



GROW WITH US

Essential Utilities, Inc. 2020 Annual Report



**\$543.5
MILLION**

Invested in water
and wastewater



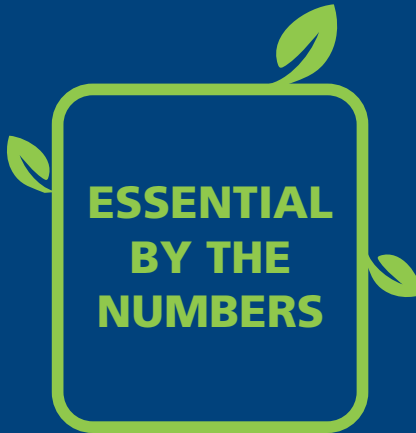
**\$345.6
MILLION**
Invested in
natural gas



10
States



ESTIMATED
5,000,000
People served



3,100
Employee base



327
Miles of pipeline
replacement



6
Closed water
and wastewater
acquisitions

A WORD FROM OUR CHAIRMAN & CEO

Dear Shareholder,

Transformation. Resilience. Perseverance. Achievement. We have all heard these words individually associated with people or companies. But how often has it been suggested that all four words, together capture the spirit of a company? In 2020, the people who operate and manage Essential Utilities have captured the essence of all four words through their determined work. None of us could have predicted the events of 2020, a year that tested our nation's health, values and stamina. Despite the challenges we faced, your company and its people rose to the occasion and worked hard to keep each other safe and to keep the company strong.

2020 was a year we transformed the business by combining two companies, each with more than 135 years of history and roots in our home state of Pennsylvania. Under our new Essential Utilities name, we have combined Aqua and Peoples along with the expertise of their employees and collective financial strength. The combined company represents one of the largest underground utilities in the United States with approximately 29,000 miles of water, sewer and natural gas mains. By spending nearly a billion dollars a year to replace pipe and utility infrastructure, we are increasing reliability and safety while improving the environment. In fact, we have committed to a 60% reduction from our 2019 carbon footprint by 2035. We have also committed to treating PFAS in our water to less than 13 parts per trillion (ppt) – much lower than the federal Health Advisory Level of 70 ppt. As we transformed our business, we also strove to provide transformational leadership in the industry.

Resilience is a requirement when providing essential products and services during a global pandemic. Although our emergency planning was strong, we did not have a playbook with instructions on how to react to a global pandemic of the magnitude of COVID-19. What we did have, was an employee base that was passionate about the mission we have proudly carried out for nearly a century and a half. Our people remained resolute in our commitment to provide safe and reliable service, and I'm pleased to report that there were no disruptions or impact to water, wastewater or natural gas services due to the pandemic. We executed our business continuity procedures, provided resources to employees to mitigate the spread of COVID-19 and allowed employees to work from home if their job responsibilities allowed. We also expanded support to the communities we serve, providing donations to community organizations and direct support for customers facing difficulty paying their bills.

Perseverance, despite the challenges we faced in 2020, allowed us to provide quality service to our customers while achieving one of the safest years on record for employees. Last year also proved to be a year in which our environmental compliance both in water and wastewater was near record levels. Our natural gas business achieved its best year in the speed at which we fix natural gas leaks. Our determination to provide an inclusive and diverse work environment has led us to set new objectives for supplier diversity and employee diversity. Again, we are working to provide transformational leadership in the industry by connecting these goals to compensation and providing transparency in the goals by detailing them in our annual proxy statement.

Our perseverance was also demonstrated by our continued growth of the company in 2020. We have six signed water and wastewater acquisition agreements pending closing, with a total purchase price of \$438 million. This includes the largest municipal transaction in our 135-year company history, the acquisition of the Delaware County Regional Water Quality Control Authority (DELCORA). Essential's business development team continues to evaluate potential growth opportunities that would total approximately 375,000 additional customers.

Achievement in a year with so many challenges can be considered in many ways. Most importantly, we continued uninterrupted service to our customers and put measures in place to keep our employees safe and protected. In addition, we nearly doubled the size of our customer base and achieved financial results that allowed us to provide adjusted earnings per share of \$1.58 – the top of our guidance range to investors. There is no doubt that, in many ways, we were fortunate in 2020. Good fortune is often the outcome of good planning, resilience, perseverance and unwavering dedication to mission. This is true for Essential as we remain focused on our mission to sustain life and improve economic prosperity by safely and reliably delivering Earth's most essential resources to our customers and communities.

On behalf of the Essential leadership team, board of directors and our employees, thank you for your steadfast support of our mission. The future looks bright at Essential; I look forward to a prosperous, safe and healthy 2021.

Sincerely,



Christopher H. Franklin
Chairman and CEO, Essential Utilities, Inc.



FINANCIAL HIGHLIGHTS

In thousands, except per-share amounts

	2020	2019	% Change
Operating revenues	\$1,462,698	\$889,692	64.4%
Net income	\$284,849	\$224,543	26.9%
Diluted net income per common share	\$1.12	\$1.04	7.7%
Exclude:			
Transaction-related rate credits issued to utility customers	\$23,004	–	
Transaction costs and other items related to the Peoples acquisition	\$25,573	\$66,066	
Adjustments to provide full-year 2020 run rate of Peoples operating results, including additional net interest expense	\$108,132	–	
Pre-acquisition interest expense for funds borrowed for acquisition of Peoples, net	–	\$5,961	
Overlapping net interest expense on refinanced debt	–	\$452	
Interest income earned on proceeds from April 2019 equity offerings	–	(\$23,377)	
Income tax effect of Non-GAAP adjustments	(\$38,450)	(\$10,149)	
Adjusted income (a) (Non-GAAP financial measure)	\$403,108	\$263,496	53.0%
Adjusted income per common share (a) (b) (Non-GAAP financial measure)	\$1.58	\$1.47	7.5%
Annualized dividend rate per common share (12/31)	\$1.0028	\$0.9372	7.0%
Total assets	\$13,705,277	\$9,361,985	46.4%
Number of utility customers served	1,798,803	1,026,704	75.2%

(a) The GAAP financial measures are net income and net income per share.

(b) Shares used in calculating adjusted income per common share exclude the effect of the shares issued in April 2019 for our common share (25,903) and tangible equity unit issuances (11,278) for our acquisition of Peoples, since the acquisition for which the equity offerings were issued was not yet complete as of Dec. 31, 2019. Please see the investor relations page of Essential.co for a reconciliation of GAAP to non-GAAP financial measures.

Diluted Adjusted Income per Common Share



Capital Investment

(in millions of dollars)

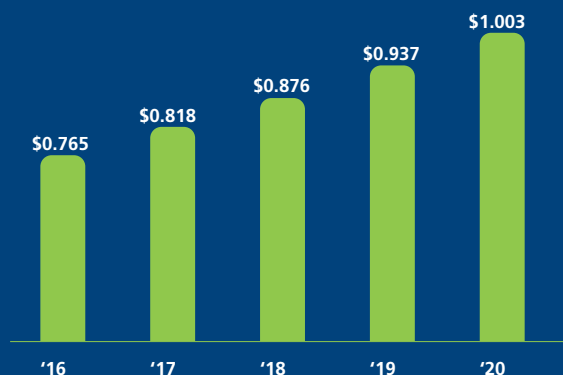


Utility Customer Connections



Dividends per Share

(annualized)



¹ 2018 Net income per share was \$1.08 (GAAP). 2018 adjusted for transaction costs and other items related to the Peoples transaction (Non-GAAP).

² 2019 Net income per share was \$1.04 (GAAP). 2019 adjusted for transaction costs and other items related to the Peoples transaction (Non-GAAP).

³ 2020 Net income per share was \$1.12 (GAAP). 2020 adjusted for transaction costs and other items related to the Peoples transaction (Non-GAAP).

Please see the investor relations page of Essential.co for a reconciliation of GAAP to non-GAAP financial measures.

⁴ 2020 Capital investment includes \$53.5 million of capital invested by Peoples prior to closing.

SYSTEM GROWTH

While 2020 was a memorable year for all of us, it stands out for Essential as a year of monumental growth with our landmark acquisition of Peoples, the largest natural gas distribution company in Pennsylvania, serving approximately 750,000 customers in Pennsylvania, West Virginia and Kentucky. We also had substantial growth on the water and wastewater side of our business as we closed six water and wastewater system acquisitions:

City of Campbell (Aqua Ohio)

Dogwood Knolls (Aqua North Carolina)

East Norriton Township
(Aqua Pennsylvania)

Rockwell Utilities, LLC (Aqua Illinois) –
Water and Wastewater

New Garden Township
(Aqua Pennsylvania)

Purchasing private and municipally owned systems allows Essential to play an important part in the communities where our employees live and work. Municipalities often use the proceeds of a sale to invest money back into their communities, while Essential repairs and replaces infrastructure that is vital to prosperity and economic growth. In 2020 alone, Essential invested \$543.5 million in water and wastewater infrastructure improvements and \$345.6 million in natural gas capital investments, including \$53.5 million of capital invested in the natural gas business in 2020 prior to acquiring Peoples in March 2020.



Essential has many ongoing capital investment projects within its regulated water and natural gas segments.



Natural Gas Long Term Infrastructure Improvement Plan (LTIIP)

Launched in 2013, Peoples' LTIIP will replace 3,000 miles of aging bare steel and cast iron in our service territory by 2034. Each mile of new pipeline helps Pennsylvania to significantly reduce methane emissions while improving reliability and safety.



Ashtabula Water Plant

Aqua Ohio will invest \$14 million in a water plant modernization project in Ashtabula, Ohio. With roots dating back to 1887 as a Lake Erie intake well with a steam-driven pumping station, the treatment plant was constructed in 1908 and produces about 5 million gallons a day for Ashtabula's 13,903 service connections and four additional public water systems.



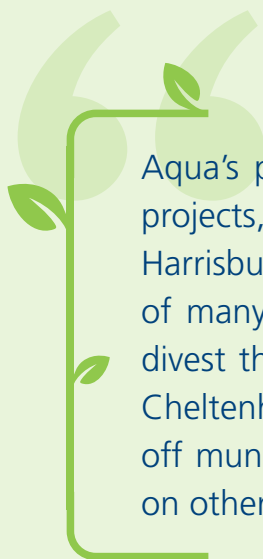
Goodwin and Tombaugh System

Peoples is investing more than \$100 million to replace 300 miles of the Goodwin and Tombaugh systems in western Pennsylvania, preserving and improving natural gas service to nearly 1,600 customers. Peoples will convert the aging gathering systems to a modern pipeline distribution system which will provide continued service and additional access for years to come.



Vermilion Dam

In 2020, Aqua Illinois completed \$20 million in capital improvements to the Lake Vermilion dam. Originally built in 1925 to create a reservoir and recreational lake, Aqua Illinois replaced 11 floodgates and made structural dam modifications to protect this vital water source. The project preserved the lake for the public to enjoy for future generations.



Aqua's proven ability to manage large scale infrastructure projects, plus their outstanding relationships with officials in Harrisburg and other water departments, eased the minds of many. After a careful financial analysis, the decision to divest the system became the only viable option to secure Cheltenham's future. The Township utilized proceeds to pay off municipal debt, alleviate future tax increases and focus on other pressing needs."

**Drew Sharkey, Former Commissioner,
Cheltenham Township, Pa.**



**2020 MUNICIPAL
ACQUISITIONS
PROGRAM**

**CLOSED
ACQUISITIONS
6**

**WATER
CUSTOMERS¹
>3,800**

**WASTEWATER
CUSTOMERS¹
>8,300**

**TOTAL RATE BASE
\$62.9M**

¹Essential's estimate of the number of equivalent dwelling units

GROWING OUR ESG COMMITMENT



EMPLOYEES

Essential understands that we owe our success to our employees across the organization, and our employees know that their work each day helps us carry out our promise to deliver vital natural resources to customers. Safe and reliable service is a point of pride. For so many Essential employees, their work is more than just a job. It is a mission.



**TOTAL NUMBER
OF EMPLOYEES**
3,100

In 2020, across our 10-state footprint, we employed more than 3,100 people, hired 342 new employees and retained 93% of our workforce. These team members are Essential, Aqua and Peoples employees – essential field workers, customer service representatives, scientists, engineers and corporate employees.

**EMPLOYEE
RETENTION**
93%

Essential understands the importance of building a diverse and inclusive company to ensure we relate to our diverse customer population, and that all our employees feel a sense of belonging while at work. We are dedicated to continuing our Diversity, Equity and Inclusion (DEI) work across our enterprise and supporting all employees in their professional growth.

This year, Essential focused its DEI efforts on establishing robust Employee Resource groups, following best practices in recruitment to attract and retain diverse talent and incorporating all employees in our DEI work. Essential employees participated in unconscious bias workshops in 2020 to improve communication across the company. All employees, especially those who are not part of an underrepresented group, are called upon to grow and sustain our inclusive culture.

We also amplified our diversity, equity and inclusion efforts by formalizing our commitments in a multi-year plan to nearly double our diverse supplier spend to 15% and increase employee diversity by 20%, reflecting the diversity of the communities in which we work.

SAFETY

Essential is dedicated to employee health and safety. We understand that the success of our business depends on the safety of our operations across our 10-state footprint, so we encourage employees to stop work if they have safety concerns. In 2020, we introduced new processes to close safety gaps, better track and communicate safety performance and share safety best practices. We have focused on reporting and case management, safety audits and investigations of safety incidents and correcting root causes.

The safety of our employees has always been our top priority, and Essential strives to encourage a culture of safety across the organization. Because leaders often create culture, culture shapes employee behaviors and employee behaviors influence safety outcomes, we announced a new national safety director in 2020 to lead the charge of standardizing employee safety programs across the organization. The national safety director leads a new work group that was established to create a safety strategy road map. This group, which includes employees from across the enterprise, is focused on reviewing existing safety programs and policies while identifying opportunities to align and improve those plans.



COVID-19 Safety

Essential took immediate action to support employees' health and safety during the COVID-19 pandemic. Employees whose jobs allowed them to work remotely immediately began working from home, and those required to be physically present to operate plants, upgrade infrastructure or support our company's operations were supplied with personal protective equipment (PPE), began operating under procedures to limit employee interaction and saw an increase in cleaning and sanitation of their locations.

Throughout the pandemic, Essential sought to be as transparent as possible and frequently communicated with all employees via email, daily huddles and weekly CEO town halls. Each of the communications focused on health and safety, including mental health. Essential enhanced medical and childcare leave benefits in the event an employee needed time off for COVID-19 illness or to take care of children during school closures. Additionally, we offered telemedicine and telecounseling resources for employees and their dependents.



Essential's Safety Record

Lost Time/Restricted Time Rate (per 200,000 hours worked)

2020*	2019†	2018†	2017†
1.2	2.4	2.2	2.4



Employees are more likely to have safe behavior and participate in company safety programs if they truly believe that their frontline leaders are strongly committed to working safely. When we as Essential leaders create the best safe work practices, programs and procedures, how they are implemented and brought to life day-to-day is where the rubber meets the road.”

Essential National Safety Director, Ruth Werne

*Combined Aqua and Peoples
†Aqua Only

ENVIRONMENT

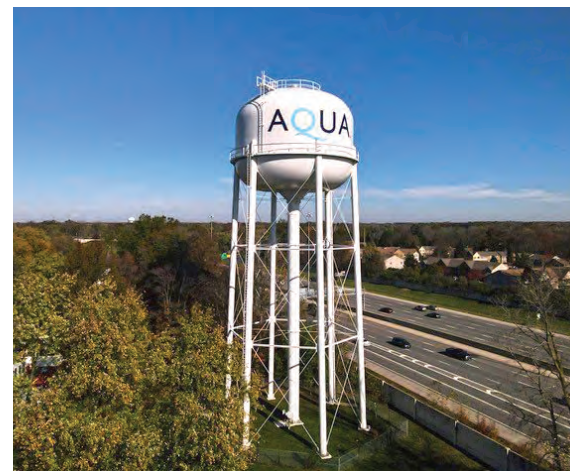
Essential's mission is to sustain life and improve economic prosperity by safely and reliably delivering Earth's most essential resources to our customers and communities. For more than 135 years, we have taken our responsibility to safeguard the environment seriously. Because of our operations – including treating water, cleaning wastewater and returning it back to the environment, as well as digging into the earth for infrastructure repairs, we understand firsthand the need for conservation and environmental stewardship. This is why we strive to build resiliency in each of our communities. The sustainable systems and infrastructure we design and care for today will help secure the future of our children and planet tomorrow.



Urgently and aggressively addressing climate change is one of the most critical pillars of these efforts. Earlier this year, we announced an ambitious enterprise-wide target to reduce greenhouse gas (GHG) emissions. Through extensive gas pipeline replacement, renewable energy purchasing and accelerated methane leak detection and repair, Essential will reduce Scope 1 and 2 emissions by 60% from our 2019 baseline by 2035; this reduction is nearly equivalent to removing 76,000 cars from the road. This is consistent with the rate of reduction necessary over the next 15 years to remain on track with the Paris Agreement, which aims to limit a global temperature rise to well below 2 degrees Celsius.

Our 2035 target achieves substantial reductions from proven efforts we have already initiated. As we move ahead and technology continues to develop rapidly, we will leave no stone unturned in our efforts to transform our operations and processes where necessary through bold and creative innovation. In 2020, Peoples completed an additional 149 miles of its Long Term Infrastructure Improvement Plan (LTIIP) to replace 3,000 miles of aging bare steel and cast iron pipe over 20 years. In other efforts to reduce GHG, the natural gas business is helping landfills and agricultural partners capture, recycle and distribute renewable natural gas (RNG) to repurpose it for natural gas pipelines, transportation or energy creation. Also in 2020, we committed to utilizing 100% renewable energy in our water and wastewater businesses in Illinois, New Jersey, Ohio and Pennsylvania by 2022, as well as utilizing 25% renewable energy in water and wastewater operations in Texas.

In our water operations, we consistently and widely outperform the national average for water quality.¹ Our team of scientists continually monitors emerging contaminants like per- and poly-fluoro alkyl substances (PFAS – PFOA, PFOS, etc.). In 2020, Essential took a number of steps to address these contaminants for our customers. First, we broke ground on a new, state-of-the-art laboratory, which will be the only utility-owned facility in Pennsylvania that is both certified and accredited to test for PFAS substances. And second, **we set a company-wide standard of 13 parts per trillion (ppt) for PFOA, PFOS and PFNA, which are aligned with the most stringent standards adopted in any state in which our regulated water segment does business.** Our industry leadership on this critical health issue is further reinforced by an unprecedented commitment to test every single water source in our footprint, across almost 1,500 community systems, for PFAS.



Environmental, Social and Governance issues are integral to Essential's mission and vision. For a wider scope of our activities, please see our Environmental, Social and Governance report at esg.essential.co.

¹Measured by the percentage of community water systems with health-based violations, according to data from the Environmental Protection Agency (EPA). Please see the "Compliance With Regulations" section of our ESG Report for more detail.



**MORE THAN
\$4 MILLION**
Community giving
in 2020



\$800,000
Donated to the
United Way



**MORE THAN
\$1.1 MILLION**
Contributed to water and
wastewater customer
assistance programs



**MORE THAN
\$11.5 MILLION**
Distributed in natural
gas relief and customer
assistance programs



\$290,000
Donated to food banks
across 10 states

Giving back to the communities where we live and work is a fundamental part of Essential's culture. Through corporate giving and volunteering, Essential strives to be a good corporate citizen supported by passionate and altruistic employees.

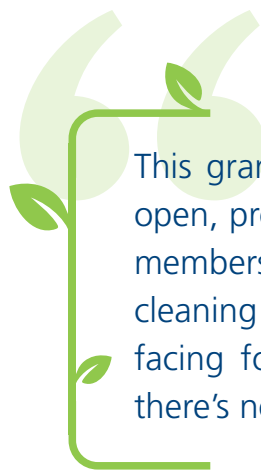
Essential makes monetary donations through the Essential Foundation. Contributions from the Foundation are granted to organizations that improve quality of life with a focus on community-based nonprofit organizations within our footprint. In 2020, the Essential Foundation budgeted more than \$4 million for nonprofits. One such organization was the Garage Community and Youth Center in Pennsylvania. This nonprofit provides youth development programs to vulnerable middle and high school students and has operated community classrooms for students to virtually attend school during the pandemic. The Essential Foundation was proud to support this work.

In 2020, the Essential Foundation participated in a fundraiser for the United Way. Through Essential, Aqua and Peoples employee donations, and the Foundation match, we were able to donate \$800,000 to the United Way.

The Essential Foundation also donated \$20,000 to Aqua Pennsylvania's Helping Hand customer assistance program, helping low-income customers make manageable payments on their water and wastewater utility bills. Essential has additional customer assistance programs across its footprint to help customers keep their water running; Aqua Aid operates in Illinois, New Jersey and Ohio. Essential is proud that the total customer assistance distributed through these programs in 2020 totaled more than \$1.1 million.

Essential also supports natural gas customers through the Dollar Energy Fund, which provided \$1.2 million in grants to more than 3,000 households; the Emergency Furnace and Service Line Repair Program, serving nearly 250 homes at a cost of \$637,000; LIHEAP/Crisis, totaling more than \$11.5 million in relief; and a customer assistance program with more than 36,000 enrolled customers. Peoples also weatherized 224 customer homes in 2020, helping prevent the loss of heat and energy.

At the height of the COVID-19 pandemic, Essential saw the growing need of food banks across our territories. We donated \$290,000 to multiple food banks across all 10 states, including the Greater Pittsburgh Community Food Bank, multiple food banks in southeastern Pennsylvania and at least one food bank in each of the other nine states where we operate. We focused on ensuring the funds made a real impact in the local communities, and were glad to do our small part in helping our customers.



This grant comes at a very critical time for CityTeam Chester as we remain open, providing food and shelter for some of our most vulnerable community members. This donation ensures that we can maintain enough food supplies, cleaning materials and other vital resources for the growing number of people facing food insecurity during this pandemic. Without this type of support, there's no way we could keep up with the pace of the needs right now."

Kwinn Tucker,
Executive Director for CityTeam Chester



ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Management's Discussion and Analysis of Financial Condition and Results of Operations
(In thousands of dollars, except per share amounts)

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements in this Annual Report (the "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.

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 diversion of our management's time and resources caused by the integration efforts with respect to the Peoples Gas business;
- 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;
- our ability to integrate and otherwise realize all of the anticipated benefits of businesses, technologies or services which we may acquire;
- changes in environmental conditions, including the effects of climate change;
- 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;
- 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;
- increases 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;

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)
(In thousands of dollars, except per share amounts)

- the phase-out of the London Interbank Offered Rate (“LIBOR”), or the replacement of LIBOR with a different reference rate or modification of the method used to calculate LIBOR, which may adversely affect interest rates;
- changes in accounting pronouncements;
- litigation and claims; and
- restrictions on our subsidiaries' ability to make dividends and other distributions.

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* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2020.

OVERVIEW

The following discussion and analysis of our financial condition and results of operations should be read together with our Consolidated Financial Statements and related Notes included in this Annual Report. 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., (referred to as “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 what we estimate to be almost 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 is Aqua Pennsylvania, Inc., which accounted for approximately 55% of operating revenues and approximately 67% of income for our Regulated Water segment in 2020. As of December 31, 2020, 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 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. Aqua Resources offers through a third-party, water and sewer line protection solutions and repair services to households.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)
(In thousands of dollars, except per share amounts)

COVID-19 Pandemic

The impact of the global outbreak of the current novel coronavirus ("COVID-19") pandemic has created significant volatility in the global economy and at times have led to reduced economic activity. We are monitoring the global outbreak of COVID-19 and taking steps to mitigate the potential risks to our employees and our customers posed by its spread, as described below.

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. For example, we have taken precautions with regard to employee and facility hygiene, imposed travel restrictions on our employees and at time have directed our employees to work remotely wherever possible depending on the operating location and status of state and local regulations. We have implemented additional protocols for required work within customers' premises to protect our employees, our customers and the public. Additionally, we have assessed and updated, where appropriate, our existing business continuity plan in the context of this pandemic, including our recent acquisition of Peoples. We also worked with our suppliers to understand the potential impacts to our supply chain. At this time, no material risks to our supply chain have been identified; however, if there were global shortages it could impact our maintenance and capital programs and the effects of any such impact cannot currently be anticipated. 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 remote workforce and maintain uninterrupted service to our customers. To maximize our financial flexibility in light of the uncertainty surrounding the impact of the COVID-19 pandemic, we entered into a credit agreement on April 3, 2020, which provided the Company with a short-term borrowing facility of \$500,000 in unsecured term loans, which was drawn, and subsequent to the Company's \$1,100,000 issuance of long-term debt on April 13, 2020, in May and June of 2020 the Company repaid \$300,000 and \$200,000 of the term loan, respectively, and based on the Company's ability to access financial markets, we terminated the facility.

This continues to be a rapidly evolving situation, and we will continue to monitor developments affecting our business, workforce, and suppliers and take additional precautions as we believe are warranted. We are actively monitoring our utility billings and have noticed increases in residential water customer usage offset by decreases in commercial and industrial usage. In response to concerns about customer economic hardship and affordability during the COVID-19 health crisis, our state regulators mandated the temporary curtailment of certain collection practices, such as disconnections from utility service. 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. In some of the states where we operate, regulators have allowed utilities to resume disconnections from utility service for certain customers who have unpaid balances. Some public utility commission are issuing guidance for utilities to defer COVID-19 expenses in anticipation of seeking recovery in a future rate proceeding, and we are currently evaluating the impact of this guidance. We are continuing with our capital investment program, and based on the current situation, continue to believe we are able to complete the planned projects and improvements to our utility infrastructure. Despite our efforts, the ultimate impact to the Company of the COVID-19 pandemic also depends on factors beyond our knowledge or control, including the duration and severity of this pandemic as well as third party actions taken to contain its spread and mitigate its public health effects. Although we have experienced that some of our customers are facing economic hardships due to various impacts of the COVID-19 pandemic and may be unable to pay for our utility services, we do not currently anticipate a significant impact to our financial position, results of operations or cash flows as a result of the COVID-19 pandemic.

Industry Mission

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. A number of challenges face the utility industry, including:

- strict environmental, health and safety standards;
- aging utility infrastructure and the need for substantial capital investment;
- economic regulation by state, and/or, in some cases, local government;
- declining consumption per customer as a result of conservation;

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)
(In thousands of dollars, except per share amounts)

- lawsuits and the need for insurance;
- the impact of weather on natural gas sales demand; and
- the impact of weather and sporadic drought conditions on water sales demand.

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, as was the case for our Texas operations where, in 2014, economic regulation changed from the Texas Commission on Environmental Quality to the Public Utility Commission of Texas. 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 – 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. Accordingly, the objective of our rate case management strategy is to provide that the rates of our utility operations reflect, to the extent practicable, the timely recovery of increases in costs of operations (primarily labor and employee benefits, electricity, chemicals, transportation, maintenance expenses, insurance and claims costs, and costs to comply with environmental regulations), capital, and taxes. 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, 2020, the Company's rate base is estimated to be \$8,000,000, which is comprised of:

- \$5,500,000 in the Regulated Water segment; and
- \$2,500,000 in the Regulated Natural Gas segment.

As of December 31, 2020, the regulatory status of the Company's rate base is estimated to be as follows:

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

Our water and wastewater operations are composed of 46 rate divisions, and our natural gas operations are comprised of 5 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

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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.

Revenue Surcharges – Seven states in which we operate water utilities, seven states in which we operate wastewater utilities, and two 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.

Effects of Inflation – 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 yet be reflected in rates, 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.

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, natural gas, 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 2020, in addition to the Peoples Gas Acquisition, we completed six acquisitions, 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. During 2018, we completed nine acquisitions, which along with the organic growth in our existing systems, represents 22,741 new customers.

We believe that utility acquisitions, organic growth, and a potential expansion of our market-based business will continue to be the primary sources of growth for us. With approximately 50,000 public or private water utility 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). In the states where we operate regulated water utilities, we

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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. The vast 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 that there are many potential water and wastewater system acquisition candidates throughout the United States. We believe the factors driving the 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 technological 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 water and wastewater utility operations through regulated utility acquisitions or otherwise, including the management of publicly-owned facilities in a public-private partnership. We intend to continue to pursue acquisitions of government-owned and regulated water and wastewater utility systems that provide services in areas near our existing service territories or in new service areas. It is our intention to focus on growth opportunities in states where we have critical mass, which allows us to improve economies of scale through spreading our fixed costs over more customers – this cost efficiency should enable us to reduce the size of future rate increases. Currently, the Company seeks to acquire businesses in the U.S. regulated sector, which includes water, wastewater, and natural gas utilities and other regulated utilities, and to pursue growth ventures in market-based activities, by acquiring businesses that provide water and wastewater or other utility-related services and investing in infrastructure projects.

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

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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, 2020, our operating revenues for our Regulated Water segment were derived principally from the following states: approximately 54% in Pennsylvania, 12% in Ohio, 8% in Illinois, 8% in Texas, and 6% in North Carolina.

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 business. Furthermore, we review the measure of earnings before unusual items that are not directly related to our core business, 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 and 2018. 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

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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. 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. Commencing in 2012, as a result of utility rates incorporating the effects of income tax benefits derived from deducting qualifying utility asset improvements for tax purposes that are capitalized for book purposes in Aqua Pennsylvania, the Company forwent operating revenue increases until its next rate case became effective in May 2019. 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.

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Consolidated Selected Financial and Operating Statistics

Our selected five year consolidated financial and operating statistics follow:

Years ended December 31,	2020	2019	2018	2017	2016
Utility customers:					
Residential water	832,902	822,817	815,663	807,872	801,190
Commercial water	42,535	41,892	41,532	40,956	40,582
Industrial water	1,338	1,339	1,340	1,338	1,349
Residential gas	690,642	-	-	-	-
Commercial gas	59,424	-	-	-	-
Industrial gas	1,436	-	-	-	-
Other water	18,561	18,984	19,273	19,430	19,036
Wastewater	151,965	141,672	127,782	113,253	110,108
Total utility customers	<u>1,798,803</u>	<u>1,026,704</u>	<u>1,005,590</u>	<u>982,849</u>	<u>972,265</u>
Operating revenues:					
Residential water	\$ 567,485	\$ 518,192	\$ 482,946	\$ 483,865	\$ 484,901
Commercial water	143,479	145,599	133,753	130,373	131,170
Industrial water	29,764	30,667	28,848	27,880	27,916
Other water	67,712	72,942	85,894	65,324	62,983
Wastewater	121,117	105,204	94,170	87,560	82,780
Customer rate credits	(4,080)	-	-	-	-
Other utility	13,063	13,826	9,027	9,903	10,357
Regulated water segment	<u>938,540</u>	<u>886,430</u>	<u>834,638</u>	<u>804,905</u>	<u>800,107</u>
Residential gas	314,274	-	-	-	-
Commercial gas	50,239	-	-	-	-
Industrial gas	6,923	-	-	-	-
Gas transportation	133,685	-	-	-	-
Customer rate credits	(18,924)	-	-	-	-
Other utility	20,367	-	-	-	-
Regulated gas segment	<u>506,564</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total	1,445,104				
Other and eliminations	17,594	3,262	3,453	4,620	19,768
Consolidated operating revenues	<u>\$ 1,462,698</u>	<u>\$ 889,692</u>	<u>\$ 838,091</u>	<u>\$ 809,525</u>	<u>\$ 819,875</u>
Operations and maintenance expense	<u>\$ 528,611</u>	<u>\$ 333,102</u>	<u>\$ 308,478</u>	<u>\$ 282,253</u>	<u>\$ 297,184</u>
Net income (1)	<u>\$ 284,849</u>	<u>\$ 224,543</u>	<u>\$ 191,988</u>	<u>\$ 239,738</u>	<u>\$ 234,182</u>
Capital expenditures	<u>\$ 835,642</u>	<u>\$ 550,273</u>	<u>\$ 495,737</u>	<u>\$ 478,089</u>	<u>\$ 382,996</u>
Operating Statistics					
Selected operating results as a percentage of operating revenues:					
Operations and maintenance	36.1%	37.4%	36.8%	34.9%	36.2%
Depreciation and amortization	17.6%	17.6%	17.5%	16.9%	16.2%
Taxes other than income taxes	5.2%	6.7%	7.1%	7.0%	6.9%
Interest expense	12.9%	14.1%	11.8%	10.9%	9.9%
Net income (1)	<u>19.5%</u>	<u>25.2%</u>	<u>22.9%</u>	<u>29.6%</u>	<u>28.6%</u>
Return on Essential Utilities stockholders' equity (1)	<u>6.1%</u>	<u>5.8%</u>	<u>9.6%</u>	<u>12.2%</u>	<u>12.7%</u>
Ratio of capital expenditures to depreciation expense	<u>3.3</u>	<u>3.5</u>	<u>3.4</u>	<u>3.5</u>	<u>2.9</u>
Effective tax rate	<u>(7.5%)</u>	<u>(6.2%)</u>	<u>(7.7%)</u>	<u>6.6%</u>	<u>8.2%</u>

(1) Reflects Peoples Gas Acquisition transaction-related expenses of \$20,925 (\$25,573 pre-tax) in 2020, \$18,246 (\$22,891 pre-tax) in 2019, \$11,611 (\$14,184 pre-tax) in 2018; 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) and 2018 of \$47,225 (\$59,779 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

RESULTS OF OPERATIONS

Net income varies over time as a result of increases in operating income, timing of transaction expenses for acquisitions, including fluctuations in fair value adjustments for interest rate swap agreements entered into in connection with the Peoples Gas Acquisition, and other factors described below. During the past five years, our operating revenues grew at a compound rate of 12.4% and operating expenses grew at a compound rate of 15.9%. Operating expenses in 2020 grew higher than historic experience due to \$25,573 of transaction-related expenses for the Peoples Gas Acquisition and the addition of Peoples' operating expenses after the transaction closed on March 16, 2020.

Operating Segments

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 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 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.

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The following table provides the Regulated Water and Natural Gas segments and consolidated information for the years ended December 31, 2020, 2019, and 2018:

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
Taxes other than income taxes	60,505	13,307	2,785	76,597
Earnings (loss) before interest, taxes, depreciation and amortization	<u>\$ 568,427</u>	<u>\$ 140,771</u>	<u>\$ (17,453)</u>	691,745
Depreciation and amortization				257,059
Operating income				<u>434,686</u>
Other expense (income):				
Interest expense				188,435
Interest income				(5,363)
Allowance for funds used during construction				(12,687)
Gain on sale of other assets				(661)
Equity loss in joint venture				3,374
Other				(3,383)
Provision for income taxes (benefit)				(19,878)
Net income				<u>\$ 284,849</u>

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
Taxes other than income taxes	57,671	2,284	59,955
Earnings (loss) before interest, taxes, depreciation and amortization	<u>\$ 513,707</u>	<u>\$ (17,072)</u>	496,635
Depreciation and amortization			156,476
Operating income			<u>340,159</u>
Other expense (income):			
Interest expense			125,383
Interest income			(25,406)
Allowance for funds used during construction			(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			(923)
Equity earnings in joint venture			(2,210)
Other			5,691
Provision for income taxes (benefit)			(13,017)
Net income			<u>\$ 224,543</u>

2018	Regulated Water	Other and Eliminations	Consolidated
Operating revenues	\$ 834,638	\$ 3,453	\$ 838,091
Operations and maintenance expense	292,232	16,246	308,478
Taxes other than income taxes	57,140	2,622	59,762
Earnings before interest, taxes, depreciation and amortization	<u>\$ 485,266</u>	<u>\$ (15,415)</u>	469,851
Depreciation and amortization			146,673
Operating income			<u>323,178</u>
Other expense (income):			
Interest expense			99,054
Interest income			(152)
Allowance for funds used during construction			(13,023)
Change in fair value of interest rate swap agreements			59,779
Gain on sale of other assets			(714)
Equity earnings in joint venture			(2,081)
Other			1,996
Provision for income taxes (benefit)			(13,669)
Net income			<u>\$ 191,988</u>

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Consolidated Results of Operations Comparison for 2020 and 2019

For the comparison of fiscal years 2019 and 2018, 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, 2019, filed with the SEC on February 28, 2020. The following results of operations includes the operating results of Peoples Gas Acquisition or the Regulated Natural Gas segment for the period since the acquisition on March 16, 2020.

Operating Revenues – Operating revenues totaled \$1,462,698 in 2020, \$889,692 in 2019, and \$838,091 in 2018. Our Regulated Water segment's revenues totaled \$938,540 in 2020, \$886,430 in 2019, and \$834,638 in 2018, and our Regulated Natural Gas segment's revenues totaled \$506,564 in 2020. The growth in our Regulated Water segment's revenues over the past three years is a result of increases in our water and wastewater rates and our customer base. Rate increases implemented during the past three years have provided additional operating revenues of \$32,660 in 2020, \$55,658 in 2019, and \$8,362 in 2018. In 2020, we experienced a decrease in water revenues of \$1,402 as a result of a do not consume advisory that was initiated in mid-2019 for some of our customers served by our Illinois subsidiary, which we expect to continue into 2021. In 2019, the impact from this matter reduced water and wastewater revenues by \$1,574. The number of customers increased at an annual compound rate of 22.3% 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 \$10,951 in 2020, \$8,393 in 2019, and \$3,877 in 2018. The Peoples Gas acquisition provided natural gas revenues of \$520,944 in 2020, since the acquisition date.

Associated with the approval of the Peoples Gas Acquisition from the Pennsylvania Public Utility Commission, the Company provided \$23,004 of one-time customer rate credits in 2020 to its Pennsylvania natural gas utility customers and water and wastewater customers served by Aqua Pennsylvania. Specifically, the Company granted \$4,080 of customer rate credits to its water and wastewater customers in the third quarter of 2020, and \$18,924 to its natural gas utility customers in the fourth quarter of 2020.

On March 31, 2020, the Company changed its method of tax accounting for certain qualifying infrastructure investments at its Peoples Natural Gas subsidiary. This change allows a tax deduction for qualifying utility asset improvement costs that were formerly capitalized for tax purposes. The Company uses flow-through accounting to record the income tax benefits of this change. In addition, the calculation of the income tax benefits for qualifying capital expenditures made prior to March 16, 2020 was completed and a regulatory liability of \$160,155 was recorded to defer these tax benefits pending regulatory guidance.

In 2012, Aqua Pennsylvania changed its tax accounting method to permit the expensing of qualifying utility asset improvement costs that historically had been capitalized and depreciated for book and tax purposes. This change provided for the flow-through of income tax benefits that resulted in a substantial reduction in income tax expense and greater net income and cash flow. During 2020, 2019, and 2018, the income tax accounting change resulted in income tax benefits of \$49,077, \$66,816, and \$64,183, that reduced the Company's current income tax expense and increased net income. The Company recognized a tax deduction on its 2012 Federal tax return of \$380,000 for qualifying capital expenditures made prior to 2012. Based on a rate case settlement agreement, beginning in 2013, the Company began to amortize these expenditures, which reduced income tax expense. In 2019, Aqua Pennsylvania filed a settlement for a base rate case, which incorporated the repair tax benefits, using a collar mechanism, and an adjusted amortization of the pre-2012 tax benefits into its cost of service. Incremental rates from this settlement of approximately \$47,000 went into effect in May 2019.

Our operating subsidiaries received rate increases representing estimated annualized revenues of \$4,480 in 2020 resulting from five base rate decisions, \$52,974 in 2019 resulting from four base rate decisions, and \$11,558 in 2018 resulting from five base rate decisions. Revenues from these increases realized in the year of grant were \$1,594 in 2020, \$32,287 in 2019, and \$7,270 in 2018. As of December 31, 2020, our operating subsidiaries have filed two rate requests, which are being reviewed by the state utility commissions, proposing an aggregate increase of \$1,766 in annual revenues. During 2021, we intend to file seven additional rate requests; the timing and extent to which our rate increase requests may be granted will vary by state.

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Currently, Pennsylvania, Illinois, Ohio, Indiana, Virginia, North Carolina and New Jersey allow for the use of an infrastructure rehabilitation surcharge for both water and wastewater utility systems. Additionally, Pennsylvania and Kentucky allow for the use of an infrastructure rehabilitation surcharge for natural gas utility systems. The rate increases under this surcharge typically adjust periodically based on additional qualified capital expenditures completed or anticipated in a future period. This surcharge is capped as a percentage of base rates, generally at 5% to 12.75% of base rates, 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 \$13,039 in 2020, \$16,007 in 2019, and \$31,836 in 2018.

Our Regulated Water segment also includes operating revenues of \$8,781 in 2020, \$13,835 in 2019, and \$9,427 in 2018 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, and \$4,080 of one-time customer rate credits provided in 2020 associated with the regulatory approval of the Peoples Gas Acquisition.

In addition to the Regulated Water segment operating revenues, we recognized market-based revenues that are associated with our non-regulated natural gas operations (post-closing), Aqua Resources, and Aqua Infrastructure of \$17,776 in 2020, \$3,395 in 2019, and \$3,590 in 2018.

Operations and Maintenance Expenses – Operations and maintenance expenses totaled \$528,611 in 2020, \$333,102 in 2019, and \$308,478 in 2018. 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 consumption, weather, and the degree of water treatment required due to variations in the quality of the raw water. The principal elements of operating costs are 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 consumption, raw water quality, 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 main.

Operations and maintenance expenses increased in 2020, as compared to 2019, by 195,509 or 58.7%, primarily due to:

- Operating costs of \$199,851 associated with the Peoples Gas Acquisition, including expenses attributed to the COVID-19 pandemic of \$8,735 primarily associated with an increase in bad debt expense of \$6,551;
- additional expenses of \$8,518 associated with the COVID-19 pandemic for our water utility operations consisting primarily of bad debt expense of \$5,980, and the purchase of personal protective equipment and disinfecting supplies of \$903, which are offset by decreases in travel expenses, office supplies, and office utility expenses;
- additional operating costs associated with acquired and pending acquisitions of water and wastewater utility systems of \$7,202; and
- transaction expenses of \$25,397, compared to expenses of \$22,891 incurred in the prior year, for the Peoples Gas Acquisition, primarily representing expenses associated with investment banking fees, including bridge financing, employee related expenses, obtaining regulatory approvals, legal expenses, and integration planning; offset by
- insurance proceeds of \$2,874 received for expenses incurred related to the advisory for some of our water utility customers served by our Illinois subsidiary;
- lower expenses of \$1,911 in 2020 compared to 2019 for expenses associated with remediating a do not consume advisory we initiated in 2019 for some of our customers served by our Illinois subsidiary. We expect that the expenses associated with remediating the advisory to continue into the second quarter of 2021. Further, the Company has determined that it is reasonably possible that a fine or penalty may be incurred, however, we cannot estimate the possible range of loss at this time and no liability has been accrued for these future costs.

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- a decrease in our self-insured employee medical plan benefits of \$1,927; and
- a stimulus payment of \$1,038 received by our Ohio subsidiary from the Ohio Bureau of Workers' Compensation as a result of the COVID-19 pandemic.

In order to continue the Company's tradition of good corporate citizenship and community giving, in 2020, the Company contributed \$30,000 to the Essential Foundation, a 501(c)(3) organization. This amount pre-funds our regulatory and community commitments over multiple years and furthers the charitable purposes of the Essential Foundation.

Purchased Gas – Purchased gas of \$165,745 represents the cost of gas sold by Peoples during the period since the acquisition date of March 16, 2020. There were no corresponding amounts in prior periods.

Taxes Other than Income Taxes – Taxes other than income taxes totaled \$76,597 in 2020, \$59,955 in 2019, and \$59,762 in 2018, and has increased principally due to increases in payroll taxes of \$8,750 and property taxes of \$4,319 resulting from additional expenses associated with acquired operations including the Peoples Gas Acquisition.

Depreciation and Amortization Expenses – Depreciation expense was \$251,443 in 2020, \$158,179 in 2019, and \$146,032 in 2018, and has increased principally as a result of the significant capital expenditures made to expand and improve our utility facilities, and our acquisitions of new utility systems. 2020 marks the inclusion of \$81,672 of depreciation from the People's Gas Acquisition since March 16, 2020.

Amortization expense (credit) was \$5,616 in 2020, \$(1,703) in 2019, and \$641 in 2018, and increased in 2020 primarily due to the prior year effect of a favorable one-time adjustment recorded in of 2019 resulting from a rate order received for our Pennsylvania water subsidiary. 2020 marks the inclusion of \$2,576 of amortization from the Peoples Gas Acquisition. Expenses associated with filing rate cases are deferred and amortized over periods that generally range from one to three years.

Interest Expense – Interest expense was \$188,435 in 2020, 125,383 in 2019, and \$99,054 in 2018. Interest expense increased in 2020 primarily due to the following items:

- an increase in average borrowings;
- interest of \$28,939 on debt assumed in the Peoples Gas Acquisition;
- pre-acquisition interest expense of \$3,959 from the issuance of \$900,000 of long-term debt and \$119,081 of amortizing notes in April 2019 partially for funding of the Peoples Gas Acquisition; and
- interest of \$1,399 on the Company's \$500,000 term loan to provide liquidity during the COVID-19 pandemic, which was repaid in May and June 2020; offset by
- a decrease in our effective interest rate.

The weighted average cost of fixed rate long-term debt was 3.73% at December 31, 2020, 4.09% at December 31, 2019, and 4.31% at December 31, 2018. The weighted average cost of fixed and variable rate long-term debt was 3.56% at December 31, 2020, 4.09% at December 31, 2019, and 4.23% at December 31, 2018.

Interest Income – Interest income was \$5,363 in 2020, \$25,406 in 2019, and \$152 in 2018. The decrease in 2020 is primarily due to the utilization of the proceeds held from our April 2019 equity and debt offerings to close the Peoples Gas Acquisition on March 16, 2020.

Allowance for Funds Used During Construction – The allowance for funds used during construction ("AFUDC") was \$12,687 in 2020, \$16,172 in 2019, and \$13,023 in 2018, 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 decrease in 2020 is primarily due to a decrease in the average balance of utility plant construction

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work in progress, to which AFUDC is applied. The amount of AFUDC related to equity was \$8,253 in 2020, \$11,941 in 2019, and \$9,691 in 2018.

Change in Fair Value of Interest Rate Swap Agreements – The change in fair value of interest rate swap agreements of \$23,742 for 2019 and \$59,779 for 2018 represents the mark-to-market adjustment of our interest rate swap agreements that were entered into on October 23, 2018 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 swap agreements did not qualify for hedge accounting, and any changes in the fair value of the swaps were included in earnings. 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 \$436,000 of the purchase price of the Peoples Gas Acquisition, redeem \$313,500 of the Company's existing debt, and fund other corporate expenses.

Loss on Debt Extinguishment – The loss on debt extinguishment of \$18,528 results from the extinguishment of \$313,500 of existing debt that was refinanced in May 2019. 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."

Gain on Sale of Other Assets – Gain on sale of other assets totaled \$661 in 2020, \$923 in 2019, and \$714 in 2018, and consists of the sales of property, plant and equipment.

Equity (Loss) Earnings in Joint Venture – Equity earnings (loss) in joint venture totaled \$(3,374) in 2020, \$2,210 in 2019, and \$2,081 in 2018. The equity loss in 2020 primarily resulted from a charge of \$3,700 recorded in 2020 reflecting a loss on sale of our joint venture investment realized in October 2020 and a decrease in the sale of raw water to firms in the natural gas drilling industry.

Other – Other totaled \$(3,383) in 2020, \$5,691 in 2019, and \$1,996 in 2018, and primarily represents the non-service cost components of our net periodic pension and postretirement benefit costs and, the change in fair value of our equity investments in an employee benefit plan. 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, and a decrease in the non-service cost components of our net benefit cost for pension benefits as well as the credit balance for Peoples Natural Gas which was acquired March 16, 2020.

Income Taxes – Our effective income tax rate was (7.5)% in 2020, (6.2)% in 2019, and (7.7)% in 2018. 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 decreased in 2020 due to an increase in the income tax benefit recognized as a result of tax deductions for qualifying infrastructure investments of Peoples Natural Gas, offset partially by an increase in our income before income taxes of \$53,445. 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 due to the flow-through treatment of the current tax repair benefits.

Summary –

	Years ended December 31,		
	2020	2019	2018
Operating income	\$ 434,686	\$ 340,159	\$ 323,178
Net income	284,849	224,543	191,988
Diluted net income per share	1.12	1.04	1.08

The changes in diluted net income per share in 2020 over the previous year were due to the aforementioned changes.

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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.

Although we have experienced increased income in the recent past, continued adequate rate increases reflecting increased operating costs and new capital investments, are important to the future realization of improved profitability.

Fourth Quarter Results – The following table provides our fourth quarter results:

	Three Months Ended	
	December 31,	
	2020	2019
Operating revenues	\$ 473,998	\$ 226,042
Operations and maintenance	157,196	85,321
Purchased gas	92,811	-
Depreciation	69,777	40,066
Amortization	1,204	437
Taxes other than income taxes	20,173	14,917
	<u>341,161</u>	<u>140,741</u>
Operating income	132,837	85,301
Other expense (income):		
Interest expense	51,785	33,142
Interest income	(17)	(7,287)
Allowance for funds used during construction	(3,966)	(3,892)
Gain on sale of other assets	(303)	(480)
Equity loss (earnings) in joint venture	91	(292)
Other	(213)	1,006
Income before income taxes	85,460	63,104
Provision for income tax benefit	(17,247)	(1,123)
Net income	<u>\$ 102,707</u>	<u>\$ 64,227</u>

The increase in operating revenues of \$247,956 was primarily due to:

- natural gas revenues of \$240,644 associated with the Peoples Gas Acquisition, net of customer rate credits of \$18,924 granted to our natural gas customers served by Peoples in Pennsylvania;
- additional revenues of \$3,318 associated with a larger customer base due to utility acquisitions and organic growth; and
- an increase in water and wastewater rates, net of infrastructure rehabilitation surcharges, of \$5,010; offset by
- a decrease in water revenues of \$361 as a result of a do not consume advisory we initiated in 2019 for some of our customers served by our Illinois subsidiary. We expect this decrease in revenues to continue into 2021.

The increase in operations and maintenance expense of \$71,875 was primarily due to:

- operating costs of \$72,615 associated with the Peoples Gas Acquisition, including expenses attributed to the COVID-19 pandemic of \$1,785 primarily associated with an increase in bad debt expense of \$1,357;
- additional expenses of \$2,570 associated with the COVID-19 pandemic for our water utility operations consisting primarily of bad debt expense of \$1,812, and the purchase of personal protective equipment and disinfecting supplies of \$119;

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- additional operating costs associated with acquired and pending utility systems of \$2,866; and
- expenses of \$790 associated with remediating a do not consume advisory we initiated in 2019 for some of our customers served by our Illinois subsidiary, which is offset by the prior year effect of expenses of \$1,217 recognized in the fourth quarter of 2020. We expect that the expenses associated with remediating the advisory to continue in the second quarter of 2021; offset by
- the effect of transaction expenses of \$1,005 incurred in the prior year quarter for the Peoples Gas Acquisition, primarily representing expenses associated with obtaining regulatory approvals, investment banking fees, legal expenses, and integration planning.

Purchased gas of \$92,811 represents the cost of gas sold by Peoples. There were no corresponding amounts in prior periods.

Depreciation expense increased by \$29,711 primarily due to depreciation expense of \$26,293 associated with our completion of the Peoples Gas Acquisition and the utility plant placed in service since December 31, 2019.

Amortization increased by \$767 primarily due to amortization expense of \$548 associated with our completion of the Peoples Gas Acquisition.

Taxes other than income taxes increased by \$5,256 primarily due to additional expenses of \$4,475 associated with our completion of the Peoples Gas Acquisition consisting primarily of additional payroll and property taxes.

Interest expense increased by \$18,643 primarily due to:

- an increase in average borrowings; and
- interest of \$9,573 on debt assumed in the Peoples Gas Acquisition; offset by
- a decrease in our effective interest rate.

Interest income decreased by \$7,270 primarily due to the utilization of the proceeds held from our April 2019 equity and debt offerings to close the Peoples Gas Acquisition on March 16, 2020.

Equity loss (earnings) in joint venture decreased by \$383 due to the sale of our joint venture investment in October 2020.

Other expense decreased by \$1,219 primarily due to a decrease in the non-service cost components of our net benefit cost for pension benefits.

The provision for income tax benefit increased by \$16,124 primarily due to income tax benefits recognized for qualifying infrastructure investments of Peoples recognized in the fourth quarter of 2020. 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. The Company's provision for income taxes represented an income tax benefit due to the effects of tax deductions recognized for certain qualifying infrastructure improvements for Peoples Natural Gas and Aqua Pennsylvania.

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Gross Margin – Regulated Natural Gas Segment

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. 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 operating results for our Regulated Natural Gas segment for the period since the acquisition date of March 16, 2020, including the reconciliation of gross margin (non-GAAP) to operating revenues (GAAP):

	Year ended December 31, 2020
Operating revenues (GAAP)	\$ 506,564
Purchased gas	154,103
Gross margin (non-GAAP)	\$ 352,461

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 five years ended December 31, 2020 were as follows:

	Net Operating Cash			
	Flows	Dividends	Capital Expenditures	Acquisitions
2016	\$ 396,163	\$ 130,923	\$ 382,996	\$ 9,423
2017	381,318	140,660	478,089	5,860
2018	368,522	150,736	495,737	145,693
2019	338,523	188,512	550,273	59,687
2020	508,024	232,571	835,642	3,501,835
	\$ 1,992,550	\$ 843,402	\$ 2,742,737	\$ 3,722,498

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. Net cash flows from operating activities decreased from 2018 to 2019 primarily due to the payment for the settlement of the interest rate swap agreements of \$83,520, offset by an increase in net income. Net cash flows from operating activities decreased from 2017 to 2018 primarily due to a reduction in deferred income taxes and a change in working capital. Net income in 2018 was comparable to 2017, when excluding the after-tax effect of the change in the fair value of the interest rate swap agreements. Net cash flows from operating activities decreased from 2016 to 2017 due to an increase in pension and other postretirement benefits contributions, changes in deferred income taxes and an increase in the amount of AFUDC related to equity funds of \$5,072 in 2017 compared to 2016.

Included in capital expenditures for the five 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 five year period, we received \$40,710 of

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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 \$2,542,222 and have refunded \$31,678 of customers' advances for construction. Dividends increased during the past five years as a result of annual increases in the dividends declared and paid and increases in the number of shares outstanding.

Our planned 2021 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 2021 capital program is expected to include \$504,000 for infrastructure rehabilitation surcharge qualified projects. Our planned 2021 capital program in Pennsylvania for our water and natural gas utilities is estimated to be approximately \$734,000, a portion of which is expected to be eligible as a deduction for qualifying utility asset improvements for Federal income tax purposes. Our overall 2021 capital program along with \$84,353 of debt repayments and \$416,381 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 2022 through 2023, 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 \$1,860,000. We anticipate that approximately less than one-half of these expenditures will require external financing. We expect to refinance \$726,447 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 consumption, and changes in Federal tax laws with respect to the reduction in the corporate income tax rate, 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. 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

Pursuant to the Company's growth strategy, on March 16, 2020 (the "Closing Date"), the Company completed the Peoples Gas Acquisition and paid cash consideration of \$3,465,344, which is subject to adjustment based upon the terms of the purchase agreement. Purchase price adjustments include the completion of a closing balance sheet, which was provided to the seller, and the finalization of an adjustment for utility capital expenditures made by the seller during the period between November 1, 2018 and the Closing Date. There is a dispute between the parties regarding this adjustment for utility capital expenditures. It is expected the matter will be resolved in accordance with the provisions of the purchase agreement or by the competent court of law with jurisdiction over the matter. Peoples is headquartered in Pittsburgh, Pennsylvania, and serves approximately 750,000 gas utility customers in western Pennsylvania, West Virginia, and Kentucky. The estimated purchase price paid by the Company was determined based on a base price of \$4,275,000, which was adjusted by \$43,935 for an estimated change in working capital, certain capital expenditures of \$247,500, and

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the assumption of \$1,101,091 of indebtedness as of the Closing Date, consisting of \$920,091 of senior notes and \$181,000 of short-term debt. 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. On October 22, 2018, the Company obtained the Bridge Commitment from certain banks to provide senior unsecured bridge loans in an aggregate amount of up to \$5,100,000 to, among other things, backstop the Peoples Gas Acquisition purchase price and the refinancing of certain debt of the Company and of Peoples. On March 16, 2020, as a result of our completion of the Peoples Gas Acquisition, we terminated the Bridge Commitment. On October 23, 2018, the Company entered into interest rate swap agreements to mitigate interest rate risk associated with our planned issuance of long-term debt to fund a portion of the Peoples Gas Acquisition. The interest rate swaps were settled in April 2019 in conjunction with the issuance of long-term 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 were included in our earnings.

Prior to closing of the Peoples Gas Acquisition, in 2019 Peoples entered into agreements to build three onsite natural gas fueled energy plants on customer-owned property in the western Pennsylvania area. During 2020, construction began on the three plants and is expected to be completed in 2021. Through December 31, 2020, Peoples has invested \$58,380 to construct these plants which are included in property, plant and equipment, and the construction cost is estimated to approximate \$71,000. Once these plants are on-line and begin generation activity, the balance of our investment will be classified as a note receivable. Peoples has committed to design, construct, and operate each of the plants using third-party partners. For two of the projects, Peoples will receive a fixed-fee pursuant to a 20-year agreement, with both the cost of the natural gas commodity used to fuel the plants and the operating costs of the plants being passed through to the customer. For the third plant, Peoples will receive a variable fee based on the kilowatt-hours generated by the energy plant at agreed-upon prices with the customer, with any excess kilowatts of generation sold to the local regional transmission organization over the 20-year term of the agreement.

Excluding the Peoples Gas Acquisition, during the past five years, we have expended cash of \$257,154 and issued 439,943 shares of common stock, valued at \$12,845 at the time of acquisition, related to the acquisition of both water and wastewater utility systems.

Water and Wastewater Utility Acquisitions – Pending Completion

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 December 2020, the Company entered into a purchase agreement to acquire the wastewater utility system assets of the Village of Bourbonnais, Illinois, which consists of approximately 6,500 customers for \$32,100. 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. In July 2020, the Company entered into a purchase agreement to acquire the water utility system assets of Commons Water, Texas, which consists of approximately 980 customers for \$4,000.

The purchase price for our 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 base 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 closings of our acquisitions of East Whiteland Township and Willistown Township are expected to occur the first quarter of 2022, closing for the Village of Bourbonnais is expected to occur before the end of 2021, and closing for Lower Makefield Township is expected to occur in the second half of 2021. Closing for our utility acquisitions are subject to the timing of the regulatory approval process.

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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 consist 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. 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. The administrative law judges in the regulatory approval process recommended that the Company's application be denied. The Company provided exceptions to the recommended decision and which will be considered by the Pennsylvania Public Utility Commission in March. Closing of our acquisition of DELCORA is expected to occur in the first half of 2021, subject to the timing of the regulatory approval process. The Company expects to finance this acquisition with a mix of common equity and debt financing.

In addition to the Company's pending acquisitions of DELCORA, as part of the Company's growth-through-acquisition strategy, the Company has entered into purchase agreements to acquire the five water or wastewater utility systems described previously, which will add approximately 29,000 customers in three of the states in which the Company operates, for a total combined purchase price in cash of \$161,500. 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 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 our remaining acquisitions, are expected to occur in the fourth quarter of 2021 and the first quarter 2022, respectively, subject to the timing of the regulatory approval process.

Water and Wastewater Utility Acquisitions - Completed

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. The purchase price allocation for this acquisition consisted primarily of property, plant and equipment. 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 this acquisition 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 was \$3,569.

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.

In July 2018, the Company acquired the wastewater utility system assets of Limerick Township, Pennsylvania which serves 5,497 customers. The total cash purchase price for the utility system was \$74,836. The purchase price allocation for this acquisition consisted primarily of acquired property, plant and equipment of \$64,759 and goodwill of \$10,790. Additionally, during 2018, we completed seven acquisitions of water and wastewater utility systems for \$42,519 in cash in three of the states in which we operate, adding 8,661 customers. Further, in December 2018, the Company acquired the Valley Creek Trunk Sewer System, serving area municipalities in Pennsylvania, from the Tredyffrin Township Municipal Authority for \$28,338. The purchase price allocation for this acquisition consisted primarily of property, plant and equipment of \$22,904 and goodwill of \$5,434. The system receives untreated wastewater from area municipalities, which

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is conveyed to the Valley Forge Treatment Plan. The system consists of 49,000 linear feet of gravity sewers, pump stations, and force mains.

In 2017, we completed four acquisitions of water and wastewater utility systems for \$5,860 in cash in two of the states in which we operate, adding 1,003 customers.

In January 2016, we acquired the water utility system assets of Superior Water Company, Inc., which provided public water service to 4,108 customers in portions of Berks, Chester, and Montgomery counties in Pennsylvania. The total purchase price for the utility system was \$16,750, which consisted of the issuance of 439,943 shares of the Company's common stock and \$3,905 in cash. Additionally, during 2016, we completed 18 acquisitions of water and wastewater utility systems for \$5,518 in cash in eight of the states in which we operate, adding 2,469 customers.

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.

Joint Venture

Aqua Infrastructure, LLC was a partner in a joint venture with a firm that operates natural gas pipelines and processing plants for the operation of a private pipeline system to supply raw water to natural gas well drilling operations in the Marcellus Shale in north-central Pennsylvania (the "Joint Venture"). We owned 49% of the Joint Venture. The 56 mile pipeline construction and permitted intake on the Susquehanna River cost \$109,000. In October 2020, the Company sold its investment in the Joint Venture, and recorded a charge of \$3,700 associated with the sale. Our 49% investment in the Joint Venture was an unconsolidated affiliate and was accounted for under the equity method of accounting. Our initial investment was carried at cost. Subsequently, the carrying amount of our investment was adjusted to reflect capital contributions or distributions, our equity in earnings and losses since the commencement of the system's operations, and a decline in the fair value of our investment.

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 2020, the Company sold a water system in Texas that served approximately 265 customers, which resulted in proceeds of \$395, and recognized a loss on sale of \$469, of which \$450 was previously reserved for in 2017. 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 2017, the Company sold two business units within Aqua Resources, which resulted in total proceeds of \$867, and recognized a net loss of \$324. In 2016, the Company sold two business units within Aqua Resources, which resulted in total proceeds of \$4,459, and recognized a net loss of \$543.

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 \$6,505,870 of long-term debt, and obtained other short-term borrowings during the past five years. At December 31, 2020, we have a \$1,000,000 long-term revolving credit facility that expires in December 2023, of which \$23,457 was designated for letter of credit usage, \$591,543 was available for borrowing, and \$385,000 of borrowings were outstanding at December 31, 2020. In addition, we have short-term lines of credit of \$235,500 of which \$157,302 was available as of December 31, 2020. Included in the short-term lines of credit is a Peoples Natural Gas \$100,000 364 day unsecured revolving credit facility with two banks that was originated in November 2020. 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.

In August 2020, we entered into a forward equity sale agreement for 6,700,000 shares of common stock with affiliates of a certain underwriter ("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.

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We will not receive any proceeds from the sale of our common stock by the forward purchaser until settlement of all or a portion of the forward equity sale agreement. The actual proceeds to be received by us will vary depending upon the settlement date, the number of shares designated for settlement on that settlement date, and the method of settlement. We intend to use any proceeds received by us upon settlement of the forward equity sale agreement for general corporate purposes, including for water and wastewater utility acquisitions, working capital and capital expenditures.

On April 13, 2020, the Company issued \$1,100,000 of long-term debt, 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 by the Company on March 13, 2020, and to repay a portion of the borrowings under our existing five year unsecured revolving credit agreement.

On April 3, 2020, the Company entered into a 364 day credit agreement that provided the Company with a short-term borrowing facility of \$500,000 in unsecured term loans, which was drawn. The Company used the proceeds from the term loans 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 loan, respectively, and based on the Company's ability to access financial markets, we terminated the facility.

In October 2018, we entered into a \$5,100,000 syndicated, committed bridge facility to support our agreement to acquire Peoples. On March 16, 2020, as a result of our completion of the Peoples Gas Acquisition, the Company terminated the Bridge Commitment.

We financed the purchase price of the Peoples Gas Acquisition and refinanced certain debt with a mix of common equity, mandatory convertible equity units, debt financing, which included senior notes issued in capital markets transactions, and credit facilities. The estimated purchase price paid by the Company for this acquisition was determined based on a base price of \$4,275,000, which was adjusted by \$43,935 for an estimated change in working capital, certain capital expenditures of \$247,500, and the assumption of \$1,101,091 of indebtedness as of the Closing Date, consisting of \$920,091 of senior notes and \$181,000 of short-term debt.

As a result of the proceeds raised from the April 2019 financings that were being held to fund the Peoples Gas Acquisition the Company had a positive working capital position as of December 31, 2019. However, historically, our consolidated balance sheet 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 2020, 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.

The Company has a universal "pay as you go" shelf registration statement, filed with the SEC in February 2018, 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 our common stock, preferred stock, debt securities, and other securities specified therein at indeterminate prices. The registration statement expired in February 2021, and we intend to file a new three-year universal shelf registration statement. In April 2019, March 2020 and August 2020, we have 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* for further information regarding these financings.

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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, 2020 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.

In May 2020, the Company amended its Articles of Incorporation to increase the number of authorized shares of common stock from 300,000,000 to 600,000,000 shares.

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 2020 dividend payment, holders of 6.2% 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 five years, we have sold 876,448 original issue shares of common stock for net proceeds of \$33,485 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 2020 and 2019, we sold 388,978 and 236,666 original issues shares of common stock for net proceeds of \$16,522 and 8,959, respectively, through the dividend reinvestment portion of the plan. In 2019, and 2018, 183,731, and 321,585 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, and \$11,343, respectively.

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* for further information regarding these agreements.

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Contractual Obligations

The following table summarizes our contractual cash obligations as of December 31, 2020:

	Payments Due By Period				
	Total	Less than 1 year	1 - 3 years	3 - 5 years	More than 5 years
Long-term debt	\$ 5,630,243	\$ 84,353	\$ 726,447	\$ 221,231	\$ 4,598,212
Interest on fixed-rate, long-term debt (1)	200,830	3,508	17,772	9,943	169,607
Operating leases (2)	90,635	11,674	22,765	22,068	34,128
Unconditional purchase obligations (3)	23,872	5,207	9,576	8,486	603
Gas purchase obligations (4)	2,778,227	205,336	407,093	406,648	1,759,150
Other purchase obligations (5)	172,474	172,474	-	-	-
Retirement plan obligations (6)	14,775	14,775	-	-	-
Other obligations (7)	10,864	3,407	2,088	2,153	3,216
Total	\$ 8,921,920	\$ 500,734	\$ 1,185,741	\$ 670,529	\$ 6,564,916

- (1) Represents interest payable on fixed rate, long-term debt. Amounts reported may differ from actual due to future refinancing of debt.
- (2) Represents operating leases that are noncancelable, before expiration, for the lease of motor vehicles, buildings, land and other equipment.
- (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.

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- *Uncertain tax positions* - We have uncertain tax positions of \$19,194. 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 during the past five years:

December 31,	2020	2019	2018	2017	2016
Long-term debt (1)	54.7%	44.2%	56.1%	52.3%	50.8%
Essential Utilities stockholders' equity	45.3%	55.8%	43.9%	47.7%	49.2%
	100.0%	100.0%	100.0%	100.0%	100.0%

(1) Includes current portion, as well as our borrowings under a variable rate revolving credit agreement of \$385,000 at December 31, 2020, \$0 at December 31, 2019, \$370,000 at December 31, 2018, \$60,000 at December 31, 2017, and \$25,000 at December 31, 2016.

Over the past five 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

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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 and regulatory 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.

We had an investment in a joint venture, for which we owned 49%, and used the equity method of accounting to account for this joint venture. In October 2020, the Company sold its investment in the joint venture. The joint venture operated a private pipeline system to supply raw water to natural gas well drilling operations in the Marcellus Shale in north central Pennsylvania. Refer to Note 1 – *Summary of Significant Accounting Policies – Property, Plant and Equipment and Depreciation*, and *Investment in Joint Venture* in this Annual Report for additional information regarding the review of long-lived assets for impairment.

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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, we may perform a quantitative goodwill impairment test by determining the fair value of a reporting unit based on a discounted cash flow analysis. 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 2.57% for our pension plan, and 2.68% for our other post-retirement benefit plans as of December 31, 2020, which represent a 78 and 74 basis-point decrease as compared to the discount rates selected at December 31, 2019, respectively. Our post-retirement benefits expense under these plans is determined using the discount rate as of the beginning of the year, which was 3.35% for our pension plan and 3.42% for our other-postretirement benefit plan for 2020, and will be 2.57% for our pension plan, and 2.68% for our other post-retirement benefit plans for 2021.

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 2020, we used a 6.0% expected return on plan assets assumption which will not change for 2021.

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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 2021 our pension contribution is expected to be \$14,775. 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.

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
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, 2020, the Company's internal control over financial reporting was effective.

As permitted by SEC guidance for newly acquired businesses, management's assessment of internal control over financial reporting did not include an assessment of the internal control over financial reporting of the Peoples Gas Acquisition, which was completed on March 16, 2020. Peoples Gas is a wholly-owned subsidiary and accounted for approximately 23% of our total assets and 36% of our total operating revenues as of and for the year ended December 31, 2020.



Christopher H. Franklin
Chairman, President and Chief Executive Officer



Daniel J. Schuller
Executive Vice President and Chief Financial Officer

March 1, 2021

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, 2020 and 2019, and the related consolidated statements of operations, comprehensive income, equity, and cash flows for each of the three years in the period ended December 31, 2020, including the related notes and schedule of condensed parent company financial statements as of December 31, 2020 and 2019 and for each of the three years in the period ended December 31, 2020 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, 2020, 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, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020 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, 2020, 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.

As described in Management's Report on Internal Control over Financial Reporting, management has excluded Peoples Gas from its assessment of internal control over financial reporting as of December 31, 2020, because it was acquired by the Company in a purchase business combination during 2020. We have also excluded Peoples Gas from our audit of internal control over financial reporting. Peoples Gas is a wholly-owned subsidiary whose total assets and total revenues excluded from management's assessment and our audit of internal control over financial reporting represent approximately 23% and 36%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2020.

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.

Rate Regulation and Regulatory Accounting

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, 2020, regulatory assets were \$1,368 million and regulatory liabilities were \$793 million. 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. 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 the Company's rate regulation and regulatory accounting is a critical audit matter are the significant judgment by management in assessing the potential outcomes and related accounting impacts associated with pending rate cases; this in turn led to a high degree of auditor judgment, subjectivity and effort in performing procedures related to the recovery of regulatory assets and the refund of regulatory liabilities.

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, excluding regulatory assets and liabilities acquired in the purchase of Peoples Gas. These procedures also included, among others (i) obtaining the Company's correspondence with regulators and assessing the reasonableness of management's judgments regarding the probability of recovery of regulatory assets and refund of regulatory liabilities in light of correspondence with regulators, among other factors, (ii) assessing the reasonableness of management's judgments regarding new and updated regulatory guidance and proceedings and the related accounting implications, and (iii) testing the calculation of regulatory assets and liabilities based on provisions and formulas outlined in regulatory filings, pending regulatory orders and other correspondence.

A handwritten signature in cursive script, appearing to read "PricewaterhouseCoopers LLP".

Philadelphia, Pennsylvania
March 1, 2021

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,	
	2020	2019
Assets		
Property, plant and equipment, at cost	\$ 11,620,019	8,201,936
Less: accumulated depreciation	2,107,142	1,856,146
Net property, plant and equipment	9,512,877	6,345,790
Current assets:		
Cash and cash equivalents	4,827	1,868,922
Accounts receivable, net	154,775	67,137
Unbilled revenues	118,538	40,483
Inventory - materials and supplies	21,669	18,379
Inventory - gas stored	36,732	-
Prepayments and other current assets	38,594	16,259
Regulatory assets	5,085	2,389
Assets held for sale	-	1,558
Total current assets	380,220	2,015,127
Regulatory assets	1,362,788	875,743
Deferred charges and other assets, net	56,002	42,652
Investment in joint venture	-	5,984
Funds restricted for construction activity	1,268	-
Goodwill	2,324,547	63,822
Operating lease right-of-use assets	60,334	12,867
Intangible assets	7,241	-
Total assets	\$ 13,705,277	9,361,985

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,	
	2020	2019
Liabilities and Equity		
Essential Utilities stockholders' equity:		
Common stock at \$0.50 par value, authorized 600,000,000 shares, issued 248,571,355 and 223,871,284 as of December 31, 2020 and December 31, 2019	\$ 124,285	\$ 111,935
Capital in excess of par value	3,379,057	2,636,555
Retained earnings	1,261,862	1,210,072
Treasury stock, at cost, 3,180,887 and 3,112,565 shares as of December 31, 2020 and December 31, 2019	(81,327)	(77,702)
Total stockholders' equity	4,683,877	3,880,860
Long-term debt, excluding current portion	5,545,890	2,972,349
Less: debt issuance costs	38,146	29,022
Long-term debt, excluding current portion, net of debt issuance costs	5,507,744	2,943,327
Commitments and contingencies (See Note 9)		
Current liabilities:		
Current portion of long-term debt	84,353	105,051
Loans payable	78,198	25,724
Accounts payable	177,489	74,919
Book overdraft	44,003	10,944
Accrued interest	39,408	29,818
Accrued taxes	37,172	22,775
Regulatory liabilities	19,866	4,612
Other accrued liabilities	123,384	49,618
Total current liabilities	603,873	323,461
Deferred credits and other liabilities:		
Deferred income taxes and investment tax credits	1,258,098	936,158
Customers' advances for construction	99,014	95,556
Regulatory liabilities	773,310	512,987
Asset retirement obligations	1,336	-
Operating lease liabilities	55,642	11,645
Pension and other postretirement benefit liabilities	91,896	69,406
Other	56,713	33,059
Total deferred credits and other liabilities	2,336,009	1,658,811
Contributions in aid of construction	573,774	555,526
Total liabilities and equity	\$13,705,277	\$9,361,985

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,		
	2020	2019	2018
Operating revenues	\$ 1,462,698	\$ 889,692	\$ 838,091
Operating expenses:			
Operations and maintenance	528,611	333,102	308,478
Purchased gas	165,745	-	-
Depreciation	251,443	158,179	146,032
Amortization	5,616	(1,703)	641
Taxes other than income taxes	76,597	59,955	59,762
Total operating expenses	<u>1,028,012</u>	<u>549,533</u>	<u>514,913</u>
Operating income	434,686	340,159	323,178
Other expense (income):			
Interest expense	188,435	125,383	99,054
Interest income	(5,363)	(25,406)	(152)
Allowance for funds used during construction	(12,687)	(16,172)	(13,023)
Change in fair value of interest rate swap agreements	-	23,742	59,779
Loss on debt extinguishment	-	18,528	-
Gain on sale of other assets	(661)	(923)	(714)
Equity loss (earnings) in joint venture	3,374	(2,210)	(2,081)
Other	(3,383)	5,691	1,996
Income before income taxes	<u>264,971</u>	<u>211,526</u>	<u>178,319</u>
Provision for income tax benefit	(19,878)	(13,017)	(13,669)
Net income	<u>\$ 284,849</u>	<u>\$ 224,543</u>	<u>\$ 191,988</u>
Comprehensive income	<u>\$ 284,849</u>	<u>\$ 224,543</u>	<u>\$ 191,988</u>
Net income per common share:			
Basic	<u>\$ 1.14</u>	<u>\$ 1.04</u>	<u>\$ 1.08</u>
Diluted	<u>\$ 1.12</u>	<u>\$ 1.04</u>	<u>\$ 1.08</u>
Average common shares outstanding during the period:			
Basic	<u>249,768</u>	<u>215,550</u>	<u>177,904</u>
Diluted	<u>254,629</u>	<u>215,931</u>	<u>178,399</u>

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,	
	2020	2019
Essential Utilities stockholders' equity:		
Common stock, \$0.50 par value	\$ 124,285	\$ 111,935
Capital in excess of par value	3,379,057	2,636,555
Retained earnings	1,261,862	1,210,072
Treasury stock, at cost	(81,327)	(77,702)
Total stockholders' equity	4,683,877	3,880,860
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	2,805
1.00% to 1.99%	2020 to 2039	10,260
2.00% to 2.99%	2022 to 2033	265,557
3.00% to 3.99%	2020 to 2056	1,316,872
4.00% to 4.99%	2020 to 2059	1,315,812
5.00% to 5.99%	2020 to 2043	17,804
6.00% to 6.99%	2022 to 2036	33,955
7.00% to 7.99%	2022 to 2027	29,890
8.00% to 8.99%	2021 to 2025	4,425
9.00% to 9.99%	2021 to 2026	16,900
		3,014,280
		1,887,117
Notes payable to bank under revolving credit agreement, variable rate, due 2023	385,000	-
Unsecured notes payable:		
Bank note at 3.50% due 2020	-	50,000
Amortizing notes at 3.00% due 2022	60,502	99,356
Notes at 2.704% due 2030	500,000	-
Notes ranging from 3.01% to 3.59%, due 2029 through 2050	1,125,000	490,000
Notes at 4.28%, due 2049	500,000	500,000
Notes ranging from 5.64% to 5.95%, due 2020 through 2034	45,461	50,927
Total long-term debt	5,630,243	3,077,400
Current portion of long-term debt	84,353	105,051
Long-term debt, excluding current portion	5,545,890	2,972,349
Less: debt issuance costs	38,146	29,022
Long-term debt, excluding current portion, net of debt issuance costs	5,507,744	2,943,327
Total capitalization	\$ 10,191,621	\$ 6,824,187

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	Accumulated Other Comprehensive Income	Total
Balance at December 31, 2017	\$ 90,350	\$ 807,135	\$ 1,132,556	\$ (73,280)	\$ 860	\$ 1,957,621
Net income	-	-	191,988	-	-	191,988
Dividends declared (\$0.8474 per share)	-	-	(150,736)	-	-	(150,736)
Issuance of common stock under dividend reinvestment plan (158,205 shares)	79	5,084	-	-	-	5,163
Repurchase of stock (73,898 shares)	-	-	-	(2,555)	-	(2,555)
Equity compensation plan (201,563 shares)	101	(101)	-	-	-	-
Exercise of stock options (91,808 shares)	46	1,413	-	-	-	1,459
Stock-based compensation	-	7,567	(423)	-	-	7,144
Cumulative effect of change in accounting principle - financial instruments	-	-	860	-	(860)	-
Other	-	(720)	-	-	-	(720)
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

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,		
	2020	2019	2018
Cash flows from operating activities:			
Net income	\$ 284,849	\$ 224,543	\$ 191,988
Adjustments to reconcile net income to net cash flows from operating activities:			
Depreciation and amortization	257,059	156,476	146,673
Deferred income taxes	(17,782)	(10,436)	(14,950)
Provision for doubtful accounts	32,325	5,306	5,305
Stock-based compensation	8,160	7,368	7,567
Gain on sale of utility system and other assets	(642)	(1,328)	(714)
Loss on interest rate swap agreements	-	23,742	59,779
Loss on debt extinguishment	-	18,528	-
Settlement of interest rate swap agreements	-	(83,520)	-
Net change in receivables, inventory and prepayments	(35,348)	(4,335)	(18,024)
Net change in payables, accrued interest, accrued taxes and other accrued liabilities	(1,819)	5,108	567
Pension and other postretirement benefits contributions	(20,282)	(8,597)	(14,216)
Other	1,504	5,668	4,547
Net cash flows from operating activities	<u>508,024</u>	<u>338,523</u>	<u>368,522</u>
Cash flows from investing activities:			
Property, plant and equipment additions, including the debt component of allowance for funds used during construction of \$4,434, \$4,231, and \$3,332	(835,642)	(550,273)	(495,737)
Acquisitions of utility systems and other, net	(3,501,835)	(59,687)	(145,693)
Net proceeds from the sale of utility systems and other assets	2,115	2,893	716
Other	1,696	2,464	899
Net cash flows used in investing activities	<u>(4,333,666)</u>	<u>(604,603)</u>	<u>(639,815)</u>
Cash flows from financing activities:			
Customers' advances and contributions in aid of construction	9,585	9,092	7,458
Repayments of customers' advances	(8,337)	(6,825)	(6,217)
Net proceeds (repayments) of short-term debt	(129,407)	10,275	11,799
Proceeds from long-term debt	3,366,838	1,434,506	1,331,868
Repayments of long-term debt	(1,820,571)	(1,048,471)	(914,125)
Extinguishment of long-term debt	-	(25,237)	-
Change in cash overdraft position	33,059	1,993	(12,678)
Proceeds from issuance of common stock under dividend reinvestment plan	16,522	8,959	5,163
Proceeds from stock issued to finance acquisition	729,301	1,263,099	-
Proceeds from tangible equity unit issuance	-	673,642	-
Proceeds from exercised stock options	1,589	1,898	1,459
Repurchase of common stock	(4,365)	(1,867)	(2,555)
Dividends paid on common stock	(232,571)	(188,512)	(150,736)
Other	(96)	(1,177)	(720)
Net cash flows from financing activities	<u>1,961,547</u>	<u>2,131,375</u>	<u>270,716</u>
Net increase (decrease) in cash and cash equivalents	(1,864,095)	1,865,295	(577)
Cash and cash equivalents at beginning of year	1,868,922	3,627	4,204
Cash and cash equivalents at end of year	<u>\$ 4,827</u>	<u>\$ 1,868,922</u>	<u>\$ 3,627</u>
Cash paid during the year for:			
Interest, net of amounts capitalized	\$ 169,048	\$ 89,228	\$ 93,630
Income taxes	4,853	970	2,103
Non-cash investing activities:			
Property, plant and equipment additions purchased at the period end, but not yet paid	\$ 98,569	\$ 60,628	\$ 65,285
Non-cash utility property contributions	36,181	30,693	24,660

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. On February 3, 2020, we changed our name from Aqua America, Inc. to Essential Utilities, Inc. to align the name of the Company with its business plan following the March 16, 2020 completion of the Peoples Gas Acquisition and to reflect the combination of regulated water utilities and natural gas utilities that offer essential utility services to customers. 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 67% of our Regulated Water segment’s income for 2020. As of December 31, 2020, 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 utility subsidiaries provide similar services in seven additional states. Additionally, 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 our non-regulated natural gas operations, Aqua Infrastructure LLC, and Aqua Resources, Inc. 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.

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

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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 caused significant social and economic restrictions that have been imposed in the United States and abroad, which has 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 unprecedented and ever evolving, future events and effects related to the COVID-19 pandemic 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. The following prior period amounts in the consolidated balance sheet have been reclassified to conform to the current period presentation:

- the current portion of regulatory assets and liabilities; and
- pension and other postretirement liabilities, which was formerly presented in non-current liabilities within other.

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, 2020, utility plant includes a net credit acquisition adjustment of \$12,215, which is generally being amortized from 2 to 59 years. Amortization of the acquisition adjustments totaled \$2,895 in 2020, \$6,076 in 2019, and \$2,645 in 2018.

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, 2020, \$1,557 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

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Notes to Consolidated Financial Statements (continued)
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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, 2020, \$31,509 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.

Long-lived assets of the Company, which consist primarily of utility plant in service, and regulatory assets, are reviewed for impairment when changes in circumstances or events occur. These circumstances or events could include a disallowance of utility plant in service or regulatory assets by the respective utility commission, 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 period there has been no change in circumstances or events that have occurred that require adjustments to the carrying values of the Company's long-lived assets.

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 2020 was \$8,253, 2019 was \$11,941, and 2018 was \$9,691. No interest was capitalized by our market-based businesses.

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.

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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:

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	<u>\$ 804,771</u>	<u>\$ 120,908</u>	<u>\$ 506,564</u>	<u>\$ 30,455</u>

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	<u>\$ 767,480</u>	<u>\$ 105,115</u>	<u>\$ 17,097</u>

2018	Water Revenues	Wastewater Revenues	Other Revenues
Revenues from contracts with customers:			
Residential	\$ 482,946	\$ 73,418	-
Commercial	133,753	13,147	-
Fire protection	32,236	-	-
Industrial	28,848	1,857	-
Other water	53,658	-	-
Other wastewater	-	5,748	-
Other utility	-	-	9,427
Revenues from contracts with customers	731,441	94,170	9,427
Alternative revenue program	(708)	308	-
Other and eliminations	-	-	3,453
Consolidated	<u>\$ 730,733</u>	<u>\$ 94,478</u>	<u>\$ 12,880</u>

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.

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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 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. See description below for a discussion on the performance obligation for each of these revenue streams:

- **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 commissions, and revenues are billed cyclically and accrued for when unbilled. Other water and other wastewater revenues consists primarily of fines, penalties, surcharges, and availability lot fees. Customer rate credits represent a commitment that the Company made, associated with the approval of the Peoples Gas Acquisition by the Pennsylvania Public Utility Commission, 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 water and wastewater customers, and \$18,924 to its natural gas utility customers. Our performance obligation for tariff revenues is to provide potable water, wastewater treatment service, or delivery 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 represents 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 represents 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, which results in either a refund due to customers or a payment from 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 Financial Accounting Standards Board’s (“FASB”) accounting guidance for recognizing revenue from contracts with customers.

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- **Other and Eliminations** – Other and eliminations consists 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 to 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. 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 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 is to deliver non-potable water to the joint venture’s customers. Aqua Infrastructure’s share of the revenues recognized by the joint venture is reflected, net, in equity earnings in joint venture on our consolidated statements of operations. Aqua Resources earns revenues by providing non-regulated water and wastewater services through an operating and maintenance contract, which concluded in 2020, and third-party water and sewer service line protection and repair services. The performance obligations are performing agreed upon services in the contract, most commonly operation of third-party water or wastewater treatment services, or billing services, or allowing the use of our logo to a third-party water and sewer service line protection and repair services. Revenues are primarily recognized over time as service is delivered. The Company’s market-based subsidiaries recognized revenues of \$16,761 in 2020, \$3,395 in 2019, and \$3,590 in 2018.

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 \$44,003 and \$10,944 at December 31, 2020 and 2019, 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 as equity loss (earnings) in joint venture. During 2020 and 2019 we received distributions of \$2,137 and \$3,185, respectively.

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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, we may perform a quantitative goodwill impairment test by determining the fair value of a reporting unit based on a discounted cash flow analysis. 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 Company performed a quantitative assessment for its annual test of the goodwill attributable to its Regulated Water and Aqua Resources reporting units for impairment and a qualitative assessment for its Regulated Natural gas business reporting unit as of July 31, 2020, 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, 2018	\$ 47,885	\$ -	4,841	\$ 52,726
Goodwill acquired	11,126	-	-	11,126
Reclassifications to utility plant acquisition adjustment	(30)	-	-	(30)
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	<u>\$ 58,659</u>	<u>\$ 2,261,047</u>	<u>\$ 4,841</u>	<u>\$ 2,324,547</u>

On March 16, 2020, the Company completed the Peoples Gas Acquisition, which resulted in goodwill of \$2,261,047, subject to adjustment over the one year measurement period. 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,

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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 and other costs. Marketable equity securities are carried on the balance sheet at fair market value, and changes in fair value are included in other expense (income).

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. Contributions in aid of construction include direct non-refundable contributions and the portion of customers' advances for construction that become non-refundable.

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.

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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, 2020 and 2019.

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 Company is evaluating the requirements of the updated guidance to determine the impact of adoption.

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 is evaluating the impact of this accounting guidance.

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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. The updated accounting guidance is effective for fiscal years beginning after December 15, 2020 and interim periods within those fiscal years with early adoption permitted. The Company has evaluated the requirements of the updated guidance and has determined the impact of adoption will not be material to the Company's financial statements.

Pronouncements adopted during the fiscal year:

In August 2018, the FASB issued updated accounting guidance, which modifies the disclosures required for defined benefit pension and other postretirement benefit plans. The modifications in this update remove disclosures that are no longer considered cost beneficial, clarify the specific requirements of disclosures, and add disclosure requirements identified as relevant. The updated accounting guidance is effective for fiscal years ending after December 15, 2020, with early adoption available. On December 31, 2020, we adopted the new guidance which resulted in the removal of the disclosure of the amounts recorded as regulatory assets that are expected to be recognized as components of net periodic benefit cost over the next fiscal year, and the effects of a one-percentage-point change in the assumed healthcare cost trend rate in Company's financial statement disclosures for its defined benefit pension and other postretirement benefit plans.

In August 2018, the FASB issued updated accounting guidance on accounting for cloud computing arrangements. The updated guidance requires entities that are customers in cloud computing arrangements to defer implementation costs if they would be capitalized by the entity in software licensing arrangements under the internal-use software guidance. The guidance may be applied retrospectively or prospectively to implementation costs incurred after the date of adoption. The updated accounting guidance is effective for fiscal years beginning after December 15, 2019 and interim periods within those fiscal years. On January 1, 2020, we adopted the new guidance prospectively, which did not have a material impact on our consolidated financial statements.

In August 2018, the FASB issued updated accounting guidance that modifies the disclosure requirements on fair value measurements. The modifications in this update eliminates, amends, and adds disclosure requirements for fair value measurements, which is expected to reduce costs for preparers while providing more decision-useful information for financial statement users. The updated accounting guidance is effective for fiscal years ending after December 15, 2019, with early adoption available. On January 1, 2020, we adopted the new guidance, which did not have an impact on our consolidated financial statements.

In June 2016, the FASB issued updated accounting guidance on accounting for impairments of financial instruments, including trade receivables, which requires companies to estimate expected credit losses on trade receivables over their contractual life. Historically, companies reserve for expected credit losses by applying historical loss percentages to respective aging categories. Under the updated accounting guidance, companies will use a forward-looking methodology that incorporates lifetime expected credit losses, which will result in an allowance for expected credit losses for receivables that are either current or not yet due, which historically have not been reserved for. The updated accounting guidance is effective for fiscal years beginning after December 15, 2019 and interim periods within those fiscal years, with early adoption available. On January 1, 2020, we adopted the new guidance, which did not have a material impact on our consolidated financial statements.

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Note 2 – Acquisitions

Peoples Gas Acquisition

Pursuant to the Company’s growth strategy, 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 is subject to adjustment based upon the terms of the purchase agreement. Purchase price adjustments include the completion of a closing balance sheet, which was provided to the seller, and the finalization of an adjustment for utility capital expenditures made by the seller during the period between November 1, 2018 and closing. There is a dispute between the parties regarding this adjustment for utility capital expenditures. It is expected the matter will be resolved in accordance with the provisions of the purchase agreement or by the competent court of law with jurisdiction over the matter. The estimated 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	\$	3,465,344

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.

The Company accounted for the Peoples Gas Acquisition as a business combination using the acquisition method of accounting. The estimated purchase price is allocated to the net tangible and intangible assets based upon their estimated fair values at the date of the acquisition. The purchase price allocation is preliminary and subject to revision. The Company has not completed the allocation of the purchase price as we are finalizing the valuation of the net assets acquired, including the evaluation of certain acquired contracts, regulatory assets, deferred income taxes and contingent liabilities, among others. Additionally, we are continuing to work towards finalizing the purchase price for the capital expenditures adjustments provided for in the purchase agreement. As of December 31, 2020, the Company recorded adjustments to reduce goodwill by \$26,630 primarily reflecting adjustments to deferred income taxes offset by the adjustments to liabilities for postretirement benefit obligations, refunds due to customers representing purchased gas costs charged to customers in periods prior to the Closing Date, and a sales tax audit for pre-acquisition periods. The Company expects to finalize the purchase price allocation no later than March 15, 2021. Additionally, in the event we identify 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, and they are related to new information obtained about facts and circumstances that existed as of the acquisition date, those changes are considered a measurement-period

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adjustment, and we record the offset to goodwill. The following table summarizes the preliminary purchase price allocation as of the acquisition date and subsequent adjustments as of December 31, 2020:

	Amounts Previously Recognized as of Acquisition Date (a)	Measurement Period Adjustments	Amounts Recognized as of Acquisition Date (as Adjusted)
Property, plant and equipment, net	\$ 2,468,946	\$ 7,605	2,476,551
Current assets	241,372	1,159	242,531
Regulatory assets	288,665	(1,914)	286,751
Goodwill	2,287,677	(26,630)	2,261,047
Other long-term assets	82,528	(7,457)	75,071
Total assets acquired	<u>5,369,188</u>	<u>(27,237)</u>	<u>5,341,951</u>
Current portion of long-term debt	5,136	-	5,136
Loans payable	181,000	-	181,000
Other current liabilities	182,622	3,498	186,120
Long-term debt	999,460	-	999,460
Deferred income taxes	245,701	(32,054)	213,647
Regulatory liabilities	134,875	(11,846)	123,029
Other long-term liabilities	155,050	13,165	168,215
Total liabilities assumed	<u>1,903,844</u>	<u>(27,237)</u>	<u>1,876,607</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-Q for the period ended March 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 will be 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 consists of costs recorded as operations and maintenance expenses in 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.

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.

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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).

On October 22, 2018, the Company obtained a commitment (the “Bridge Commitment”) from certain banks to provide senior unsecured bridge loans in an aggregate amount of up to \$5,100,000 to, among other things, backstop the Peoples Gas Acquisition purchase price and refinancing of certain debt of the Company and Peoples. On March 16, 2020, as a result of our completion of the Peoples Gas Acquisition, the Company terminated the Bridge Commitment.

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. In 2020, the Company granted \$4,080 of customer rate credits to its water and wastewater customers, and \$18,924 to its natural gas utility customers.

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 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 December 2020, the Company entered into a purchase agreement to acquire the wastewater utility system assets of the Village of Bourbonnais, Illinois, which consists of approximately 6,500 customers for \$32,100. 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. In July 2020, the Company entered into a purchase agreement to acquire the water utility system assets of Commons Water, Texas, which consists of approximately 980 customers for \$4,000.

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 closings of our acquisitions of East Whiteland Township and Willistown Township are expected to occur in

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the first quarter of 2022, closing for the Village of Bourbonnais is expected to occur before the end of 2021, and closing for Lower Makefield Township is expected to occur in the second half of 2021. 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 consist 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. The administrative law judges in the regulatory approval process recommended that the Company’s application be denied. The Company provided exceptions to the recommended decision, which will be considered by the Pennsylvania Public Utility Commission in an anticipated March 2021 order. 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.

Water and Wastewater Utility Acquisitions - Completed

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. The purchase price allocation for this acquisition consisted primarily of property, plant and equipment. 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 this acquisition 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 are \$3,569.

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 were \$8,353 in 2020 and \$506 in 2019.

In July 2018, the Company acquired the wastewater utility systems assets of Limerick Township, Pennsylvania which serves 5,497 customers. The total cash purchase price for the utility system was \$74,836. The purchase price allocation for this acquisition consisted primarily of acquired property, plant and equipment of \$64,759, and goodwill of \$10,790. Additionally, during 2018, the Company completed seven acquisitions of water and wastewater utility systems in three states adding 8,661 customers. The total purchase price of these utility systems consisted of \$42,519 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 were \$11,652 in 2020, \$8,905 in 2019, and in 2018 were \$3,308. Further, in December 2018, the Company acquired the Valley Creek Trunk Sewer System, serving area municipalities in Pennsylvania, from the Tredyffrin Township Municipal Authority for \$28,338. The purchase price allocation for this acquisition consisted primarily of property, plant and equipment of \$22,904 and goodwill of \$5,434. The system receives untreated wastewater from area municipalities, which is conveyed to the Valley Forge Treatment Plant. The system consists of 49,000 linear feet of gravity sewers, pump stations, and force mains. The operating revenues included in the

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consolidated financial statements of the Company for the Valley Creek Trunk Sewer System were \$2,799 in 2020 and \$2,799 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 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.

In 2017, the Company decided to market for sale a water system in Texas that serves approximately 265 customers. This water system was reported as assets held for sale in the Company's consolidated balance sheet, and in September 2020, the Company completed the sale for proceeds of \$395 and recognized a loss on sale of \$469, of which \$450 was previously reserved for in 2017.

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Note 4 – Property, Plant and Equipment

	December 31,		Approximate Range of Useful Lives	Weighted Average Useful Life
	2020	2019		
Regulated Water segment:				
Utility plant and equipment				
Mains and accessories	\$ 3,800,878	\$ 3,585,506	32 - 94 years	76 years
Services, hydrants, treatment plants and reservoirs	2,425,303	2,152,397	5 - 89 years	56 years
Operations structures and water tanks	352,094	332,812	14 - 80 years	48 years
Miscellaneous pumping and purification equipment	976,719	904,757	9 - 76 years	42 years
Meters, transportation and other operating equipment	898,607	847,945	5 - 84 years	29 years
Land and other non-depreciable assets	137,390	156,617	-	-
Utility plant and equipment - regulated water segment	8,590,991	7,980,034		
Utility construction work in progress	225,208	214,633	-	-
Net utility plant acquisition adjustment	(12,215)	(15,248)	2 - 59 years	28 years
Non-utility plant and equipment	21,681	22,517	5 - 64 years	57 years
Property, Plant and Equipment - Regulated Water segment	8,825,665	8,201,936		
Regulated Gas segment:				
Natural gas transmission	362,477		5 - 93 years	67 years
Natural gas storage	60,846	-	5 - 85 years	47 years
Natural gas gathering and processing	126,105	-	5 - 88 years	59 years
Natural gas distribution	1,540,366	-	25 - 78 years	62 years
Meters, transportation and other operating equipment	580,043	-	5 - 95 years	24 years
Land and other non-depreciable assets	3,872	-	-	-
Utility plant and equipment - Regulated Gas segment	2,673,709	-		
Utility construction work-in-progress	120,645	-	-	-
Property, plant and equipment-Regulated Gas segment	2,794,354	-		
Total property, plant and equipment	\$ 11,620,019	\$ 8,201,936		

Note 5 – Accounts Receivable

	December 31,	
	2020	2019
Billed utility revenue	\$ 189,280	\$ 69,205
Other	5,594	5,285
	194,874	74,490
Less allowance for doubtful accounts	40,099	7,353
Net accounts receivable	\$ 154,775	\$ 67,137

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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, 2020, 2019, and 2018. The following table summarizes the changes in the Company's allowance for doubtful accounts:

	2020	2019	2018
Balance at January 1,	\$ 7,353	\$ 6,914	\$ 7,071
Amounts charged to expense	32,325	5,306	5,305
Accounts written off	(12,613)	(5,980)	(6,587)
Recoveries of accounts written off and other	13,034	1,113	1,125
Balance at December 31,	<u>\$ 40,099</u>	<u>\$ 7,353</u>	<u>\$ 6,914</u>

For Recoveries of accounts written off and other, other represents the opening balance from the Peoples Gas Acquisition of \$10,962 in 2020.

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, 2020		December 31, 2019	
	Regulatory Assets	Regulatory Liabilities	Regulatory Assets	Regulatory Liabilities
Income taxes	\$ 1,098,363	\$ 630,106	\$ 736,120	\$ 389,424
Purchased gas costs	585	18,618	-	-
Customer refunds resulting from TCJA	-	1,719	-	3,907
Utility plant retirement costs	50,225	50,560	7,873	43,742
Post-retirement benefits	108,036	89,953	110,661	78,557
Accrued vacation	4,056	-	2,439	-
Water tank painting	6,306	978	6,175	1,928
Fair value adjustment of long-term debt assumed in acquisition	76,019	-	2,166	-
Debt refinancing	14,880	-	6,564	-
Rate case filing expenses and other	9,403	1,242	6,134	41
	<u>\$ 1,367,873</u>	<u>\$ 793,176</u>	<u>\$ 878,132</u>	<u>\$ 517,599</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 for income taxes includes an amount of \$659 related to Aqua Pennsylvania's deductions on qualifying utility system repairs. This regulatory asset is recoverable in future rate filings based on the amount in excess 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

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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. As of December 31, 2020, the Company has recorded a regulatory liability of \$160,655 for these tax benefits which will remain on the consolidated balance sheet pending regulatory guidance.

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 liability for customer refunds resulting from the TCJA, which was enacted on December 22, 2017, represents a revenue reserve for customer refunds associated with the reduction in the Federal corporate income tax rate from 35% to 21%. Reductions in accumulated deferred income tax balances due to the reduction in the corporate income tax rate will result in amounts previously collected from utility customers for these deferred taxes to be refundable to such customers, generally through reductions in future rates. The TCJA includes provisions that stipulate how these excess deferred taxes relating to certain accelerated tax depreciation benefits are to be passed back to customers. Since 2018 adjusted base rates or surcredits were added to customer bills to reflect the lower corporate income tax rate.

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 2021 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 May 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.

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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,		
	2020	2019	2018
Current:			
Federal	\$ (1,831)	\$ (4,415)	-
State	(265)	1,834	1,281
	<u>(2,096)</u>	<u>(2,581)</u>	<u>1,281</u>
Deferred:			
Federal	(11,527)	(3,906)	(8,721)
State	(6,255)	(6,530)	(6,229)
	<u>(17,782)</u>	<u>(10,436)</u>	<u>(14,950)</u>
Total tax benefit	<u>\$ (19,878)</u>	<u>\$ (13,017)</u>	<u>(13,669)</u>

The statutory Federal tax rate is 21% for 2020, 2019, and 2018. 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 2020, 2019, and 2018 was (7.5)%, (6.2)%, and (7.7)%, respectively. The Company remains subject to examination by federal and state tax authorities for the 2017 through 2020 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,		
	2020	2019	2018
Computed Federal tax expense at statutory rate	\$ 55,644	\$ 44,420	\$ 37,447
Decrease in Federal tax expense related to an income tax accounting change for qualifying utility asset improvement costs	(53,532)	(48,518)	(44,089)
State income taxes, net of Federal tax benefit	(6,896)	(3,616)	(4,964)
Increase (decrease) in tax expense for depreciation expense to be recovered in future rates	140	347	328
Stock-based compensation	(1,484)	(167)	(414)
Deduction for Essential Utilities common dividends paid under employee benefit plan	(315)	(315)	(312)
Amortization of deferred investment tax credits	(319)	(361)	(373)
Impact of Federal rate change and amortization of excess deferred income tax	(15,352)	(6,323)	(313)
Other, net	2,236	1,516	(979)
Actual income tax benefit	<u>\$ (19,878)</u>	<u>\$ (13,017)</u>	<u>(13,669)</u>

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 \$49,077, \$66,816, and \$64,183 during 2020, 2019, and 2018, respectively. In May 2019 the Pennsylvania Public Utility

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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:

	2020	2019
Balance at January 1,	\$ 18,671	\$ 17,792
Impact of current year activity on tax provision	523	879
Balance at December 31,	\$ 19,194	\$ 18,671

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, 2020, 2019, and 2018. The Company accrued \$24 in interest relative to their uncertain tax position during the year ended December 31, 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, 2020 and 2019, \$33,050 and \$31,015, 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.

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

	December 31,	
	2020	2019
Deferred tax assets:		
Customers' advances for construction	\$ 30,155	\$ 22,664
Costs expensed for book not deducted for tax, principally accrued expenses	11,441	1,473
Post-retirement benefits	51,914	20,575
Tax attribute and credit carryforwards	206,347	65,438
Operating lease liabilities	17,432	3,540
Unrecovered purchased gas costs	5,239	-
Other	10,979	2,798
	<u>333,507</u>	<u>116,488</u>
Less valuation allowance	34,772	22,873
	<u>298,735</u>	<u>93,615</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	1,298,127	909,219
Deferred taxes associated with the gross-up of revenues necessary to recover, in rates, the effect of temporary differences	205,869	101,126
Tax effect of regulatory asset for post-retirement benefits	30,441	8,973
Utility plant acquisition adjustment basis differences	195	827
Deferred investment tax credit	5,744	6,088
Operating lease right-of-use assets	16,457	3,540
	<u>1,556,833</u>	<u>1,029,773</u>
Net deferred tax liability	<u>\$ 1,258,098</u>	<u>\$ 936,158</u>

At December 31, 2020, the Company has a cumulative Federal NOL of \$419,000. 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, 2020, the Company has a cumulative state NOL of \$1,375,000 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.

The Company's Federal and state NOL carryforwards are reduced by an unrecognized tax position, on a gross basis, of \$74,589 and \$85,588, 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 \$493,000, and \$1,460,000, respectively. The Company records its unrecognized tax benefit as a component of its net deferred income tax liability.

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. The Company is performing an analysis to determine the ultimate amount of qualifying utility asset improvement costs eligible to be deducted under the IRS's final tangible

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property regulations that will be reflected on its 2020 Federal Tax Return to be filed in October 2021. As a result, the Company has estimated a portion of its infrastructure investment at Peoples Natural Gas since the acquisition date that will qualify as a utility system repairs deduction for 2020. In addition, the calculation to determine the income tax benefits for qualifying capital expenditures made prior to March 16, 2020 (“catch-up adjustment”) has been finalized. As of December 31, 2020, the Company completed its analysis and recorded a regulatory liability of \$160,655 for these tax benefits which will remain on the consolidated balance sheet pending regulatory guidance.

In connection with the completion of the Peoples Gas Acquisition, in the event the Company identifies 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, and they are related to new information obtained about facts and circumstances that existed as of the acquisition date, those changes are considered a measurement-period adjustment, and the offset will be an adjustment to goodwill. The Company records all other changes to deferred tax assets and liabilities in current-period income tax expense.

In response to the COVID-19 pandemic, President Donald Trump signed into law the Coronavirus Aid, Relief, and Economic Security (“CARES”) Act on March 27, 2020. The CARES Act provides numerous tax provisions and other stimulus measures, including temporary changes regarding the prior and future utilization of net operating losses, temporary changes to the prior and future limitations on interest deductions, temporary suspension of certain payment requirements for the employer portion of Social Security taxes, technical corrections from prior tax legislation for tax depreciation of certain qualified improvement property, and the creation of certain refundable employee retention credits. We evaluated the provisions of the CARES Act and concluded that the associated impacts, do not have a material effect on our financial position or liquidity.

Note 8 – Taxes Other than Income Taxes

The following table provides the components of taxes other than income taxes:

	Years Ended December 31,		
	2020	2019	2018
Property	\$ 32,054	\$ 27,735	\$ 27,469
Gross receipts, excise and franchise	14,462	13,500	14,521
Payroll	19,053	10,303	9,789
Regulatory assessments	3,130	2,916	2,752
Pumping fees	6,028	5,112	4,978
Other	1,870	389	253
Total taxes other than income taxes	<u>\$ 76,597</u>	<u>\$ 59,955</u>	<u>\$ 59,762</u>

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 2026. The estimated annual commitments related to such purchases through 2025 are expected to average \$4,654 and the aggregate of the years remaining approximates \$603.

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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:

	2021	2022	2023	2024	2025	Thereafter
\$	3,407 \$	1,041 \$	1,047 \$	1,065 \$	1,088 \$	3,216

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 2025 are expected to average \$203,816 and the aggregate of the years remaining beyond 2025 approximates \$1,759,150.

One of the Company's subsidiaries entered into an agreement in 2019 to build three onsite natural gas fueled energy plants on customer-owned property in the western Pennsylvania area. Construction is in progress and expected to be completed in 2021. As of December 31, 2020, the Company is contractually committed to complete construction of these plants and estimates the remaining construction costs to be \$16,892.

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

	Years Ended December 31,		
	2020	2019	2018
Purchased water under long-term agreements	\$ 5,931	\$ 6,577	\$ 6,065
Water treatment expense under contractual agreement	1,006	989	970
Purchased natural gas under long-term agreements	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, 2020, the aggregate amount of \$21,607 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, 2020, estimates that approximately \$3,491 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. Although the Company has determined that it is reasonably possible that a fine or penalty may be incurred, it cannot estimate the possible range of loss at this time and no liability has been accrued for these future costs. 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

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complaint is in the discovery phase and class certification has not been granted. The Company plans to vigorously defend 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 \$1,535 and \$1,852 at December 31, 2020 and 2019 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 74 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.

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. On March 16, 2020, the Company completed the Peoples Gas Acquisition and adopted the standard upon the date of acquisition. As a result of the sublease of one of the office facilities, a lease impairment was recorded as of adoption date and is being amortized over the life of the lease resulting in the right of use asset being lower than the total lease obligation by approximately \$2.9 million. 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.

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Notes to Consolidated Financial Statements (continued)
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	Years Ended December 31,		
	2020	2019	2018
Components of lease expense were as follows:			
Operating lease cost	\$ 8,496	\$ 2,183	\$ 2,569
	Years Ended December 31,		
	2020	2019	
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	\$ 6,324	\$ 1,992	
	December 31,		
	2020	2019	
Supplemental balance sheet information related to leases was as follows:			
Operating leases:			
Lease impairments	\$ (2,974)	\$ -	
Operating lease right-of-use assets	63,308	12,867	
Total operating lease right-of-use assets	\$ 60,334	\$ 12,867	
Other accrued liabilities	\$ 7,666	\$ 1,222	
Operating lease liabilities	55,642	11,645	
Total operating lease liabilities	\$ 63,308	\$ 12,867	
	December 31,		
	2020	2019	
Weighted average remaining lease term:			
Operating leases	11 years	27 years	
Weighted average discount rate:			
Operating leases	3.62%	4.08%	

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Maturities of operating lease liabilities and a reconciliation of the operating lease liabilities reported on our Consolidated Balance Sheets as of December 31, 2020 are as follows:

	Operating Leases
2021	\$ 11,674
2022	11,570
2023	11,195
2024	11,004
2025	11,064
Thereafter	34,128
Total operating lease payments	\$ 90,635
Total operating lease payments	\$ 90,635
Less operating lease liabilities	63,308
Present value adjustment	\$ 27,327

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, 2020 and 2019. 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, 2020, restrictions on the net assets of the Company were \$3,645,521 of the total \$4,683,877 in net assets. Included in this amount were restrictions on Aqua Pennsylvania’s net assets of \$1,439,502 of their total net assets of \$1,911,851. As of December 31, 2020, \$1,729,269 of Aqua Pennsylvania’s retained earnings of \$1,749,269 and \$276,283 of the retained earnings of \$342,660 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	2021	2022	2023	2024	2025	Thereafter
0.00% to 0.99%	\$ 464	\$ 464	\$ 462	\$ 256	\$ 196	\$ 963
1.00% to 1.99%	968	947	385,826	755	766	5,998
2.00% to 2.99%	1,913	103,711	2,017	1,619	1,427	654,870
3.00% to 3.99%	42,671	23,067	33,130	54,271	742	2,348,493
4.00% to 4.99%	22,753	651	159,063	203	125,420	1,507,722
5.00% to 5.99%	7,124	787	12,865	10,611	636	31,242
6.00% to 6.99%	1,364	1,591	-	-	-	31,000
7.00% to 7.99%	624	366	17	-	23,000	5,884
8.00% to 8.99%	1,572	710	772	841	488	41
9.00% to 9.99%	4,900	-	-	-	-	12,000
Total	\$ 84,353	\$ 132,294	\$ 594,152	\$ 68,556	\$ 152,675	\$ 4,598,213

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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 includes \$920,091 of senior notes and \$181,000 of short-term debt. The senior notes have maturities ranging from 2021 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."

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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, 2020 and 2019 was 3.56% and 4.09%, respectively. The weighted average cost of fixed rate long-term debt at December 31, 2020 and 2019 was 3.73% and 4.09%, respectively.

As of December 31, 2020, the Company has an amended \$1,000,000 five year unsecured revolving credit facility, which expires in December 2023, which provides additional borrowing capacity over former amendments since March 2020. The Company’s unsecured revolving credit facility is used for other general corporate purposes. In March 2020, amendments provided the Company with an additional \$300,000 of borrowing capacity, and pursuant to the terms of the revolving credit facility, our borrowing capacity thereunder was further increased by \$150,000 upon the completion of the Peoples Gas Acquisition on March 16, 2020. As a result of these two increases, our total borrowing capacity increased to \$1,000,000. The facility includes a \$25,000 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, 2020, the Company has the following sublimits and available capacity under the credit facility: \$50,000 letter of credit sublimit, \$26,543 of letters of credit available capacity, \$0 borrowed under the swing-line commitment, and \$385,000 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 1.62% and 3.55%, and the average borrowing was \$221,230 and \$102,973, during 2020 and 2019, 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 2020, 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 2020, 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, 2020 and 2019, funds borrowed under the agreement were \$49,198 and \$25,724, respectively. Interest under this facility is 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. 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 1.12% and 3.12%, and the average borrowing was \$37,166 and \$21,871, during 2020 and 2019, respectively. The maximum amount outstanding at the end of any one month was \$54,669 and \$39,930 in 2020 and 2019, respectively.

In November 2020, Peoples Natural Gas Companies entered into a \$100,000 364-day secured revolving credit facility with two banks. As of December 31, 2020, funds borrowed under the agreement were \$29,000. The funds borrowed under this agreement are classified as loans payable and used to provide working capital. Interest under this facility is 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. 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

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was 0.96%, and the average borrowing was \$2,417, during 2020. The maximum amount outstanding at the end of any one month was \$29,000 in 2020.

At December 31, 2020 and 2019, 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, 2020 and 2019, funds borrowed under the short-term lines of credit were \$0, respectively. The average borrowing under the lines was \$2,500 and \$0 during 2020 and 2019, respectively. The maximum amount outstanding at the end of any one month was \$7,500 in 2020 and 2019. 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 2020 and 2019 was 1.11% and 3.12%, respectively.

Interest Income and Expense— Interest income of \$5,363, \$25,406, and \$152 was recognized for the years ended December 31, 2020, 2019, and 2018, respectively. Interest expense was \$188,435, \$125,383, and \$99,054 in 2020, 2019, and 2018, including amounts capitalized for borrowed funds of \$4,434, \$4,231, and \$3,332, respectively.

Unsecured Bridge Loan Commitment – On October 22, 2018, the Company obtained the Bridge Commitment from certain banks to provide senior unsecured bridge loans in an aggregate amount of up to \$5,100,000 to, among other things, backstop the Peoples Gas Acquisition purchase price and the refinancing of certain debt of the Company and of Peoples. On March 16, 2020, as a result of our completion of the Peoples Gas Acquisition, the Company terminated the Bridge Commitment.

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. Other than the interest rate swaps, the Company has no other derivative instruments. 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,		
	2020	2019	2018
Derivatives not designated as hedging instrument:			
Interest rate swaps	\$	-	\$ (23,742)
Other expense			\$ (59,779)

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.

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The fair value of loans payable is determined based on its carrying amount and utilizing level 1 methods and assumptions. As of December 31, 2020 and 2019, the carrying amount of the Company's loans payable was \$78,198 and \$25,724, which equates to their estimated fair value. The fair value of cash and cash equivalents, which is comprised of uninvested cash, and prior to our completion of the Peoples Gas Acquisition on March 16, 2020, the proceeds from the April 2019 issuances of common stock, tangible equity units, and long-term debt for the Peoples Gas Acquisition, which were held in an interest-bearing account, is determined based on level 1 methods and assumptions. As of December 31, 2020 and 2019, the carrying amounts of the Company's cash and cash equivalents were \$4,827 and \$1,868,922, 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, 2020 and 2019, the carrying amount of these securities was \$25,780 and \$23,419, 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,		
	2020	2019	2018
Net gain (loss) recognized during the period on equity securities	\$ 492	\$ 293	\$ (95)
Less: net gain / loss recognized during the period on equity securities sold during the period	-	-	-
Unrealized gain (loss) recognized during the reporting period on equity securities still held at the reporting date	<u>\$ 492</u>	<u>\$ 293</u>	<u>\$ (95)</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,	
	2020	2019
Carrying amount	\$ 5,630,243	\$ 3,077,400
Estimated fair value	6,366,030	3,324,377

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 \$99,014 and \$95,556 at December 31, 2020 and 2019, 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 rate increases. Portions of these non-interest bearing instruments are payable annually through 2030 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.

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Note 13 – Stockholders’ Equity

In May 2020, the Company amended its Articles of Incorporation to increase the number of authorized shares of common stock from 300,000,000 to 600,000,000 shares. At December 31, 2020, 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,		
	2020	2019	2018
Shares outstanding	245,390,468	220,758,719	178,091,621
Treasury shares	3,180,887	3,112,565	3,060,206

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 will 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 will vary depending upon the settlement date, the number of shares designated for settlement on that settlement date and the method of settlement. The Company intends to use any 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 is accounted for as an equity instrument and was recorded at a fair value of \$0 at inception. The fair value will not be adjusted so long as the Company continues to meet the accounting requirements for equity instruments.

The Company may elect to settle the forward equity sale agreement by means of a physical share settlement, net cash settlement, or net share settlement, on a settlement date or dates, no later than August 10, 2021. The forward equity sale agreement provides that the forward price will be computed based upon the initial forward price of \$46.00 per share, and is subsequently 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. As of December 31, 2020, the forward price was \$45.40 per share. Under limited circumstances or certain unanticipated events, the forward purchaser also has the ability to require the Company to physically settle the forward equity sale agreement in shares prior to the maturity date. As of December 31, 2020, the Company has not settled any portion of 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. The Investor has agreed to certain transfer restrictions for a period of 15 months from the closing date of the Peoples Gas Acquisition.

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’s 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.

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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. 6,088,862 stock purchase contracts have been early settled by the holders of the contracts, resulting in the issuance of 7,182,255 shares of the Company’s common stock. The balance of stock purchase contracts is 7,711,138. 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, filed with the SEC in February 2018, 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, 2020, the Company had 1,770,819 shares of authorized but unissued Series Preferred Stock, \$1.00 par value.

The Company had a universal “pay as you go” shelf registration statement, filed with the SEC in February 2018 which allowed 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. This registration statement expired in February 2021, and the Company intends to file a new three-year universal shelf registration statement.

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, 2020 is \$487,155.

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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.

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 2020 and 2019, the Company sold 388,978 and 236,666 original issue shares of common stock through the dividend reinvestment portion of the Plan, for net proceeds of \$16,522 and \$8,959, respectively. In 2019 and 2018, 183,731 and 321,585 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, and \$11,343, respectively.

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,		
	2020	2019	2018
Average common shares outstanding during the period for basic computation	249,768	215,550	177,904
Effect of dilutive securities:			
Forward equity sale agreement	-	-	-
Issuance of common stock from private placement	4,438	-	-
Tangible equity units	-	-	-
Employee stock-based compensation	423	381	495
Average common shares outstanding during the period for diluted computation	254,629	215,931	178,399

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, 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. For the year ended December 31, 2018, the Company’s employee stock options to purchase 8,596 shares of common stock were excluded from the calculation of diluted net income per share as the calculated cost to exercise the stock options was greater than the average market price

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of the Company's common stock during this period. 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, 2020 and 2019, the average common shares outstanding during the period for basic computation includes the weighted-average impact of 9,370,646 and 10,533,133 shares, respectively, based on the minimum number of shares of 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. Further, for the year ended December 31, 2020, average common shares outstanding during the period for diluted computation includes the impact of the additional shares to be issued in April 2022 upon settlement of the stock purchase contracts based on the threshold appreciation price of \$42.41.

Equity per common share was \$19.09 and \$17.58 at December 31, 2020 and 2019, 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, 2020, 2,395,696 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 2020 and 2018, 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 2020 and 2018 PSU grants consisted of the following metrics:

	Performance Grant of:	
	2020	2018
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%	25.0%
Metric 2 – Company's TSR compared to the TSR for the companies listed in the Standard and Poor's Midcap Utilities Index (a market-based condition)	-	25.0%
Metric 3 – Achievement of a targeted cumulative level of rate base growth as a result of acquisitions (a performance-based condition)	30.77%	25.0%
Metric 4 – Achievement of targets for maintaining consolidated operations and maintenance expenses over the three year measurement period (a performance-based condition)	30.77%	25.0%

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

	Years ended December 31,		
	2020	2019	2018
Stock-based compensation within operations and maintenance expense	\$ 3,630	\$ 2,741	\$ 4,817
Income tax benefit	957	767	1,344

The following table summarizes nonvested PSU transactions for the year ended December 31, 2020:

	Number of Share Units	Weighted Average Fair Value
Nonvested share units at beginning of period	261,398	\$ 16.35
Granted	108,212	55.25
Performance criteria adjustment	85,720	46.68
Forfeited	(2,971)	37.40
Share units issued	(169,352)	25.75
Nonvested share units at end of period	<u>283,007</u>	34.57

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,		
	2020	2019	2018
Expected term (years)	3.0	-	3.0
Risk-free interest rate	0.66%	-	2.43%
Expected volatility	24.2%	-	17.2%
Weighted average fair value of PSUs granted	\$ 55.25	-\$	37.42
Intrinsic value of vested PSUs	\$ 9,030	\$ 3,181	\$ 4,704
Fair value of vested PSUs	\$ 5,215	\$ 2,569	\$ 3,613

As of December 31, 2020, \$6,623 of unrecognized compensation costs related to PSUs is expected to be recognized over a weighted average period of approximately 2.1 years. The aggregate intrinsic value of PSUs as of December 31, 2020 was \$13,383. 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.

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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,		
	2020	2019	2018
Stock-based compensation within operations and maintenance expense	\$ 2,180	\$ 1,650	\$ 1,605
Income tax benefit	585	466	456

The following table summarizes nonvested RSU transactions for the year ended December 31, 2020:

	Number of Stock Units	Weighted Average Fair Value
Nonvested stock units at beginning of period	141,884	\$ 34.39
Granted	64,829	49.19
Stock units vested and issued	(41,790)	31.83
Forfeited	(1,017)	42.42
Nonvested stock units at end of period	<u>163,906</u>	40.80

The following table summarizes the value of RSUs:

	Years ended December 31,		
	2020	2019	2018
Weighted average fair value of RSUs granted	\$ 49.19	\$ 36.25	\$ 35.15
Intrinsic value of vested RSUs	2,130	1,456	1,605
Fair value of vested RSUs	1,203	1,341	1,268

As of December 31, 2020, \$3,118 of unrecognized compensation costs related to RSUs is expected to be recognized over a weighted average period of approximately 1.5 years. The aggregate intrinsic value of RSUs as of December 31, 2020 was \$7,751. 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.

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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 year ended December 31, 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,		
	2020	2019	2018
Stock-based compensation within operations and maintenance expenses	\$ 1,322	\$ 2,280	\$ 546
Income tax benefit	374	643	184

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:

	Years ended December 31,	
	2019	2018
Expected term (years)	5.47	5.46
Risk-free interest rate	2.53%	2.72%
Expected volatility	17.7%	17.2%
Dividend yield	2.44%	2.37%
Grant date fair value per option	\$ 5.25	\$ 5.10

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.

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The following table summarizes stock option transactions for the year ended December 31, 2020:

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Life (years)	Aggregate Intrinsic Value
Outstanding, beginning of year	1,041,756	\$ 34.20		
Granted	-	-		
Forfeited	(18,953)	35.78		
Expired / Cancelled	(291)	35.61		
Exercised	(74,832)	21.24		
Outstanding at end of year	<u>947,680</u>	<u>\$ 35.22</u>	7.8	<u>\$ 11,441,448</u>
Exercisable at end of year	<u>419,324</u>	<u>\$ 34.44</u>	7.5	<u>\$ 5,388,815</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,		
	2020	2019	2018
Intrinsic value of options exercised	\$ 1,849	\$ 2,552	\$ 1,806
Fair value of options vested	1,673	422	156

The following table summarizes information about the options outstanding and options exercisable as of December 31, 2020:

	Options Outstanding			Options Exercisable	
	Shares	Weighted Average Remaining Life (years)	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price
Range of prices:					
\$15.00 - 33.99	92,842	6.1	\$ 30.47	92,842	\$ 30.47
\$34.00 - 34.99	130,461	7.2	34.51	86,260	34.51
\$35.00 - 35.99	716,999	8.2	35.93	237,762	35.93
\$36.00 - 37.99	7,378	8.2	37.80	2,460	37.80
	<u>947,680</u>	<u>7.8</u>	<u>\$ 35.22</u>	<u>419,324</u>	<u>\$ 34.44</u>

As of December 31, 2020, there was \$597 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 0.7 years.

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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 years ended December 31, 2019 and 2018.

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

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

The following table summarizes restricted stock transactions for the year ended December 31, 2020:

	Number of Shares	Weighted Average Fair Value
Nonvested shares at beginning of period	-\$	-
Granted	13,228	34.02
Vested	-	-
Nonvested shares at end of period	<u>13,228</u>	<u>34.02</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,		
	2020	2019	2018
Stock-based compensation within operations and maintenance expense	\$ 695	\$ 698	600
Income tax benefit	201	202	173

The following table summarizes the value of stock awards:

	Years ended December 31,		
	2020	2019	2018
Intrinsic and fair value of stock awards vested	\$ 695	\$ 698	600
Weighted average fair value of stock awards granted	41.97	41.75	34.95

ESSENTIAL UTILITIES, INC. AND SUBSIDIARIES
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The following table summarizes stock award transactions for year ended December 31, 2020:

	Number of Stock Awards	Weighted Average Fair Value
Nonvested stock awards at beginning of period	-\$	-
Granted	16,555	41.97
Vested	(16,555)	41.97
Nonvested stock awards at end of period	-	-

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, we completed the Peoples Gas Acquisition and assumed the pension and other postretirement benefit plans for its employees. The operating results of Peoples has been included in our consolidated financial statements since the date of acquisition. 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 \$10,889 and \$10,197 to participants who elected this option during 2020 and 2019.

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.

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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	
2021	\$	28,291	\$	5,764
2022		29,950		5,955
2023		30,221		6,185
2024		29,141		6,167
2025		29,220		6,423
2026-2030		152,391		34,734

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	
	2020	2019	2020	2019
Change in benefit obligation:				
Benefit obligation at January 1,	\$ 310,381	\$ 281,964	\$ 79,542	\$ 69,443
Service cost	3,775	2,718	2,276	819
Interest cost	13,710	11,817	3,687	2,999
Actuarial loss	37,632	36,885	5,181	7,238
Plan participants' contributions	-	-	795	145
Benefits paid	(28,150)	(23,003)	(6,287)	(1,102)
Acquisitions	148,871	-	40,181	-
Benefit obligation at December 31,	486,219	310,381	125,375	79,542
Change in plan assets:				
Fair value of plan assets at January 1,	266,461	239,007	54,011	45,422
Actual return on plan assets	54,732	41,955	11,910	9,436
Employer contributions	16,274	8,502	5,034	-
Participants' contributions	-	-	795	-
Benefits paid	(28,150)	(23,003)	(6,199)	(847)
Acquisitions	117,484	-	33,444	-
Fair value of plan assets at December 31,	426,801	266,461	98,995	54,011
Funded status of plan:				
Net liability recognized at December 31,	\$ 59,418	\$ 43,920	\$ 26,380	\$ 25,531

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

	Pension Benefits		Other Post-retirement Benefits	
	2020	2019	2020	2019
Non-Current Asset	\$ -	-	\$ (11,446)	-
Current liability	551	403	895	-
Noncurrent liability	58,867	43,517	36,931	25,531
Net liability recognized	\$ 59,418	\$ 43,920	\$ 26,380	\$ 25,531

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At December 31, 2020 and 2019, the Company's pension plans had benefit obligations in excess of its plan assets. The following tables provide the projected benefit obligation, the accumulated benefit obligation and fair market value of the plan assets as of December 31,:

	Projected Benefit Obligation Exceeds the Fair Value of Plan Assets	
	2020	2019
	Projected benefit obligation	\$ 486,219
Fair value of plan assets	426,801	266,461

	Accumulated Benefit Obligation Exceeds the Fair Value of Plan Assets	
	2020	2019
	Accumulated benefit obligation	\$ 458,658
Fair value of plan assets	426,801	266,461

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

	Pension Benefits			Other Post-retirement Benefits		
	2020	2019	2018	2020	2019	2018
Service cost	\$ 3,775	\$ 2,718	\$ 3,249	\$ 2,276	\$ 819	\$ 1,049
Interest cost	13,710	11,817	11,495	3,687	2,999	2,831
Expected return on plan assets	(21,249)	(15,272)	(18,211)	(4,079)	(2,482)	(2,706)
Amortization of prior service cost (credit)	591	620	527	(464)	(464)	(509)
Amortization of actuarial loss	7,967	7,927	7,291	622	664	1,182
Settlement loss	-	-	5,931	-	-	-
Net periodic benefit cost	\$ 4,794	\$ 7,810	\$ 10,282	\$ 2,042	\$ 1,536	\$ 1,847

The Company records the underfunded status of its pension and other post-retirement benefit plans on its consolidated balance sheets and records a regulatory asset 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. The Company's pension and other post-retirement benefit plans were underfunded at December 31, 2020 and 2019. 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 that have not been recognized as components of net periodic benefit cost as of December 31,:

	Pension Benefits		Other Post-retirement Benefits	
	2020	2019	2020	2019
Net actuarial loss	\$ 83,967	\$ 87,786	\$ 7,224	\$ 10,496
Prior service cost (credit)	1,524	2,115	(432)	(896)
Total recognized in regulatory assets	\$ 85,491	\$ 89,901	\$ 6,792	\$ 9,600

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

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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	
	2020	2019	2020	2019
Weighted Average Assumptions Used to Determine Benefit Obligations as of December 31,				
Discount rate	2.57%	3.35%	2.68%	3.42%
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	2025	2024

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		
	2020	2019	2018	2020	2019	2018
Weighted Average Assumptions Used to Determine Net Periodic Benefit Costs for Years Ended December 31,						
Discount rate	3.35%	4.30%	3.66%	3.42%	4.34%	3.73%
Expected return on plan assets	6.00%	6.50%	6.75%	6.00%	4.1-6.5%	4.25-6.75%
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%	6.6%	7.0%
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	2023	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.

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

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increases as the expected return on plan assets decreases. For 2020, the Company used a 6.0% expected return on plan assets assumption which will remain at 6.0% for 2021. 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,	
		2020	2019
Return seeking assets	50 to 70%	54%	56%
Liability hedging assets	30 to 50%	46%	44%
Total	100%	100%	100%

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

	Level 1	Level 2	Level 3	Assets measured at	Total
				NAV (a)	
Common stock	\$ 17,620	\$ -	\$ -	-	\$ 17,620
Return seeking assets:					
Global equities	-	-	-	120,220	120,220
Hedge / diversifying strategies	-	-	-	38,417	38,417
Credit	-	-	-	53,378	53,378
Liability hedging assets	-	-	-	140,891	140,891
Cash and cash equivalents	56,275	-	-	-	56,275
Total pension assets	\$ 73,895	\$ -	\$ -	352,906	\$ 426,801

(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, 2019 by asset class are as follows:

	Level 1	Level 2	Level 3	Assets measured at	Total
				NAV (a)	
Common stock	\$ 17,166	\$ -	\$ -	-	\$ 17,166
Return seeking assets:					
Global equities	-	-	-	51,408	51,408
Real estate securities	-	-	-	13,970	13,970
Hedge / diversifying strategies	-	-	-	38,099	38,099
Credit	-	-	-	27,847	27,847
Liability hedging assets	-	-	-	113,777	113,777
Cash and cash equivalents	4,194	-	-	-	4,194
Total pension assets	\$ 21,360	\$ -	\$ -	245,101	\$ 266,461

Equity securities include our common stock in the amounts of \$17,620 or 4.1% and \$17,166 or 6.4% of total pension plans' assets as of December 31, 2020 and 2019, respectively.

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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,	
		2020	2019
Return seeking assets	50 to 70%	64%	64%
Liability hedging assets	30 to 50%	36%	36%
Total	100%	100%	100%

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	Total
				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

- (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, 2019 by asset class are as follows:

	Level 1	Level 2	Level 3	Assets measured at	Total
				NAV (a)	
Return seeking assets:					
Global equities	\$ 10,795	\$ -	\$ -	17,781	\$ 28,576
Real estate securities	2,449	-	-	3,751	6,200
Liability hedging assets	5,685	-	-	9,984	15,669
Cash and cash equivalents	3,566	-	-	-	3,566
Total other post-retirement assets	\$ 22,495	\$ -	\$ -	31,516	\$ 54,011

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,

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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 2021 our pension contribution is expected to be \$14,775.

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 \$15,445, \$6,259, and \$6,096, for the years ended December 31, 2020, 2019, and 2018, respectively.

Note 17 –Rate Activity

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.

On June 7, 2012, Aqua Pennsylvania reached a settlement agreement in its rate filing with the Pennsylvania Public Utility Commission, which in addition to a water rate increase, provided for a reduction in current income tax expense as a result of the recognition of qualifying income tax benefits upon Aqua Pennsylvania changing its tax accounting method to permit the expensing of qualifying utility asset improvement costs that historically have been capitalized and depreciated for book and tax purposes. In December 2012, Aqua Pennsylvania implemented this change which provides for the flow-through of income tax benefits that resulted in a substantial reduction in income tax expense and greater net income and cash flow. This change allowed Aqua Pennsylvania to suspend its water Distribution System Improvement Charges in 2013 and lengthen the amount of time until the next Aqua Pennsylvania rate case. Beginning on October 1, 2017, Aqua Pennsylvania initiated a water infrastructure rehabilitation surcharge for the capital invested since the last rate proceeding and in August 2018 filed for a base rate increase in water and wastewater rates for its customers. In May 2019, the

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Company received an order from the Pennsylvania Public Utility Commission, resulting in an increase of \$47,000 in annual revenue, 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 are designed with \$158,865 of tax benefits assumed 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.

In December 2018, the Company’s operating subsidiary in New Jersey filed for a base rate increase in water rates for its customers. In May 2019, the Company 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 North Carolina, Pennsylvania, and New Jersey rate awards noted above, the Company’s operating subsidiaries were allowed annualized rate increases of \$4,480 in 2020, \$974 in 2019, and \$11,558 in 2018, represented by five, two, and five rate decisions, respectively. Revenues from these rate increases realized in the year of grant were approximately \$1,594, \$974, and \$7,270 in 2020, 2019, and 2018, respectively.

Seven states in which the Company operates permit water utilities, and in seven states 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. Currently, Pennsylvania, Illinois, Ohio, Indiana, Virginia, New Jersey, and North Carolina allow for the use of an infrastructure rehabilitation surcharge for both water and wastewater utility systems. 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 2020, 2019, and 2018 of \$13,039, \$16,007, and \$31,836, respectively.

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

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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:

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
Operating income (loss)	397,275	56,570	(19,159)	434,686
Interest expense, net	101,810	29,016	52,246	183,072
Allowance for funds used during construction	11,231	1,456	-	12,687
Change in fair value of interest rate swap agreements	-	-	-	-
Equity loss in joint venture	-	-	(3,374)	(3,374)
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
Operating income (loss)	357,979	(17,820)	340,159
Interest expense, net	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
Provision for income taxes (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

2018	Regulated Water	Other and Eliminations	Consolidated
Operating revenues	\$ 834,638	\$ 3,453	\$ 838,091
Operations and maintenance expense	292,232	16,246	308,478
Depreciation and amortization	146,378	295	146,673
Operating income (loss)	338,388	(15,210)	323,178
Interest expense, net	89,112	9,790	98,902
Allowance for funds used during construction	13,023	-	13,023
Change in fair value of interest rate swap agreements	-	59,779	59,779
Equity earnings in joint venture	-	2,081	2,081
Provision for income taxes (benefit)	4,158	(17,827)	(13,669)
Net income (loss)	259,160	(67,172)	191,988
Capital expenditures	495,730	7	495,737
Total assets	6,807,960	156,536	6,964,496

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Selected Quarterly Financial Data (Unaudited)

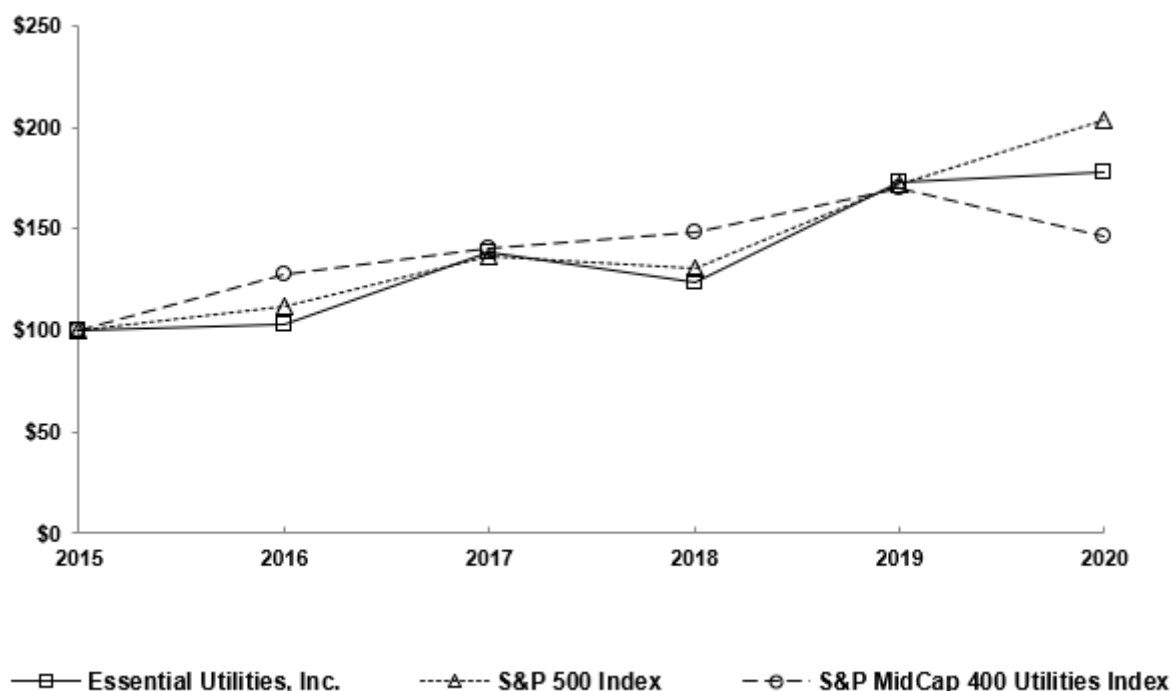
(In thousands of dollars, except per share amounts)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
<u>2020</u>					
Operating revenues	\$ 255,585	\$ 384,468	\$ 348,647	\$ 473,998	1,462,698
Operations and maintenance expense	106,637	128,604	136,174	157,196	528,611
Purchased gas	12,770	43,420	16,744	92,811	165,745
Operating income	73,497	123,119	105,233	132,837	434,686
Net income	51,781	74,629	55,732	102,707	284,849
Basic net income per common share	0.22	0.29	0.22	0.40	1.14
Diluted net income per common share	0.20	0.29	0.22	0.40	1.12
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
<u>2019</u>					
Operating revenues	\$ 201,132	\$ 218,892	\$ 243,626	\$ 226,042	889,692
Operations and maintenance expense	79,314	86,445	82,022	85,321	333,102
Operating income	67,439	80,949	106,470	85,301	340,159
Net income (loss)	16,924	54,903	88,489	64,227	224,543
Basic net income (loss) per common share	0.09	0.25	0.38	0.28	1.04
Diluted net income (loss) per common share	0.09	0.25	0.38	0.28	1.04
Dividend paid per common share	0.2190	0.2190	0.2343	0.2343	0.9066
Dividend declared per common share	0.2190	0.2190	0.2343	0.2343	0.9066

The graph below compares the cumulative 5-Year total return of holders of Essential Utilities, Inc.'s common stock with the cumulative total returns of the S&P 500 index and the S&P MidCap 400 Utilities index. The graph assumes that the value of the investment in our common stock, in each index, and in the peer group (including reinvestment of dividends) was \$100 on 12/31/2015 and tracks it through 12/31/2020.

Comparison of five year cumulative total return*

Among Essential Utilities, Inc., the S&P 500 Index, and S&P MidCap 400 Utilities Index



*\$100 invested on 12/31/15 in stock or index, including reinvestment of dividends. Fiscal year ending December 31.

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	Years as of December 31					
	2015	2016	2017	2018	2019	2020
Essential Utilities, Inc.	100.00	103.22	138.07	123.32	173.15	178.22
S&P 500 Index	100.00	111.96	136.40	130.42	171.49	203.04
S&P MidCap 400 Utilities Index	100.00	127.25	140.49	147.92	169.51	146.00

The stock price performance included in this graph is not necessarily indicative of future stock price performance.

Financial Reports and Investor Relations

Copies of the company's public financial reports, including annual reports and Forms 10-K and 10-Q, are available online and can be downloaded from the investor relations section of our website at Essential.co. You may also obtain these reports by writing to us at:

Investor Relations Department
Essential Utilities, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010-3489

Corporate Governance

We are committed to maintaining high standards of corporate governance and are in compliance with the corporate governance rules of the Securities and Exchange Commission (SEC) and the New York Stock Exchange. Copies of our key corporate governance documents, including our Corporate Governance Guidelines, Code of Ethical Business Conduct, and the charters of each committee of our Board of Directors can be obtained from the corporate governance portion of the investor relations section of our website, Essential.co. Amendments to the Code of Ethical Business, and in the event of any grant of waiver from a provision of the Code of Conduct requiring disclosure under applicable SEC rules will be disclosed on our website.

Annual Meeting

The 2021 Annual Meeting of Shareholders of Essential Utilities, Inc. will be held virtually via live webcast on Wednesday, May 5, 2021, at 8 a.m. Eastern Time, at www.virtualshareholdermeeting.com/WTRG2021.

Transfer Agent and Registrar

Computershare
P.O. Box 505000
Louisville, KY 40233
800.205.8314 or
www.computershare.com/investor

Independent Registered Public Accounting Firm

PricewaterhouseCoopers LLP
Two Commerce Square
Suite 1800
2001 Market Street
Philadelphia, PA 19103-7042

Stock Exchange

The Common Stock of the company is listed on the New York Stock Exchange (NYSE) and under the ticker symbol **WTRG**.

Dividend Reinvestment and Direct Stock Purchase Plan

The company's Dividend Reinvestment and Direct Stock Purchase Plan ("Plan") enables shareholders to reinvest all, or a designated portion of, dividends paid on up to 100,000 shares of Common Stock in additional shares of Common Stock at a discretionary discount from a price based on the market value of the stock. The discount between 0 and 5.0 percent on the shares purchased or issued to meet the dividend reinvestment requirement will be designated by us in our sole discretion prior to the purchase or issuance of such shares. We reserve the right to change, reduce or discontinue any discount at any time without notice. In addition, shareholders may purchase additional shares of Essential Utilities Common Stock at any time with a minimum investment of \$50, up to a maximum of \$250,000 annually. Individuals may become shareholders by making an initial investment of at least \$500. A Plan prospectus may be obtained by calling Computershare at 800.205.8314 or by visiting www.computershare.com/investor. Please read the prospectus carefully before you invest.

IRA, Roth IRA, Education IRA

An IRA, Roth IRA or Coverdell Education Savings Account may be opened through the Plan to hold shares of Common Stock of the company and to make contributions to the IRA to purchase shares of Common Stock. Participants in the Plan may roll over an existing IRA or other qualified plan distribution in cash into an IRA under the Plan to purchase the company's Common Stock. Participants may also transfer the company's Common Stock from an existing IRA into an IRA under the Plan. A prospectus, IRA forms and a disclosure statement may be obtained by calling Computershare at 800.597.7736. Please read the prospectus carefully before you invest.

Direct Deposit

With direct deposit, Essential Utilities cash dividends are deposited automatically on the dividend payment date of each quarter. Shareholders will receive confirmation of their deposit in the mail. Shareholders interested in direct deposit should call the company's transfer agent at 800.205.8314.

Delivery of voting materials to shareholders sharing an address

The SEC's rules permit the Company to deliver a Notice of Internet Availability of Proxy Materials or a single set of proxy materials to one address shared by two or more of the Company's shareholders. This is intended to reduce the printing and postage expense of delivering duplicate voting materials to our shareholders who have more than one Essential Utilities stock account. A separate Notice of Internet Availability or proxy card is included for each of these shareholders. If you received a Notice of Internet Availability you will not receive a printed copy of the proxy materials unless you request it by following the instructions in the notice for requesting printed proxy material.

How to obtain a separate set of voting materials

If you are a registered shareholder who shares an address with another registered shareholder and have received only one Notice of Internet Availability of Proxy Materials or set of proxy material and wish to receive a separate copy for each shareholder in your household for the 2021 annual meeting, you may write or call us to request a separate copy of this material at no cost to you at 610.645.1021 or write us at:

Attn: Investor Relations
Essential Utilities, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA, 19010

Email: investorrelations@essential.co

For future annual meetings, you may request separate voting material by calling Broadridge at 866.540.9095, or by writing to Broadridge Financial Solutions, Inc., Householding Department, 51 Mercedes Way, Edgewood, New York 11717.

Account Access

Essential Utilities shareholders may access their account by visiting www.computershare.com/investor. Shareholders may view their account, purchase additional shares, and make changes to their account. To learn more, visit www.computershare.com/investor or call 800.205.8314.

Dividends

Essential Utilities has paid dividends for 76 consecutive years. The normal Common Stock dividend dates for 2021 and the first six months of 2022 are:

Declaration Date	Ex-Dividend Date	Record Date	Payment Date
February 1, 2021	February 11, 2021	February 12, 2021	March 1, 2021
May 3, 2021	May 13, 2021	May 14, 2021	June 1, 2021
August 2, 2021	August 12, 2021	August 13, 2021	September 1, 2021
November 1, 2021	November 11, 2021	November 12, 2021	December 1, 2021
January 31, 2022	February 10, 2022	February 11, 2022	March 1, 2022
May 2, 2022	May 12, 2022	May 13, 2022	June 1, 2022

To be an owner of record, and therefore eligible to receive the quarterly dividend, shares must have been purchased before the ex-dividend date. Owners of any share(s) on or after the ex-dividend date will not receive the dividend for that quarter. The previous owner — the owner of record — will receive the dividend.

Only the Board of Directors may declare dividends and set record dates. Therefore, the payment of dividends and these dates may change at the discretion of the Board.

Dividends paid on the company's Common Stock are subject to Federal and State income tax.

Lost Dividend Checks, Stock Certificates and Escheatment

Dividend checks lost by shareholders, or those that might be lost in the mail, will be replaced upon notification of the lost or missing check. All inquiries concerning lost or missing dividend checks should be made to the company's transfer agent at 800.205.8314. Shareholders should call or write the company's transfer agent to report a lost certificate. Appropriate documentation will be prepared and sent to the shareholder with instructions.

Escheatment is the act of reporting and transferring property to a state when the rightful owner has an invalid address or has not made contact or initiated a transaction during the state's designated dormancy period. Escheated assets are transferred to the state for safekeeping (and often liquidated) until the rightful owner makes a claim on the asset. To keep your shares of stock and uncashed dividends from being escheated, you must maintain contact (recommended at least once a year) with the company's transfer agent, especially if you recently changed your address, changed your marital status or are managing an estate following a death. Unclaimed property laws vary widely from state to state.

Safekeeping of Stock Certificates

Under the Direct Stock Purchase Plan, shareholders may have their stock certificates deposited with the transfer agent for safekeeping free of charge. Stock certificates and written instructions should be forwarded to:

Computershare, N.A.
P.O. BOX 505000
Louisville, KY 40233



Our Mission:

To sustain life and improve economic prosperity by safely and reliably delivering Earth's most essential resources to our customers and communities.

Our Values: Integrity Respect Excellence



BOARD OF DIRECTORS

Christopher H. Franklin
Chairman, Chief Executive Officer
and President
Essential Utilities, Inc.
Director since 2015

Elizabeth B. Amato
Former Sr. Vice President and
Chief Human Resources Officer
United Technologies Corporation
Director since 2018

Nicholas DeBenedictis
Chairman Emeritus
Essential Utilities, Inc.
Director since 1992

Wendy A. Franks
EVP Strategy and Investment
Management
Northland Power
Director since 2020

Daniel J. Hilferty
Former President and
Chief Executive Officer
Independence Health Group
Director since 2017

Francis Idehen
Chief Operating Officer
GCM Grosvenor
Director since 2019

Ellen T. Ruff
Former President
Duke Energy
Director since 2006

Lee C. Stewart
Private Financial Consultant
Director since 2018

Christopher C. Womack
President, Georgia Power
Southern Company
Director since 2019

OFFICERS

Christopher H. Franklin
Chairman, Chief Executive Officer
and President

Richard S. Fox
Executive Vice President
Chief Operating Officer

Christopher P. Luning
Executive Vice President
General Counsel and Secretary

Matthew Rhodes
Executive Vice President
Strategy and Corporate
Development

Robert A. Rubin
Senior Vice President
Chief Accounting Officer

Daniel J. Schuller
Executive Vice President
Chief Financial Officer

Forward-Looking Statements

This document contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, which generally include words such as "believes," "expects," "intends," "anticipates," "estimates" and similar expressions. The Company can give no assurance that any actual or future results or events discussed in these statements will be achieved. Any forward-looking statements represent its views only as of today and should not be relied upon as representing its views as of any subsequent date. Readers are cautioned that such forward-looking statements are subject to a variety of risks and uncertainties that could cause the company's actual results to differ materially from the statements contained in this release. There are important factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements including the factors discussed in our Annual Report on Form 10-K and our Quarterly Reports on Form 10-Q, which are filed with the Securities and Exchange Commission. For more information regarding risks and uncertainties associated with the Company's business, please refer to the Company's annual, quarterly and other SEC filings. The Company is not under any obligation - and expressly disclaims any such obligation - to update or alter its forward-looking statements whether as a result of new information, future events or otherwise.



Essential Utilities, Inc.
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