursuant to or in connection with, or in the course of administering, this Agreement will be syndicate-level information, which may contain MNPI. Each Lender represents to the Borrower and the Administrative Agent that (i) it has developed compliance procedures regarding the use of MNPI and that it will handle MNPI in accordance with such procedures and applicable law, including federal, state and foreign securities laws, and (ii) it has identified in its administrative questionnaire a credit contact who may receive information that may contain MNPI in accordance with its compliance procedures and applicable law, including United States (federal or state) and foreign securities laws.

The Borrower and each Lender acknowledge that, if information furnished by or on behalf of the Borrower pursuant to or in connection with this Agreement is being distributed by the Administrative Agent through Debt Domain, IntraLinks, SyndTrak or a similar electronic transmission system (the "Platform"), (i) the Administrative Agent may post any information that the Borrower has indicated as containing MNPI solely on that portion of the Platform designated for Private Side Lender Representatives and (ii) if the Borrower has not indicated whether any information furnished by it pursuant to or in connection with this Agreement contains MNPI, the Administrative Agent reserves the right to post such information solely on that portion of the Platform designated for Private Side Lender Representatives. The Administrative Agent shall be entitled to rely on any designation by the Borrower that information is suitable to be made available

to Public Side Lender Representatives without liability or responsibility for the independent verification thereof.

The Borrower hereby authorizes the Administrative Agent to distribute this Agreement and the Loan Documents to all Lenders, including their Public Side Lender Representatives, and represents and warrants that none of the information contained in the Loan Documents constitutes or contains MNPI. The Borrower acknowledges its understanding that Lenders, including their Public Side Lender Representatives, may be trading in securities of the Borrower or its Affiliates while in possession of the Loan Documents.

6.2 Certificates; Other Information. Furnish to the Administrative Agent and each Lender (or, in the case of clause (i) below, to the relevant Lender):

(a) concurrently with the delivery of the financial statements referred to in Section 6.1(a), (i) a certificate of a Responsible Officer stating that, to the best of each such Responsible Officer's knowledge, each Loan Party during such period has observed or performed all of its covenants and other agreements, and satisfied every condition contained in this Agreement and the other Loan Documents to which it is a party to be observed, performed or satisfied by it, and that such Responsible Officer has obtained no knowledge of any Default or Event of Default except as specified in such certificate and (ii) in the case of annual financial statements, a Compliance Certificate containing reasonably detailed information and calculations necessary for determining compliance with each of the financial covenants set forth in Section 7.1 as of the last day of the fiscal year of the Borrower;

(b) concurrently with the delivery of the financial statements referred to in Section 6.1(b) (commencing with the fiscal quarter ending September 30, 2020), (i) a certificate of a Responsible Officer stating that, to the best of each such Responsible Officer's knowledge, each Loan Party during such period has observed or performed all of its covenants and other agreements, and satisfied every condition contained in this Agreement and the other Loan Documents to which it is a party to be observed, performed or satisfied by it, and that such Responsible Officer has obtained no knowledge of any Default or Event of Default except as specified in such certificate and (ii) in the case of quarterly financial statements, a Compliance Certificate containing reasonably detailed information and calculations necessary for determining compliance with each of the financial covenants set forth in Section 7.1 as of the last day of such fiscal period of the Borrower;

(c) on or prior to February 15 of each fiscal year, a budgeted balance sheet, income statement and statement of cash flow of the Borrower and its Subsidiaries for the current fiscal year;

(d) within five (5) days after the same are sent, copies of all financial statements and reports that any Group Member sends to the holders of any class of its debt securities or, to the extent applicable, its public equity securities and, to the extent applicable, within five (5) days after the same are filed, copies of all financial statements and reports that any Group Member may make to, or file with, the SEC;

(e) [reserved];

(f) promptly after receipt thereof, any writing from a Rating Agency that such Rating Agency (i) will take public action with respect to the rating of the Senior Notes or (ii) will no longer, or intends to no longer, rate the Senior Notes;

(g) no later than five (5) Business Days after the effectiveness thereof, copies of any amendment, supplement, waiver or other modification to the Senior Notes Documentation;

(h) promptly after any request therefor, such information and documentation reasonably requested by the Administrative Agent or any Lender for purposes of compliance with applicable “know your customer” requirements under the Patriot Act, the Beneficial Ownership Regulation or other applicable anti-money laundering laws; and

(i) promptly upon request, such additional financial and other information which is reasonably available to the Borrower or its Subsidiaries as any Lender may from time to time reasonably request.

6.3 Payment of Taxes. Pay, discharge or otherwise satisfy before they become delinquent or in default, as the case may be, all Taxes, except where (a) the amount or validity thereof is currently being contested in good faith by appropriate proceedings and reserves in conformity with GAAP with respect thereto have been provided on the books of the relevant Group Member or (b) the failure to make payment could not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect.

6.4 Maintenance of Existence; Compliance. (a)(i) Preserve, renew and keep in full force and effect its organizational existence and (ii) take all reasonable action to maintain all rights, privileges and franchises necessary or desirable in the normal conduct of its business, except, in each case, as otherwise permitted by Section 7.3, and except, other than in the case of clause (i) above with respect to the Borrower or any Significant Subsidiary, to the extent that failure to do so could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect and (b) comply with all Requirements of Law except to the extent that failure to comply therewith could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

6.5 Maintenance of Property; Insurance. (a) Keep all property useful and necessary in its business in good working order and condition, ordinary wear and tear and casualty and condemnation excepted, except in each case where the failure to take any such actions, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect and (b) maintain with financially sound and reputable insurance companies insurance on all its property in at least such amounts, with such deductibles and against at least such risks as are usually insured against in the same general area by companies engaged in the same or a similar business.

6.6 Inspection of Property; Books and Records; Discussions. (a) Keep proper books of records and account in which full, true and correct entries in conformity with GAAP and all Requirements of Law shall be made of all material dealings and transactions in relation to its business and activities and (b) permit representatives of the Administrative Agent, and any agent designated by the Administrative Agent, to visit and inspect any of its properties and examine and

make abstracts from any of its books and records at any reasonable time and as often as may reasonably be desired and to discuss the business, operations, properties and financial and other condition of the Group Members with officers and employees of the Group Members and with their independent certified public accountants; provided that, the Administrative Agent may not exercise such rights more often than once during any calendar year (it being understood that any expenses incurred by the Administrative Agent in connection therewith shall be subject to reimbursement by the Borrower in accordance with Section 10.5); provided, further, that when an Event of Default exists, the Administrative Agent (or any of its agents) may do any of the foregoing (at the expense of the Borrower) at any time during normal business hours and upon reasonable advance notice. Notwithstanding anything to the contrary in this Section, neither the Borrower nor any Subsidiary shall be required to disclose, permit the inspection, examination of, or discussion of, any document, information or other matter that (i) constitutes non-financial trade secrets or non-financial proprietary information, (ii) in respect of which disclosure to the Administrative Agent (or its agents) is prohibited by applicable law or any binding confidentiality agreement between the Borrower or any Subsidiary and a Person that is not the Borrower or any Subsidiary not entered into in contemplation of preventing such disclosure, inspection, examination or discussion or (iii) is subject to attorney-client or similar privilege or constitutes attorney work-product.

6.7 Notices. Promptly after obtaining actual knowledge thereof give notice to the Administrative Agent and each Lender of:

- (a) the occurrence of any continuing Default;
- (b) any litigation, investigations or proceedings that may, if adversely decided, reasonably be expected to have a Material Adverse Effect;
- (c) the occurrence of any ERISA Event that, alone or together with any other ERISA Events that have occurred, could reasonably be expected to result in a Material Adverse Effect;
- (d) any Group Member becoming subject to regulation under federal or state law as a public utility; and
- (e) any development or event that has had or could reasonably be expected to have a Material Adverse Effect.

Each notice pursuant to this Section 6.7 (other than Section 6.7(d)) shall be accompanied by a statement of a Responsible Officer setting forth details of the occurrence referred to therein and stating what action the relevant Group Member proposes to take with respect thereto.

6.8 Environmental Laws. Except as could not, in the aggregate, reasonably be expected to have a Material Adverse Effect:

- (a) Comply in all material respects with, and ensure compliance in all material respects by all tenants and subtenants, if any, with, all applicable Environmental Laws, and obtain and comply in all material respects with and maintain, and ensure that all tenants and subtenants

obtain and comply in all material respects with and maintain, any and all licenses, approvals, notifications, registrations or permits required by applicable Environmental Laws.

(b) Conduct and complete all investigations, studies, sampling and testing, and all remedial, removal and other actions required under Environmental Laws and, except to the extent being reasonably contested in good faith by appropriate proceedings, reasonably promptly comply in all material respects with all lawful orders and directives of all Governmental Authorities regarding Environmental Laws.

6.9 Use of Proceeds. Ensure that proceeds of Loans shall be used for working capital needs and for other general corporate purposes of the Borrower and its Subsidiaries.

6.10 Further Assurances. Make, execute and deliver all such additional and further acts, things, deeds and instruments as the Administrative Agent or the Lenders (through the Administrative Agent) may reasonably require to document and consummate the transactions contemplated hereby and to vest completely in and insure the Administrative Agent and the Lenders their respective rights under this Agreement and the other Loan Documents.

6.11 [Reserved].

6.12 Intercompany Loans. Make funds available to Peoples, Peoples Gas or any Subsidiary that is a regulated local gas distribution company in the form of intercompany loans from the Borrower and not capital contributions from the Borrower to the extent (a) not in violation of any Requirement of Law (including any Pennsylvania Public Utility Commission order or condition applicable to Peoples and Peoples Gas or other public utilities commission order or condition applicable to such other Subsidiary) and (b) deemed in good faith by the Borrower as constituting an appropriate capital structure given regulatory requirements and conditions.

6.13 First Priority Security Interest. Take all reasonable steps necessary or reasonably requested of it by the Administrative Agent to maintain a first priority (except with respect to Liens permitted by Section 7.2) security interest in the Collateral evidenced by the Lien in favor of the Collateral Agent on behalf of the Lenders and the other Senior Lenders (as such term is defined in the Security Agreement).

6.14 Direct Ownership. Maintain sole direct ownership by the Borrower of Peoples, Peoples Gas and any other Significant Subsidiary, and promptly deliver or cause to be delivered any certificates representing the Capital Stock of each Significant Subsidiary to the Collateral Agent, duly endorsed or accompanied by duly executed instruments of assignment or transfer in blank, and take such other action as may be necessary or desirable to cause all of the Capital Stock of each Significant Subsidiary to constitute Pledged Stock subject to a first priority security interest in favor of the Collateral Agent on behalf of the Lenders and the other Senior Lenders (as such term is defined in the Security Agreement).

6.15 Sanctions; Anti-Terrorism Laws; Anti-Corruption Laws. Ensure that (i) none of the Borrower, any Subsidiary nor any Affiliate (other than an Excluded Affiliate) of the Borrower or any Subsidiary will become a Sanctioned Person, (ii) none of the Borrower, any Subsidiary nor any Affiliate (other than an Excluded Affiliate) of the Borrower or any Subsidiary, either in its own right or through any third party, will (A) have any of its assets in a country subject

to a sanctions program maintained under any Anti-Terrorism Law or in the possession, custody or control of a Sanctioned Person in violation of any Anti-Terrorism Law; (B) do business in or with, or derive any of its income from investments in or transactions with, any country subject to a sanctions program maintained under any Anti-Terrorism Law or Sanctioned Person in violation of any Anti-Terrorism Law; (C) engage in any dealings or transactions prohibited by any Anti-Terrorism Law or (D) use Revolving Extensions of Credit to fund any operations in, finance any investments or activities in, or, make any payments to, a country subject to a sanctions program maintained under any Anti-Terrorism Law or Sanctioned Person in violation of any Anti-Terrorism Law, (iii) the funds used to repay the Obligations will not be derived from any unlawful activity, (iv) the Borrower, each Subsidiary and each Affiliate (other than an Excluded Affiliate) of the Borrower or any Subsidiary shall comply in all material respects with all Anti-Terrorism Laws, (v) the Borrower shall promptly notify the Administrative Agent in writing upon the occurrence of a Reportable Compliance Event and (vi) the Borrower shall and shall cause each of its Subsidiaries to maintain in effect and enforce policies and procedures reasonably designed to ensure compliance by the Borrower, its Subsidiaries and their respective directors, officers, employees and agents with Anti-Corruption Laws and applicable Sanctions.

SECTION 7. NEGATIVE COVENANTS

The Borrower hereby agrees that, until all Obligations have been paid in full (other than contingent indemnification obligations that are not yet due and payable) and the Revolving Commitments have been terminated, the Borrower shall not or permit its Subsidiaries to, directly or indirectly:

7.1 Financial Covenants.

(a) Permit, at any time, the ratio of (i) Consolidated Debt to (ii) Consolidated Capitalization to exceed 0.60 to 1.00.

(b) Permit, at any time, the ratio of (i) Consolidated EBITDA for the four consecutive fiscal quarters ending on, or most recently ended prior to, such time, to (ii) Consolidated Interest Expense for such period to be less than 2.00 to 1.00.

(c) Permit, at any time, the then outstanding aggregate principal amount of Subsidiary Debt to exceed an amount equal to \$100,000,000.

7.2 Liens. Create, incur, assume or suffer to exist any Lien upon any property of the Borrower (other than property of Subsidiaries of the Borrower), whether now owned or hereafter acquired, except:

(a) Liens for Taxes, assessments or governmental charges not yet due or that are being contested in good faith by appropriate proceedings, provided that adequate reserves with respect thereto are maintained on the books of the Borrower or its Subsidiaries, as the case may be, in conformity with GAAP;

(b) landlords', carriers', warehousemen's, mechanics', materialmen's, repairmen's or other like Liens arising in the ordinary course of business that are not overdue for a period of more than 30 days or that are being contested in good faith by appropriate proceedings;

(c) pledges or deposits in connection with workers' compensation, unemployment insurance and other social security legislation;

(d) deposits to secure the performance of bids, trade contracts (other than for borrowed money), leases (other than Finance Lease Obligations), insurance, statutory obligations (other than any such obligation imposed pursuant to Section 430(k) of the Code or Sections 303(k) or 4068 of ERISA), surety and appeal bonds, performance bonds and other obligations of a like nature incurred in the ordinary course of business;

(e) easements, rights-of-way, zoning and building restrictions and other restrictions and similar encumbrances incurred in the ordinary course of business that, in the aggregate, are not substantial in amount and that do not in any case materially detract from the value of the property subject thereto or materially interfere with the ordinary conduct of the business of the Borrower;

(f) Liens securing Indebtedness of the Borrower incurred pursuant to clauses (i) and (ii) of the definition of Specified Indebtedness;

(g) [reserved];

(h) Liens created pursuant to the Security Documents and securing the Obligations;

(i) any interest or title of a lessor under any operating lease entered into by the Borrower in the ordinary course of its business and covering only the assets so leased;

(j) Liens incurred in connection with overdraft protection arrangements and other related cash management programs (including any Cash Management Agreements);

(k) Liens existing on the date of this Agreement and set forth on Schedule 7.2; and

(l) Liens incurred in connection with the collection or disposition of delinquent accounts receivable in the ordinary course of business.

7.3 Fundamental Changes. Enter into any merger, consolidation or amalgamation, or liquidate, wind up or dissolve itself (or suffer any liquidation or dissolution), or Dispose of all or substantially all of its property or business; except that, if at the time thereof and immediately after giving effect thereto no Event of Default shall have occurred and be continuing:

(a) any Subsidiary may merge, consolidate or amalgamate into the Borrower in a transaction in which the Borrower is the surviving entity;

(b) any Subsidiary may merge, consolidate or amalgamate into any other Subsidiary in a transaction in which the surviving entity is a wholly-owned Subsidiary;

(c) any Subsidiary may merge, consolidate or amalgamate with any other Person so long as the surviving or continuing entity is the Subsidiary with respect to which the

Borrower shall, immediately following such transaction or series of transactions, have at least the same degree of ownership and control with respect to such Subsidiary as it did prior to such transaction;

(d) any Subsidiary may Dispose of all or substantially all of its property or business to (i) the Borrower, (ii) any wholly-owned Subsidiary or (iii) any other person to the extent permitted by Section 7.4(d); and

(e) any Subsidiary may liquidate, wind up or dissolve, so long as all assets and other property, if any, of such Subsidiary are distributed to (i) the Borrower, (ii) any wholly-owned Subsidiary or (iii) any other person to the extent permitted by Section 7.4(d).

7.4 Disposition of Property. Dispose of any of its property, whether now owned or hereafter acquired, or, in the case of any Subsidiary, issue or sell any shares of such Subsidiary's Capital Stock to any Person, except:

(a) the Disposition of obsolete, surplus or worn out property in the ordinary course of business;

(b) the sale of inventory in the ordinary course of business;

(c) the sale of Cash Equivalents;

(d) the Disposition of other property having a fair market value not to exceed five percent (5%) of the Consolidated Total Assets in the aggregate for any fiscal year of the Borrower, calculated as of the commencement of such fiscal year; provided that, after giving effect thereto, no Default or Event of Default exists; and

(e) the Disposition of property of any Subsidiary to the Borrower or any wholly-owned Subsidiary.

7.5 Restricted Payments. Declare or pay any dividend (other than dividends payable solely in common stock of the Person making such dividend) on, or make any payment on account of, or set apart assets for a sinking or other analogous fund for, the purchase, redemption, defeasance, retirement or other acquisition of, any Capital Stock of any Group Member, whether now or hereafter outstanding, or make any other distribution in respect thereof, either directly or indirectly, whether in cash or property or in obligations of any Group Member (collectively, "Restricted Payments"), except that:

(a) each of the Borrower's Subsidiaries may make Restricted Payments to the Borrower or any wholly-owned Subsidiary;

(b) the Borrower may make Restricted Payments to LDC Holdings or any direct or indirect owner of the Borrower for any taxable period (or portion thereof) in which the Borrower and/or any of its Subsidiaries is a member of a consolidated, combined, unitary or similar U.S. federal, state, local and/or foreign income or similar tax group whose common parent is a direct or indirect parent of the Borrower (a "Tax Group"), or in which the Borrower is disregarded from an indirect parent entity that is a C corporation for U.S. federal income tax purposes, to pay such U.S.

federal, state, local and/or foreign Taxes of such Tax Group that are attributable to the taxable income, revenue, receipts, gross receipts, gross profits, capital or margin of the Borrower and/or its applicable Subsidiaries; and

(c) the Borrower may make Restricted Payments to the Essential Group so long as no Default or Event of Default shall have occurred and be continuing, and both immediately before and immediately after giving effect thereto, the Borrower shall be in compliance with the financial covenant set forth in Section 7.1(b) and in pro forma compliance with the financial covenants set forth in Section 7.1(a) and Section 7.1(c).

7.6 Transactions with Affiliates. Enter into any transaction, including any purchase, sale, lease or exchange of property, the rendering of any service or the payment of any management, advisory or similar fees, with any Affiliate (other than transactions among the Borrower and its Subsidiaries not involving any other Affiliate of the Borrower), other than (a) any such transaction that is (i) not prohibited by this Agreement, (ii) in the ordinary course of business of the relevant Group Member, and (iii) upon fair and reasonable terms no less favorable to the relevant Group Member than it would obtain in a comparable arm's length transaction with a Person that is not an Affiliate and (b) any other transaction (if part of a series of related transactions, together with such related transactions) involving consideration or value of less than \$3,000,000. Notwithstanding the foregoing, any Group Member may reimburse any other Group Member on a cost of services basis for the cost of services provided.

7.7 Indebtedness. Permit the incurrence of any Indebtedness unless (a) immediately after giving effect to any such Indebtedness, the ratio of Consolidated Debt to Consolidated Capitalization shall not exceed 0.60 to 1.00, and (b) at the time of such incurrence, no Default or Event of Default then exists or would arise therefrom.

7.8 Swap Agreements. Enter into any Swap Agreement, except non-speculative (a) Swap Agreements entered into to hedge or mitigate risks to which the Borrower or any of its Subsidiaries has actual exposure (other than those in respect of Capital Stock) and (b) Swap Agreements entered into in order to effectively cap, collar or exchange interest rates (from fixed to floating rates, from one floating rate to another floating rate or otherwise) to which the Borrower or any of its Subsidiaries has actual exposure with respect to any interest-bearing liability or investment of the Borrower or any such Subsidiary.

7.9 Changes in Fiscal Periods. Permit the fiscal year of any Group Member to end on a day other than December 31 or change any Group Member's method of determining fiscal quarters.

7.10 Clauses Restricting Distributions. Enter into or suffer to exist or become effective any consensual encumbrance or restriction on the ability of Peoples, Peoples Gas or any other Significant Subsidiary to make Restricted Payments in respect of any of its Capital Stock to the Borrower, except for such encumbrances or restrictions (a) as may be required by the Pennsylvania Public Utility Commission or other Governmental Authority, (b) existing under or by reason of any restrictions existing under the Loan Documents or the Note Purchase Agreement or (c) existing under or by reason of customary restrictions existing under loan documentation for Indebtedness permitted under clauses (i), (ii) or (vi) of the definition of Specified Indebtedness.

7.11 Amendments to Indebtedness Documents. Amend, supplement or otherwise modify (pursuant to a waiver or otherwise) the terms and conditions of any Indebtedness permitted under clauses (i), (ii) or (vi) of the definition of Specified Indebtedness in any respect, when taken as a whole, materially adverse to the Lenders without the prior written consent of the Required Lenders.

7.12 New Subsidiaries. Form, acquire or otherwise own any Subsidiaries, other than Subsidiaries that engage in the regulated utility business or other activity or ancillary business related thereto.

7.13 Lines of Business. Engage in any business if, as a result, the general nature of the business in which the Borrower and its Subsidiaries, taken as a whole, would then be engaged would be substantially changed from the regulated utility business and any other activity or ancillary business related thereto; provided that such ancillary business shall not include gas processing, exploration and development.

7.14 [Reserved].

7.15 Use of Proceeds. Request any Loan, and the Borrower shall not use, and shall not procure that its Subsidiaries and its or their respective directors, officers, employees and agents shall not use, the proceeds of any Loan (a) in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any Person in violation of any Anti-Corruption Laws, (b) for the purpose of funding, financing or facilitating any activities, business or transaction of or with any Sanctioned Person, or in any Sanctioned Country, to the extent such activities, business or transaction would be prohibited by Sanctions if conducted by a corporation incorporated in the United States, or (c) in any manner that would result in the violation of any Sanctions applicable to any party hereto.

SECTION 8. EVENTS OF DEFAULT

If any of the following events shall occur and be continuing:

(a) the Borrower shall fail to pay any principal of any Loan when due in accordance with the terms hereof; or the Borrower shall fail to pay any interest on any Loan, fees or any other amounts payable hereunder or under any other Loan Document, within five (5) days after any such interest, fees or other amounts become due in accordance with the terms hereof; or

(b) any representation or warranty made or deemed made by any Loan Party herein or in any other Loan Document or that is contained in any certificate, document or financial or other statement furnished by it at any time under or in connection with this Agreement or any such other Loan Document shall prove to have been inaccurate in any material respect (and in the case of the representations made in Section 4.21, in any respect) on or as of the date made or deemed made; or

(c) any Loan Party shall default in the observance or performance of any agreement contained in clause (i) or (ii) of Section 6.4(a), Section 6.7(a), Section 6.15 or Section 7 of this Agreement or Sections 4.4 and 4.6(b) of the Security Agreement; or

(d) any Loan Party shall default in the observance or performance of any other agreement contained in this Agreement or any other Loan Document (other than as provided in paragraphs (a) through (c) of this Section), and such default shall continue unremedied for a period of thirty (30) days after notice to the Borrower from the Administrative Agent or the Required Lenders; or

(e) the Borrower or its Subsidiaries shall (i) default in making any payment (in respect of principal or interest) of any material Indebtedness (including the Senior Notes and any Guarantee Obligation, but excluding the Loans) when and as the same shall become due and payable after giving effect to any notice requirements and grace periods applicable thereto; or (ii) default in the observance or performance of any other agreement or condition relating to any such Indebtedness or contained in any instrument or agreement evidencing, securing or relating thereto, or any other event shall occur or condition exist, the effect of which default or other event or condition is to cause, or to permit the holder or beneficiary of such Indebtedness (or a trustee or agent on behalf of such holder or beneficiary) to cause, with the giving of notice if required, such Indebtedness to become due prior to its stated maturity or (in the case of any such Indebtedness constituting a Guarantee Obligation) to become payable; provided, that a default, event or condition described in clause (i) or (ii) of this paragraph (e) shall not at any time constitute an Event of Default unless, at such time, one or more defaults, events or conditions of the type described in clauses (i) or (ii) of this paragraph (e) shall have occurred and be continuing with respect to Indebtedness the outstanding principal amount of which exceeds in the aggregate \$50,000,000; or

(f) (i) any Group Member shall commence any case, proceeding or other action (A) under any existing or future law of any jurisdiction, domestic or foreign, relating to bankruptcy, insolvency, reorganization or relief of debtors, seeking to have an order for relief entered with respect to it, or seeking to adjudicate it a bankrupt or insolvent, or seeking reorganization, arrangement, adjustment, winding up, liquidation, dissolution, composition or other relief with respect to it or its debts, or (B) seeking appointment of a receiver, trustee, custodian, conservator or other similar official for it or for all or any substantial part of its assets; or (ii) there shall be commenced against any Group Member any case, proceeding or other action of a nature referred to in clause (i) above that (A) results in the entry of an order for relief or any such adjudication or appointment or (B) remains undismissed or undischarged for a period of sixty (60) days; or (iii) there shall be commenced against any Group Member any case, proceeding or other action seeking issuance of a warrant of attachment, execution, distraint or similar process against all or any substantial part of its assets that results in the entry of an order for any such relief that shall not have been vacated, discharged, or stayed or bonded pending appeal within sixty (60) days from the entry thereof; or (iv) any Group Member shall take any action in furtherance of, or indicating its consent to, approval of, or acquiescence in, any of the acts set forth in clause (i), (ii), or (iii) above; or (v) or any Group Member shall generally not, or shall be unable to, or shall admit in writing its inability to, pay its debts as they become due; or (vi) any Group Member shall make a general assignment for the benefit of its creditors; or

(g) one or more ERISA Events shall have occurred that, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Effect; or

(h) one or more judgments or decrees (excluding regulatory orders payable through adjustments to rates or through periodic payments or refunds to customers) shall be entered against any Group Member involving in the aggregate a liability (not paid or fully covered by insurance as to which the relevant insurance company has acknowledged coverage) of \$50,000,000 or more, and all such judgments or decrees shall not have been vacated, discharged, stayed or bonded pending appeal within sixty (60) days from the entry thereof; or

(i) any of the Loan Documents shall cease, for any reason, to be in full force and effect, or any Loan Party or any Affiliate of any Loan Party shall so assert, or any Lien created by any of the Security Documents shall cease to be enforceable and of the same effect and priority purported to be created thereby; or

(j) an event or series of events by which (i) Essential shall cease to directly or indirectly own and control at least 51% of the economic and voting interests in the Borrower, or (ii) the Borrower shall cease to directly own and control 100% of the economic and voting interests in Peoples, Peoples Gas, and any other Significant Subsidiary; or

(k) LDC Holdings shall (i) conduct, transact or otherwise engage in, or commit to conduct, transact or otherwise engage in, any business or operations other than those incidental to its ownership of the Capital Stock of the Borrower, (ii) incur, create, assume or suffer to exist any Indebtedness or other liabilities or financial obligations, except (x) nonconsensual obligations imposed by operation of law and (y) obligations with respect to its Capital Stock, or (iii) own, lease, manage or otherwise operate any properties or assets (including cash (other than cash received in connection with dividends or distributions made by the Borrower in accordance with Section 7.5 pending application in the manner contemplated by said Section) and cash equivalents) other than the ownership of shares of Capital Stock of the Borrower; then, and in any such event, (A) if such event is an Event of Default specified in clause (i) or (ii) of paragraph (f) above with respect to the Borrower, automatically the Revolving Commitments shall immediately terminate and the Loans (with accrued interest thereon) and all other amounts owing under this Agreement and the other Loan Documents shall immediately become due and payable, and (B) if such event is any other Event of Default, either or both of the following actions may be taken: (i) with the consent of the Required Lenders, the Administrative Agent may, or upon the request of the Required Lenders, the Administrative Agent shall, by notice to the Borrower declare the Revolving Commitments to be terminated forthwith, whereupon the Revolving Commitments shall immediately terminate; and (ii) with the consent of the Required Lenders, the Administrative Agent may, or upon the request of the Required Lenders, the Administrative Agent shall, by notice to the Borrower, declare the Loans (with accrued interest thereon) and all other amounts owing under this Agreement and the other Loan Documents to be due and payable forthwith, whereupon the same shall immediately become due and payable. Except as expressly provided above in this Section, presentment, demand, protest and all other notices of any kind are hereby expressly waived by the Borrower.

SECTION 9. THE AGENTS

9.1 Appointment. Each Lender hereby irrevocably designates and appoints PNC Bank, National Association, as the administrative agent of such Lender under this Agreement and the other Loan Documents (including the Intercreditor Agreement), and each such Lender

irrevocably authorizes the Administrative Agent, in such capacity, to take such action on its behalf under the provisions of this Agreement and the other Loan Documents and to exercise such powers and perform such duties as are expressly delegated to the Administrative Agent by the terms of this Agreement (which includes executing and delivering the Joinder to Intercreditor Agreement and carrying out its obligations under the Intercreditor Agreement on behalf of the Lenders) and the other Loan Documents, together with such other powers as are reasonably incidental thereto. Notwithstanding any provision to the contrary elsewhere in this Agreement, the Administrative Agent shall not have any duties or responsibilities, except those expressly set forth herein, or any fiduciary relationship with any Lender, and no implied covenants, functions, responsibilities, duties, obligations or liabilities shall be read into this Agreement or any other Loan Document or otherwise exist against the Administrative Agent.

9.2 Delegation of Duties. The Administrative Agent may execute any of its duties under this Agreement and the other Loan Documents by or through agents or attorneys-in-fact and shall be entitled to advice of counsel concerning all matters pertaining to such duties. The Administrative Agent shall not be responsible for the negligence or misconduct of any agents or attorneys-in-fact selected by it with reasonable care.

9.3 Exculpatory Provisions. Neither any Agent nor any of their respective officers, directors, employees, agents, advisors, attorneys-in-fact or affiliates shall be (i) liable for any action lawfully taken or omitted to be taken by it or such Person under or in connection with this Agreement or any other Loan Document (except to the extent that any of the foregoing are found by a final and nonappealable decision of a court of competent jurisdiction to have resulted from its or such Person's own gross negligence or willful misconduct) or (ii) responsible in any manner to any of the Lenders for any recitals, statements, representations or warranties made by any Loan Party or any officer thereof contained in this Agreement or any other Loan Document or in any certificate, report, statement or other document referred to or provided for in, or received by the Agents under or in connection with, this Agreement or any other Loan Document or for the value, validity, effectiveness, genuineness, enforceability or sufficiency of this Agreement or any other Loan Document or for any failure of any Loan Party a party thereto to perform its obligations hereunder or thereunder. The Agents shall not be under any obligation to any Lender to ascertain or to inquire as to the observance or performance of any of the agreements contained in, or conditions of, this Agreement or any other Loan Document, or to inspect the properties, books or records of any Loan Party.

9.4 Reliance by Administrative Agent. The Administrative Agent shall be entitled to rely, and shall be fully protected in relying, upon any instrument, writing, resolution, notice, consent, certificate, affidavit, letter, email message, statement, order or other document or conversation believed by it to be genuine and correct and to have been signed, sent or made by the proper Person or Persons and upon advice and statements of legal counsel (including counsel to the Borrower), independent accountants and other experts selected by the Administrative Agent. The Administrative Agent may deem and treat the payee of any Note as the owner thereof for all purposes unless a written notice of assignment, negotiation or transfer thereof shall have been filed with the Administrative Agent. The Administrative Agent shall be fully justified in failing or refusing to take any action under this Agreement or any other Loan Document unless it shall first receive such advice or concurrence of the Required Lenders (or, if so specified by this Agreement, all Lenders) as it deems appropriate or it shall first be indemnified to its satisfaction by the Lenders

against any and all liability and expense that may be incurred by it by reason of taking or continuing to take any such action. The Administrative Agent shall in all cases be fully protected in acting, or in refraining from acting, under this Agreement and the other Loan Documents in accordance with a request of the Required Lenders (or, if so specified by this Agreement, all Lenders), and such request and any action taken or failure to act pursuant thereto shall be binding upon all the Lenders and all future holders of the Loans.

9.5 Notice of Default. The Administrative Agent shall not be deemed to have knowledge or notice of the occurrence of any Default or Event of Default unless the Administrative Agent has received notice from a Lender or the Borrower referring to this Agreement, describing such Default or Event of Default and stating that such notice is a “notice of default”. In the event that the Administrative Agent receives such a notice, the Administrative Agent shall give notice thereof to the Lenders and the other Agents. The Administrative Agent shall take such action with respect to such Default or Event of Default as shall be reasonably directed by the Required Lenders (or, if so specified by this Agreement, all Lenders); provided that unless and until the Administrative Agent shall have received such directions, the Administrative Agent may (but shall not be obligated to) take such action, or refrain from taking such action, with respect to such Default or Event of Default as it shall deem advisable in the best interests of the Lenders.

9.6 Non-Reliance on Agents and Other Lenders. Each Lender expressly acknowledges that neither the Agents nor any of their respective officers, directors, employees, agents, advisors, attorneys-in-fact or affiliates have made any representations or warranties to it and that no act by any Agent hereafter taken, including any review of the affairs of a Loan Party or any affiliate of a Loan Party, shall be deemed to constitute any representation or warranty by any Agent to any Lender. Each Lender represents to the Agents that it has, independently and without reliance upon any Agent or any Lender, and based on such documents and information as it has deemed appropriate, made its own appraisal of an investigation into the business, operations, property, financial and other condition and creditworthiness of the Loan Parties and their affiliates and made its own decision to make its Loans hereunder and enter into this Agreement. Each Lender also represents that it will, independently and without reliance upon any Agent or any Lender, and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit analysis, appraisals and decisions in taking or not taking action under this Agreement and the other Loan Documents, and to make such investigation as it deems necessary to inform itself as to the business, operations, property, financial and other condition and creditworthiness of the Loan Parties and their affiliates. Except for notices, reports and other documents expressly required to be furnished to the Lenders by the Administrative Agent hereunder, the Administrative Agent shall not have any duty or responsibility to provide any Lender with any credit or other information concerning the business, operations, property, condition (financial or otherwise), prospects or creditworthiness of any Loan Party or any affiliate of a Loan Party that may come into the possession of the Administrative Agent or any of its officers, directors, employees, agents, advisors, attorneys-in-fact or affiliates.

9.7 Indemnification. The Lenders agree to indemnify each Agent, the Swing Line Lender and their respective officers, directors, employees, affiliates, agents, advisors and controlling persons (each, an “Agent Indemnitee”) (to the extent not reimbursed by the Borrower and without limiting the obligation of the Borrower to do so), ratably according to their respective Revolving Percentages in effect on the date on which indemnification is sought under this Section

(or, if indemnification is sought after the date upon which the Revolving Commitments shall have terminated and the Loans shall have been paid in full, ratably in accordance with such Revolving Percentages immediately prior to such date), from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements of any kind whatsoever that may at any time (whether before or after the payment of the Loans) be imposed on, incurred by or asserted against such Agent Indemnitee in any way relating to or arising out of, the Revolving Commitments, this Agreement, any of the other Loan Documents or any documents contemplated by or referred to herein or therein or the transactions contemplated hereby or thereby or any action taken or omitted by such Agent Indemnitee under or in connection with any of the foregoing; provided that no Lender shall be liable for the payment of any portion of such liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements that are found by a final and nonappealable decision of a court of competent jurisdiction to have resulted from such Agent Indemnitee's gross negligence or willful misconduct. The agreements in this Section shall survive the payment of the Loans and all other amounts payable hereunder.

9.8 Agent in Its Individual Capacity. Each Agent and its affiliates may make loans to, accept deposits from and generally engage in any kind of business with any Loan Party as though such Agent were not an Agent. With respect to its Loans made or renewed by it, each Agent shall have the same rights and powers under this Agreement and the other Loan Documents as any Lender and may exercise the same as though it were not an Agent, and the terms "Lender" and "Lenders" shall include each Agent in its individual capacity.

9.9 Successor Administrative Agent. The Administrative Agent may resign as Administrative Agent upon 10 days' notice to the Lenders and the Borrower. If the Administrative Agent shall resign as Administrative Agent under this Agreement and the other Loan Documents, then the Required Lenders shall appoint from among the Lenders a successor agent for the Lenders, which successor agent shall (unless an Event of Default under Section 8(a) or Section 8(f) with respect to the Borrower shall have occurred and be continuing) be subject to approval by the Borrower (which approval shall not be unreasonably withheld or delayed), whereupon such successor agent shall succeed to the rights, powers and duties of the Administrative Agent, and the term "Administrative Agent" shall mean such successor agent effective upon such appointment and approval, and the former Administrative Agent's rights, powers and duties as Administrative Agent shall be terminated, without any other or further act or deed on the part of such former Administrative Agent or any of the parties to this Agreement or any holders of the Loans. If no successor agent has accepted appointment as Administrative Agent by the date that is 10 days following a retiring Administrative Agent's notice of resignation, the retiring Administrative Agent's resignation shall nevertheless thereupon become effective, and the Lenders shall assume and perform all of the duties of the Administrative Agent hereunder until such time, if any, as the Required Lenders appoint a successor agent as provided for above. After any retiring Administrative Agent's resignation as Administrative Agent, the provisions of this Section 9 and of Section 10.5 shall continue to inure to its benefit. Any such successor Administrative Agent shall promptly execute and deliver to the Collateral Agent an Administrative Agent Joinder (as such term is defined in the Intercreditor Agreement).

9.10 Lead Arranger. The Lead Arranger shall not have any duties or responsibilities hereunder in its capacity as such.

9.11 Certain ERISA Matters.

(a) Each Lender (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, the Administrative Agent, the Lead Arranger and their respective Affiliates and not, for the avoidance of doubt, to or for the benefit of the Borrower or any other Loan Party, that at least one of the following is and will be true:

(i) such Lender is not using “plan assets” (within the meaning of Section 3(42) of ERISA or otherwise) of one or more Benefit Plans with respect to such Lender’s entrance into, participation in, administration of and performance of the Loans, the Revolving Commitments or this Agreement,

(ii) the transaction exemption set forth in one or more PTEs, such as PTE 84-14 (a class exemption for certain transactions determined by independent qualified professional asset managers), PTE 95-60 (a class exemption for certain transactions involving insurance company general accounts), PTE 90-1 (a class exemption for certain transactions involving insurance company pooled separate accounts), PTE 91-38 (a class exemption for certain transactions involving bank collective investment funds) or PTE 96-23 (a class exemption for certain transactions determined by in-house asset managers), is applicable with respect to such Lender’s entrance into, participation in, administration of and performance of the Loans, the Revolving Commitments and this Agreement,

(iii) (A) such Lender is an investment fund managed by a “Qualified Professional Asset Manager” (within the meaning of Part VI of PTE 84-14), (B) such Qualified Professional Asset Manager made the investment decision on behalf of such Lender to enter into, participate in, administer and perform the Loans, the Revolving Commitments and this Agreement, (C) the entrance into, participation in, administration of and performance of the Loans, the Revolving Commitments and this Agreement satisfies the requirements of sub-sections (b) through (g) of Part I of PTE 84- 14 and (D) to the best knowledge of such Lender, the requirements of subsection (a) of Part I of PTE 84-14 are satisfied with respect to such Lender’s entrance into, participation in, administration of and performance of the Loans, the Revolving Commitments and this Agreement, or

(iv) such other representation, warranty and covenant as may be agreed in writing between the Administrative Agent, in its sole discretion, and such Lender.

(b) In addition, unless either (1) sub-clause (i) in the immediately preceding clause (a) is true with respect to a Lender or (2) a Lender has provided another representation, warranty and covenant in accordance with sub-clause (iv) in the immediately preceding clause (a), such Lender further (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, the Administrative Agent, the Lead Arranger and their respective Affiliates and not, for the avoidance of doubt, to or for the benefit of the Borrower or any other Loan Party, that none of the Administrative Agent, the Lead Arranger nor any of their respective Affiliates is a fiduciary with respect to the assets of such Lender involved in such Lender’s entrance into, participation in, administration of and

performance of the Loans, the Revolving Commitments and this Agreement (including in connection with the reservation or exercise of any rights by the Administrative Agent under this Agreement, any Loan Document or any documents related hereto or thereto).

SECTION 10.MISCELLANEOUS

10.1 Amendments and Waivers. Except as set forth in Section 2.18, neither this Agreement, any other Loan Document, nor any terms hereof or thereof may be amended, waived, supplemented or modified except in accordance with the provisions of this Section 10.1. The Required Lenders and each Loan Party to the relevant Loan Document may, or, with the written consent of the Required Lenders, the Administrative Agent and each Loan Party to the relevant Loan Document may, from time to time, (a) enter into written amendments, supplements or modifications hereto and to the other Loan Documents for the purpose of adding any provisions to this Agreement or the other Loan Documents or changing in any manner the rights of the Lenders or of the Loan Parties hereunder or thereunder or (b) waive, on such terms and conditions as the Required Lenders or the Administrative Agent, as the case may be, may specify in such instrument, any of the requirements of this Agreement or the other Loan Documents or any Default or Event of Default and its consequences; provided, however, that no such waiver and no such amendment, supplement or modification shall, (i) increase any Lender's Revolving Commitment, forgive the principal amount or extend the final scheduled date of maturity of any Loan, reduce the stated rate of any interest or fee payable hereunder (except (x) in connection with the waiver of applicability of any post-default increase in interest rates (which waiver shall be effective with the consent of the Required Lenders) and (y) that any amendment or modification of defined terms used in the financial covenants in this Agreement shall not constitute a reduction in the rate of interest or fees for purposes of this clause (i)) or extend the scheduled date of any payment thereof, or increase the amount or extend the expiration date of any Lender's Revolving Commitment, in each case without the written consent of each Lender directly affected thereby; (ii) eliminate or reduce the voting rights of any Lender under this Section 10.1 without the written consent of such Lender; (iii) reduce any percentage specified in, or otherwise change, the definition of Required Lenders, consent to the assignment or transfer by the Borrower of any of its rights and obligations under this Agreement and the other Loan Documents, release all or substantially all of the Collateral or release the Borrower from its obligations under the Security Agreement, in each case without the written consent of all directly and adversely affected Lenders; (iv) amend, modify or waive any provision of (A) Sections 2.12(a)-(c) (or any other section relating to the pro rata treatment of Lenders) without the written consent of each directly and adversely affected Lender or (B) the other portions of Section 2.12 without the written consent of the Required Lenders; (v) amend, modify or waive any provision of Section 9 or any other provision of any Loan Document that affects the Administrative Agent without the written consent of the Administrative Agent or (vi) amend, modify or waive any provision of any Loan Document that directly and adversely affects the Swing Line Lender without the written consent of the Swing Line Lender. Any such waiver and any such amendment, supplement or modification shall apply equally to each of the Lenders and shall be binding upon the Loan Parties, the Lenders, the Administrative Agent and all future holders of the Loans. In the case of any waiver, the Loan Parties, the Lenders and the Administrative Agent shall be restored to their former position and rights hereunder and under the other Loan Documents, and any Default or Event of Default waived shall be deemed to be cured

and not continuing; but no such waiver shall extend to any subsequent or other Default or Event of Default, or impair any right consequent thereon.

Furthermore, notwithstanding the foregoing: (a) the Administrative Agent, with the consent of the Borrower, may amend, modify or supplement any Loan Document without the consent of any Lender or the Required Lenders in order to correct, amend or cure any ambiguity, inconsistency or defect or correct any typographical error or other manifest error in any Loan Document, (b) no consent with respect to any amendment, modification, waiver or supplement of this Agreement or any other Loan Document shall be required of any Defaulting Lender, except as provided in Section 2.19 and (c) in the case of any amendment, modification, waiver or supplement referred to in the proviso of the first paragraph of this Section 10.1, no consent with respect to any amendment, modification, waiver or supplement of this Agreement or any other Loan Document shall be required of any Lender that receives payment in full of the principal of and interest accrued on each Loan made by such Lender, and all other amounts owing to or accrued for the account of such Lender under this Agreement and the other Loan Documents, at the time such amendment, modification, waiver or supplement becomes effective and whose Revolving Commitments terminate by the terms and upon the effectiveness of such amendment, modification, waiver or supplement.

10.2 Notices. All notices, requests and demands to or upon the respective parties hereto to be effective shall be in writing (including by electronic transmission), and, unless otherwise expressly provided herein, shall be deemed to have been duly given or made when delivered, or three Business Days after being deposited in the mail, postage prepaid, or, in the case of electronic transmission notice, upon the receiver's acknowledgment such notice has been received, addressed as follows in the case of the Borrower, the Administrative Agent and the Swing Line Lender, and as set forth in an administrative questionnaire delivered to the Administrative Agent in the case of the Lenders, or to such other address as may be hereafter notified by the respective parties hereto:

Borrower: PNG Companies LLC
762 W. Lancaster Avenue
Bryn Mawr, PA 19010-3489
Attention: Stan Szczygiel, Treasurer
Email: sfszczygiel@essential.co

With a copy to:

Essential Utilities, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010-3489
Attention: Christopher P. Luning, Executive Vice President
and General Counsel
Email: cpluning@essential.co

With a copy to (which shall not constitute notice):

Simpson Thacher & Bartlett LLP
600 Travis Street, Suite 5400
Houston, TX 77002
Attention: Matthew Einbinder
Telephone: (713) 821-5620
Email: meinbinder@stblaw.com

Administrative Agent
and Swing Line Lender:

PNC Bank, National Association
Mail Stop: F4-F074-03-1
1000 Westlakes Drive
Berwyn, PA 19312
Attention: Mark McCue
Telecopy: (610) 725-5799
Telephone: (610) 725-1316
Email: mark.mccue@pnc.com
With a copy to:

Agency Services
PNC Bank, National Association
Mail Stop: P7-PFSC-05-W
500 First Avenue
Pittsburgh, PA 15219
Attention: Agency Services
Telecopy: (412) 768-0423
Telephone: (412) 715-2006

With a copy to (which shall not constitute notice):

Jones Day
500 Grant Street, Suite 4500
Pittsburgh, PA 15219-2514
Attention: Brian D. Trudgen
Telecopy: (412) 394-7959
Telephone: (412) 394-9540
Email: btrudgen@jonesday.com

provided that any notice, request or demand to or upon the Administrative Agent, Swing Line Lender or the other Lenders shall not be effective until received.

Notices and other communications to the Lenders hereunder may be delivered or furnished by electronic communications pursuant to procedures approved by the Administrative Agent; provided that the foregoing shall not apply to notices pursuant to Section 2 unless otherwise agreed by the Administrative Agent and the applicable Lender. The Administrative Agent or the Borrower may, in its discretion, agree to accept notices and other communications to it hereunder

by electronic communications pursuant to procedures approved by it; provided that approval of such procedures may be limited to particular notices or communications.

10.3 No Waiver; Cumulative Remedies. No failure to exercise and no delay in exercising, on the part of the Administrative Agent or any Lender, any right, remedy, power or privilege hereunder or under the other Loan Documents shall operate as a waiver thereof; nor shall any single or partial exercise of any right, remedy, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege. The rights, remedies, powers and privileges herein provided are cumulative and not exclusive of any rights, remedies, powers and privileges provided by law.

10.4 Survival of Representations and Warranties. All representations and warranties made hereunder, in the other Loan Documents and in any document, certificate or statement delivered pursuant hereto or in connection herewith shall survive the execution and delivery of this Agreement and the making of the Loans and other extensions of credit hereunder.

10.5 Payment of Expenses.

(a) The Borrower agrees (i) to pay or reimburse the Administrative Agent, the Collateral Agent, the Lead Arranger and their Affiliates for all their reasonable and documented out-of-pocket costs and expenses incurred in connection with, the syndication of the facilities evidenced pursuant to the Loan Documents, the negotiation, preparation, delivery, execution, administration and closing of, and any amendment, waiver, supplement or modification to, this Agreement and the other Loan Documents and any other documents prepared in connection herewith or therewith, and the consummation and administration of the transactions contemplated hereby and thereby, including the reasonable and documented fees, disbursements and other charges of counsel for any of the foregoing (but limited to a single primary counsel and, if necessary, a single local counsel in each relevant material jurisdiction (which may be a single local counsel acting in multiple jurisdictions), in each case, for the Administrative Agent, the Lead Arranger and their respective Affiliates, taken as a whole), and filing and recording fees and expenses, with statements with respect to the foregoing to be submitted to the Borrower prior to the Closing Date (in the case of amounts to be paid on the Closing Date) and from time to time thereafter on a quarterly basis or such other periodic basis as the Administrative Agent shall deem appropriate, (ii) to pay or reimburse each of the Lead Arranger, the Lenders and Agents for all its costs and expenses incurred in connection with the enforcement (including pursuant to the administration of any bankruptcy proceeding relating to the Borrower) or preservation of any rights under this Agreement, the other Loan Documents and any such other documents, including the reasonable fees, disbursements and other charges of counsel, (iii) to pay, indemnify, and hold the Lead Arranger, each Lender and Agent and their respective affiliates and the officers, directors, employees, agents and controlling persons of each of the foregoing harmless from, any and all recording and filing fees that may be payable or determined to be payable in connection with the execution and delivery of, or consummation or administration of any of the transactions contemplated by, or any amendment, supplement or modification of, or any waiver or consent under or in respect of, this Agreement, the other Loan Documents and any such other documents, and (iv) to pay, indemnify, and hold the Lead Arranger, each Lender and Agent and their respective affiliates and the officers, directors, employees, agents, and controlling persons (each, an "Indemnitee") harmless from and against any and all other liabilities, costs or expenses of any kind

or nature whatsoever (regardless of whether such Indemnitee is a party thereto and regardless of the party initiating such matter) that relates to the execution, delivery, enforcement, performance and administration of this Agreement and any of the other Loan Documents, including those relating to the use of proceeds of the Loans or the violation of, noncompliance with or liability under, any Environmental Law applicable to the operations of any Group Member or any of the Properties and the reasonable fees disbursements and other charges of legal counsel in connection with claims, actions or proceedings by any Indemnitee against any Loan Party under any Loan Document (all the foregoing in this clause (iv), collectively, the “Indemnified Liabilities”); provided that the foregoing indemnity will not, as to any Indemnitee, apply to Indemnified Liabilities to the extent (A) they are found by a final and nonappealable decision of a court of competent jurisdiction to have resulted primarily from (1) the gross negligence or willful misconduct of such Indemnitee or (2) a material breach by such Indemnitee or its Affiliates of their obligations under this Agreement or (B) arising out of or in connection with any proceeding that does not involve an act or omission of the Borrower or any of its Affiliates and that is brought by an Indemnitee against any other Indemnitee (other than against any Agent, the Lead Arranger or another named agent, in each case, acting in its capacity or fulfilling its role as such); provided, further that (x) such legal expenses shall be limited to the fees, disbursements and other charges of a single primary counsel to the Indemnitees, taken as a whole, and, if necessary, a single local counsel to the Indemnitees, taken as a whole, in each relevant material jurisdiction (which may be a single local counsel acting in multiple jurisdictions) (and, in the case of an actual or perceived conflict of interest where the Indemnitee affected by such conflict informs the Borrower of such conflict and thereafter retains its own single counsel (or, if necessary, its own single local counsel in each relevant material jurisdiction (which may be a single local counsel acting in multiple jurisdictions)), of such conflict counsel for such affected Indemnitee and all similarly situated Indemnitees, taken as a whole) and (y) each Indemnitee shall promptly repay to the Borrower all amounts previously paid by the Borrower pursuant to the foregoing provisions to the extent that such Indemnitee is found by a final and nonappealable decision of a court of competent jurisdiction not to be entitled to indemnification hereunder as contemplated by the immediately preceding proviso. For the avoidance of doubt, this Section 10.5 shall not apply to Taxes, except any Taxes that represent Indemnified Liabilities arising from any non-Tax claims.

(b) To the fullest extent permitted by applicable law, none of the parties hereto shall assert, or permit any of its controlled Affiliates to assert, and each party hereto hereby waives, any claim on any theory of liability for special, indirect, consequential or punitive damages (as opposed to direct or actual damages) arising out of, in connection with, or as a result of this Agreement, any other Loan Document or any agreement or instrument contemplated hereby or thereby; provided that nothing in this paragraph (b) shall limit the Borrower’s indemnity and reimbursement obligations set forth in this Section 10.5, including such indemnity and reimbursement obligations with respect to any special, indirect, consequential or punitive damages arising out of, in connection with or as a result of any claim, litigation, investigation or proceeding brought against any Indemnitee by any third party.

(c) All amounts due under this Section 10.5 shall be payable promptly after written demand therefor. The agreements in this Section 10.5 shall survive repayment of the Loans and all other amounts payable hereunder.

10.6 Successors and Assigns; Participations and Assignments.

(a) The provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns permitted hereby, except that (i) the Borrower may not assign or otherwise transfer any of its rights or obligations hereunder without the prior written consent of each Lender (and any attempted assignment or transfer by the Borrower without such consent shall be null and void) and (ii) no Lender may assign or otherwise transfer its rights or obligations hereunder except in accordance with this Section.

(b) (i) Subject to the conditions set forth in paragraph (b)(ii) below, any Lender may assign to one or more assignees (provided that any assignee shall not be the Borrower or its Affiliates, a natural person or a Defaulting Lender) (each, an “Assignee”) all or a portion of its rights and obligations under this Agreement (including all or a portion of its Revolving Commitment and the Loans at the time owing to it) with the prior written consent of:

(A) the Borrower (such consent not to be unreasonably withheld or delayed), provided that no consent of the Borrower shall be required for an assignment to a Lender, an affiliate of a Lender, an Approved Fund (as defined below) or, if an Event of Default under Section 8(a) or Section 8(f) has occurred and is continuing, any other Person;

(B) the Administrative Agent (such consent not to be unreasonably withheld or delayed); provided that no consent of the Administrative Agent shall be required for an assignment to a Lender, an affiliate of a Lender or an Approved Fund; and

(C) the Swing Line Lender (such consent not to be unreasonably withheld or delayed); provided that no consent of the Swing Line Lender shall be required for an assignment to a Lender, an affiliate of a Lender or an Approved Fund.

(ii) Assignments shall be subject to the following additional conditions:

(A) except in the case of an assignment to a Lender, an affiliate of a Lender or an Approved Fund or an assignment of the entire remaining amount of the assigning Lender’s Revolving Commitment or Loans, the amount of the Revolving Commitment or Loans of the assigning Lender subject to each such assignment (determined as of the date the Assignment and Assumption with respect to such assignment is delivered to the Administrative Agent) shall not be less than \$5,000,000 unless each of the Borrower and the Administrative Agent otherwise consent, provided that (1) no such consent of the Borrower shall be required if an Event of Default under Section 8(a) or Section 8(f) has occurred and is continuing and (2) such amounts shall be aggregated in respect of each Lender and its affiliates or Approved Funds, if any;

(B) (1) the parties to each assignment shall execute and deliver to the Administrative Agent an Assignment and Assumption, together with a processing

and recordation fee of \$3,500 and (2) the assigning Lender shall have paid in full any amounts owing by it to the Administrative Agent; and

(C) the Assignee, if it shall not be a Lender, shall deliver to the Administrative Agent an administrative questionnaire in which the Assignee designates one or more credit contacts to whom all syndicate-level information (which may contain MNPI) will be made available and who may receive such information in accordance with the Assignee's compliance procedures and applicable laws, including federal and state securities laws.

For the purposes of this Section 10.6, "Approved Fund" means any Person (other than a natural person) that is engaged in making, purchasing, holding or investing in bank loans and similar extensions of credit in the ordinary course of its business and that is administered or managed by (a) a Lender, (b) an affiliate of a Lender or (c) an entity or an affiliate of an entity that administers or manages a Lender.

(iii) Subject to acceptance and recording thereof pursuant to paragraph (b)(iv) below, from and after the effective date specified in each Assignment and Assumption the Assignee thereunder shall be a party hereto and, to the extent of the interest assigned by such Assignment and Assumption, have the rights and obligations of a Lender under this Agreement, and the assigning Lender thereunder shall, to the extent of the interest assigned by such Assignment and Assumption, be released from its obligations under this Agreement (and, in the case of an Assignment and Assumption covering all of the assigning Lender's rights and obligations under this Agreement, such Lender shall cease to be a party hereto but shall continue to be entitled to the benefits of Sections 2.13, 2.14, 2.15 and 10.5). Any assignment or transfer by a Lender of rights or obligations under this Agreement that does not comply with this Section 10.6 shall be treated for purposes of this Agreement as a sale by such Lender of a participation in such rights and obligations in accordance with paragraph (c) of this Section.

(iv) The Administrative Agent, acting for this purpose as an agent of the Borrower, shall maintain at one of its offices a copy of each Assignment and Assumption delivered to it and a register (reflecting each Assignment and Assumption) for the recordation of the names and addresses of the Lenders, and the Revolving Commitment of, and principal amount (and stated interest) of the Loans owing to, each Lender pursuant to the terms hereof from time to time (the "Register"). The entries in the Register shall be conclusive absent manifest error, and the Borrower, the Administrative Agent and the Lenders may treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement, notwithstanding notice to the contrary. The Register shall be available for inspection at the Funding Office (or such other office designated by the Administrative Agent) by the Borrower or any Lender at any reasonable time and from time to time upon reasonable prior notice.

(v) Upon its receipt of a duly completed Assignment and Assumption executed by an assigning Lender and an Assignee, the Assignee's completed administrative questionnaire (unless the Assignee shall already be a Lender hereunder), the processing and recordation fee referred to in paragraph (b) of this Section and any written consent to

such assignment required by paragraph (b) of this Section, the Administrative Agent shall accept such Assignment and Assumption and record the information contained therein in the Register. No assignment shall be effective for purposes of this Agreement unless it has been recorded in the Register as provided in this paragraph.

(c) (i) Any Lender may, without the consent of the Borrower, the Administrative Agent or the Swing Line Lender, sell participations to one or more banks or other entities (a “Participant”) in all or a portion of such Lender’s rights and obligations under this Agreement (including all or a portion of its Revolving Commitment and the Loans owing to it); provided that (A) such Lender’s obligations under this Agreement shall remain unchanged, (B) such Lender shall remain solely responsible to the other parties hereto for the performance of such obligations and (C) the Borrower, the Administrative Agent and the other Lenders shall continue to deal solely and directly with such Lender in connection with such Lender’s rights and obligations under this Agreement. Any agreement pursuant to which a Lender sells such a participation shall provide that such Lender shall retain the sole right to enforce this Agreement and to approve any amendment, modification or waiver of any provision of this Agreement; provided that such agreement may provide that such Lender will not, without the consent of the Participant, agree to any amendment, modification or waiver that (I) requires the consent of each Lender directly affected thereby pursuant to clauses (i), (ii) and (iii) of the proviso to the second sentence of Section 10.1 and (II) directly affects such Participant. Subject to paragraph (c)(ii) of this Section, the Borrower agrees that each Participant shall be entitled to the benefits of Sections 2.13, 2.14, 2.15 (subject to the requirements and limitations therein, including the requirements under Sections 2.14(d), (e) and (i) (it being understood that the documentation required under Sections 2.14(d), (e) and (i) shall be delivered to the participating Lender)) to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to paragraph (b) of this Section. To the extent permitted by law, each Participant also shall be entitled to the benefits of Section 10.7(b) as though it were a Lender, provided such Participant shall be subject to Section 10.7(a) as though it were a Lender.

(ii) A Participant shall not be entitled to receive any greater payment under Section 2.13 or 2.14 than the applicable Lender would have been entitled to receive with respect to the participation sold to such Participant, except to the extent such entitlement to receive a greater payment results from an adoption of or any change in any Requirement of Law or in the interpretation or application thereof or compliance by any Lender with any request or directive (whether or not having the force of law) from any central bank or other Governmental Authority made subsequent to the date hereof that occurs after the Participant acquired the applicable participation. Any Participant that is a Non-U.S. Lender shall not be entitled to the benefits of Section 2.14 unless such Participant complies with Section 2.14(d), (e) and (i). Each Lender that sells a participation shall, acting solely for this purpose as an agent of the Borrower, maintain a register on which it enters the name and address of each Participant and the principal amounts (and stated interest) of each Participant’s interest in the obligations under this Agreement (the “Participant Register”); provided that no Lender shall have any obligation to disclose all or any portion of the Participant Register to any Person (including the identity of any Participant or any information relating to a Participant’s interest in the obligations under

this Agreement) except to the extent that such disclosure is necessary to establish that such interest is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and such Lender shall treat each person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary.

(d) Any Lender may at any time pledge or assign a security interest in all or any portion of its rights under this Agreement to secure obligations of such Lender, including any pledge or assignment to secure obligations to a Federal Reserve Bank, and this Section shall not apply to any such pledge or assignment of a security interest; provided that no such pledge or assignment of a security interest shall release a Lender from any of its obligations hereunder or substitute any such pledgee or Assignee for such Lender as a party hereto.

(e) The Borrower, upon receipt of written notice from the relevant Lender, agrees to issue Notes to any Lender requiring Notes to facilitate transactions of the type described in paragraph (d) above.

10.7 Adjustments; Set-off.

(a) Except to the extent that this Agreement, any other Loan Document or a court order expressly provides for payments to be allocated to a particular Lender or to the Lenders, if any Lender (a "Benefitted Lender") shall receive any payment of all or part of the Obligations owing to it (other than in connection with an assignment made pursuant to Section 10.6), or receive any collateral in respect thereof (whether voluntarily or involuntarily, by set-off, pursuant to events or proceedings of the nature referred to in Section 8(f), or otherwise), in a greater proportion than any such payment to or collateral received by any other Lender, if any, in respect of the Obligations owing to such other Lender, such Benefitted Lender shall purchase for cash from the other Lenders a participating interest in such portion of the Obligations owing to each such other Lender, or shall provide such other Lenders with the benefits of any such collateral, as shall be necessary to cause such Benefitted Lender to share the excess payment or benefits of such collateral ratably with each of the Lenders; provided, however, that if all or any portion of such excess payment or benefits is thereafter recovered from such Benefitted Lender, such purchase shall be rescinded, and the purchase price and benefits returned, to the extent of such recovery, but without interest.

(b) Subject to the Intercreditor Agreement, in addition to any rights and remedies of the Lenders provided by law, each Lender shall have the right, without notice to the Borrower, any such notice being expressly waived by the Borrower to the extent permitted by applicable law, upon any Obligations becoming due and payable by the Borrower (whether at the stated maturity, by acceleration or otherwise), to apply to the payment of such Obligations, by setoff or otherwise, any and all deposits (general or special, time or demand, provisional or final), in any currency, and any other credits, indebtedness or claims, in any currency, in each case whether direct or indirect, absolute or contingent, matured or unmatured, at any time held or owing by such Lender, any affiliate thereof or any of their respective branches or agencies to or for the credit or the account of the Borrower; provided that if any Defaulting Lender shall exercise any such right of setoff, (i) all amounts so set off shall be paid over immediately to the Administrative Agent for further application in accordance with the provisions of this Agreement and, pending

such payment, shall be segregated by such Defaulting Lender from its other funds and deemed held in trust for the benefit of the Administrative Agent and the Lenders and (ii) the Defaulting Lender shall provide promptly to the Administrative Agent a statement describing in reasonable detail the obligations owing to such Defaulting Lender as to which it exercised such right of set-off. Each Lender agrees promptly to notify the Borrower and the Administrative Agent after any such application made by such Lender, provided that the failure to give such notice shall not affect the validity of such application.

10.8 Counterparts. This Agreement may be executed by one or more of the parties to this Agreement on any number of separate counterparts, and all of said counterparts taken together shall be deemed to constitute one and the same instrument. Delivery of an executed signature page of this Agreement by email or facsimile transmission shall be effective as delivery of a manually executed counterpart hereof. A set of the copies of this Agreement signed by all the parties shall be lodged with the Borrower and the Administrative Agent.

10.9 Severability. Any provision of this Agreement that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.

10.10 Integration. This Agreement and the other Loan Documents represent the entire agreement of the Borrower, the Administrative Agent and the Lenders with respect to the subject matter hereof and thereof, and there are no promises, undertakings, representations or warranties by the Administrative Agent or any Lender relative to the subject matter hereof not expressly set forth or referred to herein or in the other Loan Documents.

10.11 GOVERNING LAW. THIS AGREEMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES UNDER THIS AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

10.12 Submission To Jurisdiction; Waivers. Each party hereto hereby irrevocably and unconditionally:

(a) submits for itself and its property in any legal action or proceeding relating to this Agreement and the other Loan Documents to which it is a party, or for recognition and enforcement of any judgment in respect thereof, to the exclusive jurisdiction of the courts of the State of New York, the courts of the United States for the Southern District of New York, and appellate courts from any thereof; provided, that nothing contained herein or in any other Loan Document will prevent any Lender or the Administrative Agent from bringing any action to enforce any award or judgment or exercise any right under the Security Documents or against any Collateral or any other property of any Loan Party in any other forum in which jurisdiction can be established;

(b) consents that any such action or proceeding may be brought in such courts and waives any objection that it may now or hereafter have to the venue of any such action or

proceeding in any such court or that such action or proceeding was brought in an inconvenient court and agrees not to plead or claim the same;

(c) agrees that service of process in any such action or proceeding may be effected by mailing a copy thereof by registered or certified mail (or any substantially similar form of mail), postage prepaid, to such party at its address set forth in Section 10.2 or at such other address of which the Administrative Agent shall have been notified pursuant thereto; and

(d) agrees that nothing herein shall affect the right to effect service of process in any other manner permitted by law or shall limit the right to sue in any other jurisdiction.

10.13 Acknowledgements. The Borrower hereby acknowledges that:

(a) it has been advised by legal, accounting, regulatory and tax advisors in the negotiation, execution and delivery of this Agreement and the other Loan Documents;

(b) neither the Administrative Agent nor any Lender has any fiduciary relationship with or duty to the Borrower and its Subsidiaries arising out of or in connection with this Agreement or any of the other Loan Documents, and the relationship between Administrative Agent and Lenders, on one hand, and the Borrower and its Subsidiaries, on the other hand, in connection herewith or therewith is solely that of debtor and creditor;

(c) no joint venture is created hereby or by the other Loan Documents or otherwise exists by virtue of the transactions contemplated hereby among the Lenders or among the Borrower and its Subsidiaries and the Lenders;

(d) the Credit Parties, on the one hand, and the Loan Parties, on the other hand, have an arm's length business relationship that does not directly or indirectly give rise to, nor do the Loan Parties rely on, any fiduciary duty to the Loan Parties or their affiliates on the part of the Credit Parties;

(e) the Loan Parties are capable of evaluating and understanding, and the Loan Parties understand and accept, the terms, risks and conditions of the transactions contemplated by this Agreement and the other Loan Documents;

(f) the Loan Parties have been advised that the Credit Parties are engaged in a broad range of transactions that may involve interests that differ from the Loan Parties' interests and that the Credit Parties have no obligation to disclose such interests and transactions to the Loan Parties;

(g) each Credit Party has been, is, and will be acting solely as a principal and, except as otherwise expressly agreed in writing by it and the relevant parties, has not been, is not, and will not be acting as an advisor, agent or fiduciary for the Loan Parties, any of their affiliates or any other Person; and

(h) none of the Credit Parties has any obligation to the Loan Parties or their affiliates with respect to the transactions contemplated by this Agreement or the other Loan

Documents except those obligations expressly set forth herein or therein or in any other express writing executed and delivered by such Credit Party and the Loan Parties or any such affiliate.

10.14 Releases of Liens.

(a) Notwithstanding anything to the contrary contained herein or in any other Loan Document, the Administrative Agent is hereby irrevocably authorized by each Lender (without requirement of notice to or consent of any Lender except as expressly required by Section 10.1) to take any action requested by the Borrower having the effect of releasing any Collateral (i) to the extent necessary to permit consummation of any transaction not prohibited by any Loan Document or that has been consented to in accordance with Section 10.1 or (ii) under the circumstances described in paragraphs (b) and (c) below.

(b) At such time as all Obligations have been paid in full (other than contingent indemnification obligations that are not yet due and payable) and the Revolving Commitments have been terminated, the Collateral shall automatically be released from the Liens created by the Security Documents to the extent securing the Obligations, and the Security Documents and all obligations (other than those expressly stated to survive such termination) of the Administrative Agent and each Loan Party under the Security Documents shall terminate as to the Obligations, all without delivery of any instrument or performance of any act by any Person. At the request and sole expense of the Borrower following any such termination, the Administrative Agent shall deliver to the Borrower any Collateral held by the Administrative Agent under the Security Documents, and execute and deliver to the Borrower such documents as the Borrower shall reasonably request to evidence such termination.

(c) If any of the Collateral shall be sold, transferred or otherwise disposed of by the Borrower in a transaction permitted by the Loan Documents, then the Administrative Agent, at the request and sole expense of the Borrower, shall execute and deliver to the Borrower all releases or other documents reasonably necessary for the release of the Liens created by the Security Documents on such Collateral to the extent securing the Obligations.

10.15 Confidentiality. Each of the Administrative Agent and each Lender agrees to keep confidential all Information (as defined below); provided that nothing herein shall prevent the Administrative Agent or any Lender from disclosing any such information (a) to the Administrative Agent, any Lender or any affiliate thereof, (b) subject to an agreement to comply with the provisions of this Section, to any actual or prospective Transferee or any direct or indirect counterparty to any Swap Agreement (or any professional advisor to such counterparty), (c) to its employees, directors, agents, attorneys, accountants and other professional advisors or those of any of its affiliates, (d) upon the request or demand of any Governmental Authority, (e) in response to any order of any court or other Governmental Authority or as may otherwise be required pursuant to any Requirement of Law, (f) if requested or required to do so in connection with any litigation or similar proceeding, (g) that has been publicly disclosed, (h) to the National Association of Insurance Commissioners or any similar organization or any nationally recognized rating agency that requires access to information about a Lender's investment portfolio in connection with ratings issued with respect to such Lender, or (i) in connection with the exercise of any remedy hereunder or under any other Loan Document, or (j) if agreed by the Borrower in its sole discretion, to any other Person. "Information" means all information received from the

Borrower relating to the Loan Parties or their businesses, other than any such information that is available to the Administrative Agent or any Lender on a non-confidential basis prior to disclosure by the Borrower and other than information pertaining to this Agreement routinely provided by arrangers to data service providers, including league table providers, that serve the lending industry; provided that in the case of information received from the Borrower after the date hereof, such information is clearly identified at the time of delivery as confidential. Any Person required to maintain the confidentiality of Information as provided in this Section 10.15 shall be considered to have complied with its obligation to do so if such Person has exercised the same degree of care to maintain the confidentiality of such Information as such Person would accord its own confidential information.

Each Lender acknowledges that information furnished to it pursuant to this Agreement or the other Loan Documents may include material non-public information concerning the Borrower and its Affiliates and their related parties or their respective securities, and confirms that it has developed compliance procedures regarding the use of material non-public information and that it will handle such material non-public information in accordance with those procedures and applicable law, including federal and state securities laws.

All information, including requests for waivers and amendments, furnished by the Borrower or the Administrative Agent pursuant to, or in the course of administering, this Agreement or the other Loan Documents will be syndicate-level information, which may contain material non-public information about the Borrower and its Affiliates and their related parties or their respective securities. Accordingly, each Lender represents to the Borrower and the Administrative Agent that it has identified in its administrative questionnaire a credit contact who may receive information that may contain material non-public information in accordance with its compliance procedures and applicable law, including federal and state securities laws.

10.16 WAIVERS OF JURY TRIAL. THE BORROWER, THE ADMINISTRATIVE AGENT AND THE LENDERS HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVE TRIAL BY JURY IN ANY LEGAL ACTION OR PROCEEDING RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT AND FOR ANY COUNTERCLAIM THEREIN.

10.17 USA Patriot Act. Each Lender hereby notifies the Borrower that pursuant to the requirements of the USA Patriot Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)) (the "Patriot Act"), it is required to obtain, verify and record information that identifies the Borrower, which information includes the name, address, tax identification number and other information regarding the Borrower that will allow each of the Lenders to identify the Borrower in accordance with the Patriot Act. This notice is given in accordance with the requirements of the Patriot Act and is effective as to each Lender. The Borrower shall provide (a) all documentation and information that each Lender reasonably requests in order to satisfy such Lender's obligations under the Patriot Act and (b) all documentation and information required by bank regulatory authorities under applicable "know your customer" rules and regulations.

10.18 Intercreditor Agreement. Each Lender hereby (a) acknowledges that a copy of the Intercreditor Agreement was delivered, or made available, to such Lender, (b) approves the Intercreditor Agreement, (c) agrees that it will be bound by, and will take no actions contrary to,

the provisions of the Intercreditor Agreement, (d) authorizes and instructs the Administrative Agent to enter into the Intercreditor Agreement as Administrative Agent on behalf of such Lender and (e) agrees that, upon becoming a party hereto, such Lender is deemed to have made the representations and warranties set forth in Section 2.2(a) of the Intercreditor Agreement for the benefit of the other parties thereto.

10.19 Acknowledgment Regarding any Supported QFCs. To the extent that the Loan Documents provide support, through a guarantee or otherwise, for any Swap Agreement or any other agreement or instrument that is a QFC (such support, “QFC Credit Support”, and each such QFC, a “Supported QFC”), the parties acknowledge and agree as follows with respect to the resolution power of the Federal Deposit Insurance Corporation under the Federal Deposit Insurance Act and Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act (together with the regulations promulgated thereunder, the “U.S. Special Resolution Regimes”) in respect of such Supported QFC and QFC Credit Support (with the provisions below applicable notwithstanding that the Loan Documents and any Supported QFC may in fact be stated to be governed by the laws of the State of New York and/or of the United States or any other state of the United States):

(a) In the event a Covered Entity that is party to a Supported QFC (each, a “Covered Party”) becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer of such Supported QFC and the benefit of such QFC Credit Support (and any interest and obligation in or under such Supported QFC and such QFC Credit Support, and any rights in property securing such Supported QFC or such QFC Credit Support) from such Covered Party will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if the Supported QFC and such QFC Credit Support (and any such interest, obligation and rights in property) were governed by the laws of the United States or a state of the United States. In the event a Covered Party or a BHC Act Affiliate of a Covered Party becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under the Loan Documents that might otherwise apply to such Supported QFC or any QFC Credit Support that may be exercised against such Covered Party are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if the Supported QFC and the Loan Documents were governed by the laws of the United States or a state of the United States. Without limitation of the foregoing, it is understood and agreed that rights and remedies of the parties with respect to a Defaulting Lender shall in no event affect the rights of any Covered Party with respect to a Supported QFC or any QFC Credit Support.

(b) As used in this Section 10.19, the following terms have the following meanings:

“BHC Act Affiliate” of a party means an “affiliate” (as such term is defined under, and interpreted in accordance with, 12 U.S.C. 1841(k)) of such party.

“Covered Entity” means any of the following: (i) a “covered entity” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b); (ii) a “covered bank” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or (iii)

a “covered FSI” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b).

“Default Right” has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable.

“QFC” has the meaning assigned to the term “qualified financial contract” in, and shall be interpreted in accordance with, 12 U.S.C. 5390(c)(8)(D).

Acknowledgment and Consent to Bail-In of Affected Financial Institutions. Notwithstanding anything to the contrary in any Loan Document or in any other agreement, arrangement or understanding among any such parties, each party hereto acknowledges that any liability of any Affected Financial Institution arising under any Loan Document, to the extent such liability is unsecured, may be subject to the Write-Down and Conversion Powers of the applicable Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by

(a) , the application of any Write-Down and Conversion Powers by the applicable Resolution Authority to any such liabilities arising hereunder which may be payable to it by any party hereto that is an Affected Financial Institution; and

(b) the effects of any Bail-In Action on any such liability, including, if applicable:

(i) a reduction in full or in part or cancellation of any such liability;

(ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such Affected Financial Institution, its parent undertaking, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability under this Agreement or any other Loan Document; or

(i) the variation of the terms of such liability in connection with the exercise of the Write-Down and Conversion Powers of the applicable Resolution Authority.

[Remainder of page intentionally left blank.]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed and delivered by their proper and duly authorized officers as of the day and year first above written.

PNG COMPANIES LLC, as Borrower

By: /s/ Stanley F. Szczygiel

Name: Stanley F. Szczygiel

Title: Senior Vice President and Treasurer

Signature Page to PNG Companies LLC Credit Agreement

NAI-1513061749v11

PNC BANK, NATIONAL ASSOCIATION, as
Administrative Agent, Swing Line Lender and as a
Lender

By: /s/ Domenic D’Ginto
Name: Domenic D’Ginto
Title: Managing Director

Signature Page to PNG Companies LLC Credit Agreement

TD BANK, N.A., as a Lender

By: /s/ Jennifer L. Suspenski
Name: Jennifer L. Suspenski
Title: Vice President

Signature Page to PNG Companies LLC Credit Agreement

NAI-1513061749v11

Revolving Commitments

<u>Name of Lender</u>	<u>Revolving Commitment</u>
PNC Bank, National Association	\$50,000,000.00
TD Bank, N.A.	\$50,000,000.00
Total:	\$100,000,000.00

NAI-1513061749v11

Consents, Authorizations, Filings and Notices

None.

NAI-1513061749v11

Subsidiaries

Company Name	Jurisdiction of Organization	Significant Subsidiary
1. Peoples Homeworks LLC	Delaware	No
2. PNG Gathering LLC	Delaware	No
3. Peoples Natural Gas Company LLC	Pennsylvania	Yes
4. Peoples Gas Company LLC	Pennsylvania	Yes
5. Peoples Gas WV LLC	West Virginia	No
6. Peoples Gas KY LLC	Kentucky	No
7. Delta Natural Gas Company, Inc.	Kentucky	No
8. Delta Resources, LLC	Kentucky	No
9. Delgasco, LLC	Kentucky	No
10. Enpro, LLC	Kentucky	No

NAI-1513061749v11

UCC Filing Jurisdictions

Filing	Debtor	Secured Party	Location
UCC-1	Borrower	Collateral Agent	Delaware Secretary of State

NAI-1513061749v11

Existing Liens

1. Ronald Meder v. Peoples Natural Gas Company LLC; Court of Common Pleas of Allegheny County, Pennsylvania Civil Division; Case No. AR-06-010230 (arbitration judgment against Peoples Natural Gas Company LLC in the amount of \$1,800)
2. Commonwealth of Pennsylvania v. PNG Companies LLC, Court of Common Pleas of Allegheny County, Pennsylvania, Notice Number: BU10053999300 (Foreign Franchise Tax against PNG Companies LLC in the amount of \$2,588.19).

FORM OF
COMPLIANCE CERTIFICATE

This Compliance Certificate is delivered pursuant to Section 6.2 of the Credit Agreement, dated as of November 25, 2020 (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), among PNG Companies LLC, the Lenders party thereto and PNC Bank, National Association, as administrative agent for the Lenders (in such capacity, the "Administrative Agent"). Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

I, the undersigned, hereby certify, in my capacity as [•] [FINANCIAL OFFICER] of the Borrower and not in my individual capacity, to the Administrative Agent as follows:

1. I am a duly elected, qualified and acting Financial Officer of the Borrower.
2. I have reviewed and am familiar with the contents of this Compliance Certificate.
3. I have reviewed the terms of the Credit Agreement and the Loan Documents and have made or caused to be made under my supervision, a review in reasonable detail of the transactions and condition of the Borrower during the accounting period covered by the financial statements attached hereto as Attachment 1 (the "Financial Statements"). As of the date of this certificate, I have obtained no knowledge of the existence of any condition or event which constitutes a Default or Event of Default[, except as set forth below: _____].
4. Attached hereto as Attachment 2 are the computations showing compliance with each of the financial covenants set forth in Section 7.1 of the Credit Agreement as of the last day of the accounting period covered by the Financial Statements.

[Remainder of page intentionally left blank.]

IN WITNESS WHEREOF, I have executed this Certificate this ____ day of _____,
20__.

PNG COMPANIES LLC

By:

Name:

Title:

NAI-1513061749v11

[Attach Financial Statements]

NAI-1513061749v11

The information described herein is as of _____, _____, and pertains to the period
from _____, _____ to _____, _____.

[Set forth each Financial Covenant Calculation as of the last day of the accounting period covered
by the Financial Statements]

NAI-1513061749v11

FORM OF
CLOSING CERTIFICATE

November 25, 2020

Pursuant to Section 5.1(e) of the Credit Agreement, dated as of November 25, 2020 (the "Credit Agreement"; terms defined therein being used herein as therein defined), among PNG Companies LLC (the "Borrower"), the Lenders party thereto, and PNC Bank, National Association, as administrative agent for the Lenders (in such capacity, the "Administrative Agent"), the undersigned, in its capacity as [INSERT TITLE OF OFFICER] of the Borrower and not in its individual capacity, hereby certifies on behalf of the Borrower as follows:

1. The representations and warranties of the Borrower set forth in each of the Loan Documents to which it is a party are true and correct in all material respects (it being understood that the materiality qualifier shall not be applicable with respect to any clause of any representation or warranty which itself contains a materiality qualification) on and as of the date hereof with the same effect as if made on the date hereof, except for representations and warranties expressly stated to relate to a specific earlier date, in which case such representations and warranties were true and correct in all material respects (or all respects, as applicable) as of such earlier date.
2. No Default or Event of Default has occurred and is continuing as of the date hereof.
3. Attached hereto as Annex 1 is a true and complete copy of a Written Consent duly adopted by the Board of Directors of the Borrower on November 25, 2020; such Written Consent has not in any way been amended, modified, revoked or rescinded, has been in full force and effect since its adoption to and including the date hereof and is now in full force and effect.
4. Attached hereto as Annex 2 is a true and complete copy of the Amended and Restated Limited Liability Company Agreement of the Borrower as in effect on the date hereof.
5. Attached hereto as Annex 3 is a true and complete copy of the Certificate of Formation of the Borrower as in effect on the date hereof.
6. Attached hereto as Annex 4 are now duly elected and qualified officers or authorized representatives of the Borrower holding the offices indicated next to their respective names below, and the signatures appearing opposite their respective names below are the true and genuine signatures of such officers, and each of such officers is duly authorized to execute and deliver on behalf of the Borrower each of the Loan Documents to which it is a party and any certificate or other document to be delivered by the Borrower pursuant to the Loan Documents to which it is a party.

IN WITNESS WHEREOF, the undersigned have hereunto set our names as of the date set forth above.

Name:
Title:

NAI-1513061749v11

FORM OF
ASSIGNMENT AND ASSUMPTION

Reference is made to the Credit Agreement, dated as of November 25, 2020 (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the “Credit Agreement”), among PNG Companies LLC, the Lenders party thereto, and PNC Bank, National Association, as administrative agent for the Lenders (in such capacity, the “Administrative Agent”). Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

The Assignor identified on Schedule 1 hereto (the “Assignor”) and the Assignee identified on Schedule 1 hereto (the “Assignee”) agree as follows:

1. The Assignor hereby irrevocably sells and assigns to the Assignee without recourse to the Assignor, and the Assignee hereby irrevocably purchases and assumes from the Assignor without recourse to the Assignor, as of the Effective Date (as defined below), the interest described in Schedule 1 hereto (the “Assigned Interest”) in and to the Assignor’s rights and obligations under the Credit Agreement.
2. The Assignor (a) makes no representation or warranty and assumes no responsibility with respect to any statements, warranties or representations made in or in connection with the Credit Agreement or with respect to the execution, legality, validity, enforceability, genuineness, sufficiency or value of the Credit Agreement, any other Loan Document or any other instrument or document furnished pursuant thereto, other than that the Assignor has not created any adverse claim upon the interest being assigned by it hereunder and that such interest is free and clear of any such adverse claim and (b) makes no representation or warranty and assumes no responsibility with respect to the financial condition of the Borrower, any of its Affiliates or any other obligor or the performance or observance by the Borrower, any of its Affiliates or any other obligor of any of their respective obligations under the Credit Agreement or any other Loan Document or any other instrument or document furnished pursuant hereto or thereto.
3. The Assignee (a) represents and warrants that it is legally authorized to enter into this Assignment and Assumption; (b) confirms that it has received a copy of the Credit Agreement, together with copies of the financial statements delivered pursuant to Section 4.1 thereof and such other documents and information as it has deemed appropriate to make its own credit analysis and decision to enter into this Assignment and Assumption; (c) agrees that it will, independently and without reliance upon the Assignor, the Administrative Agent or any Lender and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking action under the Credit Agreement, the other Loan Documents or any other instrument or document furnished pursuant hereto or thereto; (d) appoints and authorizes the Administrative Agent to take such action as agent on its behalf and to exercise such powers and discretion under the Credit Agreement, the other Loan Documents or any other instrument or document furnished pursuant hereto or thereto as are delegated to the Administrative Agent by the terms thereof, together with such powers as are incidental thereto; and (e) agrees that it will be

bound by the provisions of the Credit Agreement and will perform in accordance with its terms all the obligations which by the terms of the Credit Agreement are required to be performed by it as a Lender including, if it is organized under the laws of a jurisdiction outside the United States, its obligation pursuant to Section 2.14(d) of the Credit Agreement.

4. The effective date of this Assignment and Assumption shall be the Effective Date of Assignment described in Schedule 1 hereto (the "Effective Date"). Following the execution of this Assignment and Assumption, it will be delivered to the Administrative Agent for acceptance by it and recording by the Administrative Agent pursuant to the Credit Agreement, effective as of the Effective Date (which shall not, unless otherwise agreed to by the Administrative Agent, be earlier than five Business Days after the date of such acceptance and recording by the Administrative Agent).

5. Upon such acceptance and recording, from and after the Effective Date, the Administrative Agent shall make all payments in respect of the Assigned Interest (including payments of principal, interest, fees and other amounts) to the Assignee whether such amounts have accrued prior to the Effective Date or accrue subsequent to the Effective Date. The Assignor and the Assignee shall make all appropriate adjustments in payments by the Agent for periods prior to the Effective Date or with respect to the making of this assignment directly between themselves.

6. From and after the Effective Date, (a) the Assignee shall be a party to the Credit Agreement and, to the extent provided in this Assignment and Assumption, have the rights and obligations of a Lender thereunder and under the other Loan Documents and shall be bound by the provisions thereof and (b) the Assignor shall, to the extent provided in this Assignment and Assumption, relinquish its rights and be released from its obligations under the Credit Agreement.

7. This Assignment and Assumption shall be governed by and construed in accordance with the laws of the State of New York.

8. This Assignment and Assumption may be executed by one or more of the parties hereto on any number of separate counterparts, and all of said counterparts taken together shall be deemed to constitute one and the same instrument. Delivery of an executed signature page of this Assignment and Assumption by electronic or facsimile transmission shall be effective as delivery of a manually executed counterpart hereof.

IN WITNESS WHEREOF, the parties hereto have caused this Assignment and Assumption to be executed as of the date first above written by their respective duly authorized officers on Schedule 1 hereto.

Schedule 1
to Assignment and Assumption with respect to
the Credit Agreement, dated as of November 25, 2020,
among
PNG Companies LLC (the "Borrower"),
the Lenders party thereto, and
PNC Bank, National Association, as Administrative Agent

Name of Assignor:

Name of Assignee:

Effective Date of Assignment:

<u>Principal Amount Assigned</u>	<u>Commitment Percentage Assigned</u>
\$ _____	____.____%

[Name of Assignee]

[Name of Assignor]

By:

Title:

By:

Title:

Accepted for Recordation in the Register:

, as
Administrative Agent

Required Consents (if any):

PNG Companies LLC

By:

Title:

By:

Title:

, as
Administrative Agent

By: Title:

, as
Swing Line Lender

By: Title:

FORM OF LEGAL OPINION OF Simpson Thacher & Bartlett LLP

[On File With Administrative Agent]

NAI-1513061749v11

FORM OF LEGAL OPINION OF POST & SCHELL P.C.

[On File With Administrative Agent]

NAI-1513061749v11

FORM OF U.S. TAX CERTIFICATE

(For Non-U.S. Lenders That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Credit Agreement dated as of November 25, 2020 (as amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), among PNG Companies LLC (the "Borrower"), the Lenders party thereto, and PNC Bank, National Association, as administrative agent (in such capacity, the "Administrative Agent").

Pursuant to the provisions of Section 2.14 of the Credit Agreement, the undersigned hereby certifies that (i) it is the sole record and beneficial owner of the Loan(s) (as well as any Note(s) evidencing such Loan(s)) in respect of which it is providing this certificate, (ii) it is not a bank within the meaning of Section 881(c)(3)(A) of the Code, (iii) it is not a ten percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Code, (iv) it is not a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code and (v) the interest payments in question are not effectively connected with the undersigned's conduct of a U.S. trade or business.

The undersigned has furnished the Administrative Agent and the Borrower with a certificate of its non-United States person status on IRS Form W-8BEN-E (or W-8BEN if applicable). By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform the Borrower and the Administrative Agent and (2) the undersigned shall have at all times furnished the Borrower and the Administrative Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

[NAME OF LENDER]

By:

Title:

Name:

Date: _____, 20[__]

FORM OF U.S. TAX CERTIFICATE

(For Non-U.S. Lenders That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Credit Agreement dated as of November 25, 2020 (as amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), among PNG Companies LLC (the "Borrower"), the Lenders party thereto, and PNC Bank, National Association, as administrative agent (in such capacity, the "Administrative Agent").

Pursuant to the provisions of Section 2.14 of the Credit Agreement, the undersigned hereby certifies that (i) it is the sole record owner of the Loan(s) (as well as any Note(s) evidencing such Loan(s)) in respect of which it is providing this certificate, (ii) its direct or indirect partners/members are the sole beneficial owners of such Loan(s) (as well as any Note(s) evidencing such Loan(s)), (iii) with respect to the extension of credit pursuant to this Credit Agreement, neither the undersigned nor any of its direct or indirect partners/members is a bank extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Code, (iv) none of its direct or indirect partners/members is a ten percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Code, (v) none of its direct or indirect partners/members is a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code and (vi) the interest payments in question are not effectively connected with the undersigned's or its direct or indirect partners/members' conduct of a U.S. trade or business.

The undersigned has furnished the Administrative Agent and the Borrower with IRS Form W-8IMY accompanied by one of the following forms from each of its direct or indirect partners/members claiming the portfolio interest exemption: (i) an IRS Form W-8BEN-E (or W-8BEN if applicable) or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN-E (or W-8BEN if applicable) from each of such direct or indirect partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform the Borrower and the Administrative Agent and (2) the undersigned shall have at all times furnished the Borrower and the Administrative Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

[NAME OF LENDER]

By:

Title:

Name:

Date: _____, 20[___]

FORM OF U.S. TAX CERTIFICATE

(For Non-U.S. Participants That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Credit Agreement dated as of November 25, 2020 (as amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), among PNG Companies LLC (the "Borrower"), the Lenders party thereto, and PNC Bank, National Association, as administrative agent (in such capacity, the "Administrative Agent").

Pursuant to the provisions of Section 2.14 of the Credit Agreement, the undersigned hereby certifies that (i) it is the sole record and beneficial owner of the participation in respect of which it is providing this certificate, (ii) it is not a bank within the meaning of Section 881(c)(3)(A) of the Code, (iii) it is not a ten percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Code, (iv) it is not a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code and (v) the interest payments in question are not effectively connected with the undersigned's conduct of a U.S. trade or business.

The undersigned has furnished its participating Lender with a certificate of its non-United States person status on IRS Form W-8BEN-E (or W-8BEN if applicable). By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform such Lender in writing and (2) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

[NAME OF PARTICIPANT]

By:

Title:

Name:

Date: _____, 20[]

FORM OF U.S. TAX CERTIFICATE

(For Non-U.S. Participants That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Credit Agreement dated as of November 25, 2020 (as amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), among PNG Companies LLC (the "Borrower"), the Lenders party thereto, and PNC Bank, National Association, as administrative agent (in such capacity, the "Administrative Agent").

Pursuant to the provisions of Section 2.14 of the Credit Agreement, the undersigned hereby certifies that (i) it is the sole record owner of the participation in respect of which it is providing this certificate, (ii) its direct or indirect partners/members are the sole beneficial owners of such participation, (iii) with respect to such participation, neither the undersigned nor any of its direct or indirect partners/members is a bank extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Code, (iv) none of its direct or indirect partners/members is a ten percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Code, (v) none of its direct or indirect partners/members is a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code and (vi) the interest payments in question are not effectively connected with the undersigned's or its direct or indirect partners/members' conduct of a U.S. trade or business.

The undersigned has furnished its participating Lender with IRS Form W-8IMY accompanied by one of the following forms from each of its direct or indirect partners/members claiming the portfolio interest exemption: (i) an IRS Form W-8BEN-E (or W-8BEN if applicable) or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN-E (or W-8BEN if applicable) from each of such direct or indirect partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform such Lender and (2) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

[NAME OF PARTICIPANT]

By:

Title:

Name:

Date: _____, 20[]

FORM OF BORROWING REQUEST

PNC Bank, National Association,
as Administrative Agent
for the Lenders referred to below

Agency Services
PNC Bank, National Association
Mail Stop: P7-PFSC-05-W
500 First Avenue
Pittsburgh, PA 15219
Attention: Agency Services
Telecopy: (412) 768-0423
Telephone: (412) 715-2006

[Date]

Dear Ladies and Gentlemen:

Reference is made to the Credit Agreement dated as of November 25, 2020 (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), among PNG Companies LLC, the Lenders party thereto, and PNC Bank, National Association, as administrative agent for the Lenders (in such capacity, the "Administrative Agent"). Terms defined in the Credit Agreement are used herein with the same meanings. The Borrower hereby requests to borrow Revolving Loans under the Credit Agreement, and in that connection the Borrower specifies the following information with respect to such borrowing of Revolving Loans requested hereby:

1. Principal amount of Revolving Loan¹: _____
2. Date of Revolving Loan (which is a Business Day)²: _____
3. Type of Revolving Loan³: _____

¹ Not less than \$1,000,000 (or \$250,000 in the case of an ABR Loan) and in integral multiples of \$100,000 (or \$50,000 in the case of an ABR Loan).

² Notice shall be delivered prior to 11:00 A.M., New York City time, (a) three Business Days prior to the requested Borrowing Date, in the case of Eurodollar Loans, or (b) on the day of the requested Borrowing Date, in the case of ABR Loans; in each case, notice will be considered delivered on the following Business Day if delivered after 11:00 AM New York City time.

³ Eurodollar or ABR.

4. Interest Period⁴:_____
5. Location and number of Borrower's account at Administrative Agent to which proceeds of borrowing are to be disbursed:_____

The Borrower hereby represents and warrants as of the date of the making of such Revolving Loan, that the conditions set forth in Section 5.2 of the Credit Agreement have been satisfied or waived.

[Remainder of page intentionally left blank.]

⁴ Which must comply with the definition of "Interest Period" and end not later than the Revolving Commitment Termination Date.

IN WITNESS WHEREOF, the Borrower has executed and delivered this Borrowing Request as of the date first written above.

Very truly yours,

PNG COMPANIES LLC

By:

Name:

Title:

NAI-1513061749v11

FORM OF NOTE

\$ _____
 York

New York, New

[____], 20[__]

FOR VALUE RECEIVED, PNG COMPANIES LLC, a Delaware limited liability company (the “Borrower”), hereby promises to pay to _____ (the “Lender”) and its registered assigns, in lawful money of the United States of America in immediately available funds, at the Funding Office of PNC Bank, National Association, in its capacity as Administrative Agent (in such capacity, the “Administrative Agent”) under the Credit Agreement (as defined below), on the Revolving Commitment Termination Date the principal sum of _____ DOLLARS (\$ _____) or, if less, the then unpaid principal amount of all Revolving Loans made by the Lender pursuant to the Credit Agreement.

The Borrower promises also to pay interest on the unpaid principal amount of each Revolving Loan made by the Lender in like money to the Administrative Agent from the date hereof until paid at the rates and at the times provided in Section 2 of the Credit Agreement.

This Note is one of the Notes issued pursuant to that certain Credit Agreement, dated as of November 25, 2020, among the Borrower, the Lenders and the Administrative Agent, (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the “Credit Agreement”), and is entitled to the benefits and subject to the terms thereof and of the other Loan Documents. This Note is subject to voluntary and mandatory repayment prior to the Revolving Commitment Termination Date, in whole or in part, upon the terms and conditions specified in the Credit Agreement.

All Revolving Loans made by the Lender, the respective types and maturities thereof and all repayments of the principal thereof shall be recorded by the Lender and, if the Lender so elects in connection with any transfer or enforcement hereof, appropriate notations to evidence the foregoing information with respect to each such Revolving Loan then outstanding may be endorsed by the Lender on the schedule attached hereto, or on a continuation of such schedule attached to and made a part hereof; provided that the failure of the Lender to make any such recordation or endorsement shall not limit or otherwise affect the obligations of the Borrower hereunder or under the Credit Agreement.

In case an Event of Default shall occur and be continuing, the principal of and accrued interest on this Note then remaining unpaid may become, or be declared to be, due and payable in the manner and with the effect provided in the Credit Agreement.

The Borrower hereby waives presentment, demand, protest or notice of protest in connection with this Note to the extent permitted under applicable law. The non-exercise by the holder hereof of any of its rights hereunder in any particular instance shall not constitute a waiver thereof in that or any subsequent instance.

This Note is a registered obligation, subject to restrictions on transfer or assignment as provided in Section 10.6 of the Credit Agreement, and transferable only upon notation in the Register, and no assignment hereof shall be effective until recorded therein; provided, however, nothing shall prevent or prohibit the Lender from pledging this Note, including, without limitation, to a Federal Reserve Bank in support of borrowings made by such Lender from such Federal Reserve Bank.

Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

[Remainder of page intentionally left blank.]

THIS NOTE SHALL BE CONSTRUED IN ACCORDANCE WITH AND BE GOVERNED BY THE LAW OF THE STATE OF NEW YORK.

PNG COMPANIES LLC

By:

Name:

Title:

NAI-1513061749v11

REVOLVING LOANS AND PAYMENTS OF PRINCIPAL

Date	Amount of Revolving Loan	Type of Revolving Loan	Amount of Principal Repaid	Maturity Date	Notation Made By

NAI-1513061749v11

FORM OF CONVERSION/CONTINUATION NOTICE

PNC Bank, National Association,
as Administrative Agent
under the Credit Agreement
referred to below

Agency Services
PNC Bank, National Association
Mail Stop: P7-PFSC-05-W
500 First Avenue
Pittsburgh, PA 15219
Attention: Agency Services
Telecopy: (412) 768-0423
Telephone: (412) 715-2006

Date: []

The undersigned, PNG Companies LLC (the “Borrower”) refers to the Credit Agreement, dated as of November 25, 2020 (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the “Credit Agreement”), among the Borrower, the Lenders party thereto, and PNC Bank, National Association, as administrative agent for the Lenders (in such capacity, the “Administrative Agent”). Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

The undersigned hereby requests (select one):

- a conversion of a Eurodollar Loan to an ABR Loan,
- a conversion of an ABR Loan to a Eurodollar Loan, or
- a continuation of a Eurodollar Loan

¹ on _____ (a Business Day),¹

¹ Notice shall be delivered prior to 11:00 A.M., New York City time, (a) three Business Days prior to the requested conversion or continuation, in the case of Eurodollar Loans, or (b) on the day of the requested conversion, in the case of ABR Loans; in each case, notice will be considered delivered on the following Business Day if delivered after 11:00 AM New York City time.

2. [and in the amount of \$_____ to be converted into an ABR Loan.]
[in the amount of \$_____ to be converted into or continued as a Eurodollar Loan, and]²

3. [with an Interest Period of _____ months.]³

[Remainder of page intentionally left blank.]

² Not less than \$1,000,000 (or \$250,000 in the case of an ABR Loan) and in integral multiples of \$100,000 (or \$50,000 in the case of an ABR Loan).

³ Use for conversions to, and continuations of, Eurodollar Loans.

IN WITNESS WHEREOF, the Borrower has executed and delivered this Conversion/Continuation Notice as of the date first written above.

PNG COMPANIES LLC

By:

Name:

Title:

NAI-1513061749v11

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES

The following table lists the significant subsidiaries and other active subsidiaries of Essential Utilities, Inc. at December 31, 2021:

Aqua Pennsylvania, Inc. (Pennsylvania)
Aqua Resources, Inc. (Delaware)
Essential Utilities Services, Inc. (Pennsylvania)
Aqua Services, Inc. (Pennsylvania)
Aqua Infrastructure, LLC (Pennsylvania)
Aqua Ohio, Inc. (Ohio)
Aqua Illinois, Inc. (Illinois)
Aqua New Jersey, Inc. (New Jersey)
Aqua North Carolina, Inc. (North Carolina)
Aqua Texas, Inc. (Texas)
Aqua Indiana, Inc. (Indiana)
Aqua Virginia, Inc. (Virginia)
Aqua Water Holdings, Inc. (Pennsylvania)
LDC Funding, LLC (Delaware)
LDC Holdings, LLC (Delaware)

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (Nos. 333-240088, 333-255235, and 333-257234), on Form S-4 (No. 333-202393), and on Form S-8 (Nos. 033-52557, 033-53689, 333-26613, 333-70859, 333-81085, 333-61768, 333-107673, 333-113502, 333-116776, 333-126042, 333-148206, 333-156047, 333-159897, and 333-181389) of Essential Utilities, Inc. of our report dated March 1, 2022 relating to the financial statements and financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Philadelphia, Pennsylvania

March 1, 2022

CERTIFICATION OF CHIEF EXECUTIVE OFFICER, PURSUANT TO RULE 13A-14(A) AS ADOPTED
UNDER THE SECURITIES AND EXCHANGE ACT OF 1934

I, Christopher H. Franklin, certify that:

1. I have reviewed this annual report on Form 10-K of Essential Utilities, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Christopher H. Franklin

Christopher H. Franklin

Chairman, President and Chief Executive Officer

March 1, 2022

CERTIFICATION OF CHIEF FINANCIAL OFFICER, PURSUANT TO RULE 13A-14(A) AS ADOPTED
UNDER THE SECURITIES AND EXCHANGE ACT OF 1934

I, Daniel J. Schuller, certify that:

1. I have reviewed this annual report on Form 10-K of Essential Utilities, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

\s Daniel J. Schuller

Daniel J. Schuller

Executive Vice President and Chief Financial Officer

March 1, 2022

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350

In connection with the Annual Report on Form 10-K for the year ended December 31, 2021 of Essential Utilities, Inc. (the "Company") as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Christopher H. Franklin, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

- (1) The Report of the Company fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. Section 78m(a) or Section 78o(d)); and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Christopher H. Franklin

Christopher H. Franklin

Chairman, President and Chief Executive Officer
March 1, 2022

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350

In connection with the Annual Report on Form 10-K for the year ended December 31, 2021 of Essential Utilities, Inc. (the "Company") as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Daniel J. Schuller, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. Section 78m(a) or Section 78o(d)); and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Daniel J. Schuller

Daniel J. Schuller

Executive Vice President and Chief Financial Officer

March 1, 2022
