

Deanne M. O'Dell
717.255.3744
dodell@eckertseamans.com

April 27, 2020

Via Electronic Filing

Rosemary Chiavetta, Secretary
PA Public Utility Commission
P.O. Box 3265
Harrisburg, PA 17105-3265

Re: Implementation of Chapter 32 of the Public Utility Code RE: Pittsburgh Water
and Sewer Authority; Docket Nos. M-2018-2640802 and M-2018-2640803

Petition of the Pittsburgh Water and Sewer Authority for Approval of Its Long-Term
Infrastructure Improvement Plan; Docket Nos. P-2018-3005037 and P-2018-3005039

Dear Secretary Chiavetta:

Enclosed for electronic filing please find The Pittsburgh Water and Sewer Authority's ("PWSA") revised Compliance Plan which is being submitted pursuant to the Commission's March 26, 2020 Final Order ("Final Order") with regard to the above-referenced matter.¹ PWSA's initial Compliance Plan was filed on September 28, 2018. A Compliance Plan Supplement was filed on February 1, 2019. A Joint Petition for Partial Settlement was filed on September 13, 2019 and approved in the Final Order.

The revisions to the Compliance Plan include:

- incorporating the Compliance Plan Supplement;
- incorporating the Stage 1 Joint Petition for Partial Settlement;
- incorporating directives from the Final Order which are not currently under reconsideration;
- presents most current update on items that are and will continue to be reported in the Quarterly Compliance Plan Progress Report;
- removes Stormwater and the appropriate Customer Service issues that are to be addressed; and,
- Updates the background information.

¹ In further compliance with the Final Order, PWSA is also filing under separate cover): (1) an Amended Long-Term Infrastructure Improvement Plan; and, (2) Tariff Supplement No. 3 to the Water and Wastewater Tariffs.

Please note that PWSA's Amended LTIIP is not included as part of the Revised Compliance Plan as it is being filed under separate cover. Copies to be served in accordance with the attached Certificate of Service.

Sincerely,

A handwritten signature in dark ink, reading "Deanne M. O'Dell". The signature is written in a cursive, flowing style.

Deanne M. O'Dell

DMO/lww
Enclosure

cc: Hon. Conrad Johnson w/enc.
Hon. Mark Hoyer w/enc.
Certificate of Service w/enc.

CERTIFICATE OF SERVICE

I hereby certify that this day I served a copy of PWSA's Revised Compliance Plan upon the persons listed below in the manner indicated in accordance with the requirements of 52 Pa.

Code Section 1.54.

Via Email Only

Sharon Webb, Esq.
Erin K. Fure, Esq.
Daniel Asmus, Esq.
Forum Place Building
555 Walnut Street, 1st Floor
Harrisburg, PA 17101
swebb@pa.gov
efure@pa.gov
dasmus@pa.gov

Christine Maloni Hoover, Esq.
Erin L. Gannon, Esq.
Lauren E. Guerra, Esq.
Office of Consumer Advocate
555 Walnut St., 5th Fl., Forum Place
Harrisburg, PA 17101-1923
choover@paoca.org
egannon@paoca.org
lguerra@paoca.org

Gina L. Miller, Esq.
John M. Coogan, Esq.
Bureau of Investigation & Enforcement
Commonwealth Keystone Building
400 North St., 2nd Floor West
Harrisburg, PA 17120
ginmiller@pa.gov
jcoogan@pa.gov

Elizabeth R. Marx, Esq.
John W. Sweet, Esq.
The Pennsylvania Utility Law Project
118 Locust St.
Harrisburg, PA 17101
pulp@palegalaid.net

Susan Simms Marsh, Esq.
Pennsylvania-American Water Company
852 Wesley Drive
Mechanicsburg, PA 17055
Susan.marsh@amwater.com

Michael A. Gruin, Esq.
Stevens & Lee
17 North Second St., 16th Fl.
Harrisburg, PA 17101
mag@stevenslee.com

Dimple Chaudhary, Esquire
Peter J. DeMarco, Esquire
Cecilia Segal, Esquire
Natural Resources Defense Council
1152 15th Street, NW, Ste. 300
Washington, DC 20005
dchaudhary@nrdc.org
pdemarco@nrdc.org
csegal@nrdc.org

Brian Kalcic
Excel Consulting
225 S. Meramec Ave., Suite 720T
St. Louis, MO 63105
Excel.consulting@sbcglobal.net

Yvonne S. Hilton, City Solicitor
John F. Doherty, Associate City Solicitor
Lawrence H. Baumiller, Assistant City
Solicitor John V. DeMarco, Assistant City
Solicitor City of Pittsburgh Department of Law
City-County Building, Suite 313
414 Grant Street
Pittsburgh, PA 15219
yvonne.hilton@pittsburghpa.gov
john.doherty@pittsburghpa.gov
lawrence.baumiller@pittsburghpa.gov
john.demarco@pittsburghpa.gov

Michelle Nacarati Chapkis
Mayor's Blue Ribbon Panel on Restructuring
the PWSA Care of Women for a Healthy
Environment
5877 Commerce St.
Pittsburgh, PA 15206
michelle@womenforahealthyenvironment.org



Dated: April 27, 2020

Deanne M. O'Dell, Esq.



Pennsylvania Public Utility Commission
Compliance Plan
for
Pittsburgh Water & Sewer Authority

Revised as of April 27, 2020

Docket Number: M-2018-2640802 (water)
Docket Number: M-2018-2640803 (wastewater)

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A *Focusing on the Future*



PURPOSE OF THE DOCUMENT

1. PURPOSE OF THE DOCUMENT

a. Introduction

On December 21, 2017, pursuant to Act 65 of 2017, the Pennsylvania Public Utility Commission (Commission or PUC) was granted jurisdiction over the provision of water, wastewater, and stormwater utility service by entities created by Pennsylvania cities of the second class under the Municipality Authorities Act. At present, Pittsburgh is Pennsylvania's only city of the second class. In accordance with Act 65, the Pennsylvania Public Utility Code Pa. Consolidated Statutes, (Title 66) was amended to establish regulatory deadlines, requirements, and obligations for subject entities, which are now codified in Chapter 32 of Title 66. Chapter 32 has prescribed a process for the regulation of the rates and service of subject utilities, including the Pittsburgh Water and Sewer Authority (PWSA or the Authority), and a process to transition to Commission jurisdiction. Chapter 32 also addresses the replacement and improvement of aging infrastructure and environmental compliance for those entities.¹

The Commission formally initiated jurisdiction over PWSA on January 18, 2018, when it issued a Tentative Implementation Order (TIO) for comment, which included methods by which the Commission and affected entities may carry out the tariff approval, ratemaking, compliance plan and assessment provision of Act 65. As part of the tariff approval process, the Authority was required to submit a Compliance Plan to the Commission, which addresses how it will achieve full regulatory compliance, including provisions to bring the Authority's existing information technology, accounting, billing, collection and other operating systems and procedures into compliance with the requirements applicable to jurisdictional water and wastewater utilities. The Commission received comments on the TIO, including extensive comments from the Authority and stakeholders, and considered them before issuing a Final

Implementation Order (FIO) on March 15, 2018, wherein the conclusions of the TIO were adopted or modified.

On April 1, 2018, the Commission formally began regulating functions of the Authority, which triggered the Authority's tariff filing deadline of 90 days, or July 2, 2018, and the Compliance Plan filing deadline of 180 days after the effective date of the Commission taking jurisdiction on September 28, 2018. PWSA filed its original Compliance Plan on September 28, 2018, and filed a Compliance Plan Supplement on February 1, 2019.

This document is being filed in compliance with the directives of Act 65 and the FIO, and revised in compliance with the Commission's March 26, 2020 Order in the Compliance Plan Stage 1 proceeding.² As directed, the Plan includes proposals to bring the Authority's existing information technology, accounting, billing, collection, and other operating systems and procedures into compliance with the requirements of the Public Utility Code and the applicable rules, regulations, and orders of the Commission. This revised plan also reflects PWSA's commitments made through settlement of PWSA's 2018 base rate cases (Docket Nos. R-2018-3002645 (water) and R02018-3002647 (wastewater)), a partial settlement of the Compliance Plan Stage 1 proceeding, and the Commission's Stage 1 Order issued on March 26, 2020.

The Authority also submitted an LTIIIP in accordance with Commission requirements. The LTIIIP was approved by the Commission's March 26, 2020 Order and PWSA filed a revised LTIIIP on April 27, 2020. The LTIIIP includes information on how PWSA intends to replace and/or upgrade targeted eligible property to improve system reliability and safety, and it includes metrics that PWSA uses to track and evaluate the effectiveness of infrastructure improvements. The LTIIIP also provides the rationale used to select and target eligible programs and property for LTIIIP consideration, and a projection of annual capital expenses to ensure that the LTIIIP is cost-

effective. The LTIIP reflects asset and project data for water system distribution services and sewer conveyance services.

b. Focusing on the Future

The City of Pittsburgh has reinvented itself many times over the years, most recently transitioning from a gritty former center of heavy manufacturing to a renowned technology and medical services hub. The water and sewer systems in Pittsburgh have echoed the fortunes of their parent City. They fell from glistening symbols of gilded age and post WWII expansion with stunning neoclassical and art deco facilities to decrepit shells of their former selves. The Authority's frequent management turnovers, decades of inadequate funding, and politically motivated investment decisions prevented proper operation and maintenance, system replacement and upgrade, the hiring of strategic professional staff to operate the utility. In addition, about \$300 million was transferred to fund the City's primary operating budgets. In fact, PWSA has incurred more than \$300 million indebtedness from compensation provided to the city during the last 20 years. Two partial privatization efforts – one in the 2001-2002 era and another in the 2012 to 2015 period – failed to achieve the desired stabilization and utility improvements.

Slowly, and declining renewed calls for other private sector radical solutions like privatization or receivership, the Authority has started turning things around. A new PWSA Board and leadership team has raised rates by nearly 50% in recent years and has tripled planned capital expenditures to address past deficiencies. In fact, actual capital investment has roughly doubled from about \$30 million per year in 2016 to more than \$67.7 million in 2018. PWSA increased capital investment to approximately \$100 million in 2019, and plans further

investments of approximately \$256 million in 2020 and \$327 million in 2021 to address decades of deferred investment.

The Authority has also moved under the jurisdiction of the PUC at the insistence of the state legislature, with the intent to resolve many of the longstanding inconsistencies with established service levels and practices. Perhaps most importantly, a new culture is taking root. It's a culture of "Get Stuff Done" and finding innovative solutions to establish the best in class rating for a municipally funded and operated utility.

As part of an on-going effort to "Get Stuff Done" for PWSA's customers and stakeholders, the Authority has put forth an Organizational and Compliance Plan, called *Focusing on the Future*. *Focusing on the Future* articulates PWSA's desired future state, which is to be a highly responsive and trusted public utility, recognized for excellence and valued by its community (Appendix A) This desired future state will be achieved with PWSA supporting community vitality by protecting public health and the environment through safe, reliable, and cost-effective delivery of drinking water, wastewater, and stormwater services.

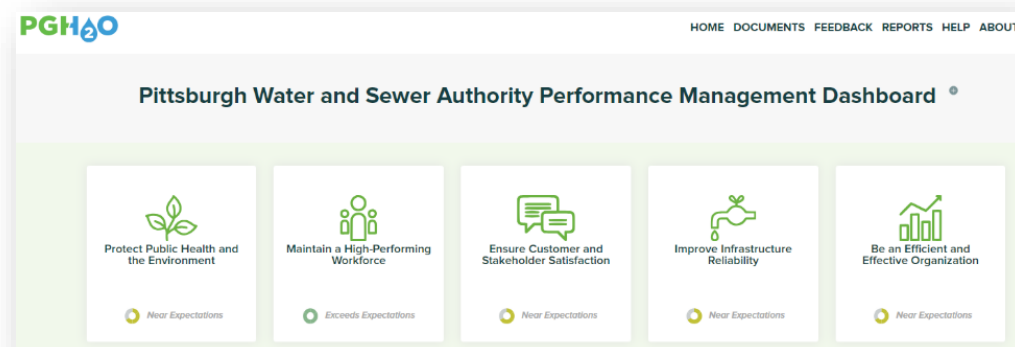
Focusing on the Future establishes five primary goal areas for PWSA:

- > Protect Public Health and the Environment – to protect and support the long-term health of our community and environment.
- > Ensure Customer and Stakeholder Satisfaction – to enhance customer and stakeholder confidence by communicating effectively and transparently engaging our community.
- > Improve Infrastructure Reliability – to ensure a high level of service reliability through responsible infrastructure investment and proactive maintenance.

- > Maintain a High-Performing Workforce – to recruit, develop, and retain a motivated and well-qualified workforce.
- > Be an Efficient and Effective Organization – to optimize the use of PWSA’s resources through innovative technology, effective processes, and continuous improvement.

The goals included in *Focusing on the Future* build on the organization’s strengths, articulate clear targets, and set forth clear actions that will be taken to move the organization forward. The goals included in *Focusing on the Future* are reflected in both the Compliance Plan and in the LTIP and becoming fully “PUC-Compliant” is now one of PWSA’s key goals. Strategic measures associated with all three documents (i.e., *Focusing on the Future*, the PUC Compliance Plan and the LTIP) is contained in the “Headwaters Performance Dashboard,” which is being used for performance tracking at the Authority.

Figure 1: Headwaters Performance Management Dashboard



In January 2020, PWSA publicly unveiled “Headwaters” to measure PWSA’s performance regarding five specific goals set forth in *Focusing on the Future*.³ These five goals are to: (1) protect the public health and the environment; (2) ensure customer and stakeholder satisfaction; (3) improve infrastructure reliability; (4) maintain a high-performing workforce; and, (5) be an efficient and effective organization. Each of these five goals includes: (1) a more

full description about why the goal is important; (2) what areas in which PWSA will focus to achieve success; and, (3) a real-time progress report measuring PWSA's progress against expectations. For example, to improve infrastructure reliability, PWSA is dedicated to investing the necessary resources to elevate the condition of its infrastructure and minimize system failures by implementing enhanced maintenance practices and renewing aging/failing infrastructure. In terms of progress, by January 2020, PWSA repaired or replaced 16,068 water meters which exceeded expectations. Similar information about the other four goals is available at the website

While achieving PWSA's desired future state will require the cooperation and support of all its varied stakeholder groups including the PUC and intervening parties, the plan is achievable, and will lead to a stronger, more capable, more resilient utility organization. Making progress on the initiatives contained within *Focusing on the Future*, undergoing and implementing the recommendations of regulatory audits to optimize treatment operations, continuing to attract and retain qualified employees for key positions, moving toward revenue sufficiency, reorganizing to support continuous improvement, and achieving PUC compliance will be vital for PWSA to achieve its ultimate goal: to be a highly responsive and trusted public utility, recognized for excellence and valued by its community.

Figure 2: *Focusing on the Future: Pittsburgh Water and Sewer Authority's Roadmap for Success*



¹ 66 Pa. C.S. § 3205.

² *Implementation of Chapter 32 of the Public Utility Code Regarding Pittsburgh Water and Sewer Authority – Stage 1, Opinion and Order*, Docket Nos. M-2018-2640802, M-2018-2640803, P-2018-3005037, and P-2018-3005039 (entered March 26, 2020).

³ See <https://headwaters.pgh2o.com/#Goals>.



OVERVIEW OF THE PITTSBURGH WATER AND SEWER AUTHORITY

2. OVERVIEW OF THE PITTSBURGH WATER AND SEWER AUTHORITY

a. History of Water and Sewer Infrastructure Development in Pittsburgh

The history of the water and sewer systems dates to the 1850s, when steel manufacturing and heavy industry was developing in the Pittsburgh area. The early water system was sized to meet the industrial water demands, as well as to provide basic water service to the surrounding population. Using the Allegheny River as its supply, several water companies independently served the region. The first water treatment plant was built in Aspinwall in 1907 as a slow sand filter plant, which was in and around the current Aspinwall water treatment plant site and the property now housing the Waterworks Mall.

The water supply and distribution system (the water system) now consists of a 117 million gallon per day (MGD) conventional flocculation, sedimentation and rapid filtration plant which was placed in service in 1969; one 26 MGD microfiltration water treatment plant; 964 miles of water mains; approximately 81,000 service lines to residential, commercial and industrial customers; 24,900 valves; 7,450 public fire hydrants; one raw water pump station located along the Allegheny River; two finished water pump stations; eight distribution pump stations; two covered finished water reservoirs; one uncovered source water reservoir; and ten distribution storage tanks/reservoirs. The average age of the water system is between 70 and 85 years old, with some water mains over 130 years in age. The total storage capacity of the reservoirs and tanks is approximately 455 million gallons. With consideration given to the pressure requirements of the distribution system, and storage capacities in each of the 15 pressure zones, the Authority stores enough finished water to provide a one- to two-day

uninterrupted supply to all customers (with water use restrictions) should the Authority temporarily be unable to treat additional water from the Allegheny River.

The sole source of water for the Authority's water system is the Allegheny River, for which the Authority and its predecessors have held withdrawal permits since 1943. In March 1989, the then Pennsylvania Department of Environmental Resources (now the Pennsylvania Department of Environmental Protection or PADEP) issued the Authority a 50-year Water Allocation Permit under the 1939 Water Rights Act. This permit authorizes the withdrawal of up to 100 MGD. PWSA's current average withdrawal of water from the Allegheny River is approximately 70 MGD. Frequent testing and analysis confirm the Authority's belief that the Allegheny River's water is of good quality, and that there is ample quantity to meet foreseeable demands given current allocation permit conditions and foreseeable river flow conditions.

PWSA's wastewater collection and conveyance system (the sewer system) is part of a regional system that provides service to about 550,000 people, of whom nearly 325,000 live within the City. The total drainage area served by the regional system is approximately 80 square miles, of which the City comprises about 55 square miles, or nearly 70 percent of the total. The outlying sewer drainage area is comprised of 24 communities that utilize the Authority's trunk sewers to convey their wastewater to the Allegheny County Sanitary Authority (ALCOSAN) regional sewage treatment facility.

PWSA's sewer system is primarily comprised of combined sewers, which were designed to carry both storm and sanitary flows. About 75% of the system is combined sewers and the remaining 25% are separate sewage and stormwater piped systems. The sewer system is comprised of a network of approximately 1,213 miles of sanitary, storm, and combined sewers and four wastewater-pumping stations. The average age of the sewer lines is between 60 and 70

years old, with some portions reaching nearly 150 years in age. Before the ALCOSAN regional treatment facility was built beginning in the 1950s, all PWSA's combined sewers discharged directly into the local rivers through several hundred outfalls. While the Authority and ALCOSAN have significantly reduced the volume of discharges into the local rivers, discharges during wet weather events still occur. The Authority and ALCOSAN are actively working with the PADEP to reduce these overflows, which is a major cost driver in the sewer system.

b. Authority Charter and Organization

The Authority is a body politic and corporate, organized and existing under the Pennsylvania Municipality Authorities Act. The Authority was established by the City in 1984, and it originally functioned as a financing authority. Since 1995, PWSA has functioned as an operating authority under the City. As an operating authority, PWSA assumed responsibility from the City for day-to-day management, operation, maintenance, and improvement of virtually the entire City water supply, distribution, and wastewater collection systems. In 2009, the Authority acquired the water system of the Borough of Millvale. Although the City has a major role in the creation (and continued existence) of PWSA, including appointment of PWSA Board members, PWSA is not a department of the City. PWSA is a separate legal entity with power to incur debt, own property and finance its activities.

PWSA and the City provide various services to and undertake various responsibilities for one another. These services are provided pursuant to a "Cooperation Agreement," first executed in 1995. PWSA has now renegotiated the Cooperation Agreement with the City and the 1995 Cooperation Agreement was terminated as of October 3, 2019. In December 2019, PWSA filed the new Cooperation Agreement with the Commission for review, which is currently pending.

The mission of PWSA is to provide high-quality drinking water, and to convey sewage and stormwater at a reasonable price for its customers. Customer satisfaction is PWSA's highest priority, and the Authority strives to work with customers to resolve any issues they may encounter.

c. Operating History

For a very long period, stretching from their beginnings in the mid-1800s until the post WWII period, the water and sewer systems in Pittsburgh functioned largely as intended under the jurisdiction of the City. During a majority of this period, there were few environmental and water quality regulations and the long-lived assets such as water mains operated as intended. Operation and maintenance activities were basic, mostly consisting of making certain that the water was flowing and leaks/failures were fixed promptly. There were adequate union labor resources staffing the systems, which was a byproduct of the success of the regions healthy manufacturing sector. As the systems aged through the 1960s and 1970s, maintenance and renewal did not keep pace. Failures increased dramatically. The passage of the Safe Drinking Water Act and Clean Water Acts in the 1970s also contributed to the burden on the City operators of the water and wastewater systems.

Continued aging of the systems' assets in the 1970s and 1980s coincided with large scale reductions in the manufacturing sector in Pittsburgh and surrounding areas. This brought political instability and an accompanying shortage of financial resources. The continued lack of funding for utility upgrades caused further degradation in the systems. The only solution to address the continued decline of the systems was an investment of cash to replace infrastructure and labor resources for improved operations and maintenance. Instead, in the mid-1980s around

the time of the last major steel mills closing in the area, the City began pulling money out of the utility by reducing staff and through the leasing arrangements with the newly created Authority.

Until 2017, the Authority has been operating on an inadequate budget with minimal investments in new assets. There has also been a lack of leadership at the Authority with more than 20 Executive Directors leading the Authority since the mid-1980s, including a brief period of contract management operation by Veolia corporation from 2012 to 2015, which resulted in mediated \$5 million settlement to PWSA and Veolia agreeing to pay \$500,000 to a fund designed to address utility affordability for the Authority's most vulnerable customers. The Authority's management and operations staff have also declined significantly since the 1970s, providing fewer skilled workers to address the growing needs of the water and sewer systems.

d. Recent Developments

Over the last 3-5 years, redevelopment within the City has begun to change the fortunes of PWSA and the City of Pittsburgh. Pittsburgh has become a hub for technology, education, and medical services, replacing tax revenue lost decades ago with the departure of many heavy manufacturing industries and bringing needed high paying jobs. Construction is also booming in the area, and there is an influx of young people. Pennsylvania Governor Tom Wolf recently joined Pittsburgh Mayor Bill Peduto to formally announce the City's release from Act 47, the state's financially distressed municipality's act, after more than 14 years.

PWSA has recently undergone a series of management audits, including those by the City Comptroller, a City-sponsored assessment by Infrastructure Management Group (IMG), PADEP, the US EPA, and the State of Pennsylvania Department of the Auditor General. These reports and other investigations, supported investments in new water and sewer infrastructure and governance changes to stabilize the Authority. Seizing this momentum, Robert Weimar, P.E., the

recently PWSA Board-appointed Executive Director (who formerly served as Interim Executive Director, as well as Interim Director of Engineering and Construction), and recruited senior staff have brought stability to the leadership of the Authority. PWSA has also recently hired several new experienced staff in numerous disciplines of water quality, regulatory compliance, water treatment, and operations management. As operations improved and the extent of critical infrastructure needs was acknowledged, the PWSA Board of Directors increased rates by more than 41% from 2016 to 2018. The rates will largely go toward fixing system assets most in need of repair or replacement, as well as instituting more robust operation and maintenance standards.

Regulation by the Commission will help to further stabilize the Authority and provide urgency for the City to adopt governance changes that will further solidify a successful future for PWSA. While discussions are still underway, PWSA and the City have considerable common ground regarding governance, financial and operations issues such as metering public facilities, and transferring responsibility for more stormwater activities to PWSA. Each group is also looking for ways to get the strong local private sector involved, whether through partnerships with other public agencies for private corporations, or through contracting professional consultants, technical specialists, and construction contractor services. These firms range from local minority to international firms with capabilities and engineering, construction management, project development, program management, as well as any other specific technical experts required for the performance of utility services.

i. Present Governance

PWSA is governed by a seven-member Board of Directors (Board) whose members are appointed by the Mayor of the City, and includes statutory members of City government including the City Treasurer, Finance Director, and a City Councilor. The current Board

members are Paul Leger, Chairperson; Margaret Lanier, Vice Chairperson; Jim Turner, Secretary; Erika Strassburger; Chaton Turner, Esq.; and Michael Domach. One board position remains vacant at this time.



SYSTEM AND OPERATIONS ACTIVITIES

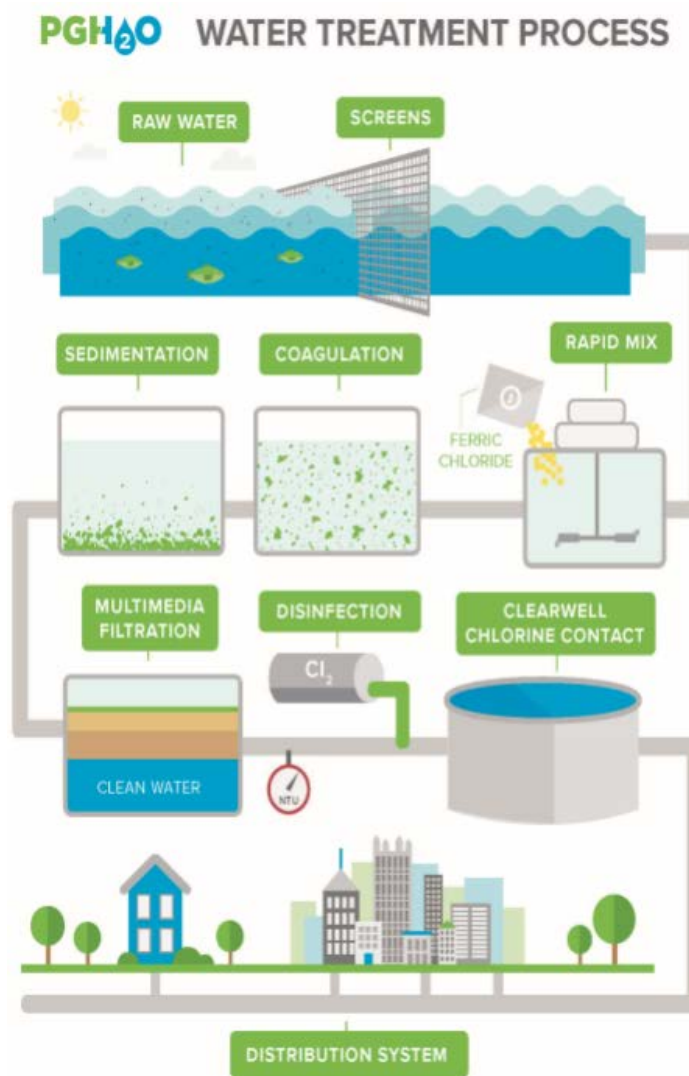
3. SYSTEM AND OPERATIONS ACTIVITIES

a. Water System

The City of Pittsburgh has a long history of innovative adaptation in its water treatment and distribution process. As the city's population and steel industry grew throughout the 19th century, the public water system evolved to meet the needs of its customer base, enhancing its treatment facilities by incorporating new technologies. By 1905, the city had begun construction on a slow-sand filtration plant, upgraded in the 1960s to include chemical treatment and high rate rapid sand filters.⁴

Today, PWSA treats an average of 70 MGD⁵ from the Allegheny River.⁶ PWSA's main water treatment facility is the 117 MGD conventional filtration plant at Aspinwall.⁷ The 26 MGD Highland Microfiltration Plant, which uses membrane treatment technology,⁸ is located at the Highland No. 1 Reservoir—the system's only uncovered reservoir.⁹ Besides the Ross pump station, which supplies raw water to the Aspinwall plant, PWSA maintains 10 finished water pumping stations.¹⁰ Ten chlorine booster stations disinfect the treated water prior to distribution,¹¹ and this finished water is transported to approximately 81,000 customers within the City¹² through more than 964 miles¹³ of water lines. The water treatment process at the Aspinwall Water Treatment is illustrated in the following figure, as provided in PWSA's annual drinking water quality report.¹⁴

Figure 3: PWSA's Water Treatment Process



The 2012 estimated cost of replacing all water infrastructure with new facilities was \$1.247 billion,¹⁵ but further study has revealed that the 40-Year Plan significantly underestimated some costs, particularly regarding pipe replacement. Due to the age of the facilities, with most water mains exceeding 70 years of age (the oldest pipes and valves date the mid-1800s¹⁶), and lack of infrastructure spending, the water system has degraded significantly. The 2012 book value of assets in the water system was only \$486.67 million.¹⁷ A 2012 capital planning report commissioned by PWSA recommended a water main replacement cost of

approximately \$14.8 million per year to adequately mitigate risk due to aging pipes,¹⁸ and PWSA's most recent capital improvement plan (as of July 2018) has estimated a water main replacement cost of approximately \$78.4 million over the next several years.¹⁹ The 2012 report also estimated substantial costs, to be incurred over a 40-year time horizon, for upgrading other water infrastructure—\$1.41 billion for distribution, \$35.02 million and \$150.65 million, respectively, for pumping and storage, and \$401.61 million for treatment facilities.²⁰

To maintain an updated, safe and reliable water system, PWSA is complying with an Administrative Order from PADEP, issued in 2017 to ensure that the most urgent water supply projects are achieved. These improvements include a new cover for the Lanpher Reservoir, upgrades to the Bruecken Pump Station, installation of security and treatment upgrades for the Highland No. 1 Reservoir and associated Microfiltration Plant, and a monitoring system to ensure that service lines maintain consistent pressure within the water distribution.²¹ PWSA's most recent capital improvement program (CIP)—a far more ambitious plan than that of previous years²²—emphasizes upgrading, renewal, and replacement of chemical feed, outdated mechanical equipment, and aged structures of the Aspinwall Treatment Plant, as well as significant improvements to the rising Main system.²³ Following proposed Administrative Orders, PWSA has incorporated other key system upgrades into its CIP, including measures to improve system reliability and resilience to natural disasters and infrastructure failures.²⁴

PWSA has recently made significant progress toward these goals. In 2019, rehabilitation of the Lanpher Reservoir was completed. PWSA is also in the process of renovating the Microfiltration Plant in Highland Park to bring it back into service. Ultraviolet disinfection systems have been added at the insistence of the PADEP and PWSA continues to upgrade the walkway, wall, and railing around the open reservoir in Highland Park under the PADEP

Consent Order. For 2020, PWSA in the process of designing 15 miles of new water mains (the previous yearly average was less than two miles), focused on locations where there is a high probability of lead service lines. PWSA has also improved staff training and equipment at its pump stations and in its laboratory.²⁵

One of the most significant of these required upgrades is the replacement of lead service lines throughout the service area. After PWSA's required monitoring revealed lead concentrations exceeding the US EPA and PADEP Lead Action Level in 2016, a Consent Order and Agreement (COA) from DEP required PWSA to replace at least 7% of its lead service lines (1,341) lead service lines by June 30, 2018.²⁶ PWSA surpassed the requirement on June 29, 2018.²⁷ After it was determined that partial lead line replacement (e.g. replacing only the publicly-owned portion of a lead service line) could actually increase lead levels for a few months, state law was amended to allow PWSA to replace lines on private property.²⁸ Since PWSA's lead service replacement program first began in 2016, over 6,100 public lead service lines have been removed from the water system.²⁹ Lead service line replacements are ongoing, but will take years to complete, and PWSA recently began adding a corrosion inhibitor (orthophosphate) to reduce leaching of lead in existing plumbing fixtures and service lines.³⁰ PWSA has posted an interactive map to their website showing historical lead service lines and areas of planned or completed lead service line replacement,³¹ with the goal of informing affected residents. The lead service line investigations and lead service line map will be completed by late 2020.

b. Wastewater System

With a collection system covering approximately 80 square miles, PWSA provides sewage collection and conveyance for approximately 550,000 people in total, including 325,000

people within the Pittsburgh city limits.³² PWSA collects and conveys sewage to ALCOSAN for treatment, and PWSA customers are billed for ALCOSAN waste treatment through a “pass-through” charge on their water bills.³³

About 75% of the PWSA sewage collection system is combined with the city’s stormwater system (the latter is discussed below).³⁴ Prior to PWSA’s partnership with ALCOSAN, which began in the 1950s following state pressure to improve water quality in city waterways and passage of the Clean Water Act in the 1970s,³⁵ all sewage and stormwater was discharged, untreated, into Pittsburgh’s rivers and streams.³⁶ The majority of the City’s sewage and some stormwater is currently treated at ALCOSAN prior to discharge. However, during significant storm events combined sewage overflows continue to be diverted into surface waters.³⁷

To address the water quality problems resulting from combined sewer overflows, PWSA and 82 other systems served by ALCOSAN signed a COA in 2004 to bring surface water quality into compliance with state law and the Clean Water Act.³⁸ Four years later, ALCOSAN signed a Consent Decree with the federal government and the state to create a Wet Weather Plan in 2013. Later in 2013, PWSA released their “Wet Weather Feasibility Study” summarizing future plans for improving water quality.³⁹ Wastewater compliance activities are ongoing. ALCOSAN is required to construct facilities to eliminate sanitary sewer overflows by 2036,⁴⁰ while a Long-Term Wet Weather Control Plan must address sewage infrastructure improvements through 2046.⁴¹

As of the publication of PWSA’s 2012 40-Year Plan, the collection system included four wastewater pumping stations supplying 1,211 miles of sewer lines greater than 3-inches in diameter.⁴² PWSA’s sewer facilities have depreciated substantially since they were first

installed. The 2012 estimated cost of replacing existing sewer collection facilities with new facilities was \$1,264,877,000⁴³ with a depreciated value of \$287,266,671.⁴⁴ The average age of PWSA's sewer lines is between 60 and 70 years old, and some lines are nearly 150 years old.⁴⁵

PWSA is making progress toward improving the wastewater system. In 2019, PWSA lined nearly five miles of sewer which adds decades of life to the line by creating a new barrier, or sleeve, inside the old pipe. Additionally, over 1,700 storm catch basins were cleaned and 800 were replaced, ensuring that the sewers can properly channel stormwater away from streets, homes and businesses around the city. PWSA plans to install liners into an additional 16 miles of sewers in 2020.⁴⁶

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- ⁴ PWSA, “PGH2O History,” n.d., <http://pgh2o.com/history>.
- ⁵ Robert Weimar, “Pittsburgh Water & Sewer Authority Initial Tariff Filings and Rate Requests: Testimony Before the Pennsylvania Public Utility Commission, Volume II,” Pub. L. No. R-2018-3002645, R-2018-3002647 (2018).
- ⁶ PWSA, “PWSA Annual Drinking Water Quality Report 2017,” 2017, <http://www.pgh2o.com/files/2017CCR.pdf>.
- ⁷ Chester Engineers, Inc., “The Pittsburgh Water and Sewer Authority 40-Year Plan” (Allegheny County, Pennsylvania, September 2012), http://apps.pittsburghpa.gov/pwsa/PWSA_40-year_Plan.pdf.
- ⁸ Chester Engineers, Inc.
- ⁹ PWSA, “PGH2O History.”
- ¹⁰ Chester Engineers, Inc., “The Pittsburgh Water and Sewer Authority 40-Year Plan.”
- ¹¹ Chester Engineers, Inc.
- ¹² Weimar, Pittsburgh Water & Sewer Authority Initial Tariff Filings and Rate Requests: Testimony Before the Pennsylvania Public Utility Commission, Volume II.
- ¹³ Weimar; PWSA, “PGH2O 2017 Media Kit.”
- ¹⁴ PWSA, “PGH2O 2017 Media Kit.”
- ¹⁵ Chester Engineers, Inc.
- ¹⁶ Chester Engineers, Inc.
- ¹⁷ Chester Engineers, Inc.
- ¹⁸ Chester Engineers, Inc.
- ¹⁹ Weimar, Pittsburgh Water & Sewer Authority Initial Tariff Filings and Rate Requests: Testimony Before the Pennsylvania Public Utility Commission, Volume II.
- ²⁰ Chester Engineers, Inc.
- ²¹ Weimar, Pittsburgh Water & Sewer Authority Initial Tariff Filings and Rate Requests: Testimony Before the Pennsylvania Public Utility Commission, Volume II.
- ²² Eugene A. DaPasquale, “Performance Audit Report: The Pittsburgh Water and Sewer Authority” (Commonwealth of Pennsylvania Department of the Auditor General, 2017).
- ²³ Weimar, Pittsburgh Water & Sewer Authority Initial Tariff Filings and Rate Requests: Testimony Before the Pennsylvania Public Utility Commission, Volume II.
- ²⁴ Weimar.
- ²⁵ Direct Testimony of Robert Weimar, PWSA St. No. 1, PWSA 2020 Tariff Filings and Rate Requests (Docket Nos. R-2020-3017951 (water) and R-2020-3017970 (wastewater)) (dated March 6, 2020).
- ²⁶ PWSA, “Press Release: PWSA Bests DEP Requirement for Lead Line Replacements,” PGH2O, June 29, 2018, <http://pgh2o.com/release?id=7703>; Commonwealth of Pennsylvania Department of Environmental Protection, “Consent Order and Agreement,” November 17, 2017, http://apps.pittsburghpa.gov/redtail/images/1005_PWSA%20Lead%20COA%2011172017%20final.pdf.
- ²⁷ PWSA, “Press Release: PWSA Bests DEP Requirement for Lead Line Replacements.”
- ²⁸ PWSA.
- ²⁹ Direct Testimony of Robert Weimar, PWSA St. No. 1, PWSA 2020 Tariff Filings and Rate Requests (Docket Nos. R-2020-3017951 (water) and R-2020-3017970 (wastewater)) (dated March 6, 2020).
- ³⁰ PWSA, “Press Release: PWSA Makes Progress on Treatment Upgrades to Reduce Lead in Water,” PGH2O, May 18, 2018, <http://pgh2o.com/release?id=7685>.
- ³¹ PWSA, *PWSA Lead Service Line Map* (PWSA, 2018), <http://pgh2o.com/leadmap>.
- ³² Weimar, Pittsburgh Water & Sewer Authority Initial Tariff Filings and Rate Requests: Testimony Before the Pennsylvania Public Utility Commission, Volume II.
- ³³ Weimar.
- ³⁴ Weimar.
- ³⁵ 3 Rivers Wet Weather, “History,” 3 Rivers Wet Weather: Improving Our Region’s Water Quality, 2016, <http://www.3riverswetweather.org/about-wet-weather-issue/understanding-sewer-collection-system/history>.
- ³⁶ Weimar, Pittsburgh Water & Sewer Authority Initial Tariff Filings and Rate Requests: Testimony Before the Pennsylvania Public Utility Commission, Volume II.
- ³⁷ Weimar.
- ³⁸ PWSA, “Wet Weather Feasibility Study: Executive Summary,” July 2013, <http://www.pgh2o.com/going-green>.
- ³⁹ PWSA.

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- ⁴⁰ “Consent Decree: United States of America, Commonwealth of Pennsylvania, Department of Environmental Protection, and Allegheny County Health Department vs. Allegheny County Sanitary Authority,” n.d., <http://www.alcosan.org/WetWeatherIssues/ConsentDecree/tabid/63/Default.aspx>.
- ⁴¹ 3 Rivers Wet Weather, “Municipal Consent Orders,” 3 Rivers Wet Weather: Improving Our Region’s Water Quality, 2016, <http://www.3riverswetweather.org/municipalities/municipal-consent-orders>.
- ⁴² Chester Engineers, Inc., “The Pittsburgh Water and Sewer Authority 40-Year Plan.”
- ⁴³ Chester Engineers, Inc.
- ⁴⁴ Chester Engineers, Inc.
- ⁴⁵ Weimar, Pittsburgh Water & Sewer Authority Initial Tariff Filings and Rate Requests: Testimony Before the Pennsylvania Public Utility Commission, Volume II.
- ⁴⁶ Direct Testimony of Robert Weimar, PWSA St. No. 1, PWSA 2020 Tariff Filings and Rate Requests (Docket Nos. R-2020-3017951 (water) and R-2020-3017970 (wastewater)) (dated March 6, 2020).



PUC COMPLIANCE REQUIREMENTS AND REPORTING – OVERVIEW

4. PUC COMPLIANCE REQUIREMENTS AND REPORTING – OVERVIEW

The Commission manages several customer service, billing, accounting, reporting and management standards contained in Title 52 of the Pa. Code. While PWSA has always been a customer-focused utility, its practices have varied from those regulated by the PUC. It has strived to adopt common industry practices, such as those recommended by the American Water Works Association (AWWA), the Water Environment Federation (WEF) and the Government Accounting Standards Board (GASB). Inadequate funding and lack of resources has often resulted in falling short on meeting many non-compulsory standards of regulatory and industry bodies. This Compliance Plan explains where PWSA meets or exceeds PUC regulatory standards, describes areas of deficiency and outlines a plan and timeframe to address any gaps.

a. Financial and Accounting Practices

PWSA generally follows Generally Accepted Accounting Principles (GAAP) and GASB guidance. It also has a yearly financial audit that complies with applicable requirements. It currently differs from PUC regulatory standards in several ways, most notably in its use of a cash-based accounting system. The PWSA set of accounts is more closely aligned with City of Pittsburgh accounting practices than PUC practices. Tracking of assets, revenue and expenditures will need to be adjusted to align with PUC standards. A timeline for compliance, including converting to a NARUC system of accounts, is laid out in this Compliance Plan.

b. Customer Service Practices

PWSA's customer service practices are almost entirely in compliance with provisions contained in 52 Pa. Code Chapter 56. PWSA's current Water and Wastewater Tariffs (effective

March 1, 2019) include rules and regulations reflecting PWSA’s intent to fully comply with the billing, collection, complaint, and termination rules of Chapter 14 of the Public Utility Code and Chapter 56 of the Commission’s regulations (except where waivers are requested). Specific items are addressed in this Compliance Plan, while others have been deferred to the Stage 2 proceeding, as discussed below.

c. Registration of Securities (66 Pa. C.S. §1901-1904)

Chapter 32 of the Public Utility Code (66 Pa. C.S. §§ 3201 to 3209) does not exempt PWSA from compliance with the requirements of Chapter 19 of the Public Utility Code, 66 Pa. C.S. § 1901-1904 (Chapter 19). See Implementation of Chapter 32 of the Public Utility Code; RE: Pittsburgh Water And Sewer Authority, Docket Nos. M-2018-2640802 and M-2018-2640803, Tentative Implementation Order entered January 18, 2018, at p. 29.

Chapter 19 provides that the “securities” of public utilities must be registered with the Commission prior to issuance or assumption by the public utility. The issuance and assumption of securities certificates is defined at 66 Pa. C.S. §§ 1901(b), (c). The required contents of securities certificates are set forth in the Public Utility Code. 66 Pa. C.S. § 1902; 52 Pa. Code § 3.601(b), (c), (d).

PWSA intends to fully comply with Chapter 19. For example, in 2018 PWSA requested the registration of a new revolving credit agreement (which will replace the prior “grandfathered” revolving credit agreement). Docket No. S-2018-3003524. In addition, the PWSA also sought a waiver from the Commission to clarify that certain interest rates changes under bonds – issued by PWSA prior to the effective date of Chapter 32 – would not require registration under Chapter 19. Docket No. P-2018-3003636. That waiver was granted on August 23, 2018.

d. Compliance Plan Progress Reports

As part of the Compliance Plan Stage 1 Partial Settlement, PWSA agreed to provide regular Compliance Plan Progress Reports pursuant to the following:

1. PWSA included with its supplemental testimony of August 2, 2018 a Second Compliance Plan Program Report, marked as PWSA Exh. RAW/C-28(A), with information available through July 31, 2019.
2. On a quarterly basis starting on or before October 31, 2019, PWSA will file an updated PWSA Compliance Plan Progress Report in a format substantially similar to PWSA Exhibit RAW/C-28.
3. Subsequent PWSA Compliance Plan Progress Reports shall be filed on or before January 30, April 30, July 30, and October 31. The Compliance Plan Progress Reports shall be filed through October 31, 2025 unless the date is otherwise extended by the Commission or through mutual agreement with the parties.
4. In addition to the information already presented in PWSA Exhibit RAW/C-28, the Compliance Plan Progress Report will include updates regarding the following items as agreed-to herein beginning with the October 31, 2019 Compliance Plan Program Report (unless otherwise noted):

Description	Cross Reference	Frequency of Information Update
Conversion of accounting to full NARUC USOA	Partial Settlement at Section III.A.2	Quarterly
Status of Risk and Resilience Assessment and Updated Emergency Response Plan	Partial Settlement at Section III.D.5	Quarterly, until completed.
Security Planning and Readiness Plans	Partial Settlement at Section III.E.3.b.	Quarterly, until completed.
Notices Regarding Accident, Death, Service Interruptions/Outage, Physical or Cyber Attack and low pressure incidents required to be reported to DEP	Partial Settlement at Section III.F.1.b (to be included in final Emergency Response Plan)	Quarterly, until completed.
Metering of Unmetered Properties	Partial Settlement at Section III.G.1.b.ii.	Quarterly, when completed all newly metered and/or previously unbilled properties to be identified
Water Conservation Measures	Partial Settlement at Section III.K.3	Quarterly, until completed
Replacement of 4-Inch Diameter Water Mains	Partial Settlement at Section III.L.2	Quarterly

PWSA Leak Detection Program	Partial Settlement at Section III.N.1.e	Annually
Status of Investigation Regarding Ownership of Wastewater Laterals	Partial Settlement at Section III.Z.3.	Quarterly, until January 15, 2021 when final report to be shared with the parties.
Construction Project Tracking and Evaluation	Partial Settlement at Section III.CC	Quarterly, (with starting date to be mutually agreed upon by I&E and PWSA)
Report of Non-Competitively Bid Construction Contracts	Partial Settlement at Section III.DD.1.c	Annually
Design Engineer and Company Affiliation for Capital Projects	Partial Settlement at Section III.DD.2	Quarterly
Funding Sources for Capital Projects	Partial Settlement at Section III.EE.2	Quarterly
Material Report, Valves, Prioritization	Partial Settlement at Section III.GG.1 & 2.	When available
Computerized Maintenance Management System (CMMS) Implementation Progress	Partial Settlement at Section III.GG.3	Quarterly, until completed
Data regarding PWSA's Interim Process Regarding Personal Contact Requirements of 52 Pa. Code §§56.94 and 56.336	Partial Settlement at Section III.MM.2.a.iii	Quarterly, beginning with PWSA Exh. RAW/C-28(A)
Customer Assistance Program Data Collected Pursuant to PWSA Rate Case Settlement (Docket No. R-2018-3002645)	Partial Settlement at Section III.NN.1.b	Quarterly, beginning with PWSA Exh. RAW/C-28(A)
Update on Orthophosphate Program	Partial Settlement at Section III.XX.1	Quarterly, until no longer required to provide updates to Pennsylvania Department of Environmental Protection

e. Compliance Deadlines

In the Compliance Plan Stage 1 Partial Settlement, PWSA agreed to the following:

1. As set forth herein, PWSA will report its progress in meeting the timelines agreed-to herein as part of the PWSA Compliance Plan Progress Reports.
2. If circumstances arise that forestall PWSA from meeting an agreed-to deadline for a specific task, PWSA agrees to provide that notice in the PWSA Compliance Plan Progress Reports. This notice will include:
 - a. Details as to why the agree-to compliance deadline target is no longer possible;
 - b. The new timeline for compliance; and,
 - c. Explanation of the steps to be taken to accommodate the new deadline.



COMPLIANCE BY TITLE 52 CHAPTER

5. COMPLIANCE BY TITLE 52 CHAPTER

As a public water and wastewater utility regulated by the PAPUC, PWSA is subject to the relevant portions of Title 52, including:

- > Chapter 56 – Standards and Billing Practices for Residential Utility Service
- > Chapter 65 – Water Service
- > Chapter 67 – Service Outages
- > Chapter 69 – General Orders, Policy Statements, and Guidelines
- > Chapter 71 – Financial Reports
- > Chapter 73 – Annual Depreciation, Service Life Studies and Capital Investment Plans
- > Chapter 101 – Public Utility Preparedness through Self Certification
- > Chapter 102 – Confidential Security Information
- > Chapter 121 – Long-term Infrastructure Improvement Plan

Table 1 presents the relevant sections of the aforementioned Chapters where PWSA believes that it is currently in compliance with the Commission’s requirements.

Table 1: Title 52 Sections where PWSA believes it is currently in compliance

Section	Subchapter	Currently in Compliance
65.2.	Accidents.	X
65.3.	Complaints.	X
65.5.	Interruptions of service.	X
65.9.	Adjustment of bills for meter error.	X
65.10.	Disputed bills.	X
65.12.	Notice of desire to have service discontinued.	X
65.13.	Temporary service.	X
65.14.	Measurement.	X
65.15.	Refusal to serve applicants.	X
65.19.	Filing of annual financial reports.	X
69.51 – 69.85	Inclusion of State Taxes and Gross Receipts Taxes in Base Rates	X

69.87.	Tariff Provisions that Limit the Liability of Utilities for Injury or Damage as A Result of Negligence or Intentional Torts—Statement of Policy	X
69.169	Policy Statement Interpreting Terms Included In 66 Pa. C.S. § 1326	X
69.261 – 69.267	Policy Statement on Customer Assistance Programs	X
69.351	Implementation of SFAS 106	X
73.7.	Capital investment plan report	X
73.8.	Format for filing the capital investment plan report	X
121.3.	LTIP	X
121.4.	Filing and Commission review procedures.	X

Table 2 highlights the Sections where PWSA believes that it will be in compliance with the Commission’s requirements within the next six months.

Table 2: Title 52 Sections where PWSA believes will be in compliance within six months

Section	Subchapter	6 Months or Less to Compliance
65.6.	Pressures.	X
65.11.	Mandatory conservation measures.	X
67.1	Service Outages.	X
69.801 – 69.809	Diversity at Major Jurisdictional Utility Companies—Statement of Policy	X
69.1601 – 69.1603	Unscheduled Water Service Interruptions and Associated Actions	X
71.3.	Filing requirements.	X
71.4.	Time of filing.	X
71.5.	Format for filing financial reports.	X
71.6.	Permitted adjustments to financial reports.	X
71.7.	Filing procedures.	X
71.9.	Financial reports as public documents.	X
101.3.	Plan requirements.	X

Finally, Table 3 shows the Sections where PWSA believes that it will take longer than six months to comply with the Commission’s requirements.

Table 3: Title 52 Sections where PWSA believes that compliance will take longer than six months

Section	Subchapter	More than 6 Months to Compliance
65.4.	Records.	X
65.7.	Metered service.	X
65.8.	Meters.	X
65.16.	System of accounts.	X
65.17	Standards of design.	X

65.18	Standards of construction.	X
65.20	Water conservation measures – statement of policy.	X
65.21	Duty of public utility to make line extensions.	X
65.22	Customer Advance Financing, Refunds, and Facilities on Private Property.	X
65.23	Special utility service.	X
69.251	Policy Statement on Plain Language Guidelines	X
73.3.	Annual depreciation reports	X
73.4.	Format for filing the annual depreciation report	X
73.5.	Service life study report	X
73.6.	Format for filing the service life study report	X
101.4.	Reporting Requirements.	X
102.3.	Filing procedures.	X
121.5.	Modifications to and expiration of an LTIP	X
121.6.	AAO plan filings.	X
121.7.	Periodic review of an LTIP.	X
121.8.	Enforcement of LTIP implementation.	X

The next several sections of this document detail the Commission’s requirements, PWSA’s compliance status, and, in areas where PWSA does not currently meet the Commission’s requirements, a plan for achieving compliance.

a. Chapter 56. Standards and Billing Practices for Residential Utility Service

Chapter 56 of the Commission's regulations (52 Pa. Code § 56.1 *et seq.*) was created to establish and enforce "uniform, fair, and equitable residential public utility service standards." Specifically, Chapter 56 deals with a variety of topics related to standards and billing practices for residential utility service, including: eligibility criteria; credit and deposit practices; and account billing, termination, and customer complaint procedures, thereby ensuring adequate provision of service, restricting unreasonable termination of or refusal to provide that service, and eliminating opportunities for customers capable of paying for service to avoid doing so.

Pursuant to the Commission's November 28, 2018 Secretarial Letter, PWSA's compliance with Chapter 56 will be addressed in Stage 2 of this Compliance Plan proceeding. In anticipation of this, PWSA has participated in a series of billings and collections workshops convened by BCS with participation from interested parties. Although most Chapter 56 issues will be addressed in Stage 2, PWSA has previously agreed to terms regarding its customer service and billing practices as part of its 2018 base rate proceedings (Docket Nos. R-2018-3002645 (water) and R-2018-3002647 (wastewater)) and in the Stage 1 Compliance Plan proceeding. Those obligations are detailed below. PWSA is reporting on these items in the Quarterly Compliance Plan Progress Reports. The most current compliance status for these items is available there. As of the January 31, 2020 Quarterly Compliance Plan Progress Report, these items have either been completed or are in process:

2018 Rate Case Settlement Terms

Customer Service Issues

1. Any agreements regarding the policies and procedures referenced in the Settlement are without waiver of PWSA's view that its current policies are already compliant with all applicable regulatory and legal requirements or of the right of parties to challenge

PWSA's policies, practices, and procedures in the Compliance Plan proceeding or other future proceedings.

2. PWSA has continued its practice of tracking informal complaint information. PWSA will conduct a regular review of this information to determine complaint trends and whether there is a need to implement additional or new internal training policies, as described in OCA St. 3, pp. 9-10. PWSA will work with the parties to determine an appropriate informal complaint tracking information review process. PWSA also agrees to track whether customer complaints are related to water, sewer, or stormwater. PWSA is consistently tracking Informal Complaint information, including the recent addition of a breakdown as to which service complaints are related. Our PUC Compliance Manager, Brittany Schacht, regularly identifies trends and works with other Customer Service management to alter processes and procedures where necessary and communicates any changes to the staff at large via email and training sessions.
3. PWSA is in the process of modifying its bills to provide more detailed information on rates and approved tariff charges. PWSA will provide interested parties and the Commission's Bureau of Consumer Services with a draft of the changes for feedback and recommendations. Parties are free to offer suggestions for improvements to the draft language. If requested by any party after review of the draft bill changes, PWSA will host a collaborative meeting with the parties to discuss its bill modification plans prior to rolling out its modified bills. Sufficient time will be allotted to allow PWSA to consider and assess recommendations and implement agreed-to changes. PWSA's revised bills will contain at least the following elements:
 - a. Eliminate the requirement that a customer must dispute charges in writing.
 - b. Identify, explain, and itemize the actual rates charged for each component of the bill.
 - c. Identify and itemize the monthly installment amount for any existing payment arrangements.
 - d. Include the installment amount for any existing payment arrangements in the total due / asked to pay amount.
 - e. Direct customers to PWSA's webpage which specifically sets forth fees associated with various bill payment options.

PWSA began working in its bill redesign in October 2018, and is currently awaiting test results from its print and mail vendor, Level One, LLC. Next steps are to provide copies of sample bills to the Bureau of Consumer Services and to other interested parties in the rate case (as per the Settlement) for review and feedback. [As of April 2020, PWSA is awaiting a second round of test bills from the vendor incorporating suggested changes by the parties. PWSA intends to issue its redesigned bill in 2020.]

4. PWSA will continue its practice of issuing written confirmation of payment arrangement terms. PWSA added this practice to its customer service training materials in November 2018.
5. PWSA has revised its 3-day and 48-hour termination notices to clarify that all residential customers have the right to negotiate a payment plan to avoid termination of service. This was accomplished by moving the language on the availability of the payment plans from the "Medical Emergency Notice" section into the general section of the notices.
6. PWSA will inform customers of the payment arrangement terms, based on the consumer's ability to pay upon contact with the customer. PWSA will offer payment arrangements as permitted by Chapter 14. PWSA acknowledges that Chapter 14 does not apply to victims of domestic violence with a Protection From Abuse Order (PFA) or other court order containing clear evidence of domestic violence and will offer these customers payment arrangement terms based on their individual circumstances, regardless of any existing or future internal policy about payment agreement length. Payment arrangements for victims of domestic violence with a PFA or other court order containing clear evidence of domestic violence may exceed the standard term lengths based on the consumers' individual facts and circumstances. PWSA added payment arrangements and PFAs to its training materials in November 2018.
7. PWSA updated its Medical Certificates Training in November 2018, and has reformed its internal medical certificate policies to provide the following:
 - a. All PWSA employees have continued to be trained to temporarily stop termination of service if they are informed that a member of the household is seriously ill or requires service to treat a medical condition, and that the household is seeking to obtain a medical certificate.
 - b. PWSA will not terminate service for non-payment when presented with an approved initial medical certificate as defined by 66 Pa. C.S. § 1403.
 - c. Additional medical certificates will be accepted to prevent termination of service so long as a customer pays their current bills for service, not including any underlying arrearages. PWSA will not limit the number of times a customer can renew a medical certificate if the customer keeps up with their current bills while protected by a medical certificate but will actively work with the customer to establish an equitable payment arrangement to otherwise address the underlying arrears and resolve the termination.
 - d. If a customer with a medical certificate fails to pay their current bills while protected by a medical certificate, only two additional renewals will be accepted to stop termination.

- e. Once an outstanding balance is paid, PWSA will accept a new medical certificate to prevent a subsequent termination of service based on a new balance, subject to the same renewal requirements outlined in subparts (b) through (c).
 - f. PWSA will inform consumers of the payment obligations for medical certificate renewals at the time a medical certificate is submitted.
- 8. PWSA has reformed its internal policies governing complaint procedures to clarify that its dispute process is available to current customers, applicants for service, and tenants and/or occupants not listed on the current bill. When providing information to consumers about the Commission's complaint process, PWSA has begun to train its customer service representatives to not evaluate or express a subjective view about the efficacy of an individual's Inquiry/Dispute/Informal/Formal Complaint or an opinion about whether or not he or she may have an actionable claim against PWSA. The Dispute Process training materials were updated in December 2018.
 - 9. When a tenant exercises their right to continued service pursuant to DSLPA, PWSA will accept as proof of identification any document issued by a public agency or public utility which contains the name and address of the tenant. PWSA updated its Tenants' Rights and DSLPA training materials in November 2018.
 - 10. PWSA has created a new draft form for owners desiring to voluntarily discontinue service to a residential property occupied by a tenant. The new form complies with the requirements of DSLPA, including the requirement that the property owner submit a notarized document swearing under penalty of perjury that the unit is unoccupied, consistent with the requirements of DSLPA. PWSA provided a draft of this form to the Bureau of Consumer Services (BCS) for review on December 31, 2018. BCS staff responded that they believe that most of the information included on the form that is not required by the statute does not need to be included on the form. BCS further responded that they will provide revisions of the draft form to PWSA by the end of January 2019.
 - 11. PWSA commits to making the changes identified in Paragraphs III.1.1 through III. 10 of the Settlement consistent with the timeframes established by the final order in this proceeding and to provide a copy of the changes to the Low Income Advisory Committee to be established pursuant to Paragraph III.3 of the Settlement, and PWSA is currently on track to do so.

Tariff Issues

- 1. PWSA has revised Part III, Section C, subpart (3)(i)(v) of its water and wastewater tariff to clarify that provision of 72-hour notice of termination by electronic mail will only occur if the customer's express written consent to accept service in this matter has been received by PWSA. If electronic notice of termination is returned as undeliverable, PWSA will provide alternative 72-hour notice consistent with subpart (3)(J)(v) of its approved water and/or wastewater tariff. PWSA has revised this provision of its water and wastewater tariffs and submitted it to the Commission on November 29, 2018.

PWSA will make further revisions, if necessary, to be consistent with any requirements established by the Commission in its Chapter 56 rulemaking.

2. PWSA has revised its tariff regarding medical certificates to clarify that it will accept medical certificates from physician assistants. This revision was filed with the Commission on November 29, 2018.
3. PWSA has relocated the collections expenses and fees described in Part I, Section G from its proposed water and wastewater tariffs and list them in PWSA's Supplemental Service Conditions. This revision was filed with the Commission on November 29, 2018.
4. On the basis of PWSA coming under the jurisdiction of the Pennsylvania Public Utility Code and the Commission's regulations PWSA agrees to suspend the use of Jordan Tax Service upon the effective date of the Commission's final order approving the Settlement. Once the Commission issues a Final Order in PWSA's initial rate case proceeding, PWSA will cease to send unpaid water/wastewater charges to JTS for collection. [PWSA has complied with this requirement and no longer sending these unpaid charges to JTS.]
5. PWSA will not require a tenant who applies for service to assume liability for debt previously accrued at the property for which the tenant was not residing and/or for which the tenant was not on the mortgage, deed, or lease as a condition to establishing service. PWSA does not knowingly allow tenants to assume debts that they themselves did not incur.
6. PWSA has revised its training materials and, to the extent necessary, its water and wastewater tariff to be clear that it does not require low income customers who are eligible for PWSA's Bill Discount Program to submit a security deposit. PWSA does not accept security deposits from any customers.

Compliance Plan Stage 1 Settlement Terms

Issues Deferred to Stage 2

1. In accordance with Commission's May 15, 2019 Secretarial Letter granting the Parties' Expedited Motion for Extension of Commission-Created Deadlines, the following issues have been deferred for further consideration as part of the Stage 2 Compliance Plan proceeding:
 - a. The language, format and method of providing suspension and termination notice pursuant to Chapter 14 of the Public Utility Code and Chapter 56 of the Commission's regulations.
 - b. PWSA's compliance with the Discontinuance of Service to Leased Premises Act ("DSLPA"), 66 Pa. C.S. §§1521-1533.

- c. PWSA's plan for collections (to include strategies to reduce overall uncollectibles and to ensure collections practices for residential customers are consistent with legal requirements).
 - d. Personal Contact Requirements of 52 Pa. Code §§ 56.94 and 56.336.
2. Interim processes and information to be addressed during Stage 2 Collaboratives
- a. Implementation of PWSA telephone process day prior to service termination
 - i. PWSA has fully implemented the process described on page 8 of the Parties' Expedited Motion for Extension of Commission-Created Deadlines.
 - ii. PWSA will continue to implement, monitor and collect data associated with this process until the Commission directs otherwise or a mutually agreed upon approach is reached during the Stage 2 collaborative process.
 - iii. In PWSA's Compliance Plan Progress Reports, beginning with the Compliance Progress Report to be submitted with supplemental testimony, PWSA will provide the following information related to its interim process:
 - a) The phone call completion rate, separately accounting for incomplete or disconnected phone numbers, calls that went to the consumer's voicemail, and calls where a consumer answered the phone; and,
 - b) The number of consumers who prevented termination after receiving a phone call, separately indicating the reason termination was avoided (for example, submission of a medical certificate; submission of a Protection from Abuse or other court order indicating the consumer is a victim of domestic violence; entering a deferred payment arrangement; paying the full balance; if there is a pending hardship fund application; or enrollment in PWSA's Winter Moratorium).
 - iv. PWSA will engage in good faith discussions of potential policies and procedures that it might be able to agree to put in place to enable its employees to provide personal contact immediately prior to termination beyond a telephone call the day before termination and whether that process and procedure is compliant with the Commission's regulations.
 - v. PWSA will elicit the help of BCS/Commission staff to gather information about the policies and procedures at place at other Pennsylvania regulated utilities for complying with the Commission's regulations and engage in a discussion with the stakeholder collaborative about such processes.

- vi. Consistent with the Expedited Motion, PWSA agrees to coordinate a discussion with the parties to assess the progress on this issue on October 25, 2019 and January 25, 2020. If the parties (with BCS sign off) have not reached a collaborative resolution by January 25, 2019 (and no extension of time has been mutually agreed to by the parties), then any party has the option to petition the Commission on this issue and PWSA agrees (to the extent necessary) to seek any waiver that may be deemed necessary.
 - vii. Each party maintains their right to advocate their views regarding what is required to comply with the personal contact requirements of 52 Pa. Code §§56.94 and 56.336 and nothing herein is intended to imply that PWSA's interim process is or is not in compliance with these requirements or that PWSA is forgoing its right to seek a waiver of the requirements.
 - b. Collections Plan
 - i. PWSA will elicit the help of BCS/Commission staff to gather information about the best practices collections policies and procedures at other Pennsylvania utilities in an effort to inform its own processes.
 - ii. PWSA agrees to provide the following information during the Stage 2 Collaborative Workshop addressing collections issues:
 - a) Identification of any current or planned use of a third party collections agency, the role of the third party, and any fees or charges that may be assessed to PWSA or to an individual consumer pursuant to a third party collections arrangement; and,
 - b) A description of how PWSA plans to address arrearages previously transferred to Jordan Tax Service ("JTS") for collections.
 - iii. In advance of the Stage 2 litigation, PWSA agrees to provide the parties with a status update of these issues.
- 3. In advance of the Stage 2 litigation, PWSA agrees to provide the parties with the following information (in writing):
 - a. A chronological description of PWSA's current termination procedure.
 - b. An update regarding the status of its collection plan to include the issues identified in Section III.MM.1.c above.
 - c. An update regarding PWSA's policies and procedures with regard to a tenant's ability to establish and maintain service pursuant to the Discontinuance of Service to Leased Premises Act.

b. Chapter 65. Water Service

Chapter 65 of the Pennsylvania Code was created to govern the provision of water service to residential, commercial, and industrial customers. The Chapter includes requirements to meet specific service levels for water pressure and meter service/accuracy, and outlines the required procedures for public utilities to undertake regarding accidents, complaints, records, interruptions of service, disputed bills, notices of desire to have service discontinued, temporary service, measurement, and customer advance financing, refunds, and facilities on private property. Finally, the Chapter details the required policies for when issues arise relating to billing adjustments, mandatory conservation measures, refusal to serve applicants, systems of accounts, design/construction standards, and the duty of the public utility to make line extensions. PWSA's compliance with Chapter 65 was addressed as part of the Stage 1 Compliance Plan proceeding. PWSA is either currently in compliance with Chapter 65 or has identified a path to achieve compliance through the Stage 1 proceeding.

65.2: Accidents

Section 65.2 states that public utilities shall submit a report regarding each reportable accident involving the facilities or operations of the utility to the Secretary of the Commission. Reportable accidents are those that result in the following circumstances: death of a person; injury that requires immediate treatment at a hospital emergency room or in-patient admittance to a hospital; occurrences of an unusual nature that result in a prolonged and serious interruption of normal service; or occurrences of an unusual nature, including attempts at cyber security measures, that cause an interruption of service or more than \$50,000 in damages.

PWSA Compliance Status

PWSA's practices are fully in compliance with Section 65.2.

PWSA Compliance Plan

Through the Partial Settlement of the Compliance Plan Stage 1 proceeding, PWSA agreed to the following:

1. Reportable Accidents and Occurrences of an Unusual Nature
 - a. PWSA has revised its Internal Investigation Policy and Procedures to ensure that telephone reports are made to Commission staff immediately after becoming aware of:
 - i. the death of a person;
 - ii. an occurrence of an unusual nature, whether or not death or injury of a person results, which apparently will result in a prolonged and serious interruption of normal service; and
 - iii. an occurrence of an unusual nature that is a physical or cyber attack, including attempts against cyber security measures as defined in Chapter 101 (relating to public utility preparedness through self-certification) which causes an interruption of service or over \$50,000 in damages or both.
 - b. PWSA will include these reporting requirements in its final Emergency Response Plan as described in Section III.D [of the Settlement].

PWSA also agreed to the following related to updating its Emergency Response Plan and developing a Risk and Resilience Assessment as required by the America Water Infrastructure Act (AWIA) (42 U.S.C. §300i-2):

1. PWSA will conduct a risk and resilience assessment (“RRA”) as required by the AWIA which is required to be concluded by March 31, 2020. The currently available and voluminous industry standard providing guidance in performing an RRA (from the ANSI – American National Standards Institute, and AWWA – American Water Works Association J100) is subject to additional further baseline guidance pending from the Environmental Protection Agency (“EPA”) about the requirements of the AWIA and this guidance, which totals fifty pages, was released August 1, 2019. Upon review and consideration of the EPA baseline guidance, the RRA will begin in earnest. [The RRA was completed as required.]
2. An Emergency Response Plan is required by the AWIA as well, and due September 30, 2020. Some of the content for PWSA’s Emergency Response Plan is predicated upon the results of the RRA.

3. Pending final completion of its Emergency Response Plan, PWSA is developing (or has developed) internal processes and procedures to comply with Commission regulations and requirements which will ultimately be included in PWSA's final Emergency Response Plan though these as developed internal processes and procedures may be revised as necessary based on the results of PWSA's risk and resilience assessment and within the overall context of the Final Emergency Response Plan. [PWSA's Emergency Response Plan has now been completed.]
4. PWSA estimates that its final Emergency Response Plan will be finalized September 30, 2020.
5. PWSA will update the status of its Risk and Resilience Assessment and Updated Emergency Response Plan process in the PWSA Compliance Plan Progress Reports.

65.3: Complaints

Section 65.3 pertains to complaint investigations and records protocols. Public utilities are responsible for making full and prompt investigations of complaints levied by the Commission or others, including customers, relating to utility service or facilities. Written records of these complaints, including the name and address of the complainant, the date and character of the complaint, and the final disposition of the complaint, are required to be preserved for at least five years.

PWSA Compliance Status

PWSA currently complies with the complaint investigation and records maintenance protocols detailed in Section 65.3.

65.4: Records

Section 65.4 requires public utilities to keep complete maps, plans, or records of its entire distribution system that show the size, character, and location of each main, street valve, and each company service line. The maps, plans, and records must be kept current, so that the utility is able to furnish copies of maps and information promptly and accurately, upon request by the Commission. These records shall be kept and preserved in accordance with the April 1974

edition of *Regulations to Govern the Preservation of Records of Electric, Gas, and Water Utilities*.

PWSA Compliance Status

Although PWSA keeps all records within their facilities, there currently is not a well-documented method for finding and filing these records. These records are also not adequately portrayed in the system's Geographic Information Systems (GIS).

PWSA Compliance Plan

PWSA will develop a series of Standard Operating Procedures for the following:

- > Records filing
- > Records update in GIS
- > Records retrieval

PWSA also plans to update its GIS to include main installation date and material, where available. It is anticipated that these efforts will be completed by 2021. Hydrant and valve status as well as main break locations will also be updated in the GIS. Secondly, the current backlog of existing records must be organized, stored, and input into the GIS according to the developed SOPs. PWSA is reporting on this item in the Quarterly Compliance Plan Progress reports and the most current status of this item is available there. As of the January 31, 2020 Quarterly Report, PWSA is on target to develop a series of SOPs for records filings, records updates in GIS, and records retrieval, as well as updating GIS with hydrant and valve status and organizing, storing and inputting the current records backlog into GIS. However, updating GIS with the main installation date and material has been delayed to 2022.

65.5: Interruptions of Service

Section 65.5 states that public utilities shall keep a record of each prolonged interruption of service that affects part or all of its system. Records shall contain the time, cause, extent, and

duration of the interruption, and interruptions shall be treated in accordance with the provisions of § 56.71, which relates to interruption of service and Chapter 67, which relates to service outages. Further, scheduled interruptions should be made at hours that minimize inconvenience to customers, consistent with reasonable and economical utility operating practices.

PWSA Compliance

PWSA practices regarding interruptions of service currently comply with Section 65.5.

Additionally, through the Compliance Plan Stage 1 Partial Settlement, PWSA agreed to the following:

1. **Unscheduled/Emergency Service Disruptions and Low Pressure Incidents Required to be Reported to Pennsylvania Department of Environmental Protection (“DEP”)**
 - a. PWSA is in the process of soliciting applicants for an Environmental Health and Safety professional who is anticipated to be hired in 2019. [Hiring for this position has now been delayed to 2020.] Pending this, a consultant is currently serving in this role to assist in developing and communicating a Standard Operating Procedure (“SOP”) for communicating Emergency Service Disruptions to the Commission, among others (including the public);
 - i. PWSA Exh. RAW/C-41 is its SOP for Reporting Low Pressure Readings, Breaks and Boil Water Advisories. PWSA Exh. RAW/C-42 sets forth the internal work flow process for the reporting.
 - ii. The SOP will be included in PWSA’s Emergency Response Plan as described in [Section III.D of the Settlement].
 - b. PWSA’s revised communication protocols include notification to the Commission:
 - i. to comply with 52 Pa. Code § 69.1601 (unscheduled water service interruptions and associated actions); and,
 - ii. of any low pressure incident or other service interruption for which it notifies the Pennsylvania Department of Environmental Protection.

65.6: Pressures

Section 65.6 pertains to variations in pressure, pressure gauges, telemetering, and pressure surveys. Public utilities shall maintain normal operating pressures of not less than 25

PSIG and no more than 125 PSIG at the main, except that during periods of peak seasonal loads the pressures at the time of hourly maximum demand may be not less than 20 PSIG nor more than 150 PSIG, and that during periods of hourly minimum demand the pressure may be not more than 150 PSIG. Within two years of the effective date of this section, utilities shall obtain one or more recording pressure gauges for each separately operated pressure zone, and pressure surveys may be made either through telemetered information electronically transferred, or through recording pressure gauges. Utilities are also required to survey the pressures in their distribution systems at representative points at least annually, and to keep records of the results of the pressure surveys for at least three years.

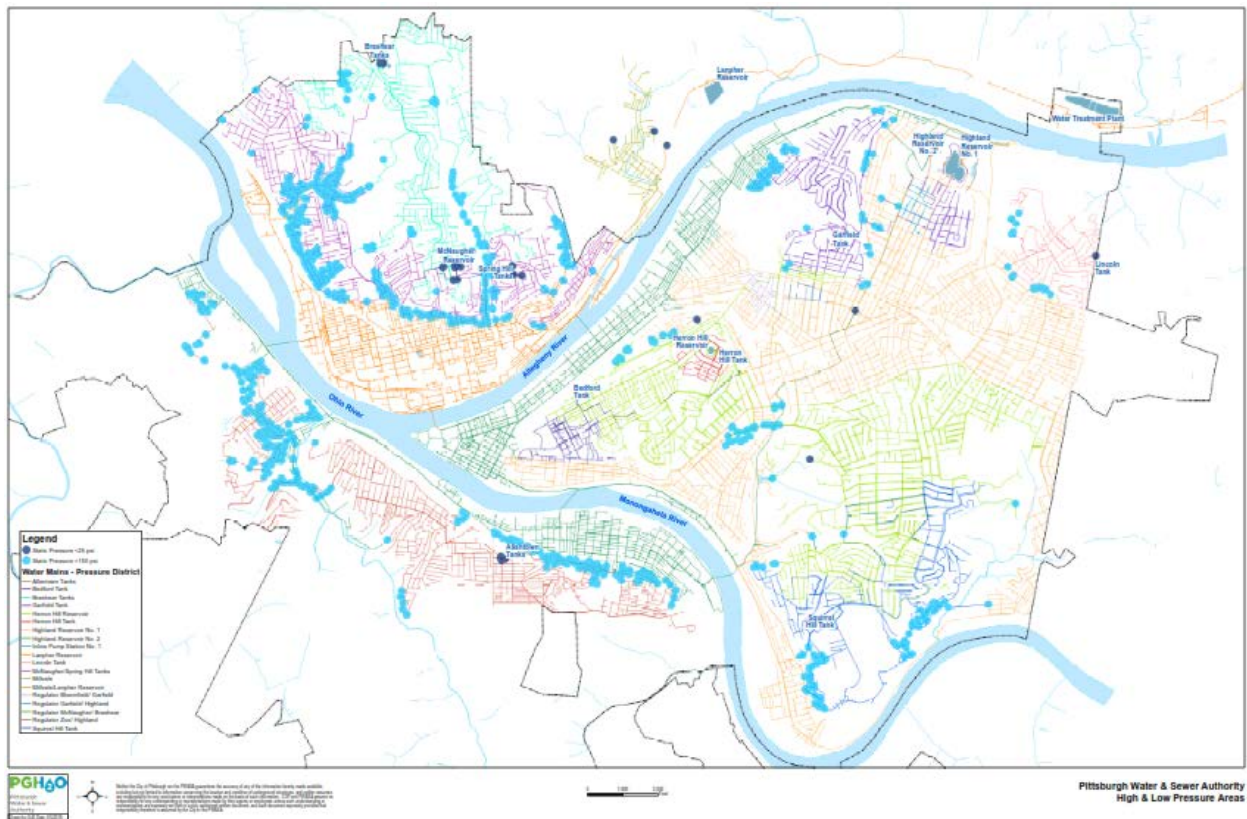
PWSA Compliance Status

PWSA is largely in compliance with Section 65.6 but is aware of locations where system pressures are less than 25 psi and is working with PADEP to improve pressures. In accordance with Part 4 of the PA DEP October 25, 2017 Administrative Order, PWSA has installed 24 pressure monitoring stations, which monitor and record pressures every 15 minutes and report on low pressure or loss of pressure events via text and email. These monitoring stations were installed in areas of chronically low pressures. Additional monitoring stations are required such that all pressure zones are adequately monitored. As a result of the PADEP required monitoring stations, PWSA has developed a capital improvements project to address these low pressure areas.

PWSA Compliance Plan

PWSA plans to install these additional monitoring stations as part of the “District Water and Pressure Meters” project. The Low Pressure Area Remediation program is planned in 2019 and 2020 to improve pressures to these chronically low-pressure areas. PWSA is also aware of

Figure 5: Locations of static pressure of less than 25 psi or over 150 psi



65.7: Metered Service

According to Section 65.7, public utilities are required to provide metered service, and shall provide, install at its own expense, and continue to own, maintain, and operate all meters. For purposes of maintenance and operation, public utilities shall have access to meters, service connections, and other property owned by the utility on the customers' premises, and utility service may be terminated if access is not granted by the customer. Utilities are required to provide a meter to each of its water customers, except for fire protection customers, and shall provide water service on an exclusively metered basis, except for water provided for fire protection.

PWSA Compliance Status

PWSA is currently in compliance with most of Section 65.7; however, not all customers are currently metered.

PWSA Compliance Plan

Through the Compliance Plan Stage 1 Partial Settlement, PWSA agreed to the steps below regarding its process for metering unmetered properties. PWSA is reporting on this in the Quarterly Compliance Plan Progress Reports and the most current status of this item is available there. As of the January 31, 2020 Quarterly Report, PWSA is on target to comply with Section 65.7 by 2024.

1. Identification of Unmetered/Unbilled and Flat Rate Properties
 - a. PWSA has accepted a proposal from, Professional Engineering Consultants, Buchart Horn entitled 2019 Unmetered & Flat Rate Properties Evaluation Project dated April 17, 2019 to assist in identifying and evaluating unmetered properties and flat-rate customers. PWSA Exh. RAW/C-37 is the Buchart Proposal.
 - i. PWSA will actively search for additional municipal, flat rate and other unmetered properties through various GIS and other data sources. When found, these properties will be added to the list of properties requiring meters.
 - ii. PWSA has started site inspections of unmetered facilities.
 - b. PWSA commits to the following timeframes consistent with the PWSA accepted Buchart Horn proposal:
 - i. By June 29, 2020 unmetered and/or unbilled locations shall be identified.
 - ii. PWSA will provide status updates regarding this process in the PWSA Compliance Plan Quarterly Reports and, once complete, PWSA will identify all the newly metered and/or previously unbilled properties.
2. Meter Installation
 - a. PWSA will install meters at all unmetered properties where such meters can physically be installed. Properties that may not be able to be separately metered would include those with plumbing restrictions, building integrity to safely support the needed modifications, site constraints (internal and external) as well

as other physical limitations. Based on currently available information, PWSA estimates the following numbers of unmetered properties exist:

- i. 200-400 municipal buildings unmetered;
 - ii. 500 flat rate customers; and
 - iii. 300-400 municipally-owned fountains, pools, etc.
- b. PWSA intends to do the following:
- i. Hire consultants, plumbers, and outside contractors to assist in the metering of unmetered properties as needed.
 - ii. Assign a project manager who will be responsible for scheduling, planning, and site visits and will ensure that all of the proper materials and equipment are on-hand to execute the metering of the municipal facilities in a timely manner.
 - iii. Complete the metering of all unmetered municipal and flat rate properties where meters can be installed within 5 years or by December 31, 2024, and will accelerate this timeframe, if possible.
3. Costs of metering party water service lines and/or converting flat rate customers to metered customers:
- a. For non-municipal properties, PWSA will pay for the meter and the meter installation, but Applicants will be required to pay for any plumbing changes, including service lines in accordance with Part III, Section B.13 of PWSA's approved Tariff, and other related appurtenances required to make the installation comply with applicable PWSA requirements and county and local plumbing codes.
 - b. For municipal properties, as this issue is within the City Cooperation Agreement between PWSA and the City of Pittsburgh, the parties agree to submit briefs regarding their position to include their response to the applicable Commission Directed Questions.

Additionally, PWSA agreed to the following steps for implementing rates for currently unmetered and/or unbilled properties once a meter is installed or it is determined that a meter cannot be installed. Issues related to billing and metering municipal accounts within the City of Pittsburgh are addressed elsewhere in this Compliance Plan related to the Cooperation Agreement.

1. Non-Municipal Accounts

- a. Once meters are installed for previously unmetered or unbilled non-municipal properties, PWSA will bill the account in full pursuant to the applicable tariff rate.
- b. All currently unmetered, flat rate billed customers will continue to pay a flat rate and customer charge until meters are installed after which PWSA will bill the account in full pursuant to the applicable tariff rate. The “flat rate” will be based on estimated usage.
- c. Properties that may not be able to be separately metered because of the configuration of their service lines:
 - i. will be billed at the appropriate single/two/three family or commercial flat rate; and,
 - ii. the characteristics of these unmetered properties and the reasonableness of the current flat rate will be reviewed in any future rate proceeding.

65.8: Meters

Section 65.8 stipulates that meters with registration errors of greater than 2% may not be placed into service, and that meters with registration errors of greater than 4% may not remain in service. Additionally, no public utility may allow a water meter of one inch or less, nor a water meter of greater than one inch to remain in service for a period longer than 20 years and 8 years, respectively without testing it for accuracy and readjusting it if it exceeds a 4% registration error. Whenever a water meter is tested, the original test record should be kept indicating the information necessary for identifying the meter, the reason for making the test, the reading of the meter before being disturbed, and the accuracy of the meter together with data taken at the time of the test.

Regarding water meter installation and removal, Section 65.8 specifies that installed water meters shall be inspected within 60 days after installation, and that meter manufacturer test results may be accepted as installation tests if the utility has verified the results by testing at least 10% or ten meters of a meter shipment. A water meter which is removed from service shall be tested within 30 days for accuracy to complete that meter’s test history. Public utilities shall

provide and keep available suitable and adequate facilities for testing its meters and shall maintain these facilities to ensure they are capable of determining the accuracy of a service meter within .5%.

Finally, a public utility shall make a test of the accuracy of registration of a water meter upon written request of the customer for whom the meter is furnished, upon payment of the fee specified in § 1.43, which specifies the schedule of fees payable to the Commission. If the meter tested upon the request is found to be accurate within the aforementioned accuracy limits, the fee shall be retained by the utility; but if not so found, the cost shall be paid by the utility and the fee paid by the customer shall be refunded.

PWSA Compliance Status

PWSA is currently working toward compliance with Section 65.8. According to the best available information, the Authority has as many as 50,000 meters that have exceeded the time allowed in the Commission's recommended testing schedule and will need to be tested and replaced. PWSA is reporting on this in the Quarterly Compliance Plan Progress Reports and the most current compliance status of this item is available there. As of the January 31, 2020 Quarterly Report, PWSA is on target to comply within the timeframes specified below.

PWSA Compliance Plan

Through the Compliance Plan Stage 1 Partial Settlement, PWSA agreed to the following regarding its process for testing and replacing meters:

1. PWSA is undertaking a comprehensive metering program to identify and replace non-working meters (of all sizes), upgrade testing processes and equipment, and ensure that PWSA has the technical ability to reasonably accommodate customer requests for meter testing. PWSA retains the option to test meters using the American Water Works Association testing protocol.
2. Customers will not be required to pay for the replacement of meters and metering equipment, unless damage resulted from the negligent or willful act of the customer.

3. In response to the Commission's Directed Question directing the parties to discuss "the feasibility of implementing a meter testing triage plan" within the stated hierarchy prioritizing out-of-compliance meters used to provide high volume service (*see* PWSA Exhibit RAW/C-1 at 6, Question number 27):
 - a. PWSA will prioritize the testing/replacement of large meters (meters 3 inches and larger), and will make its best efforts to complete the testing/replacement of all large meters/measuring chamber and registers within 3 years.
 - b. PWSA intends to replace all intermediate meters (meters equal to or larger than 1 ½ inch in diameter and equal to or smaller than 2 inches) that have been in service more than 8 years, or where the installation date is unknown, and will make its best efforts to complete the replacement of intermediate meters within 3-5 years.
 - c. PWSA intends to replace all of these small meters (meters one inch in diameter and smaller) that have been in service more than 20 years, or where the installation date is unknown, and will make its best efforts to complete the replacement of small meters within 5-7 years.
 - d. PWSA's recent efforts enable it to now accommodate customer-generated meter testing request.
4. Actions PWSA has taken to implement its Meter Replacement and Testing Plan
 - a. In April 2019, PWSA implemented a Non-Access Campaign directed to customers of all meter sizes with meters being addressed on a first-come-first served basis to address aged actual meter readings and estimated meter readings. Customers are being notified via letters, phone calls, and posting of notices to make appointments for repair/replacement of the water meters.
 - b. PWSA entered into a contract in May 2019 to test water meters 3" and greater in-line or at the vendor's testing facility. With the addition of this vendor, PWSA is able to accommodate customer-generated meter testing requests.
 - c. Regarding all 2" or less meters, PWSA has purchased and installed a state of the art water meter testing bench in its General Warehouse in March 2019 and currently tests all meters pulled from service. This equipment also enables PWSA to accommodate customer-generated meter testing requests.
5. Current Status of PWSA's Meter Replacement and Testing Plan (See also PWSA Exh. RAW/C-38)
 - a. Testing/Replacing Large Diameter Meters (meters 3 inches and larger)
 - i. PWSA has identified 806 large diameter meters that have been in service more than 8 years, or where the installation date is unknown. PWSA intends to either test, repair, or replace the measuring chamber and register

- of all large meters that have been in service for more than 8 years, or where the installation date is unknown.
- ii. PWSA will comply with Chapter 65.8 and begin testing meters on a regular interval, so that no large meter is in service longer than 8 years without testing.
- b. Testing/Replacing Intermediate Diameter Meters (meters equal to or larger than 1 1/2-inch in diameter and smaller than 2 inches)
 - i. PWSA has an estimated backlog of less than 2,000 intermediate diameter meters that have been in service more than 8 years or where the installation date is unknown.
 - ii. PWSA will test a fraction (5-10%) of the intermediate diameter meters pulled from services and not reused for quality control and to establish accuracy levels.
 - iii. PWSA will comply with Chapter 65.8 and begin testing meters on a regular interval, so that no intermediate meter is in service longer than 8 years without testing.
- c. Testing/Replacing Small Meters (1-inch diameter and smaller)
 - i. PWSA has an estimated backlog of 50,000 small meters that have been in service more than 20 years, or where the installation date is unknown.
 - ii. PWSA will test a fraction (5-10%) of the small meters pulled from services and not reused for quality control and to establish accuracy levels.
 - iii. PWSA will comply with Chapter 65.8 and begin testing meters on a regular interval, so that no small meter is in service longer than 20 years without testing.

65.9: Adjustment of Bills for Meter Error

Section 65.9 relates to the adjustments required if meters are found to be fast, slow, or non-registering. If, upon test of a meter, the meter is found to have an error of more than 4% fast, the public utility shall refund to the consumer the overcharge based upon what the meter would have registered had it not been fast or slow for a period equal to 1/2 the time elapsed since the last previous test, not to exceed 12 months. If the meter is found to have an error of more than 4% slow, the public utility may bill for the water consumed but not covered by previous bills

equal to 1/2 of the time elapsed since the previous test, not to exceed 12 months. If a meter is found not to have registered for a period or not to have fully measured the entire flow due to meter interference, the public utility shall compute the water used by taking the average of the water used for the nearest meter reading period immediately preceding and immediately following the date when the meter was found to be not registering or interfered with, which amount shall be assumed to be the amount of water used by the customer during the billing period in which the meter was found not to have registered.

PWSA Compliance Status

PWSA currently complies with the billing policies included in Section 65.9.

65.10: Disputed Bills

Section 65.10 states that in the event of a dispute between a customer and a public utility regarding a bill, the utility shall immediately investigate the case, in accordance with the procedures laid out in Chapter 56, relating to disputes, termination disputes, and informal/formal complaints.

PWSA Compliance Status

PWSA currently complies with Section 65.10.

65.11: Mandatory Conservation Measures

According to Section 65.11, public utilities may request general conservation and/or impose mandatory conservation measures to reduce or eliminate nonessential uses of water during supply shortages. Jurisdictional water utilities shall file plans of their contingent mandatory conservation measures with the Commission as part of their tariff rules and regulations. Conservation measures shall be terminated as soon as the supply shortage is terminated.

PWSA Compliance Status

PWSA is in a water-rich location and has rarely needed to impose water conservation measures on its customers. While PWSA does not currently have a contingency plan imposing mandatory conservation measures, the topic is included in the utility's emergency response plan.

PWSA Compliance Plan

Through the Compliance Plan Stage 1 Partial Settlement, PWSA has committed to developing standard operating procedures for situations that require mandatory conservation measures including communication and response protocols. PWSA is reporting on this in the Quarterly Compliance Plan Progress Reports and the most current status of this item is available there. As of the January 31, 2020 Quarterly Report, PWSA is on target and anticipates full compliance with Section 65.11 in 2020 pursuant to the following terms:

1. In order to comply with 52 Pa. Code § 65.11, PWSA shall develop standard operating procedures ("SOPs") for situations that require mandatory conservation measures, to include communication and response protocols.
 - a. Issues to be included in the SOPs:
 - i. Provisions that, in the event such conservation measures are required, PWSA will notify customers via traditional lines of communication which include automated telephone calls, social media, and the website.
 - ii. PWSA will evaluate the feasibility of pursuing interconnections with other regional water suppliers to enhance system resiliency. This evaluation will be completed and resulting changes to the process incorporated into PWSA's SOP regarding mandatory conservation measures.
 - b. Timing for SOP development:
 - i. PWSA will develop a preliminary SOP by February 28, 2020, reflecting at a minimum its ability to implement an SOP without further necessary approvals from non-PWSA entities collaborating in such measures.
 - ii. To the extent the SOP requires further approval from non-PWSA entities, PWSA will revise its preliminary SOP to incorporate procedures reflecting such further approvals and finalize its SOP by no later than December 31, 2020.

- c. PWSA will incorporate the SOPs into its Emergency Response Plan when it revises its Emergency Response Plan as described in Section III.D [of the Settlement].
2. PWSA will update its progress on these items as part of the PWSA Compliance Plan Progress Reports.

65.12: Notice of Desire to have Service Discontinued

Section 65.12 states that a customer who is about to vacate any premises or who wishes to have service discontinued shall give at least 3 days' notice to the utility, specifying the service discontinuation date. In the absence of notice, the customer shall be responsible for service rendered until the time that the utility shall have actual or constructive notice of the intent to discontinue by the customer.

PWSA Compliance Status

PWSA believes that it currently complies with this practice, as outlined in the updated Procedures Manual for Developers.

65.13: Temporary Service

According to Section 65.13, if a public utility provides temporary service for short-term use, the utility can require the customer to pay the costs associated with making the service connection and removing the material after the service has been discontinued or pay a fixed fee in advance to cover the costs. However, if the material is removed the customer shall be credited with the reasonable salvage which the public utility will receive on discontinuance of service.

PWSA Compliance Status

PWSA currently complies with the policies in Section 65.13. This policy is included in PWSA's current Water Tariff (effective March 1, 2019) in Part III Section A.10. Temporary Service (page 30).

65.14: Measurement

Section 65.14 stipulates that within three years of the effective date of this section, the utility shall install a suitable measuring device at each source of supply, in order to create and maintain a record of water production rates. These records shall be updated at least once per month, and annual totals shall be provided to the Commission.

PWSA Compliance Status

Although PWSA does have measuring devices installed at each source of supply (Raw Water into the water treatment plant and at the discharge of the two main pump stations serving the City), they are not currently operational.

PWSA Compliance Plan

Through the Compliance Plan Stage 1 Partial Settlement, PWSA agreed to the following steps to achieve compliance with Section 65.14. PWSA is reporting on this in the Quarterly Compliance Plan Progress Reports. As of the Quarterly Report filed on January 31, 2020, PWSA is now in compliance with Section 65.14.

1. PWSA's Water Distribution System Master Plan will identify where additional meters may be needed. A number of existing facility flow meters were recently refurbished as noted below. Further capital projects related to meter operability and measurement are being evaluated and the targeted completion date for the meter operability and measurement plan is late 2019.
2. Status of current PWSA Flow Metering Program
 - a. Meters at Water Intakes:
 - i. PWSA is using individual filter gallery effluent flow meters to measure the volume of produced water from the Water Treatment Plan. The total flow from plant to distribution is calculated by summing the individual meter flows, which is reported continuously. Flow meter calibration is performed on a schedule basis. Per manufacturer recommendation, the flow tubes are factory calibrated, the flow transmitting device is calibrated on a periodic basis one per year.

- ii. The Allegheny River is PWSA's only supply source. This source is brought into the water treatment plant via the Ross Pump Station. This meter is operational, recently rehabilitated, tested and found accurate.
- b. Fox Chapel
 - i. PWSA has installed a flow meters at the Fox Chapel Pumping Station to show where the water use occurs.
- c. System Delivery Flow Meters:
 - i. PWSA is currently refurbishing the existing flow meters in the Bruecken and Aspinwall pump stations to establish the point of system delivery meters. All flow meters at the Aspinwall Pump Station are operational. Flow meters at the Bruecken Pump Station for the flow to Highland 2 Reservoir are operational. Flow meters at the Bruecken Pump Station for the flow to Highland 1 Reservoir are still being rehabilitated.
 - ii. Insertion-type flow meters were installed at the Highland 1 Reservoir primary rising mains to monitor flow volume going directly into the system from the Bruecken Pump Station.
- 3. PWSA's flow metering program is anticipated to include:
 - a. Testing and calibration plan for all facility flow meters;
 - b. Rehabilitation and calibration of flow meters at existing pump stations (Herron Hill Pump Station, Herron Hill Tank Pump Station, Howard Pump Station, Mission Pump Station, Lincoln Pump Station, Saline Pump Station);
 - c. Installation of district flow meters at locations recommended by the Water Distribution System Master Plan within the distribution system; and,
 - d. Installation of flow meters at existing booster chlorination facilities as part of a booster chlorination system rehabilitation project.
- 4. The Water Distribution System Master Plan will provide a table similar to Table 4-3 of PWSA 40 year plan of 2012 explaining how and when each of the meters listed on the Table will be operational and accurate.
- 5. PWSA Exh. RAW/C-40 provides the most current System Flow Meter Operation Status available as of July 31, 2019.

65.15: Refusal to Serve Applicants

Section 65.15 states that a utility may decline to provide service to an applicant who is in noncompliance with the utility's rules and regulations; when the utility lacks adequate facilities

to render the service desired, or believes that rendering the service will be detrimental to other customers; or when installation of piping to provide service is reasonably considered to be hazardous, or could not provide satisfactory service.

PWSA Compliance Status

PWSA believes that it currently complies with the provisions included in Section 65.15. This policy is included in PWSA's current Water Tariff (effective March 1, 2019) in Part III Section B.4. Right to Reject (page 31) and current Wastewater Conveyance Tariff (effective March 1, 2019) in Part III Section B.4 Right to Reject (page 33).

65.16: System of Accounts

Section 65.16 mandates that a public utility, having an annual operating revenue of \$750,000 or more shall keep its accounts in conformity with the most recent *Uniform System of Accounts for a Class A Water Utilities* (USOA), as prescribed by the National Association of Regulatory Utility Commissioners (NARUC).

PWSA Compliance Status

PWSA is currently in the process of converting to the NARUC chart of accounts.

PWSA Compliance Plan

As part of the Compliance Plan Stage 1 Partial Settlement, PWSA has agreed to the following steps to comply with Section 65.16 and convert to the NARUC USOA. PWSA is reporting on this process in the Quarterly Compliance Plan Progress Reports and the most current status of this item is available there. As of the January 31, 2020 Quarterly Report, PWSA is on track to comply with this section by 2021.

1. PWSA shall convert its accounting system to full NARUC Uniform System of Accounts ("USOA") compliance in two phases.

- a. For Phase I, PWSA has manually mapped the PWSA Chart of Accounts (“COA”) to the NARUC USOA so that completion of the 2020 operating budget will include the NARUC USOA to conform and comply with reporting requirements. All Commission required reporting for 2019 (and in the future) will use the NARUC USOA.
 - b. For Phase II, PWSA will fully convert (and therefore automate the process) to the NARUC COA during the implementation of a new Enterprise Resource Planning (“ERP”) System. PWSA shall make good faith efforts to complete installation of the Enterprise Resource Planning System by December 2021 given the below processes that must be put into place first:
 - i. PWSA needs to issue a Request for Proposal (“RFP”) to develop and implement the new ERP;
 - ii. PWSA expects to issue the RFP by August 30, 2019;
 - iii. PWSA anticipates that the contract will be awarded in early 2020 [this will be awarded in the second quarter of 2020]; and,
 - iv. PWSA anticipates an 18-22 month implementation timeframe for financials and billing once the contract is awarded.
2. PWSA shall report on its progress on a quarterly basis in the PWSA Compliance Plan Progress Reports. The reporting will include (when available):
- a. Date when Request for Proposal is issued;
 - b. Notice of selection of an ERP contractor;
 - c. Contractor projected ERP system cost; and
 - d. Detailed implementation schedule.

65.17: Standards of Design

Section 65.17 has several sections, covering standard acceptable engineering practices, as well as the design of the distribution and transmission systems, the utility’s service lines, water supply requirements, and materials and specifications. Specifically:

- > The design of the water plant should conform to generally accepted engineering standards;

- > The distribution system shall be sized appropriately to ensure minimum pressures, and pipe with a diameter of less than 6" should not be used for distribution mains;
- > Together with the storage facilities, transmission lines from sources of supply should be sized to deliver the full capacity of those sources;
- > Utility service lines shall not be less than ¾" in diameter;
- > Materials used in designs shall have a reasonable useful service life, be capable of withstanding internal and external forces while in service, not cause water to be impure or unpotable, and should minimize corrosion, electrolysis, and deterioration; and,
- > Steel pipe used in transmission and distribution systems shall be lined inside and coated outside or lined inside and coated and wrapped outside to conform with the applicable minimum specifications of the American Water Works Association or equivalent standards.

PWSA Compliance Status

PWSA currently complies with most of Section 65.17, in that the Authority maintains standard specifications and construction details for the construction of all water mains and sewers as well as site preparation, excavation, and restoration. PWSA strives to keep their standard specifications up to date with the latest regulations and industry standards. These specifications are currently within the requirements listed in Section 65.17. PWSA also maintains a standard bid list for all horizontal infrastructure work and tracks maximum, minimum, and average unit bid item prices.

PWSA has been actively working to replace all 4-inch diameter mains in the system. There are still 27 miles remaining of 4-inch diameter main in the system. For all new water mains, PWSA requires a minimum 8-inch diameter pipe. However, exceptions are made to this

requirement, allowing a minimum 6-inch diameter pipe, in the event of shorter dead ends with little demand.

A majority of PWSA's capital projects are designed using on-call engineering consultants. Design requirements, specifications, and standard details are provided to the on-call consultant as part of the request for proposal and project initiation.

PWSA Compliance Plan

PWSA plans to incorporate these design requirements, specifications, and standard details into a formalized Design Manual. PWSA has agreed to the following steps to complete a Water Distribution System Master Plan and to replace 4-inch diameter water mains as part of the Compliance Plan Stage 1 Partial Settlement. PWSA is reporting on this in the Quarterly Compliance Plan Progress Reports and the most current status is available there. As of the January 31, 2020 Quarterly Report, PWSA is on target to meet the compliance deadlines specified below:

1. PWSA Water Distribution System Master Plan
 - a. PWSA is undertaking a master planning effort which will develop a detailed process to clearly identify needed improvements to the distribution system, to develop criteria for evaluating and ranking candidate water mains for renewal, present an assessment of expected growth in the system, assess vertical assets and recommend a five year plan of capital improvements and annual priorities.
 - b. The Final Water Distribution System Master Plan, with a targeted completion date of late 2019 to mid-2020, will also address pressure zones and gradients, pumping, storage, transmission mains, distribution mains, metering, non-revenue water and system emergency interconnections.
 - c. The Final Water Distribution System Master Plan will also address master metering and non-revenue water and will include a water audit that follows American Waterworks Association ("AWWA") guidance using available data. The Plan will also recommend locations for implementation of the district metering program.

- d. The Final Water Distribution System Master Plan will inform any future revisions that may be needed to PWSA's Long-Term Infrastructure Implementation Plan ("LTIIIP") which will be presented for the Commission's consideration as part of the LTIIIP process.
 - e. PWSA St. C-1SD and PWSA Exh. RAW/C-36 is PWSA provide updated information related to the Water Distribution System Master Plan to include the Scope of Work dated March 15, 2019 and the draft Table of Contents for the Final Water Distribution System Plan.
2. Replacement of 4-Inch Diameter Water Mains
- a. PWSA places a high priority on the replacement of 4 inch diameter mains as part of small diameter water main replacement program.
 - b. The prioritization matrix to be developed as part of PWSA's Water Distribution System Master Plan will inform the ranking of PWSA's various projects to include the replacement of four inch diameter water mains.
 - c. PWSA will provide updates as part of the Compliance Plan Progress Reports as to the timeline and projected completion date for the replacement of all 4-inch diameter water mains.

65.18: Standards of Construction

Section 65.18 has several sections, covering standard acceptable construction practices, as well as disinfection of facilities, mains, and company service lines. Specifically:

- > Construction of facilities shall comply with generally accepted engineering practices;
- > New mains, pumps, tanks, wells and other facilities for handling potable water shall be thoroughly disinfected before being connected to the system;
- > Mains shall be installed below the frost line whenever possible, designed to avoid dead-ends in its mains, laid out in a grid system with regularly spaced valves, and new or replacement mains shall be sized to maintain adequate pressure and align with engineering best practices; and,
- > Company service lines shall be constructed below the frost line to prevent freezing and should not be connected to hydrant branch lines.

PWSA Compliance Status

As noted in Section 65.17, PWSA maintains standard specifications and details for the construction of horizontal infrastructure. The existing standards meet or exceed a majority of the requirements for Section 65.18, including disinfection of facilities after construction. PWSA's standard construction depth for water mains is a minimum of 48-inches. For new mains, PWSA provides a means to flush dead end mains. However, PWSA is currently evaluating their system to determine where existing dead ends may have the opportunity to be looped or may need the ability to flush. PWSA does not currently maintain a comprehensive flushing program.

PWSA Compliance Plan

A flushing program is being developed as part of the design of the orthophosphate injection system. This flushing program will concentrate on flushing transmission mains, dead ends, and locations serving critical customers (hospitals, schools, etc.). The initial phase of the flushing program commenced in September 2018. PWSA intends to continue flushing throughout the year and in future years to ensure that the distribution system meets the compliance requirements. Note that the distribution system was originally designed to utilize washouts which were installed to provide for system Flushing and draining. The Pennsylvania DEP is requiring that these washouts be eliminated and that all discharges from the water system to drainage meet specified design criteria. PWSA will implement a washout program over the next five years to eliminate those washouts that are noncompliant and upgrade flushing locations as required.

PWSA will review its existing system to ensure there are ample valves to meet the requirements of Section 65.18(c)(3). However, additional field effort is required, and is included

as part of the 2019 Valve Replacement program to increase the number of valves inspected and operated per year to ensure there are an adequate number of functional valves.

PWSA is reporting on this in the Quarterly Compliance Plan Progress Reports and the most current status of this item is available there. As of the Quarterly Compliance Plan Progress Report filed January 31, 2020, PWSA is on track to comply with this section within the specified timeframes.

Section 65.19: Filing of Annual Financial Reports

Section 65.19 specifies that a public utility, subject to the jurisdiction of the Commission, shall file annual financial reports with the Commission by April 30 immediately following the reporting year, for reports based upon the calendar year; or by July 31 immediately following the reporting year, for reports permitted to be based upon the fiscal year ending May 31. A request for an extension of time for filing an annual report shall be submitted to the Commission prior to the filing dates.

PWSA Compliance Status

PWSA intends to comply with this requirement, and filed its first annual financial report in 2019. PWSA is reporting on this in the Quarterly Compliance Plan Progress Reports and the most current status is available there. As of the January 31, 2020 Quarterly Report, PWSA is on track to file the required annual financial reports.

Section 65.20: Water Conservation Measures – Statement of Policy

According to Section 65.20, in rate proceedings of water utilities, the Commission examines specific factors regarding the action or failure to act to encourage cost-effective conservation by their customers. Specifically, the Commission will review utilities' efforts to meet the criteria in this section when determining just and reasonable rates, including education;

water audits for large users; efficiency plumbing fixtures; unaccounted-for water; leak detection; metering; and a conservation plan.

PWSA Compliance Status

PWSA does is currently working toward compliance with Section 65.20.

PWSA Compliance Plan

As part of the Compliance Plan Stage 1 Partial Settlement, PWSA has agreed to the steps below to comply with the items in Section 65.20(1) – (3) (efficient water use brochure once a year; large water use audit availability brochure; use of efficient plumbing fixtures). The requirements in Section 65.20(4) – (7) are addressed in other parts of the Compliance Plan (i.e., reducing unaccounted for water; regular leak detection activities; meter installation and testing conservation).

1. Starting in 2019, PWSA will begin to take steps to comply with the items required by 52 Pa. Code §65.20(1) – (3) (efficient water use brochure once a year; large water use audit availability brochure; use of efficient plumbing fixtures). Those steps include:
 - a. educational brochure at least once a year;
 - b. annual water audits for large users (as per PA Dept. of Environmental Protection, Division of Water Use Planning Water Audit Procedures); and,
 - c. customer notification (billing inserts) regarding water-saving plumbing fixtures.

Section 65.21: Duty of Public Utility to Make Line Extensions

Section 65.21 relates to the conditions under which a public utility shall extend facilities to new customers within its service area. These conditions include:

- > Line extensions shall be funded without customer advance if the annual revenue from the line extension will equal or exceed the utility's annual line extension costs.
- > If the annual revenue from the line extension will not equal or exceed the utility's annual line extension costs, an applicant may be required to provide a customer advance to the

utility's cost of construction for the line extension. The utility's investment for the line extension shall be the portion of the total construction costs which generate annual line extension costs equal to annual revenue from the line extension.

PWSA Compliance Status

PWSA does not currently comply with Section 65.21, but rather follows the line extension provisions of the Municipality Authorities Act (MAA).

PWSA Compliance Plan

The Commission's March 26, 2020 Order in the Compliance Plan Stage 1 proceeding granted PWSA a temporary waiver allowing PWSA to continue its current line extension process consistent with the MAA until further Commission action. The Commission allowed PWSA one year to study the line extension regulations and its current practices. PWSA will conduct such a study and will evaluate whether to request a permanent waiver of the Commission's line extension regulations, or to submit a supplemental compliance plan detailing how PWSA will revise its line extension processes to comply with the applicable PUC regulations, per the Commission's Order.

65.22: Customer Advance Financing, Refunds, and Facilities on Private Property

Section 65.22 states that if a customer advance is required from a company with gross annual receipts of \$10 million or more, and the customer is unable to advance the funds, the utility shall either allow payments over a three-year time horizon after a deposit of up to one-third of the total advance, or provide information on financial institutions, so that the customer can finance the line extension. When a customer advance is required of a service applicant and an additional customer or customers attach service lines to the main extension within 10 years, the utility shall refund a portion of the advance to the customer in accordance with the utility's

currently effective tariff. A utility shall require a customer to pay, in advance, a reasonable charge for service lines and equipment installed on private property for the exclusive use of the customer.

PWSA Compliance Status

PWSA's current policy on line extensions is detailed in Tariffs and is consistent with the requirements of the Pennsylvania Municipality Authorities Act.

PWSA Compliance Plan

As discussed above in Section 65.21, the Commission granted PWSA a temporary waiver allowing the Authority to continue its current line extension process consistent with the MAA until further Commission action. The Commission allowed PWSA one year to study the line extension regulations and its current practices. PWSA will conduct such a study and will evaluate whether to request a permanent waiver of the Commission's line extension regulations, or to submit a supplemental compliance plan detailing how PWSA will revise its line extension processes to comply with the applicable PUC regulations, per the Commission's Order.

65.23: Special Utility Service

Section 65.23 states that Sections 65.21 and the portions of 65.22 relating to duty of public utility to make line extensions; and customer advance financing, refunds and facilities on private property do not apply to special utility service.

PWSA Compliance Status

PWSA's current policy on line extensions is detailed in Tariffs and is consistent with the requirements of the Pennsylvania Municipality Authorities Act.

PWSA Compliance Plan

As discussed above in Section 65.21, the Commission granted PWSA a temporary waiver allowing the Authority to continue its current line extension process consistent with the MAA until further Commission action. The Commission allowed PWSA one year to study the line extension regulations and its current practices. PWSA will conduct such a study and will evaluate whether to request a permanent waiver of the Commission's line extension regulations, or to submit a supplemental compliance plan detailing how PWSA will revise its line extension processes to comply with the applicable PUC regulations, per the Commission's Order.

c. Chapter 67. Service Outages

Chapter 67 of the Pennsylvania Code was created to establish procedures for electric, gas, water, steam and telephone utilities during unscheduled service interruptions. The Chapter includes requirements to take specific action, including notifying the Commission when 2,500 or 5% of the utility's total customers have a service interruption and notifying the Commission by telephone after a preliminary assessment has been completed. The Commission will then implement a plan to govern its internal operations in receiving notification of service interruptions, in investigating such interruptions, and in assisting the customers of the utility, the utility and Commonwealth agencies in restoring service. Additionally, all utilities shall list in the local telephone directories of their service areas, and on their web sites, a telephone number to be used during normal operating hours and an emergency telephone number to be used 24 hours in emergency service situations.

67.1: Service Outages

PWSA Compliance Status

PWSA has an emergency response plan and informal process for notifying the Commission during unscheduled service interruptions that affect at least 2,500 customers or 5% of the utility's total customer base (whichever is smaller). PWSA lists in the local telephone directories of its service area, and on its web sites, a telephone number to be used during normal operating hours and an emergency telephone number to be used 24 hours in emergency service situations.

PWSA Compliance Plan

PWSA is in the process updating its emergency response plan to include a comprehensive standard operating procedure related to notifying the Commission during periods of unscheduled

service interruptions. PWSA's settlement commitments related to the emergency response plan are discussed above in Sections 65.2 and 65.5. PWSA is reporting on this in the Quarterly Compliance Plan Progress Reports and the most current status of this item is available there. As of the January 31, 2020 Quarterly Report, PWSA is on track to comply with this section.

d. Chapter 69. General Orders, Policy Statements, and Guidelines on Fixed Utilities

Chapter 69 is a compilation of general orders, policy statements, and guidelines for fixed utilities. Much of Chapter 69 applies to utility services not provided by PWSA, such as electric, natural gas, and telephone. In many cases, the provision states the policy that the PUC intends to follow in specific circumstances. In such cases where the content of the subchapter does not apply, PWSA will take the policy statements into account where applicable. The remaining subchapters of Chapter 69, as well as PWSA adherence to the policies and guidelines contained within are discussed in the following sections.

69.51-69.85: Inclusion of State Taxes and Gross Receipts Taxes in Base Rates

Sections 69.51 through 69.85 state that a utility which has a State tax adjustment surcharge or gross receipts tax rider shall maintain its surcharge and rider rates at 0%. Any revenues collected through the State tax adjustment surcharge or the gross receipts tax rider shall be rolled into the utility's base rate, using either the rate case method or the non-rate case method.

PWSA Compliance Status

PWSA does not include a State tax adjustment surcharge or a gross receipts tax rider in its water or wastewater rate structure or rate revenue requirement; therefore, PWSA is in compliance with this policy.

69.87: Tariff Provisions that Limit the Liability of Utilities for Injury or Damage As A Result Of Negligence Or Intentional Torts—Statement Of Policy

Section 69.87 allows utilities to limit their liability for interruption or cessation of service. If a utility seeks to place the language in its tariff, a tariff filing should be made under

Section 1308 of the Code, relating to voluntary changes in rates. The language should include a company-specific dollar amount for the proposed limitation and work papers to substantiate the dollar amount.

PWSA Compliance Status

PWSA is in compliance with this section. PWSA's current Water and Wastewater Conveyance Tariffs (effective March 1, 2019) include a limitation of liability for service interruptions in Part III, Section I.2 of each tariff. Although PWSA's Tariffs do not include a specific dollar amount, PWSA and the parties agreed as part of the Compliance Plan Stage 1 Partial Settlement that they did not recommend PWSA revise its tariff to include dollar amounts. The Tariffs and the settlement provision have been approved by the Commission.

69.169: Policy Statement Interpreting Terms Included in 66 PA. C.S. §1326

Section 69.169 defines two of the terms used in 66 Pa. C.S § 1326: residential structure and standby charge. A residential structure is defined as a building which contains only individually metered dwelling units intended for human habitation. A standby charge is defined as a charge for the availability of water supply during fire emergencies. Costs for upsizing of company-owned service lines and meters, for the installation of additional lines and for backflow prevention devices are not standby charges for purposes of residential sprinkler systems, and these costs shall be borne by the applicant for service on a one-time basis.

PWSA Compliance Status

PWSA is currently in compliance with this section.

PWSA Compliance Plan

As part of the Compliance Plan Stage 1 Partial Settlement, PWSA agreed to take the following steps to comply with Section 69.169. PWSA is now in compliance with this section.

1. PWSA identified 49 current customers being charged a separate private fire protection charge pursuant to PWSA's tariff.
 - a. PWSA reviewed each of these accounts and, of these accounts, there were four affected customers. The remaining 45 accounts are classified as commercial properties (which includes multi-family properties).
 - b. For the four affected customers, PWSA has:
 - i. changed the rate code for each account so that the private fire protection customer charge will no longer be assessed;
 - ii. processed a bill credit for each account to refund amounts paid over the past four years consistent with PWSA's residential customer refund policy upon coming under the Commission's jurisdiction effective April 1, 2018; and,
 - iii. telephoned each customer advising him/her of the option to receive a one-time payment in lieu of the bill credit upon return to PWSA of a signed refund request.
 - c. The total amount of refunds due for all four accounts is \$4,045.80.
2. PWSA St. C-4SD (Weimar) pp 2-3 includes this information. PWSA Exh. JAQ/C-17 (also included with the Partial Settlement Petition as Exhibit 2) is a proposed pro forma tariff supplement to be submitted as part of a compliance tariff to be filed in this matter upon final Commission approval.
3. In its next base rate case:
 - a. PWSA will include a separate rate for residential, private fire protection service that excludes all standby costs.
 - b. PWSA will provide any evidence of its investment in separate or larger service lines, meters, or other customer specific facilities for residential customers with automatic fire protection systems.

69.251: Policy Statement on Plain Language Guidelines

Section 69.251 lays out the Commission's recommended guidelines for written materials that are provided to residential customers and suggests that each utility designate staff to serve as liaisons with the Bureau of Consumer Services. Plain language materials should be field tested, tested through consumer advisory panels, or considered through focus groups, prior to review by the Commission. Section 69.251 details written and visual guidelines, as well as guidelines for

bill format. Water utility bills should calculate and display the unit price per gallon, in addition to the total usage and charges; display a graph of comparative water use for the preceding five quarters or 13 months; and include clear definitions of technical terms.

PWSA Compliance Status

PWSA has adopted the plain language guidelines suggested by the Commission.

PWSA Compliance Plan

PWSA is in the process of redesigning its printed materials to be in accordance with Section 69.251. This effort includes a bill redesign and a language review of the Authority's termination notices, to reduce the reading level from 13th to 8th. PWSA is reporting on this in the Quarterly Compliance Plan Progress Reports and the most current status of this item is available there. As of the January 31, 2020 Quarterly Report, PWSA is on track to comply with this section and/or the issue has been moved to the Compliance Plan Stage 2 proceeding.

69.261 – 69.267: Policy Statement on Customer Assistance Programs

Customer Assistance Programs (CAPs) are designed to assist low-income, payment troubled customers in maintaining utility service. Customers participating in CAPs agree to make monthly payments based on household family size and gross income. Sections 69.261 through 69.267 detail scope, development considerations, design elements, cost recovery, and alternative program designs for these programs.

PWSA Compliance Status

While Sections 69.261 – 69.267 applies only to electric and large natural gas companies, PWSA has recently implemented a CAP that was developed based on the Commission's recommended design, and modeled after the program implemented by Pennsylvania American Water Company. The PWSA CAP currently has the following elements:

- > Winter Shut Off Moratorium - December 1st through March 31st for customers who are at or below 250% of the Federal Poverty Level; 2,715 customers took advantage of the 2018-2019 Winter Shut Off Moratorium
- > Bill Discount Program - 75% reduction of fixed monthly water and sewer conveyance charges for customers at or below 150% of the Federal Poverty Level; there were a total of 2,179 customers enrolled in the Bill Discount Program as of January 2, 2020
- > Hardship Program – Cash grants up to \$300 per year for customers at or below 150% of the Federal Poverty Level; 55 customers have applied for grants via the Hardship Program in the 2019-2020 Hardship Program grant season, which began October 1, 2019.
- > Private Lead Line Replacement Community Environmental Project – Private side lead line replacements for customers who are at or below 300% of the Federal Poverty Level. Over 375 customers have benefitted from this program as of January 10, 2020.

PWSA is reporting on its compliance with these sections in the Quarterly Compliance Plan Progress reports, and the most current status is available there. As part of the 2018 rate case Settlement, PWSA agreed to the following regarding its assistance programs for low-income customers:

1. PWSA will immediately begin additional data collection, including:
 - a. The amount of billed revenue;
 - b. The amount of receipts actually collected;
 - c. The number of accounts in arrears;
 - d. The dollars of arrears;
 - e. The number of accounts disconnected for nonpayment;
 - f. The number of accounts receiving a notice of disconnection for nonpayment;
 - g. The number of bill discount participants who entered the bill discount program with unpaid account balances;
 - h. The dollars of unpaid account balances for bill discount program participants at the time those participants entered the bill discount program;
 - i. The number of bill discount participants by agreed-upon poverty ranges;

- j. Average usage (along with average bills, including ALCOSAN charges in wastewater bills);
- k. The number of PWSA customers receiving a PWSA hardship grant and the average amount of the grant; and
- l. The average arrearage of PWSA customers receiving a PWSA hardship grant.

Further, PWSA agrees to consult with the Dollar Energy Fund regarding the availability of data on the income of BDP [Bill Discount Program] participants. PWSA already has a means in place and is reporting a., b., c., d., e., f., i., j., and k. monthly to the Board of Directors. Our Business Intelligence Analyst is drafting queries to provide the additional requested data.

- 2. PWSA agrees to fund the BDP using revenues collected from the approved rates in this proceeding. The approved increase in operating revenues reflects an additional amount of funding allocated to customer assistance programs and accounts for forgone revenues from BDP participants.
- 3. PWSA agrees to form a Low Income Assistance Advisory Committee (“Advisory Committee”), consisting of interested parties from this proceeding, the PUC Bureau of Consumer Services, Dollar Energy Fund, and local community and social service groups, subject to the understanding that each interested party may have no more than two representatives participating on the Advisory Committee. The initial term of the Advisory Committee will be two years, subject to being extended at PWSA’s discretion. The Advisory Committee will hold quarterly meetings, with the first meeting to be held within 90 days of the effective date of rates in this proceeding, to review program metrics and provide input and feedback on program terms and conditions and outreach documents. PWSA will have full discretion as to whether to accept feedback from the Advisory Committee, and, as required, submit proposals to the Commission for approval. Issues that will be addressed by the Advisory Committee include, but are not limited to:
 - a. improving outreach and messaging for programs;
 - b. launching a social media campaign;
 - c. assessing the feasibility and associated costs and benefits to transition the bill assistance program to a percentage of income program or a tiered discount program based on income levels; with a comprehensive arrearage forgiveness component to address arrears at the time of enrollment;
 - d. assessing applicable data;
 - e. developing efforts to fund the Hardship Cash Assistance Program on an ongoing basis;
 - f. exploring issues related to the structure of the Hardship Cash Assistance Program, including the income threshold, payment requirement, exceptions to the payment requirement, social security number requirement and inclusion of child support as income; and
 - g. reviewing changes to PWSA customer service policies and procedures identified in Paragraphs III.1.1 through III.10 of the Settlement.

- h. funding bill assistance program with separate bill assistance budgets estimated for water and wastewater populations.
4. PWSA will revise its Bill Discount Program rate to provide for a 75% discount on the minimum water and/or wastewater charge for customers with income at or below 150% of the federal poverty level.
- a. As part of PWSA's next base rate proceeding, PWSA will submit a detailed Plan which outlines the program parameters for each of its Low Income assistance programs. The Plan will include the following [PWSA has now complied with these requirements in its March 6, 2020 base rate filing]:
 - i. The eligibility parameters, benefits, budget, and needs assessment for each existing and/or proposed program, including but not limited to the Bill Discount Program (consistent with subsections v-vii below), the Winter Moratorium, the Hardship Fund Program, and the line repair and conservation program (consistent with subsection (iv) below);
 - ii. Planned outreach activities;
 - iii. A proposal for how to address all consensus issues adopted by the Low Income Assistance Advisory Committee;
 - iv. A newly proposed line repair and conservation program, which targets PWSA's highest users and is coordinated with PWSA's other assistance programs and similar usage reduction programs operated by other public utilities operating within PWSA's service territory;
 - v. Details of the average bill for customers with household income at or below 50% FPL; between 51-100% FPL; and between 101-150% FPL, separated into water and wastewater average bills, to the extent that such data is made available to PWSA by the Dollar Energy Fund.
 - vi. A proposal as to whether to make revisions to the Bill Discount Program which are aligned with the newly designed rate structures, separated into water and wastewater programs, and further providing for enhanced Bill Discount Program benefits for customers at or below 50% of the federal poverty level.

Once the Commission issues a Final Order in PWSA's initial rate case proceeding, PWSA will revise the Bill Discount rate to 75%, rather than 50%, of the minimum water and wastewater conveyance rates. Additionally, PWSA will begin to draft a detailed low-income assistance program plan through the creation of a Low-Income Assistance Advisory Committee. [PWSA has made the required revision to its Bill Discount rate and has created and continues to work with the Low-Income Assistance Advisory Committee.]

5. Through Dollar Energy Fund (“DEF”) and the Community-Based Organizations (“CBOs”), PWSA will continue to request that applicants for its Hardship Cash Assistance programs produce proof of the ratepayer’s Social Security Number (“SSN”) as a condition of application to the program. However, if the applicant is unable or unwilling to produce such proof, DEF and the CBOs will follow their current practice of checking the “no SSN” box and processing the application without requiring an SSN. Further revisions to PWSA’s SSN policy will be addressed consistent with Paragraph III.3.f of the Settlement. No additional action is necessary on the part of PWSA, DEF, or their CBO’s. This is in place.
6. Relating to program outreach efforts, PWSA agrees to continue its current outreach efforts, including but not limited to: (i) screening for eligibility during all credit-related calls; (ii) utilizing a referral or warm transfer process to Dollar Energy Fund; (iii) coordinating with other utilities that participate in the Western Pennsylvania Utility Group; and (iv) supporting Dollar Energy Fund’s efforts to actively recruit customers with existing debt to enroll in the bill assistance program or apply for a grant. PWSA will continue these outreach activities unless it determines to modify or terminate them, subject to Commission approval, as required. No additional action is necessary on the part of PWSA. This is in place.

Additionally, as part of the Compliance Plan Stage 1 Partial Settlement, PWSA agreed to the following regarding its customer assistance programs:

1. PWSA Affordability Analysis
 - a. PWSA’s Affordability Analysis was discussed at June 3, 2019 Low Income Advisory Council (“LIAAC”) meeting and a follow-up Q&A session was held on July 15, 2019. The discussion was continued at the LIAAC meeting on August 12, 2019 and the fourth meeting is scheduled for September 23, 2019. [These meetings were conducted as scheduled. PWSA completed the Affordability Analysis as of December 15, 2019.]
 - b. PWSA Exh. RAW/C-28(A) at Appendix D provided data collection pursuant to paragraph F.1 of the 2018 Rate Case Settlement (Docket No. R-2018-3002645). PWSA will continue to provide the data on a quarterly basis in PWSA’s Compliance Plan Progress Reports.
2. LIAAC meetings were/will be held on a monthly basis in August, September, and October 2019 and will begin again on a quarterly basis in January 2020. [These meetings were conducted as scheduled.] The initial two year term of the LIAAC shall be extended through March 2026, subject to further extension at PWSA’s discretion as established in paragraph F.3 of the 2018 Rate Case Settlement (Docket No. R-2018-3002645). Meeting dates and times for successive meetings will be scheduled at the end of each LIAAC meeting to best accommodate schedules. It is understood by all parties that LIAAC is an advisory group and that PWSA retains the final authority as to what recommendations

made by the LIAAC will be adopted. By participating in LIAAC, no party waives its rights to advocate their positions in any pending or future Commission proceeding where such issues are addressed.

3. Input on PWSA CAP program from BCS and LIAAC members

- a. PWSA will keep BCS informed of all scheduled LIAAC meetings intended to discuss its low income assistance programs, including its Bill Discount Program (“BDP”), Hardship Fund program, Community Environmental Program (“CEP”), and winter moratorium, and invite BCS staff to participate.
- b. PWSA is currently in the process of developing a Low Income Assistance Program Plan pursuant to the Settlement terms in its 2018 Base Rate proceeding (Docket No. R-2018-3002645), which it intends to file as part of its next base rate proceeding. PWSA provided a preliminary overview of what is under consideration at its August LIAAC Meeting with a written draft of the Low Income Assistance Program Plan to be provided during the September LIAAC meeting. LIAAC members, BCS and all parties to this proceeding will be asked to provide written recommendations and feedback related thereto one week prior to the October LIAAC meeting for discussion during the October LIAAC meeting. PWSA will seriously consider all provided feedback and will, to the extent it agrees with the received feedback, incorporate such recommendations into its plan to be filed with the rate case. With its rate case filing, PWSA will provide its specific rationale for rejecting any programmatic recommendations offered as part of the LIAAC process. [PWSA completed these steps and has included the required information as part of its 2020 base rate filing.]

4. Customer Outreach

- a. PWSA will develop an outreach plan for its customer assistance programs, with the input of interested parties – including but not limited to Dollar Energy Fund and members of LIAAC.
- b. PWSA will include its outreach plan as part of its Low Income Assistance Program Plan which will be filed as part of next base rate filing. The outreach plan will include, at a minimum, a proposed budget for outreach activities and a neighborhood canvassing aspect which will target areas of PWSA’s service territory identified through PWSA’s needs assessment. [PWSA completed these steps and included the required plan as part of its March 6, 2020 base rate filing.]
- c. PWSA welcomes the assistance of interested parties in developing and implementing its customer outreach plan.

69.351: Implementation of SFAS 106

Section 69.351 details the requirements for implementation of the Statement of Financial Accounting Standards (SFAS) for Rule No. 106. SFAS 106 provides the generally accepted accounting principles to be used by large companies in accounting for post-retirement benefits other than pensions (OPEBs). SFAS 106 operates on the premise that post-retirement benefits are a form of deferred compensation whereby an employer promises to exchange future benefits for current service. SFAS 106 requires companies to switch to the accrual method of accounting for OPEBs.

PWSA Compliance Status

PWSA does not contribute to post-retirement benefits other than pensions. As a result, SFAS 106 and Section 69.351 are not applicable to PWSA at this time.

69.801 – 69.809: Diversity at Major Jurisdictional Utility Companies – Statement of Policy

The Commission strongly believes that diversity is an economic reality that corporate entities must include in their corporate strategies now and in the future and uses Sections 69.801 through 69.809 to encourage major jurisdictional utility companies to incorporate diversity in their business strategy in connection with the workforce and procurement of goods and services.

PWSA Compliance Status

PWSA includes the following language in all procurement solicitations:

“The Authority requires that all Offerors demonstrate a good faith effort to obtain the participation of MBEs, WBEs, VBEs and/or SDVBEs in all work to be performed under Authority contracts. Such participation may be demonstrated by utilization of MBE/WBE/VBE/SDVBE firms through the use of subcontracts with such firms in support services, supplies, etc. For many of the services, supplies and equipment for which the Authority

contracts, the Authority recognizes that the current business pool does not include percentages of minorities, females, veterans, or service disabled veterans. The Authority, however, wishes to encourage MBE, WBE, VBE and/or SDVBE participation in all business pools.

It is therefore the current goal of the Authority to encourage increased MBE, WBE, VBE and/or SDVBE participation in all business pools. The Authority's current MBE goal is 18%, WBE goal is 7%, and VBE/SDVBE goal is 5% of the total dollar value of Authority contracts exceeding \$250,000. The Authority intends to monitor the progress closely, including revising the practices and procedures from time to time as conditions warrant."

PWSA does not currently have a formal policy to support diversity in the workforce, but an internal policy is currently being developed by Human Resources and will be approved by the end of 2020.

PWSA Compliance Plan

PWSA is reporting on this in the Quarterly Compliance Plan Progress Reports and the most current status of this item is available there. As of the Quarterly Report filed on January 31, 2020, PWSA is in the process of developing a formal policy to support workforce diversity. The Supplier Diversity Program policy has been approved by the Board of Directors and will be integrated into all procurement documentation. An internal diversity policy will be drafted and approved in 2020. PWSA also will submit, on a going forward basis, the "diversity program activity report" requested by Section 69.809. PWSA's first report will be submitted by March 1, 2019.

69.1601 – 69.1603: Unscheduled Water Service Interruptions and Associated Actions

Sections 69.1601 through 69.1603 stipulate the acceptable methods of public notification during an unscheduled water service interruption, encourage adherence to the National Incident

Management System's public information system to organize everything into one unified message, and encourage utilities to assign a knowledgeable contact person to answer questions and to communicate on behalf of the utility. Water utilities need to make reasonable efforts to ensure that adequate quantities of alternative supplies of water essential for domestic use are made available.

PWSA Compliance Status

PWSA has an emergency management plan that addresses public notification during unscheduled water service interruptions. Depending on the number of customers affected, PWSA has processes to notify customers through door-to-door notifications, automated phone calls, social media blasts, traditional media notifications, and posts on the PWSA website. Messages released through traditional and social media, as well as through the PWSA website, are coordinated through the PWSA Communications Office, which coordinates with PWSA customer service to answer questions on behalf of the utility. PWSA also has two water buffalos to provide potable water for essential use during longer periods of water service interruption, and bottled water is available by customer request. The existing emergency management plan does not currently adhere to the National Incident Management System's public information system.

PWSA Compliance Plan

PWSA is in the process of updating its emergency response plan to better adhere to the National Incident Management System's public information system and include updated standard operating procedures. PWSA's settlement commitments related to the emergency response plan are discussed above in Sections 65.2 and 65.5.

e. Chapter 71. Financial Reports

Chapter 71 was established to serve as a financial reporting guide for utilities that are subject to the jurisdiction of the Commission. The goal of Chapter 71 is to establish a process and set of practices that, when followed by the utility, will make it as easy as possible for the Commission to “monitor” the “financial performance and earnings” of the utility under its jurisdiction. This Chapter is addressed to utilities providing a diverse range of services, including gas, electric, telephone, or water and wastewater services. Regardless of industry and service provided, all utilities under Commission oversight are subject to the same financial reporting requirements as outlined in this chapter.

71.3-71.4: Filing Requirements and Time of Filing

Section 71.3 and Section 71.4 define the frequency and level of detail utilities must provide in their financial report filings based on their annual “intrastate” gross revenues (i.e., revenues that are subject to State jurisdiction). Water and wastewater utilities may fall into two categories: those with more than \$10 million in annual intrastate gross revenues, and those with annual intrastate gross revenues greater than \$1 million but less than \$10 million.

- > Utilities with annual intrastate gross revenues exceeding \$10 million: Large utilities must submit a financial report “for the 12-month period ending each March 31, June 30, September 30 and December 31.” These utilities must include annualization, normalization and ratemaking adjustments in their report. This report is due within 60 days of the quarter ending March 31, June 30, and September 30 of each year. However, if the utility has a general rate investigation pending (under 66 Pa. C.S. § 1308(d), 1309 or 1310, relating to voluntary rate changes, fixed rates, cost-of-production investigation, or temporary rates), the utility is not required to meet this 60-day deadline, according to

Section 71.4 (c). Instead, under this rate investigation circumstance, the utility must file a letter with the Secretary of the Commission (Secretary) “for each quarter in which a general rate investigation is pending.”

- > Utilities with annual intrastate gross revenues exceeding \$1 million but not exceeding \$10 million: Small utilities must file a financial report “for the 12-month period ending each December 31,” and *do not* need to include annualization, normalization and ratemaking adjustments in their report. This report is due within 90 days of the quarter ending December 31 of each year. However, if the utility has a general rate investigation pending (under 66 Pa. C.S. § 1308(d), 1309 or 1310, relating to voluntary rate changes, fixed rates, cost-of-production investigation, or temporary rates), the utility is not required to meet this 90-day deadline, according to Section 71.4 (c). Instead, under this rate investigation circumstance, the utility must file a letter with the Secretary of the Commission “for each quarter in which a general rate investigation is pending.”

PWSA Compliance Status

PWSA has annual intrastate gross revenues exceeding \$10 million, and currently provides annual audit reports. PWSA is now submitting (quarterly) these annual financial reports to the Commission.

PWSA Compliance Plan

PWSA intends to meet the financial reporting requirements and timeline laid out in Sections 71.3-71.4. The first financial report that PWSA will file under these sections will be for the first quarter of 2019, by May 31. PWSA is reporting on this in its Quarterly Compliance Plan Progress Reports and the most current status of this item is available there.

71.5: Format for Filing Financial Reports

Section 71.5 specifies the required components of the financial reports discussed in Section 71.4. These components include:

1. Computations that illustrate, in detail, two crucial ratemaking parameters: the utility's rate base, and income available for return and capitalization.
2. Financial data specifying "actual per book amounts, intrastate allocation percentages, intrastate amounts, adjustments to intrastate amounts and adjusted results." When presenting the actual per book amounts, the utility must use the same format as that in its most recent audited annual report filed with the Commission.
3. Adjustments to intrastate amounts, which may be in the form of annualization, normalization, or ratemaking. These adjustments must be accompanied by: 1) A demonstration of each respective adjustment's effects on revenue, expense, tax and rate base effect; 2) A brief explanation stating the nature of the adjustment (i.e., annualization, normalization or ratemaking) and the reason for the adjustment; and 3) Narrative references to prior Commission decisions and associated computations.
4. Calculation of return on common equity for the 12-month period based on 1) the utility's actual and adjusted rate base, 2) income available for return and 3) capitalization data.
5. Capitalization data showing: 1) A calculation of the utility's capital structure and related ratios; 2) The cost of debt; 3) Preferred stock and necessary adjustments to capital structure to account for changes that occurred during the reported 12-month period.

The utility must present the five components described above "in a manner which is consistent with the schedules and format specified by the Office of Special Assistants."

PWSA Compliance Status

PWSA currently provides audited financials annually. In the annual audit reports, some of the components described in Section 71.5 are addressed; however, it is important to note that PWSA is a municipal authority and does not determine nor charge a return. Thus, the sections regarding a return on assets or equity are not applicable. PWSA is reporting on this in the Quarterly Compliance Plan Progress Reports and the most current status of this item is available there. As of the January 31, 2020 Quarterly Report, these financial reports are on target to be completed as required.

PWSA Compliance Plan

PWSA intends to meet the financial reporting requirements and timeline laid out in Sections 71.5. The first financial report that PWSA will file under these sections will be for the first quarter of 2019, by May 31.

71.6: Permitted Adjustments to Financial Reports

Section 71.6 describes how a public utility should adjust its financial reports. These adjustments include annualization adjustments (e.g. to estimate full-year expenses or revenues where full year data is unavailable), normalization adjustments (e.g. adjustments for non-recurring events), and ratemaking adjustments. Ratemaking adjustments should be used to make current reporting equivalent to previous reports that had been adjusted by the Commission (provided the adjustment is still relevant under current policy), or to incorporate Commission ratemaking policy changes. Ratemaking adjustments are specified by the Commission through a Secretarial letter. Section 71.6 also defines the financial information that must be considered intrastate, and therefore must be included in financial reporting.

PWSA Compliance Status

PWSA currently provides annual audit reports that include normalization, annualization, and ratemaking adjustments, as described in Section 71.6. PWSA is reporting on this in the Quarterly Compliance Plan Progress Reports and the most current status of this item is available there. As of the January 31, 2020 Quarterly Report, these financial reports are on target to be completed as required.

PWSA Compliance Plan

PWSA intends to follow the adjustment guidelines established in Section 71.6 and specify any ratemaking adjustments to the Commission to a Secretarial letter. The first financial report that PWSA will file under these sections will be by April 30, 2019.

71.7: Filing Procedures

Section 71.7 states that the utility must provide a printed, hard-copy financial report to the Secretary, the Office of Special Assistants, Office of Trial Staff, Office of Consumer Advocate, and the Small Business Advocate. An electronic copy of the report should be provided to the Office of Special Assistants.

PWSA Compliance Plan

PWSA is meeting the financial reporting filing procedures established in Section 71.7. The first financial report that PWSA will file under these sections will include printed copies sent to the Secretary, the Office of Special Assistants, Office of Trial Staff, Office of Consumer Advocate, and the Small Business Advocate. An electronic copy will also be provided to the Office of Special Assistants.

71.8: Intrastate Allocation Factors

This section specifies that financial allocation factors must be consistent with Federal Energy Regulatory Commission and Federal Communications Commission reports, if applicable.

If a utility uses a different method for calculating allocation factors than that used in the prior quarter, the utility must provide an explanation for the change. If a utility has “non-jurisdictional revenues” and lacks a cost of service study completed within the past three years, the utility must file a cost of service study within a year of the time the utility becomes subject to this chapter.

PWSA Compliance Status

The financial allocation factors of the Federal Energy Regulatory Commission and the Federal Communications Commission are not applicable to PWSA, as PWSA does not have intrastate revenues.

71.9: Financial Reports as Public Documents

Financial reports are open to the public by default; if the utility wishes to keep some information in their financial report proprietary, they must file a petition for protective order under § 5.423.

PWSA Compliance Status

PWSA currently provides annual audit reports that are public documents, as outlined in Section 71.9.

PWSA Compliance Plan

PWSA is a municipal authority and subject to the Right-to-Know Act. Therefore, PWSA does not anticipate that information contained in its financial reports could reasonably be deemed proprietary. Should that situation change, the Authority intends to follow the process laid out in Section 71.9 and petition for a protective order under Section 5.423.

f. Chapter 73. Annual Depreciation Reports, Service Life Studies, and Capital Investment Plans

Chapter 73 was created to establish uniform and industry-wide reporting requirements, designed to improve the Commission's ability to regularly monitor depreciation practices and capital planning for public utilities subject to its jurisdiction.

73.3: Annual Depreciation Reports

Section 73.3 stipulates that public utilities that have gross intrastate revenues in excess of \$20 million per year shall file a depreciation report with the Bureau of Fixed Utility Services annually. For water utilities, the depreciation report is due on or before June 30 each year, and reports shall be prepared in a manner consisted with the formats and filing deadlines specified in Chapter 73. In years when depreciation reports and service life study reports are both due, public utilities must notify the Secretary of their intent to file both reports on or before August 31. Finally, the utility shall file a copy of its depreciation report with the Office of the Consumer Advocate and the Office of the Small Business Advocate at the same time as the report is filed with the Office of Special Assistants.

PWSA Compliance Status

PWSA is not currently able to generate an annual depreciation report that meets the Commission's requirements. PWSA inherited asset records from the City of Pittsburgh during the formation of the Authority that lack sufficient specificity to appropriately depreciate. Many of the assets are also missing information on their installation year and original cost. During the transition to PWSA control, several different asset types were entered under one journal entry by type with no associated records of installation date or original cost. PWSA has been keeping better records, tracking the installation date, depreciation, and related data since its inception.

PWSA Compliance Plan

As part of the Compliance Plan Stage 1 Partial Settlement, PWSA agreed to the following process for providing annual depreciation reports that meet the requirements of Section 73.3. PWSA is reporting on this item in the Quarterly Compliance Plan Progress Reports and the most current status of this item is available there. As of the January 31, 2020 Quarterly Report, PWSA is on track to comply with Section 73.3 by 2024.

1. PWSA shall fully comply with the Commission annual depreciation reporting requirements by 2024 (for 2023).
2. During the interim period and starting in 2020,
 - a. PWSA will file partial annual depreciation reports on the same schedule as full annual depreciation reports, detailing only known and newly constructed plant additions and retirements.
 - b. PWSA will solicit the services of a professional consultant experienced with this type of work and reporting to assist PWSA with compliance.
 - c. PWSA will work with the professional services consultant and the newly implemented Enterprise Resource Planning System to hone the current asset list to allow for full reporting by 2024.

73.4: Format for Filing the Annual Depreciation Report

Section 73.4 highlights the filing requirements for a public utility's annual depreciation report. These requirements include: an executive summary, inclusive of an explanation of the depreciation methods used; a comparison with the prior year's annual depreciation report; explanations of extraordinary events occurring over the last year; the plant database used in the most recent service life study; a summary of the depreciation calculations at the end of the calendar year by function or account; a summary of book reserve entries by function or account; a summary of retirements by function or account; and additional information if requested by the Commission.

PWSA Compliance Status

PWSA does not currently generate an annual depreciation report that meets the Commission's requirements.

PWSA Compliance Plan

PWSA is working toward providing annual depreciation reports on the schedule described above in Section 73.3. When PWSA begins filing such annual depreciation reports, PWSA plans to comply with the standards and requirements listed in Section 73.4. PWSA is reporting on this item in the Quarterly Compliance Plan Progress Reports and the most current status of this item is available there. As of the January 31, 2020 Quarterly Report, PWSA is on track to comply with this section by 2024.

73.5: Service Life Study Report

Section 73.5 stipulates that public utilities that have gross intrastate revenues in excess of \$20 million per year shall file a service life study report with the Office of Special Assistants every five years. For water utilities, the service life study report is due on or before August 31 of the appropriate year, and reports shall be prepared in a manner consisted with the formats and filing deadlines specified in Chapter 73 and based on the same body of historic data used in the annual depreciation reports. Finally, the utility shall file a copy of its depreciation report with the Office of the Consumer Advocate and the Office of the Small Business Advocate at the same time as the report is filed with the Office of Special Assistants.

PWSA Compliance Status

PWSA does not currently generate a service life study report.

PWSA Compliance Plan

As a newly regulated utility, PWSA plans to comply with the requirements listed in Section 73.5 and file a service life study report with the Office of Special Assistants every five

years, filing its first report within 5 years from the beginning of its PUC regulation, by April 1, 2022. PWSA is reporting on this item in the Quarterly Compliance Plan Progress Reports and the most current status of this item is available there. As of the January 31, 2020 Quarterly Report, PWSA is on track to comply with this section by 2022.

73.6: Format for Filing Service Life Study Report

Section 73.6 highlights the filing requirements for a public utility's annual depreciation report. These requirements include: an explanation of methods used in selecting average service lives and survivor curves, any significant changes since the last service life study report, and the impact of the proposed service lives on annual depreciation expense; an explanation by account or category of the individual factors used in selection of an average service life; an exhibit detailing the calculations done to develop plant data for survivor curve or other depreciation parameter comparisons; interim service life studies on individual accounts when circumstances indicate that a significant service life estimate change may be warranted; an exhibit of depreciation calculations by function, account, or rate category; and additional information if requested by the Commission.

PWSA Compliance Status

PWSA does not currently generate a service life study report.

PWSA Compliance Plan

At such time PWSA files its first service life study report, PWSA plans to comply with the standards and requirements listed in Section 73.6. PWSA is reporting on this item in the Quarterly Compliance Plan Progress Reports and the most current status of this item is available there. As of the January 31, 2020 Quarterly Report, PWSA is on track to comply with this requirement by 2022.

73.7: Capital Investment Plan Report

Section 73.7 indicates that public utilities that have gross intrastate revenues in excess of \$20 million per year shall file a capital investment plan report with the Office of Special Assistants every five years. For water utilities, the capital investment plan report is due on or before August 31 in the year in which it is due, and reports shall be prepared in a manner consisted with the formats and filing deadlines specified in Chapter 73. Finally, the utility shall file a copy of its capital investment plan report with the Office of the Consumer Advocate and the Office of the Small Business Advocate at the same time as the report is filed with the Office of Special Assistants.

PWSA Compliance Status

PWSA's most recent Capital Improvement Plan was completed in 2017 for the period of 2017 through 2021. PWSA's Capital Improvement Program focuses on sustaining cost-effective operations, while optimizing the system's asset performance and life expectancy. The 2017-2021 Capital Improvement Program invests in programs that consider risk and consequence of asset failure and levels of service benefits.

PWSA Compliance Plan

As a newly regulated utility, PWSA plans to comply with the standards and requirements listed in Section 73.7 and 73.8 and file a capital investment plan with the Office of Special Assistants. As part of the Compliance Plan Stage 1 Partial Settlement, PWSA agreed to file the Capital Investment Plan Reports starting in 2020 and every five years thereafter. PWSA is reporting on this item in the Quarterly Compliance Plan Progress Reports and the most current status of this item is available there. As of the January 31, 2020 Quarterly Report, PWSA is on track to comply with this section in 2020.

73.8: Format for Filing the Capital Investment Plan Report

Section 73.8 provides an overview of the filing requirements for a public utility's capital investment plan report. These requirements include: a summary with an overview of plans for major project expansion, modification, or other alteration of current and proposed facilities; a discussion of each major project expansion, modification, or other alteration of current and proposed facilities; a discussion of anticipated major expansions, modifications, or other alterations of the facilities that are not addressed under this chapter; and additional information if requested by the Commission.

PWSA Compliance Status

PWSA currently generates five-year capital investment plan reports for presentation to its Board of Directors that include many of the elements listed in Section 73.8. The most recent capital investment plan was completed January 27, 2017.

PWSA Compliance Plan

As a newly regulated utility, PWSA plans to comply with the standards and requirements listed in Section 73.8 and file a capital investment plan report with the Office of Special Assistants. As part of the Compliance Plan Stage 1 Partial Settlement, PWSA agreed to file the Capital Investment Plan Reports starting in 2020 and every five years thereafter. PWSA is reporting on this item in the Quarterly Compliance Plan Progress Reports and the most current status of this item is available there. As of the January 31, 2020 Quarterly Report, PWSA is on track to comply with this section in 2020.

g. Chapter 101. Public Utility Preparedness through Self Certification

Chapter 101 deals with the methods a utility must use to maintain contingency or emergency response plans. These plans are designed to help the utility maintain safety standards and reliable service in the case of disruption to service or accident. The utility must create a plan that addresses general operations, cybersecurity, and business operations following an unusual operational event. The plan must identify the responsibilities of each individual or job function following a disruption (see § 101.3 (c)). To demonstrate compliance, this chapter requires the utility to submit a “Self Certification Form” to the Commission to document its emergency response plans.

101.3: Plan Requirements

Section 101.3 outlines the four types of documented emergency response plans a utility must create: a physical security plan, a cyber-security plan, an emergency response plan, and a business continuity plan. The physical security plan must include a facility protection program for facilities deemed “mission critical” (defined as “essential equipment or facilities to the organization’s ability to perform necessary business functions”). The cyber security plan must include appropriate backup for software and data, as well as backup methods for “meeting critical functional responsibilities” if information technology systems are compromised. The business continuity plan must include a guideline for restoring utility operations after an emergency, as well as a detailed process addressing “business recovery” (e.g. implementing operations following an emergency), “business resumption” (e.g. the restarting of normal operations following emergency by prioritizing time-sensitive functionality), and “contingency planning” (e.g. emergency preparedness planning). The emergency response plan must include the following three steps: 1) Assessment of the problem; 2) Mitigation of the problem in a timely

manner; and 3) Notification of emergency service organizations as appropriate. To ensure that the emergency plan is up-to-date and practical as conditions change, the utility must test and update the plan annually. To demonstrate compliance with Section 101.3, the utility must submit a “Self Certification Form” to the Secretary’s Bureau.

PWSA Compliance Status

PWSA is currently in compliance with Section 101.3, and has now developed a physical security plan, a cyber-security plan, an emergency response plan, or a business continuity plan that meet the requirements laid out by the Commission.

PWSA Compliance Plan

PWSA is now in compliance with the standards and requirements listed in Section 101.3. PWSA is reporting on this item in the Quarterly Compliance Plan Progress Reports and the most current status of this item is available there. As part of the Compliance Plan Stage 1 Partial Settlement, PWSA agreed to develop these plans on the following timeline and is now in compliance:

1. PWSA will consult with the Reliability and Emergency Preparedness Section of the Commission’s Bureau of Technical Utility Services (“TUS”) in the development of its physical security, cyber security, emergency response and business continuity plans. PWSA is also working with the Department of Homeland Security and the Federal Bureau of Investigation.
2. Specific dates for completion of the plans which may be updated pursuant to PWSA’s Risk and Resilience Assessment as discussed above in Section III.D:
 - a. Physical security plan – December 31, 2019
 - b. Cyber security plan – August 1, 2019
 - c. Emergency response plan – October 31, 2019
 - d. Business continuity plan – October 31, 2019
3. Regarding the Security Self Certification Form:

- a. PWSA will file its Self-Certification Form by February 28, 2020.
- b. PWSA will provide a status report in its October 31, 2019 PWSA Compliance Plan Progress Report regarding its efforts to achieve the above stated target dates as set forth in [Section 2].

101.4: Reporting Requirements

The filing of the Self Certification Form discussed in Section 101.3 must occur at the same time as each Annual Report is filed (see Chapter 71 for more information regarding the annual financial report requirements).

PWSA Compliance Status

PWSA is now meeting the reporting requirements detailed in Section 101.4. PWSA submitted the Self-Certification Form in Section 101.3 as of February 28, 2020.

h. Chapter 102. Confidential Security Information

Chapter 102 outlines procedures for public utilities to follow when filing confidential security information with the Commission. This chapter also addresses how a utility should handle challenges by members of the public in Commission proceedings that seek to gain access to this confidential information.

102.3: Filing Procedures

Section 102.3 defines the appropriate filing procedures for confidential security information. This section addresses seven points: the maintenance of onsite records; filing requirements; utility responsibility to identify secure information; the Commission's responsibility in handling secure information; the status of previously filed records; the Commission's responsibility with non-secure information; and electronic submissions. A brief summary of each subsection follows:

1. *Utility's record-keeping:* Confidential records must be maintained onsite, and they must be certified as up-to-date according to Chapter 101 self-certification procedures. The utility must make the record with the confidential security information available for review upon request by authorized Commission employees.
2. *Submitting secure information to the Commission:* The transmittal letter accompanying the filing, itself is a public document, must clarify that the filing contains confidential security information. Each page of the filing containing confidential information must be stamped with the words "Confidential Security Information" and must be in a separate envelope. The utility must create a separate filing with the confidential security information omitted and submit this version as a public file.

3. *Public utility's responsibility:* If the utility fails to denote a record as confidential as described in the previous subsection, the record may be made available to the public.
4. *Commission's responsibility with secure information:* If the Commission employee authorized to receive the document believes the document should not be confidential, and the submitter disagrees, the Commission employee should submit a dispute to the Law Bureau for determination as a challenge under Section 102.4.
5. *Previously-filed unmarked records:* If a previously-filed public record is later deemed to include secure information, the utility must resubmit the secure information.
6. *Commission's responsibility with unmarked records:* If a member of the public requests information the Commission believes should be confidential, the Commission will refer the request to the Law Bureau for review. If the Law Bureau deems the record confidential, the utility is given the opportunity to resubmit the record as containing confidential security information.
7. *Electronic submissions:* Utilities may not use email or any other electronic mail system to submit records containing confidential security information.

PWSA Compliance Status

PWSA is currently compliant with Section 102.3's requirement that confidential records be maintained onsite and submitted a Self-Certification Form on February 28, 2020.

i. Chapter 121. Long-Term Infrastructure Improvement Plan

Chapter 121 describes how a utility may create a long-term infrastructure improvement plan (LTIIP) to ensure that their infrastructure provides “adequate, efficient, safe, reliable and reasonable service to customers.” This type of plan is designed to support “accelerated” infrastructure improvement and is associated with assessing charges to customers to recover capital costs for the distribution system (distribution system improvement charges, or DSIC). PWSA filed an LTIIP as part of the Compliance Plan Stage 1 Proceeding, which was approved by the Commission’s March 26, 2020 Order. Additionally, on March 6, 2020, PWSA filed a Petition seeking approval of a DSIC at Docket No. P-2020-3019019.

121.3: LTIIP

Utilities wishing to implement a distribution system improvement charge (DSIC)—a charge to recover costs for repair and replacement of distribution infrastructure—must file an LTIIP. The LTIIP must only address property eligible for DSIC recovery, as defined in 66 Pa. C.S. § 1351. The LTIIP must include: 1) types and age of relevant property that is owned and operated by the utility; 2) a schedule for planned infrastructure repairs and replacement for this property; 3) descriptions of the locations of the property; 4) estimated quantity to be improved or repaired; 5) projected annual expenditures to finance the improvements or repairs; 6) description of how the replacement will be accelerated and how the improvement or replacement will improve service; 7) a training program to ensure the utility’s access to qualified professionals to perform the work; 8) description of the utility’s outreach and coordination efforts with other utilities, Department of Transportation and local governments regarding the planned construction, along with roadways that may be impacted by the project.

On March 15, 2018 the PUC issued its Final Implementation Order which provides PWSA and stakeholders with guidance as to how PWSA may work to comply with its obligations under Chapter 32. Part of that guidance deals with filing of an LTIIP. The Final Implementation Order allows PWSA the discretion of filing individual or a unified LTIIP for water, wastewater and stormwater assets. If PWSA opts to file a unified LTIIP, it was directed to segregate its discrete services and operations as they exist at the time of the LTIIP filing. As to the future application of a DSIC, the PUC stated that the approved DSIC mechanisms should follow the distinct segments of PWSA operations and eligible property whether they be water, wastewater, or in the future, stormwater service.

PWSA Compliance Status

PWSA filed a unified LTIIP which was approved by the Commission on March 26, 2020 as part of the Compliance Plan Stage 1 proceeding. On March 6, 2020, PWSA submitted a Petition seeking approval of a DSIC at Docket No. P-2020-3019019. PWSA is currently in compliance with this section.

121.4: Filing and Commission Review Procedures

LTIIPs must be filed with the Commission's Secretary Bureau and copies must be provided to the Bureau of Investigation and Enforcement, the Office of Consumer Advocate, the Office of Small Business Advocate, and the parties of record in the utility's most recent base rate case. The LTIIP is a public document by default, and the utility must proactively designate and exclude confidential security information. After completion of the LTIIP, the document is open to the public for a 30-day comment period; if comments raise "material factual issues," they may be referred to a hearing under the Office of Administrative Law Judge. The utility's responsibility is to prove that its proposed LTIIP infrastructure plans and expenditures are

reasonable, cost effective, and appropriate. The Commission’s responsibility is to review the filed LTIP to confirm that the LTIP: 1) contains measures to ensure projected annual expenditures are cost-effective; 2) specifies the manner in which it accelerates or maintains an accelerated rate of infrastructure repair; 3) plans to maintain “adequate, efficient, safe, reliable and reasonable service”; and 4) meets the requirements of Section 121.3(a). If the utility’s LTIP does not meet criteria in this section or Section 121.3(a), the Commission will order the utility to file a revised LTIP. In this case, the utility may withdraw its LTIP, at which point the utility is no longer eligible to implement a DSIC charge.

PWSA Compliance Status

PWSA filed a unified LTIP which was approved by the Commission on March 26, 2020 as part of the Compliance Plan Stage 1 proceeding. On March 6, 2020, PWSA submitted a Petition seeking approval of a DSIC at Docket No. P-2020-3019019. PWSA is currently in compliance with this section.

121.5: Modifications to and Expiration of an LTIP

If a utility wishes to modify a Commission-approved LTIP based on changes to elements outlined in Section 121.3(a), the utility must file a separate petition for modification that identifies the change and explains the justification for the change. This petition will be subject to notice for interested parties, who will have 30 days to file comments on the petition. Minor modifications to the LTIP (defined in Section 121.2) will be addressed at the same time as the Commission staff’s review of the utility’s annual asset optimization plan (AAO plan), if applicable. If a utility’s LTIP expires but the utility wishes to continue its DSIC mechanism, the utility must file a new LTIP at least 120 days prior to the current LTIP’s expiration.

PWSA Compliance Status

PWSA filed a unified LTIP which was approved by the Commission on March 26, 2020 as part of the Compliance Plan Stage 1 proceeding. On March 6, 2020, PWSA submitted a Petition seeking approval of a DSIC at Docket No. P-2020-3019019.

PWSA Compliance Plan

PWSA plans to comply with the process laid out in Section 121.5 for any modifications to and expiration of an LTIP as necessary.

121.6: AAO Plan Filings

Any utility with an approved DSIC must file an associated AAO plan annually within 60 days after the expiration of the first 12 months of its LTIP period (regardless of whether the expired LTIP will be replaced with a new LTIP). This AAO plan must include a description of property improved, repaired or replaced under the prior year's LTIP, and property to be improved, repaired or replaced in the upcoming 12-month period. Major modifications to the upcoming LTIP should be accounted for in a separate petition for modification as described in Section 121.5.

PWSA Compliance Status

PWSA does not currently have an approved DSIC. PWSA is seeking approval of a DSIC through a Petition filed on March 6, 2020.

PWSA Compliance Plan

PWSA plans to comply with the process laid out in Section 121.6 for filing an AAO plan annually after its DSIC is approved.

121.7: Periodic Review of an LTIP

The Commission reviews a utility's LTIP at least once every 5 years or more frequently if deemed necessary. The review will ensure that the utility has adhered to its LTIP and if

adjustments to the LTIIIP are necessary. If the LTIIIP is considered no longer adequate to provide suitable service to customers, the Commission will direct the utility to revise the LTIIIP accordingly.

PWSA Compliance Status

PWSA's first LTIIIP was approved by the Commission in its March 26, 2020 Order in the Compliance Plan Stage 1 proceeding.

PWSA Compliance Plan

PWSA plans to comply with the Commission's policy of periodic LTIIIP review, as laid out in Section 121.7.

121.8: Enforcement of LTIIIP Implementation

A utility with a Commission-approved LTIIIP is obligated to comply with the elements of their LTIIIP. If the LTIIIP does not comply, the utility's DSIC may be subject to termination.

PWSA Compliance Status

PWSA filed an LTIIIP which was approved by the Commission on March 26, 2020 as part of the Compliance Plan Stage 1 proceeding. On March 6, 2020, PWSA submitted a Petition seeking approval of a DSIC.

PWSA Compliance Plan

PWSA plans to comply with the process laid out in Section 121.8 for enforcement of LTIIIP Implementation.

Additional LTIIIP Settlement Obligations

Through the Compliance Plan Stage 1 Partial Settlement, PWSA has agreed to the following terms regarding its LTIIIP and any future DSIC. PWSA is reporting on these items in the Quarterly Compliance Plan Progress Reports and the most current status of this item is

available there. As of the January 31, 2020 Quarterly Report, PWSA is on track to comply with these requirements:

Materials Report, Valves, Prioritization

1. In the PWSA Compliance Plan Progress Reports, PWSA will provide the comprehensive materials report and updated information about the types and sizes of valves once its GIS is updated and this information is available.
2. In the PWSA Compliance Plan Progress Reports, PWSA will provide additional information regarding the prioritization of main replacements, valve replacements.
3. PWSA will notify the parties in the PWSA Compliance Plan Progress Report when the computerized maintenance management system (CMMS) project is implemented.

Customer Owned Lead Service Lines

1. At the appropriate time, PWSA will file a Petition to Amend its Long Term Infrastructure Improvement Plan to include estimates on the number of customer-owned (i.e., private side) lead service lines, and the expected expenditures for their replacement, to the extent that the Commission has authorized or directed PWSA to replace such facilities.

Metering Unmetered Properties

1. PWSA's amended LTIIIP will include information about its plan to meter unmetered properties to include the timeline consistent with Section IIb [of the Settlement].

Workforce Development

1. PWSA Hearing Exh. 3 includes the additional information set forth in PWSA St. C-1R (Weimar) at 70-72.
2. PWSA Hearing Exh. 3 also provides more current information regarding:
 - a. workforce challenges as it relates to its LTIIIP schedule including any processes and/or plans to specifically address the issues identified in PWSA's Compliance Plan at Appendix A, pp. 5 and 8; and,
 - b. how PWSA will build a workforce to meet the needs of increased capital spending (including specific detail for how staffing projections were quantified, and an estimate of the number of required contractors. If an estimate of required contractors is not available at this time, PWSA will provide an explanation as to why such estimate is not available and explain its planned use of contractors over the term of this LTIIIP).

Construction Coordination with Other Utilities and Municipalities

1. PWSA Hearing Exh. 3 includes the additional information set forth in PWSA St. No. C-1R (Weimar) at 72.
2. PWSA Hearing Exh. 3 includes other more current information regarding how PWSA will utilize resources (such as the Pennsylvania 811 Coordinate PA web service application that shows projects and project time frames for users to readily identify opportunities for collaboration between projects) to meet the need for increased coordination with local utilities and local, state, county and city government agencies.
3. PWSA Hearing Exh. 3 also includes further explanation about how efforts between PWSA and the City of Pittsburgh are underway to address the need for additional engineering staff to be hired by the City to improve coordination efforts between PWSA and the City as well as any other necessary actions that are being explored to address this issue.

Distribution System Improvement Charge (“DSIC”)

1. PWSA agrees to seek any necessary waivers of Act 11, including waivers of 66 Pa. C.S. §§1353, 1357, 1358 before it seeks Commission approval of a Distribution System Improvement Charge (“DSIC”) that uses an annual, levelized charge as the basis for establishing DSIC rates, subject to subsequent true-up for PWSA’s actual experience.
2. If such waivers are granted:
 - a. PWSA agrees to separately track and account for all DSIC proceeds and expenditures in a separate accounting mechanism, and to specifically designate all revenue collected through the DSIC to future DSIC-related spending, or refunds to customers, if necessary.
 - b. With regard to quarterly updates of the DSIC; to minimize over or undercollections, PWSA agrees to adjust the DSIC percentage by October 1 if projected total billings and expenditures for the remainder of the year indicate that a material over or under collection of plus or minus 2% is likely to occur. However, PWSA agrees to make adjustments in earlier quarters if it is able to accurately determine that a material over or under collection is likely to result by the end of the year.
3. In its next base rate case, PWSA intends to seek Commission approval of a DSIC-with inclusion of costs related to private-side lead service line replacement, to the extent that the Commission has authorized or directed PWSA to replace such facilities and include those activities in its LTIIP; all parties reserve their rights to review and challenge inclusion of costs in the DSIC. Inclusion of costs in the LTIIP does not mean that PWSA can recover those costs through the DSIC.
4. No Party waives any right it might have to challenge the reasonableness of PWSA’s DSIC calculations or its proposed cap, the prudence of any expenditures claimed to be included in the DSIC the recovery of any category of costs claimed to be included in the

DSIC, the reasonableness and/or lawfulness of the DSIC formula proposed by PWSA, or any other aspect of a PWSA DSIC proposal included with PWSA's base rate case.



OTHER COMPLIANCE ISSUES

6. OTHER COMPLIANCE ISSUES

In addition to the areas covered by Chapter 52, the Commission’s Final Implementation Order required that PWSA address several other issues in the Compliance Plan. These issues include: PWSA’s relationship with the City of Pittsburgh, specifically relating to the Cooperation Agreement and the Capital Lease Agreement; unbilled or unmetered usage, including City usage; billing arrangements, specifically regarding those with ALCOSAN and Pennsylvania American Water Company; the Authority’s plan to address lead levels in the water supply and the replacement of lead service lines; the Authority’s plan to address non-revenue water; the Bureau of Consumer Services Access to the PWSA Customer Service Management Information System; bulk water sales; and bulk wastewater conveyance agreements. The Partial Settlement of the Compliance Plan Stage 1 proceeding also addressed a number of other related issues. The next several sections discuss these issues, providing background information, noting applicable PUC policies or laws, stating PWSA’s compliance status, and outlining PWSA’s plan to move forward in addressing each issue.

a. Relationship with City

i. PWSA Services Contract with City of Pittsburgh (“Cooperation Agreement”)

Background

The 1995 Cooperation Agreement between the City of Pittsburgh and PWSA, which was amended on March 21, 2001 (First Amendment to Cooperation Agreement), governed interactions between PWSA and the City. Under this agreement, PWSA remitted to the City of Pittsburgh (City) an annual fee of \$7.15 million (Cooperation Agreement Fee). The fee was designated to compensate the City for a variety of services and costs that the City provides to PWSA such as vehicle lease and fleet maintenance. PWSA employees also participate in the

City's pension plan and the City pays the required employer contribution amounts for pension-related costs using a portion of the fee. The fee was not accompanied by a detailed invoice.

PWSA has renegotiated the Cooperation Agreement with the City and the 1995 Cooperation Agreement was terminated as of October 3, 2019. Pursuant to the Compliance Plan Stage 1 Partial Settlement and Section 507 of the Public Utility Code, PWSA filed the new Cooperation Agreement with the Commission on December 20, 2019 and requested that the new agreement be referred to the Office of Administrative Law Judge for a formal, on-the-record proceeding to determine its reasonableness, legality and validity. This review is currently pending at Docket No. U-2020-3015258.

Applicable PUC Policies or Laws

Expenses charged to ratepayers must be just, reasonable and reasonably “known and definite.” Generally, a public utility needs to be able to show that it is receiving a service or other value from any expenditure and that ratepayers are benefitting from any *pro forma* expense.

PWSA Compliance Status

The new Cooperation Agreement provides, *inter alia*, that payments between PWSA and the City must be based on actual, verifiable, direct expenses in accordance with the Public Utility Code.

PWSA Compliance Plan

Once the new Cooperation Agreement has been approved by the Commission, the updated practices requiring payments between PWSA and the City to be based on actual, verifiable, direct expenses will be in compliance with the Public Utility Code and applicable regulations.

The Commission's March 26, 2020 Order in the Compliance Plan Stage 1 proceeding required that in the interim, while the new Cooperation Agreement is being reviewed in a

separate proceeding, PWSA must interact with the City on a transactional basis. This will involve PWSA invoicing the City for services provided, and likewise the City must invoice PWSA for services provided. PWSA will comply with this directive in the interim until the process provided for by the new Cooperation Agreement is approved.

ii. Capital Lease Agreement with City of Pittsburgh

Background

PWSA is a party to 30-year lease (Capital Lease Agreement) with the City of Pittsburgh, which was created as a mechanism for the City to draw equity invested in the water and wastewater assets to cover budget shortfalls. PWSA has the option to acquire the City's assets upon termination of the lease term in 2025.⁴⁷ The Capital Lease Agreement provides PWSA with the option to purchase the System for one dollar in 2025. The Capital Lease Agreement stipulates minimum lease payments, all of which were satisfied during the initial three years of the lease.

Applicable PUC Policies or Laws

Chapter 11 of the Public Utility Code is not applicable to the City of Pittsburgh or PWSA⁴⁸ and, therefore, PWSA does not need to obtain a Certificate of Public Convenience to acquire the Systems in 2025.

PWSA Compliance Status

There are no compliance issues at this time.

PWSA Compliance Plan

PWSA intends to purchase the system for one dollar when eligible in 2025 or renegotiate a new arrangement with the City, whereby allowing PWSA to acquire the assets sooner. Any revised lease agreement with the City will be filed with the Commission under Section 507.

b. Unmetered and/or Unbilled Usage (including City Usage)

Background

PWSA is aware of between 200-400 City-owned and/or operated locations where it either does not bill the City for water service or where it neither meters nor bills the City for water service. The exact number of locations that are not metered and/or billed is pending confirmation. Note that this number may also include other quasi-municipal, government or non-profit City affiliated water service locations, such as the Pittsburgh Zoo. More than 150 City locations have been verified to be unmetered and/or unbilled as of July 2, 2018.

As part of the previous 1995 Cooperation Agreement between the City⁴⁹ and PWSA, PWSA was required to provide up to 600 million gallons per year of unbilled water to the City. These locations are related to areas where the City, and successors and assigns of the City, are receiving water service but are not being metered. In some other cases, a meter has been installed at the location, but the water provided is not billed. Note that since PWSA has not metered the majority of City properties and does not keep an accurate accounting of metered water use at other City locations, it is impossible to determine if the City exceeds its yearly allocation of 600 million gallons. Based on estimates, however, it is suspected that the total used by the City is in excess of 600 million gallons.

PUC Policies or Laws

The Commission directed that the Compliance Plan address, *inter alia*, a metering plan identifying unmetered accounts and plans to meter all customers.⁵⁰ Failing to meter and/or failing to charge some locations but not others, is inconsistent with the Public Utility Code as well as PUC Regulations,⁵¹ prohibiting “unreasonable” discrimination in rates and service. 66 Pa. C.S. § 1304. Failing to charge tariffed rates also violates the 66 Pa. C.S. § 1303. “No public utility shall, directly or indirectly, by any device whatsoever, or in anywise, demand or receive

from any person, corporation, or municipal corporation a greater or less rate for any service rendered or to be rendered by such public utility than that specified in the tariffs of such public utility applicable thereto.”

PWSA Compliance Status

PWSA is in the process of identifying all the non-billed and/or non-metered locations, the types of meters needed, meter installation requirements (plumbing, valving, etc.), and a reasonable timeframe over which PWSA will be able to install meters and begin billings. Because the plumbing at many of the non-metered locations was not designed to accept meters, a significant amount of re-plumbing and/or construction may be required at some sites. This may consist of installing new plumbing fixtures, pipe and valving, constructing meter pits, and/or building facilities to satisfactorily house meters and appurtenances.

PWSA Compliance Plan

PWSA has committed to a plan to address currently unmetered and/or unbilled properties, as described above in Section 65.7. This plan includes metering all municipal properties by the end of 2024. Regarding the costs for metering municipal properties, the Commission’s March 26, 2020 Order in the Compliance Plan Stage 1 proceeding required that PWSA pay the cost of the meter and meter installation at both municipal and non-municipal unmetered and/or unbilled properties. PWSA will comply with this requirement.

Additionally, the March 26 Order required that PWSA must introduce a flat rate for all currently unbilled customers in its next base rate proceeding that is, at a minimum, the customer charge for the customer’s class. As meters are installed, PWSA must immediately begin billing these customers for the full amount of their metered usage. PWSA also intends to comply with this requirement.

c. Billing Arrangements

i. Billing Arrangements with ALCOSAN

Background

ALCOSAN bills each PWSA wastewater conveyance customer a charge for wastewater treatment; this charge is passed through to customers on PWSA's bill. Currently, PWSA wastewater conveyance customers bear the cost of: (1) uncollected revenue associated with ALCOSAN charges; and (2) billing and collection costs.⁵²

In May 2004, PWSA started directly billing City residents for current and delinquent ALCOSAN wastewater treatment charges and remitting to ALCOSAN the aggregate amount of service charges billed. This was done by way of a "2004 Amendment" to the 1995 Agreement between the City and ALCOSAN. Prior to the 2004 Amendment, PWSA (on behalf of the City), was required (under a 1996 Memorandum of Understanding) to purchase ALCOSAN's wastewater receivables.

Applicable PUC Policies or Laws

ALCOSAN's customers are not paying the full cost of wastewater treatment because they are not paying cost of uncollected revenue or all billing costs. The Public Utility Code generally mandates that costs should be allocated to the cost causer.

PWSA Compliance Status

While PWSA is under a contractual obligation to continue the billing relationship with ALCOSAN, PWSA is in the process of determining a reasonable methodology to recover the full cost of wastewater treatment.

PWSA Compliance Plan

Any revised agreement with ALCOSAN will have to be filed with the Commission under Section 507. The revised agreement will be between PWSA, as a public utility, and ALCOSAN,

as a municipal corporation. The revised agreement relates to a billing arrangement for service provided by ALCOSAN. Therefore, the revised agreement does not fall within the exception in Section 507 for the utility's provision of service at tariff rates. The proposed approach to dealing with the ALCOSAN would not necessarily require a revision in the ALCOSAN agreement by the PUC under section 508, but if any party disagrees then PWSA requests that the PUC exercise its authority under that section.

ii. Billing Arrangement with Pennsylvania American Water Company

Background

The City entered into an arrangement (City Ordinance No. 675; "South Hills Water Subsidy" Agreement December 28, 1973) with Pennsylvania American Water Company (PAWC) whereby the City paid a rate subsidy directly to PAWC that offset PAWC's water rates for about 27,000 of the Authority's sewer-only customers. The subsidy limited water charges for City residents served by PAWC (which are in southern reaches of the City), so their out-of-pocket rates matched PWSA prices.

The 1995 Cooperation Agreement required PWSA to reimburse the City for this expense. In practice, PWSA paid the rate subsidy directly to PAWC.

Applicable Policies or Laws

The Public Utility Code requires every expense or charge to be just and reasonable and reasonably related to the provision of public utility service to its customers; PWSA customers are currently paying a part of the water bill for a specific set of PWSA wastewater customers (who receive water service from PAWC).

PWSA Compliance Status

Pursuant to the Compliance Plan Stage 1 Partial Settlement, the rate subsidy was eliminated as of December 31, 2019. PAWC provided notice of this change to customers over

the course of two billing cycles. Based on the May 2019 billing data, over 80% of residential customers were receiving a discount of \$1 or less, over one-third of the residential customers were receiving no discount; and the average discount customers received was less than 50 cents per month.

d. Plan to Address Lead Levels in Water Supply and the Replacement of Lead Service Lines

Background

The Commission directed that the Compliance Plan address, *inter alia*, lead levels in the water supply and replacement of lead service lines.”⁵³ In 2017, PWSA entered into a Consent Order and Agreement with PADEP to resolve regulatory issues related to lead service line replacements, corrosion control treatment and other related matters. The COA sets amended deadlines for performing lead service line replacements, completing a lead service line system inventory, finishing a corrosion control treatment study, and implementing the optimized corrosion control water treatment.

Applicable PUC Policies or Laws

The Commission has concluded that the Commission (under the Public Utility Code) and the PADEP (under the state and federal Safe Drinking Water Acts) have joint jurisdiction over water quality.⁵⁴

PWSA Compliance Status

There is no detectable lead⁵⁵ in the Pittsburgh Water and Sewer Authority’s water when it leaves the treatment plant and travels through the PWSA’s water mains. However, lead can enter drinking water through lead services lines and household plumbing.

PWSA budgeted \$44 million to replace 2,100 lead service lines in Pittsburgh in 2018 as part of an agreement with PADEP.⁵⁶ PWSA has replaced 1,341 service lines as required by the PADEP order, signed in November 2017. An additional 885 lines will be replaced by December 2018, as required by the PADEP Consent Order.⁵⁷

In 2019, PWSA surpassed the number of lead line replacements required by the DEP. PWSA replaced a total of 3,202 public lead service lines, to exceed the DEP requirement to

replace 855 lead service lines between July 1, 2019 and June 30, 2020. More than 2,054 lead service lines were replaced in 2018. Since PWSA's lead service replacement program first began in 2016, over 6,100 public lead service lines have been removed from the water system. In addition to the replacements, PWSA distributed over 9,500 free lead water test kits, provided more than 5,000 certified lead water filters and pitchers, began adding orthophosphate to reduce lead levels,⁵⁸ inspected 17,000 homes, secured agreements from over 6,400 property owners to replace their private lead lines for free, fielded over 27,000 phone calls, held over 6,040 pre-construction meetings with homeowners, fielded 7,890 emails, attend 39 community meetings, and performed more than 98% trenchless replacement techniques on replacement sites. PWSA's lead service line replacement program is expected to continue to replace more than 15 to 20 service lines per day until available PENNVEST funding is exhausted (subsequent programs to replace lead service lines are being implemented to ensure continual efforts to remove lead lines).⁵⁹

PWSA counts about 71,000 total residential service line connections system-wide, and PADEP expects the Authority to inventory them all – and identify all the lead ones – by Dec. 31, 2020.⁶⁰

PWSA Compliance Plan

A comprehensive statement of PWSA's commitments regarding lead service line replacements is included in PWSA's approved LTIIP, which was filed separately with the Commission on April 27, 2020. Additionally, PWSA is reporting on these items in the Quarterly Compliance Plan Progress Reports and the most current status of these projects is available there.

e. Plan to Address Non-Revenue Water

Background

Non-revenue water (NRW) is water that has been treated at a water treatment facility, but is not billed to customers. NRW differs from Unaccounted-for-Water (UFW), which is water treated at a water treatment facility, but is not billed, measured or estimated through accepted AWWA practices.⁶¹ Water losses contributing to UFW can be real losses (through leaks, sometimes also referred to as physical losses) or apparent losses (for example through theft or metering inaccuracies).

Applicable PUC Policies or Laws

Unacceptably high NRW and UFW percentages are viewed as both an unreasonable expense (because it effectively increases the actual cost of delivering water to the customer) as well as inadequate service. Levels of NRW should be kept within reasonable amounts.⁶² The Commission has set a goal of 20% or less for NRW.⁶³

PWSA Compliance Status

PWSA is not able to make a meaningful assessment of its NRW because it lacks accurate means of determining flows into and out of the water distribution system. It is estimated that NRW is approximately 50% of the water produced at the Aspinwall treatment plant. PWSA recently installed water meters on the filters at the Aspinwall water treatment plant but does not meter water through its clearwell or water going into or out of its major pumping and storage facilities. These filter meters provide an approximation of the volume of the water going into the water system. PWSA lacks reliable meters on its raw water pump station, but it has made strides to corroborate readings with filtered water flows. PWSA meters most residential and non-residential accounts. However, some City accounts, as described in PWSA's response to Sections 65.7 and 65.8, are not metered and a large number of meters have been in service past

their prescribed testing periods, as required by PUC requirements. The combination of inadequate metering at the treatment, storage and pumping facilities and challenges with City locations and old meters, makes it impossible to develop an accurate measure of NRW or UFW.

PWSA Compliance Plan

PWSA is working towards gathering better information on flows into the distribution system. As part of the Compliance Plan Stage 1 Partial Settlement, PWSA has agreed to the steps below to address UFW and NRW and develop a leak detection and leak survey program.

Additional improvements regarding source of supply measurement are addressed above in Section 65.14

Unaccounted-for (Non-Revenue) Water

1. PWSA will use the American Waterworks Association (“AWWA”) Water Loss Control Methodology and free software, which evaluates non-revenue water.
 - a. PWSA shall use the AWWA definition of “non-revenue water” which includes such items as fire-fighting, testing and flushing under the heading of “unbilled authorized consumption.”
 - b. PWSA will submit its first AWWA Audit to the Commission prior to April 30, 2020.
 - i. Where actual information is not available the AWWA Audit will be based on available information to develop the procedures for estimating and recording accurate data when it is available.
 - ii. As part of PWSA’s Water Distribution System Plan, PWSA will finalize its plan for annual AWWA Audits based on metered withdrawals from the river, metered treated water delivered to the distribution system and estimates of non-revenue water.
2. Records of Estimated Flows for Street Sweeping, Blow-offs, Main Breaks, flushing, etc.
 - a. Water taken by Pittsburgh’s Department of Public Works (“DPW”) has not historically been metered by PWSA. PWSA has instructed the City Department to meter each and every water use using water meters provided for each DPW division and have them installed on hydrants to record water use for street sweeping and paving activities.

- i. To the extent possible, PWSA has begun estimating and recording non-revenue water used for blow-offs, street sweeping, flushing, firefighting, main breaks, tank overflows, etc.
 - ii. PWSA records water used for flushing after main breaks by having crews record the time flushed and using flow gauges to estimate water discharge rates used.
- b. PWSA has assigned one of its existing operations senior managers, with exhaustive knowledge of the system, to implement its valve operation, flushing and hydrant inspection program and this effort is expected to be documented in a Standard Operating Procedure (“SOP”) by October 2019.
- c. PWSA is currently implementing a Pennsylvania Department of Environmental Protection permitted flushing program to facilitate its orthophosphate addition program.

Leak Detection and Leak Survey

1. PWSA’s Operations Department has developed a Leak Detection Program and restructured its staff to include a new team manager with direct leak detection expertise to improve its leak detection program. The team manager is currently working with one foreman and four leak detection specialists to ensure continuity of system knowledge and standard operating procedures for future operation.
 - a. The Leak Detection Program was launched in April 2019 to modernize leak detection equipment to enhance leak detection accuracy and improve coverage as well as to adopt new leak detection technology to accurately locate breaks.
 - b. PWSA St. C-1SD (Weimar) pp 15-16 and PWSA Exh. RAW/C-39 provide additional detail about the Leak Detection Program and to-date results to include details regarding prioritization for larger transmission pipes.
 - c. PWSA’s Leak Detection Program will be consistent with American Water Works Association (“AWWA”) standards and procedures by 2020.
 - d. PWSA estimates that its Leak Detection Program can be fully operational completed in three to four years.
 - e. Until PWSA’s Leak Detection Program is fully implemented, PWSA will update on an annual basis in the PWSA Compliance Plan Progress Reports:
 - i. A breakdown of historical costs related to the program; and,
 - ii. Updated timeline for full implementation of the Leak Detection Program.

f. BCS Access to PWSA Customer Service Management Information System

Background

The Commission's Bureau of Consumer Services ("BCS") responds to consumer complaints, provides utility-related information to consumers and monitors utility compliance with PUC regulations and evaluates utility performance. The bureau consists of a Division of Customer Assistance and Complaints and a Division of Policy.

Applicable PUC Policies or Laws

The Commission directed PWSA to provide BCS with direct access to PWSA's service management information system in a manner like other similarly situated jurisdictional utilities.

PWSA Compliance Status

PWSA is providing Read-only access to BCS as of January 2020. As such, PWSA is in compliance with this requirement.

g. Bulk Water: Sales for Resale

Background

PWSA has contracts for the sale of water by PWSA to other water utilities or public authorities.

Applicable PUC Policies or Laws

Public Utility Law requires every expense or charge to be just and reasonable and reasonably related to the provision of public utility service to its customers.

PWSA Compliance Status

Part I, Section I (Sales for Resale) of the Water Tariff (effective March 1, 2019) applies to all sales of water to other water utilities or public authorities for resale. Generally speaking,

that schedule authorizes negotiated rates and terms. Service under this rate is interruptible, and the Authority reserves the right to interrupt service at Authority's discretion.

PWSA Compliance Plan

As part of the Compliance Plan Stage 1 Partial Settlement, PWSA agreed to the following regarding bulk water sales for resale. PWSA is reporting on these items in the Quarterly Compliance Plan Progress Reports and the most current status is available there. As of the January 31, 2020 Quarterly Report, PWSA is on track to comply with these requirements:

1. Within 120 days of the final Commission Order in this proceeding pursuant to 66 Pa.C.S. §507, PWSA will file with the Commission in a separate docket all bulk water sales contracts entered into with municipalities and other public utilities (both prior to and after April 1, 2018). No party is waiving its right to present its position regarding the Commission's legal authority to vary, reform or revise these contracts entered into prior to the Commission assuming jurisdiction over PWSA on April 1, 2018.
2. PWSA agrees to file all future contracts with the Commission as required by Sections 507 and 508.
3. In the next rate case, PWSA will propose a resale rate(s) that will be included in its tariff and charged to new bulk water sales.
4. PWSA will provide costs of providing these wholesale services as part of cost of service study performed for next rate case, and seek to update rates to reflect the current cost of service.

h. Bulk Wastewater Conveyance Agreements

Background

PWSA has contracts for the conveyance of wastewater from other water utilities or public authorities through PWSA's wastewater conveyance system to ALCOSAN's system.

Applicable PUC Policies or Laws

The Public Utility Code requires every expense or charge to be just and reasonable and reasonably related to the provision of public utility service to its customers.

PWSA Compliance Status

Part I, Section B (Bulk Wastewater Conveyance) of the Wastewater Tariff (effective March 1, 2019) applies to all bulk wastewater conveyance for other wastewater utilities or public authorities. Generally speaking, the schedule authorizes negotiated rates and terms.

PWSA Compliance Plan

As part of the Compliance Plan Stage 1 Partial Settlement, PWSA agreed to the following regarding bulk wastewater conveyance agreements. PWSA is reporting on these items in the Quarterly Compliance Plan Progress Reports and the most current status is available there. As of the January 31, 2020 Quarterly Report, PWSA is on track to comply with these requirements:

1. Within 120 days of the final Commission Order in this proceeding pursuant to 66 Pa.C.S. §507, to the extent that PWSA can locate them, PWSA will file with the Commission in a separate docket all bulk wastewater conveyance agreements that it has entered into with municipalities and other public utilities (both prior to and after April 1, 2018). No party is waiving its right to present its position regarding the Commission's legal authority to vary, reform or revise these contracts entered into prior to the Commission assuming jurisdiction over PWSA on April 1, 2018
2. PWSA agrees to file all future wastewater conveyance contracts with the Commission as required by Sections 507 and 508.
3. In the next rate case, PWSA will propose a rate(s) that will be included in its tariff and charged to new bulk wastewater conveyance arrangements.
4. If PWSA is unable to locate a pre-existing bulk wastewater conveyance agreement, PWSA will include the rate in its tariff.
5. To the extent ALCOSAN assumes responsibility for any existing wastewater conveyance agreements, PWSA will file notice with the Commission.

j. Ownership of Wastewater Laterals

As part of the Compliance Plan Stage 1 Partial Settlement, PWSA agreed to the following regarding ownership of wastewater laterals. PWSA is reporting on these items in the Quarterly Compliance Plan Progress Reports and the most current status of this item is available

there. As of the January 31, 2020 Quarterly Report, PWSA is currently studying these requirements:

1. PWSA will conduct a study to investigate the legal, economic and operational feasibility of owning and/or maintaining (now privately owned) wastewater laterals within public easements.
2. The report will include the cost, feasibility and appropriateness of alternatives such as facilitating the provision of private line insurance rather than PWSA owning and/or maintaining the wastewater laterals.
3. PWSA to provide update of status of study in the PWSA Compliance Plan Progress Reports with the final report to be shared with all parties by January 15, 2021.

k. Allocation of Public Fire Hydrant Costs

The PWSA water system includes approximately 7,475 public fire hydrants. In addition to replacing, repairing, and maintaining hydrants, the Authority maintains annual on-call contracts with external contractors for replacement of broken or inoperable hydrants. In addition, PWSA and its contractors replace hydrants through water main replacement/renewal projects. Hydrants that are found to be inoperable during routine maintenance and flushing activities, or that are reported through the local fire departments, are assigned to be replaced through the annual contracts. For both the 2019 and 2020 contracts, the Authority has committed to replacing one hundred hydrants per year, which is approximately 1% of the total.

As part of the Compliance Plan Stage 1 Partial Settlement, PWSA agreed to provide a class cost of service study reflecting all public fire hydrant costs as part of its next rate case. PWSA will present a rate design reflecting allocation of 25% of all public fire hydrant costs to the City of Pittsburgh in its next rate case proposal. PWSA reserved the right to propose a phase-in period for these costs. In the Commission's March 26, 2020 Order, this approach was approved and any proposed phase-in would be evaluated as part of PWSA's next base rate case.

I. Capital Projects, Construction, and Bidding Processes

As part of the Compliance Plan Stage 1 Partial Settlement, PWSA agreed to the following regarding capital projects, construction, and bidding processes. PWSA is reporting on these items in the Quarterly Compliance Plan Progress Reports and the most current status of this item is available there.

Construction Project Tracking and Evaluation

1. PWSA tracks performance of over 50 measures (metrics), including cost effectiveness and performance measures, in its Headwaters tracking database. In addition, it tracks additional information on capital projects in its eBuilder system. PWSA intends to add roughly 50 additional measures to the Headwaters tracking database that includes agreed to performance metrics from the last rate case settlement, Compliance Plan and Compliance Plan Settlement.
2. Within 60 days of entering into this Partial Settlement, PWSA will provide I&E with a list of proposed metrics on which it will report. The final list and when PWSA will begin reporting those metrics in the PWSA Compliance Plan Progress Reports will be mutually agreed to by I&E and PWSA. Any metrics mutually agreed to will be included in PWSA's Compliance Plan Progress Reports.
3. To the extent PWSA proposes any additional or changed metrics for reporting, it will provide that information as part of the PWSA Compliance Plan Progress Reports.
4. PWSA will provide this data in the PWSA Compliance Plan Progress Reports and make these and all performance metric results available to the parties/Commission in next rate case.

Selection Processes and Existing Contractors

1. Competitive Bidding.
 - a. PWSA shall continue to adhere to the requirements of the Municipality Authorities Act ("MAA") regarding competitive bidding. Generally, in accordance with the MAA, all projects over \$20,600 must be bid.
 - b. PWSA shall not be prohibited from dispensing with competitive bidding in instances or for categories of expenditure where the MAA (or other applicable law) permits an exception to the competitive bidding requirement.
 - c. On an annual basis as part of the PWSA Compliance Plan Progress Report, PWSA shall provide a list of each construction contract in the prior year that was

awarded without competitive bidding as well as how those non-competitively bid contracts compare to the total number of construction contracts awarded.

2. PWSA Exh. RAW/C-34 provides PWSA's Project Operators for Open and Active Projects as of July 31, 2019. PWSA will provide updated design engineer and company affiliation for each project in the PWSA Compliance Plan Progress Report.

Open and Active Project Information

1. Updated PWSA Exhibit RAW/C-10 provides updated information regarding the Project Name, Project Descriptions, Project Justification, Budgeted Costs, Source of Funds, Start Date, Date of Completion and In Service and Consultant/Contractor for-open and active projects as of the date of August 2, 2019.
2. PWSA will provide updated details about the funding sources that it plans to use for each project in the PWSA Compliance Plan Progress Reports.

Clearwell Improvements Projects

1. A number of thorough reviews of various alternatives to address improvements to the Clearwell have been undertaken over the years. After an in-depth evaluation of all these alternative, the one currently underway by PWSA was deemed to provide the most long-term benefits and to be the fastest one available to address current multiple operations risks as explained more fully in PWSA Exhibit RAW/C-30 (Alternatives Evaluation – Clearwell Redundancy Project March 2017 Report).
2. PWSA Board Resolution 91 adopted on May 16, 2019:
 - a. Authorizes PWSA Executive Director to accelerate implementation of highly critical facilities consistent with state and federal agency recommendations and requirements.
 - b. Identifies the repair and replacement of the Aspinwall Clearwell is designated as one of PWSA's high priority projects.
 - c. PWSA Exh. RAW/C-35 is Board Resolution 91.
3. Improvements to the Clearwell involve a Multi-Phase Program approach:
 - a. Emergency Bypass
 - b. Reservoir Pump Station and Rising Main
 - c. Pump Station Improvements
 - d. Lanpher Rising Main
 - e. Highland No. 2 Covers and Liners

4. Pending Consent Order and Agreement with the Pennsylvania Department of Environmental Protection (“DEP”).
 - a. PWSA’s projects related to the Clearwell Improvements shall proceed in accordance with the final approved Consent Order and Agreement with DEP.
 - b. At the appropriate time, PWSA will update its LTIIP consistent with the final approved Consent Order and Agreement with DEP.
 - c. PWSA will supplement its previously served testimony to provide additional information about the Consent Order and Agreement and, if available, will include the final approved Consent Order and Agreement.

Highland No. 1 Reservoir and Highland Membrane Filtration Plant

Further, as part of the 2018 rate case, PWSA agreed to provide additional information about its future plans for the Highland No. 1 Reservoir and the Highland Membrane Filtration Plant (“HMFP”).

PWSA has conceptually agreed with the PADEP to assess the performance, location and condition of the Highland No. 1 Reservoir. The Highland No. 1 Reservoir’s utility is hampered by the City’s and public’s demand that the existing Highland No. 1 Reservoir remain uncovered, as a park amenity. PWSA’s upcoming Water System Master Plan (completion expected by December, 2019) will assess the current reservoir conditions and performance versus the future distribution system needs to address PUC compliance requirements. The Water System Master Plan will evaluate options to the existing open reservoir and Microfiltration Plant operations, including design and construction of new covered Water Storage Tanks to replace the existing Highland Reservoir No. 1 water storage system.

PWSA shared the following cost breakdowns with all settlement parties on January 23, 2019, and will continue to share these cost breakdowns on a quarterly basis¹; and upon completion of repairs of the HMFP:

1. Actual and projected operating and capital costs to date incurred and estimated to be incurred as a result of the October 25, 2017 Department of Environmental Protection Administrative Order with regard to the HMFP; and
2. Actual and projected operating and capital costs on a calendar year basis incurred and estimated to be incurred to operate the HMFP.

PWSA will provide with its next base rate filing a cost/benefit analysis comparing continuing to operate the HMFP instead of covering and placing a physical barrier around Highland No. 1 Reservoir. This analysis shall include a detailed cost comparison of operating and capital costs, an evaluation of operating, costs and other consequences if the HMFP is no longer operated, as well as any other relevant legal, technical and policy analyses. PWSA's agreement to provide this information shall not be construed as PWSA's endorsement of a cost comparison analysis, and all Parties have agreed that a cost/benefit analysis will evaluate all relevant legal, technical and policy considerations, as well as a cost comparison.

m. Residency Requirement for PWSA's Employees

PWSA currently has a residency requirement in place that requires employees to be residents of the City of Pittsburgh unless a specific exemption is made. This requirement mirrors the City's Home Rule Charter. PWSA's Executive Committee has made specific exemptions to this requirement for certain positions, but otherwise this policy has applied broadly to PWSA employees.

¹ PWSA plans to provide the next update on the cost breakdowns by April 30, 2019.

In the March 26, 2020 Order in the Compliance Plan Stage 1 proceeding, the Commission required that PWSA eliminate the residency requirement. This item is currently under reconsideration per PWSA's Petition for Reconsideration filed on April 10, 2020.

⁴⁷ See Implementation of Chapter 32 of the Public Utility Code Re Pittsburgh Water and Sewer Authority, Docket No. M-2018-2640802 (water) and M-2018-2640803 (wastewater), Final Implementation Order entered March 15, 2018, at p. 27

⁴⁸ 66 Pa.C.S. § 3202(a).

⁴⁹ Or a successor or assign, such as the Pittsburgh Zoo, which is now operated by a non-profit corporation, the Pittsburgh Zoological Association.

⁵⁰ See Implementation of Chapter 32 of the Public Utility Code Re Pittsburgh Water And Sewer Authority, Docket No. M-2018-2640802 (water) and M-2018-2640803 (wastewater), Final Implementation Order entered March 15, 2018, at Ordering Paragraph 6.

⁵¹ 52 Pa. Code § 65.7. (Flat rate service permitted if there is a reasonable plan to meter.)

⁵² The ALCOSAN billing does include a small administrative fee, but it does not cover a share of PWSA's billing system costs or the labor costs associated with billing activity.

⁵³ See Implementation of Chapter 32 of the Public Utility Code Re Pittsburgh Water and Sewer Authority, Docket No. M-2018-2640802 (water) and M-2018-2640803 (wastewater), Final Implementation Order entered March 15, 2018, at Ordering Paragraph 6.

⁵⁴ *Susan K. Pickford, et. al. v. Pennsylvania American Water Company*, Docket Nos. C-20078029, et. al., Opinion and Order [on Preliminary Objections] entered March 20, 2008; 2008 Pa. PUC LEXIS 29.

⁵⁵ Using EPA approved testing methods as described in *Standard Methods for the Examination of Water and Wastewater*: 23rd Edition. Standard Methods is a joint publication of the American Public Health Association (APHA), the American Water Works Association (AWWA), and the Water Environment Federation (WEF).

⁵⁶ PWSA St. 1 at 9.

⁵⁷ PWSA St. 1 at 9.

⁵⁸ PWSA St. 1 at 10.

⁵⁹ Direct Testimony of Robert Weimar, PWSA St. No. 1, PWSA 2020 Tariff Filings and Rate Requests (Docket Nos. R-2020-3017951 (water) and R-2020-3017970 (wastewater)) (dated March 6, 2020).

⁶⁰ PWSA St. 1 at 9.

⁶¹ AWWA Manual - M36 Water Audits and Loss Control Programs, Fourth Edition

⁶² 52 Pa.Code § 65.20(4).

⁶³ 52 Pa.Code § 65.20(4).

PWSA
Compliance Plan
Appendix A

Focusing on the Future

FOCUSING ON THE

FUTURE

PGH₂O



**Pittsburgh Water
and Sewer Authority's
Roadmap for Success**

NOVEMBER | 2017

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Message from the Executive Director:

The people of Pittsburgh have enjoyed access to public water service for more than 200 years. Today, that service is provided by the Pittsburgh Water and Sewer Authority (PWSA), which exists to support the community's vitality by protecting public health and the environment through safe, reliable, and cost-effective delivery of water, wastewater conveyance, and stormwater services.

PWSA's challenges are well defined; but they are neither unique, nor insurmountable. Extended periods of underinvestment and organizational instability have led to infrastructure failures, regulatory lapses, and organizational turnover. These are common challenges that most urban water systems in the northeast face. Through a combination of new and existing initiatives, talented leadership, and a supportive Board of Directors, PWSA is committed to improving its operations and addressing these challenges.

PWSA has a solid foundation to build upon – an ample water supply from the Allegheny River, adequate delivery capacity throughout its distribution system, and a stable customer base. This Organizational and Compliance Plan builds on the utility's strength. It articulates PWSA's goals, the concrete actions that will be taken to achieve those goals, and the measures by which PWSA staff, outside stakeholders, and customers can measure its ultimate success.

With this plan – and hard work – we will be successful. We will continue working, every day, to deliver safe, reliable, and cost-effective drinking water, wastewater conveyance, and stormwater services. We will continue working, every day, to protect public health and the environment. And we will continue working, every day, to be a highly responsive and trusted public utility, recognized for excellence and valued by our community.

Pittsburgh deserves no less.

Robert Weimar, P.E.
Interim Executive Director
Pittsburgh Water and Sewer Authority

WHAT IS OUR FUTURE?

PWSA is a highly responsive and trusted public utility, recognized for excellence and valued by our community.

WHAT DO WE DO?

PWSA supports community vitality by protecting public health and the environment through safe, reliable and cost-effective delivery of drinking water, wastewater and stormwater services.

OUR GOALS



Protect Public Health and the Environment

To protect and support the long-term health of our community and environment



Ensure Customer and Stakeholder Satisfaction

To enhance customer and stakeholder confidence by communicating effectively and engaging our community



Improve Infrastructure Reliability

To ensure service reliability through responsible infrastructure investment and proactive maintenance



Maintain a High-Performing Workforce

To recruit, develop, and retain a motivated and well-qualified team



Be an Efficient and Effective Organization

To optimize the use of our resources through innovative technology, effective processes, and continuous improvement



There are several trends that water-sector utilities must contend with and respond to, including **increased utility financial constraints, regulations, workforce issues, and customer expectations.** PWSA faces each of these, and each trend challenges PWSA's ability to maintain the traditional utility approach: out of sight, out of mind.

TREN

This Organizational and Compliance Plan addresses these trends.

TREND 1:

CUSTOMER EXPECTATIONS

Changing requirements for service delivery are being driven by a new generation of customers who expect more rapid, and easy access to information. The customers of the future are driving the investments of today.

PWSA must respond by providing updated customer billing and information management systems that meet the expectations of a changing customer base.

TREND 2:

FINANCIAL CONSTRAINTS

With capital and operating budgets rising, and stakeholder groups who are increasingly resistant to rate increases, utilities struggle to make necessary investments.

PWSA carries a significant debt load of more than \$840 million, and additional capital investment is needed. Rates are expected to rise over the next several years as we replace in our aging infrastructure and strengthen our delivery of services.

TREND 3:

REGULATIONS

Across the board, regulations are becoming more stringent, which requires greater investment of an organization's scarce resources. Compliance with environmental regulations tends to be especially challenging (and costly).

In 2008, the Pittsburgh region entered a Consent Decree with the US Environmental Protection Agency to reduce and eliminate sewage contamination in local streams and rivers. The Consent Decree requires all 83 communities within the regional service area to repair broken sewer

er lines, reduce storm water entering the system, reduce the frequency and amount of combined sewer overflows, and eliminate sanitary sewer overflows.

TREND 4:

WORKFORCE ISSUES

Water-sector utilities struggle to recruit and retain staff with the necessary skills and competencies to manage utility operations. Typically, utilities have aging workforces, which make knowledge retention and succession planning significant challenges.

PWSA has experienced frequent leadership turnover in the last several years, and operates in a union environment, which can limit workforce flexibility. Compensation is limited, and often not competitive as compared to the private sector. Additionally, the utility's financial constraints have curtailed some employee development and training opportunities.

IDS



GOAL 1

PROTECT PUBLIC HEALTH AND THE ENVIRONMENT

To protect and support the long-term health of our community and environment

The primary mission of any water and wastewater utility is to protect public health and the environment. Drinking water must meet all regulatory water quality requirements when it leaves PWSA treatment facilities and when it is used at a customer's tap. PWSA must ensure that wastewater is collected from customers without backups or spills, and conveyed through the wastewater collection system to the regional ALCOSAN treatment facility. The conveyance process must be secure, and occur without sanitary sewer overflows (SSOs) that could damage the environment. Treatment then renders the wastewater safe, before it is discharged back to the environment.

FOCUS AREA 1:

DELIVER HIGH QUALITY DRINKING WATER

Our goal is to continuously meet or exceed customer and regulatory standards for the water that we provide. To do that, PWSA will pursue the following strategies:

- Perform regular tests at certified laboratories to ensure high water quality and service levels
- Report water quality results to customers in an annual Consumer Confidence Report
- Continue to actively manage and replace lead service lines

Ensuring success in this area will require PWSA to effectively manage its distribution system, including increasing the number of water quality monitoring points; regularly flushing the system; incorporating best-in-class technology and enhanced modeling capabilities; and improving its cross-connection control program to meet industry best practices.

MEASURE OF SUCCESS

Compliance with regulatory water quality standards



TARGET PERFORMANCE

365 days of full water quality compliance

Implement cross-connection control



- 100% of service connections rated for potential threat level and catalogued
- All backflow devices tested at regular intervals

Compliance with lead standards



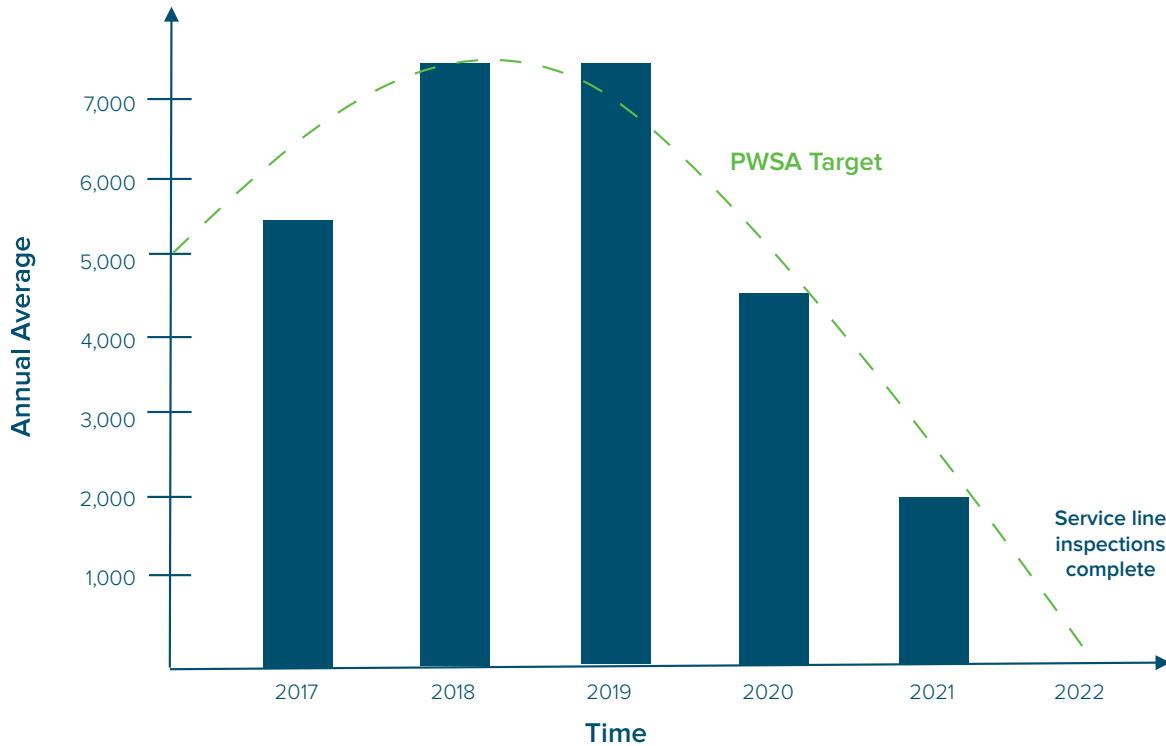
Lead levels; in compliance with EPA standards

Achieve water pressure standards



Meet target maximum and minimum pressure in water mains; minimum fire flow at hydrants

Service Line Inspections (for Lead lines)



FOCUS AREA 2:

SAFELY AND EFFECTIVELY CONVEY WASTEWATER AND STORMWATER

Our goal is to continuously meet or exceed customer and regulatory standards as we convey wastewater and stormwater to the ALCOSAN treatment facility. PWSA is committed to:

- Maintaining wastewater system cleaning, root removal, and maintenance activity to prevent back-ups
- Routinely inspecting manholes
- Monitoring and reporting on all combined and sanitary sewer overflows
- Regularly performing condition assessments on all gravity pipe segments

PWSA's continued success in this area will also require implementing a risk-based wastewater system renewal program; incorporating similar best-in-class technology and modeling capability to what is required for the water system; and adopting a lateral inspection and renewal program.

MEASURE OF SUCCESS

Compliance with regulatory wastewater and stormwater quality standards

Eliminate sanitary sewer overflows (SSOs)

Compliance with combined sewer overflow (CSO) requirements

Minimize back-ups and failures

Clean and inspect wastewater mains and manholes

TARGET PERFORMANCE

→ 365 days of full compliance

→ Zero SSOs per year

→ Reduced number and volume of CSOs

→ Fewer than one unplanned failure per 5,000 accounts (AWWA benchmark)

→ 10% of system annually



GOAL 2

MAINTAIN A HIGH-PERFORMING WORKFORCE

To recruit, develop, and retain a motivated and well-qualified team

Attracting, training, and developing the next generation of utility staff is quickly becoming a significant focus area for every major water utility. A high-performing organization needs to address capturing and transferring institutional knowledge, succession planning, career development and personal growth opportunities for its workforce. Training and incentives that enhance and recognize employee efforts provide the means to establish higher standards to meet the needs of modern utility operations. PWSA's shift to a learning-based culture will help attract and support a high-performing workforce.

FOCUS AREA 1:

INCREASE HIRING EFFECTIVENESS

Developing a strong workforce relies on identifying and hiring qualified applicants. To that end, PWSA is committed to:

- Implementing a new Human Resources Information System (HRIS)
- Reviewing and improving job postings and position descriptions
- Optimizing and streamlining the hiring process and timeline
- Reviewing employee total compensation packages

Additionally, PWSA will look to extend outreach to industry publications, community partnerships, and other venues to reach prospective talent; as well as evaluating the possibility of eliminating the City's domicile employment requirements that hinder finding and retaining good people.

MEASURE OF SUCCESS

Hiring Response Time



Position Vacancy Rate



TARGET PERFORMANCE

Average time to fill existing positions is less than three months from the date of the vacancy

Average vacancy rate is less than 3%



Photo courtesy of Tony Webster (Flickr)

FOCUS AREA 2:

ENHANCE WORKFORCE ENGAGEMENT AND PERFORMANCE

Increasing the efficiency and effectiveness of our organization requires engaged, developed, and high-performing PWSA employees. Creating this workforce will require PWSA to:

- Work cooperatively with unions to find and act on opportunities to increase workforce performance and effectiveness
- Complete a training program roadmap and inventory of the training requirements for all positions at PWSA
- Dedicate additional resources to training and development; as well as health, safety, and risk management
- Establish and track productivity goals for work groups, where applicable

Additionally, PWSA will develop a program to recognize high-performing employees and will support employee involvement in industry groups and events.

MEASURE OF SUCCESS

TARGET PERFORMANCE

Training hours per year	→	Twenty hours per employee per year
Safety Compliance	→	Maintain a workers' compensation experience modification rate of less than 1.0
OSHA Compliance	→	Meet OSHA requirements
Conduct a staff engagement survey every three years	→	Increased engagement levels



GOAL 3

ENSURE CUSTOMER AND STAKEHOLDER SATISFACTION

To enhance customer and stakeholder confidence by communicating effectively and engaging our community

PWSA is committed to maintaining an elevated level of quality, performance, and value. While the utility has recently experienced infrastructure failures, billing issues, and negative media reports, PWSA is actively working to regain community confidence. Recognizing that the utility must earn customer's support and trust, PWSA has already begun to engage the community and communicate many of the positive changes that are being made to enhance service.

FOCUS AREA 1:

RESPOND TO CUSTOMERS AND STAKEHOLDERS IN A TIMELY MANNER

Being responsive to customers is paramount to earning their trust and recognition of PWSA as a valuable community resource. To do that, PWSA will:

- Develop Standard Operating Procedures (SOPs) and standard scripts for effectively managing common types of customer contacts
- Provide customer service staff with additional training and call monitoring
- Increase call center resources to meet call volumes and achieve target performance goals

MEASURE OF SUCCESS

Less than 5% of calls abandoned



TARGET PERFORMANCE

Average answer speed of less than three minutes

Reduce call abandonment



Less than 3% of calls abandoned

Minimize customer complaints



Less than 5.9 complaints per 1,000 accounts annually

FOCUS AREA 2:

REGULARLY PROVIDE CLEAR AND EFFECTIVE INFORMATION

Customer and stakeholder support and trust begin with understanding, and that begins with the information that PWSA shares. PWSA is committed to:

- Developing a communications plan, to include social media and web-based strategies
- Increasing transparency and developing educational materials
- Providing regular progress reports to key PWSA stakeholders

MEASURE OF SUCCESS

Conduct an annual customer and stakeholder satisfaction survey



TARGET PERFORMANCE

Increased satisfaction rates

Increase social media interaction



Increased platforms, followers, and engagement

FOCUS AREA 3:

UTILIZE ADVANCED METER INFRASTRUCTURE (AMI) TO GENERATE ACCURATE CUSTOMER BILLS

Ensuring customer satisfaction, as well as utility revenue sufficiency, relies on PWSA’s ability to accurately read meters and generate the corresponding bills. This requires PWSA to:

- Meter all users, including public and commercial users
- Verify AMI and CIS communications to ensure accurate data transfers
- Adopt industry best practices for billing quality control and assurance
- Adopt AWWA Water Loss Management Practices

Additionally, PWSA will maintain a robust meter monitoring, testing, and replacement program; ensure all meters are connected to the AMI system; conduct leak detection analysis; and alter the printed bill layout to ensure that it is easily understandable.

MEASURE OF SUCCESS

Percent of accounts metered within 18 months



TARGET PERFORMANCE

100% of active, permanent accounts metered

Equip all meters with AMI technology



98% of active, permanent meters have AMI technology

Ensure accurate meters



95% of residential and 98% of commercial meters meet minimum acceptable accuracy levels (any over-billed accounts are adjusted promptly)

Provide timely and accurate bills to customers



99.9% of bills are sent on time with no errors in charges/fees

Minimize non-revenue water



Reduce non-revenue water to less than 20% of treated volume



GOAL 4

IMPROVE INFRASTRUCTURE RELIABILITY

To ensure service reliability through responsible infrastructure investment and proactive maintenance

PWSA operates and maintains over 2,000 miles of water and sewer pipe, two water treatment plants, and numerous water storage reservoirs, pumps stations, manholes, and fire hydrants. Unfortunately, most assets are underground and hidden from view, so problems with these important networks often goes unnoticed until failures occur. This has led to decades of underinvestment. PWSA is dedicated to investing the necessary resources to elevate the condition of its infrastructure and minimize system failures.

FOCUS AREA 1:

IMPLEMENT ENHANCED MAINTENANCE PRACTICES

Enhanced maintenance practices allow PWSA to extend the useful life of its assets and reduce costs over time. Doing so requires PWSA to:

- Inspect and rate the condition of gravity pipe segments on a regular schedule
- Add additional crews to implement and maintain a 2-year cycle of valve and hydrant exercising
- Increase field crew productivity

PWSA will need to focus on increasing the ratio of proactive to reactive maintenance; shift to replacing infrastructure based on risk and performance, rather than years in service; and fully integrate capital project and maintenance management technology systems.

MEASURE OF SUCCESS

Increase the number of proactive work orders

Perform manhole inspections

Conduct condition assessment of wastewater mains using CCTV

TARGET PERFORMANCE

→ 80% of work orders are proactive

→ 20% of manholes are inspected annually

→ 15% of the wastewater collection system to be assessed annually



FOCUS AREA 2:

RENEW AGING/FAILING INFRASTRUCTURE

PWSA’s success in achieving its mission and accomplishing its goals relies heavily on the condition and sufficiency of its infrastructure. Continuing to focus on developing and maintaining that infrastructure to meet customer needs now and into the future will occur by:

- Implementing and staffing the internal Project Management capability necessary to oversee and manage capital projects
- Ensuring sufficient resources to align capital renewal with the desired service levels

Renewing aging/failing infrastructure will require development of installation and repair SOPs; implementing a risk-based renewal system; adopting a lateral inspection and renewal plan; and initiating the water loss programs discussed in the previous section.

MEASURE OF SUCCESS

- Replace/rehabilitate buried assets at an accelerated rate
- Reduce water main breaks
- Ensure the financial resources are available to implement the capital plan

TARGET PERFORMANCE

- Renew at least 2% of buried assets per year
- Achieve a failure rate of less than 50 breaks per 100 miles of water main annually
- Acceptance and approval of user charges to fully fund CIP

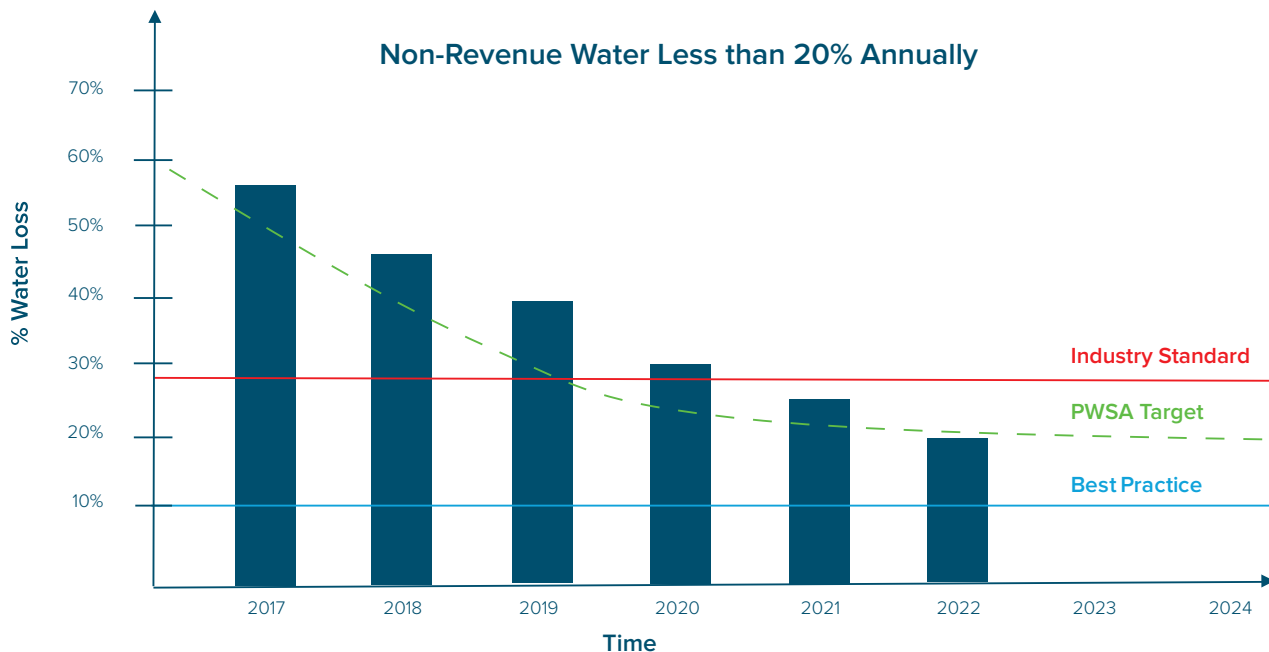


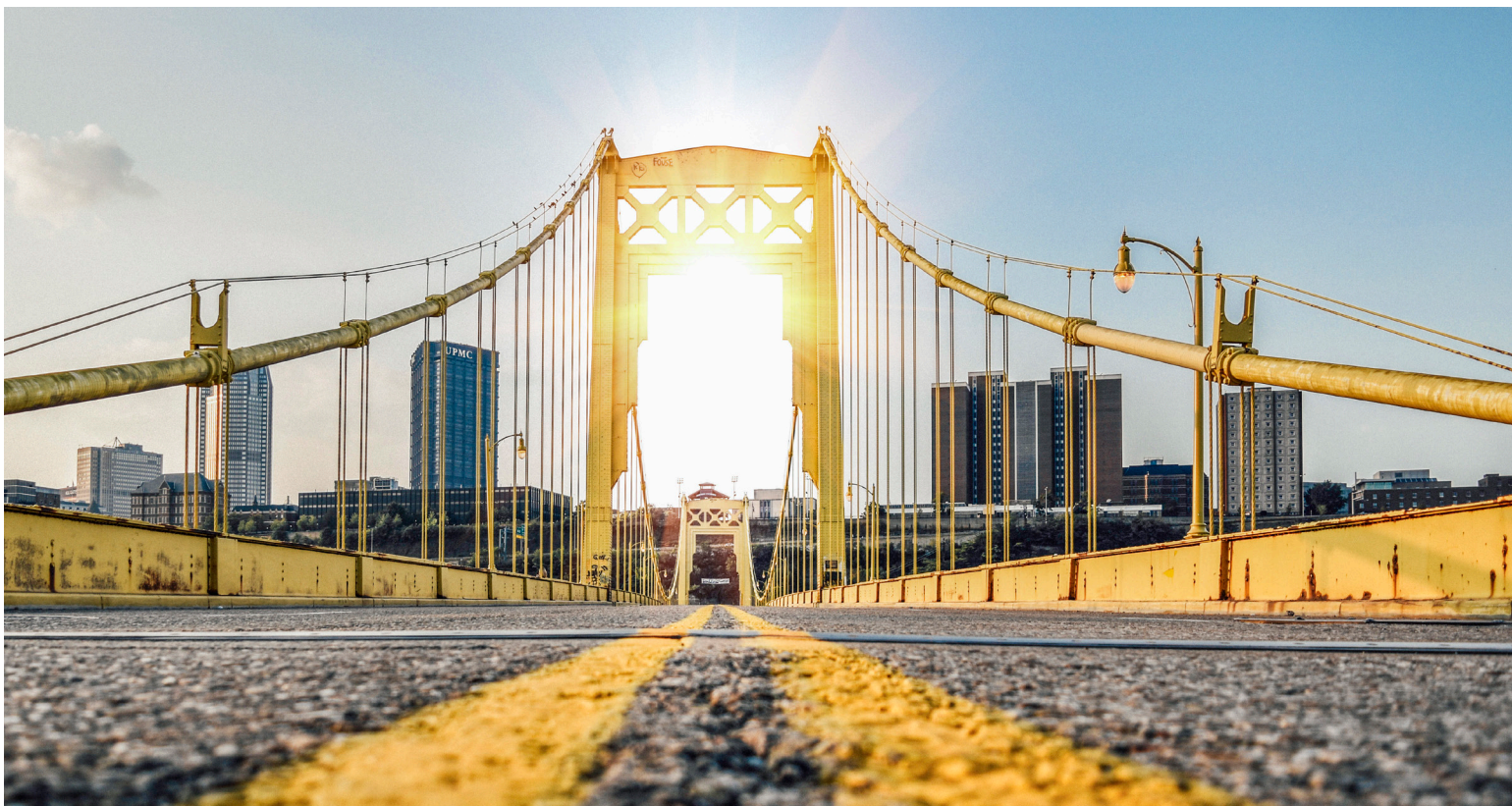
GOAL 5

BE AN EFFICIENT AND EFFECTIVE ORGANIZATION

To optimize the use of our resources through innovative technology, effective processes, and continuous improvement

The people of Pittsburgh expect PWSA to provide excellent value, spending the public's money and using its resources as efficiently and effectively as possible to ensure the delivery of high quality services. To meet these expectations, PWSA will increase its productivity and streamline its systems and processes. Ultimately, PWSA is focused on instituting better practices, implementing modern technologies, and using data to drive improvements to organizational performance. These changes will allow us to continue to provide the high-quality and timely services our customers deserve.





FOCUS AREA 1:

IMPLEMENT ENHANCED WORK PRACTICES AND STANDARDS

Increasing the efficiency and effectiveness of our organization starts with instilling a culture of continuous improvement in PWSA employees. This will allow us to look critically at our existing operations, use data to identify key areas for improvement, implement change, and measure success. Specifically, PWSA will:

- Establish a Performance Improvement group to help instill and grow a culture of continuous improvement
- Adopt technologies and reporting processes to seamlessly communicate progress in key performance areas
- Use a combination of internal and external resources to address critical staffing needs

Particular areas of opportunity include centralizing the field work yards and the warehouse; optimizing the use of fleet and vehicle assets; and implementing an operations technical support function to focus on treatment optimization and process control.

MEASURE OF SUCCESS

Consistent measurement and reporting of Key Performance Indicators (KPIs)

Efficient staffing levels

Field Crew Work Activity Tracking

Service disruptions are addressed quickly, minimizing time without service



TARGET PERFORMANCE

Continuously monitor operations and processes against KPIs, and report results

Maintain staffing numbers and cost per account ratios in line with industry standards

Time spent on task is greater than 75% of available time

Average service disruption time is less than 12 hours

FOCUS AREA 2:

INVEST IN INFORMATION TECHNOLOGY SYSTEMS AND RESOURCES

Our goal is to enhance our organization's performance through the implementation of modern technology, which will support the work practices and standards described in Focus Area 1. To achieve this goal, PWSA will:

- Implement robust IT systems that allow for increased levels of service and the elimination of paper-based recordkeeping. These systems include a computerized maintenance management system (CMMS), a Human Resources Information System (HRIS), and an updated Customer Information System (CIS).
- Increase IT resources to support security, programming, database administration, and desk-top support

Additionally, PWSA is focused on increasing its use of business analytics, GIS integration, and use of an electronic document management system.

MEASURE OF SUCCESS

TARGET PERFORMANCE

Procure and begin CMMS Implementation	→	6 months to procure and 1 year to fully implement
Procure and begin CIS Implementation	→	8 months to procure and 2 years to fully implement
Procure and begin HRIS Implementation	→	8 months to procure and 1 year to fully implement

FOCUS AREA 3:

MAINTAIN FINANCIAL INTEGRITY

Our goal is to consistently meet or exceed targeted financial metrics while delivering clean, safe, and reliable service to customers at rates they can afford. To do that, PWSA will:

- Establish and maintain revenue sufficiency to meet increasing levels of operating and capital costs
- Implement cost-justified rates that are consistent with industry best practices
- Report the results of operations annually in a Comprehensive Annual Financial Report
- Implement an affordability program to provide customer assistance

Ensuring success in the financial focus area will require PWSA to establish financial metrics that can be continuously monitored; implement proactive and cost-justified rate increases; enhance the billing process to reduce billing errors; develop an affordability program; and assess the program's impact on system revenues.

MEASURE OF SUCCESS

TARGET PERFORMANCE

Fully fund operating and capital costs	→	Set water and sewer rates at a level that allows for full funding of utility operating and capital costs
Improve PWSA's bond rating	→	Increase debt service coverage above the covenant-required 1.25% and increase liquidity through annual reserve contributions
Maintain equitable and cost-justified rates	→	Implement equitable and defensible water and sewer rates
Maintain a clean or unmodified opinion annually from PWSA external auditors	→	Adhere to GASB and Pennsylvania PUC-endorsed accounting practices



COMMUNICATIONS

Through this Organizational and Compliance Plan, PWSA has committed to improving internal and external communications. Effective communication is critical not only for the successful implementation of the plan, but also for the overall success of PWSA. The issue of communication cuts across the various goals and initiatives discussed herein.

While most specifically called out in the Ensure Customer and Stakeholder Satisfaction goal area, PWSA has committed to significantly increasing communications in many areas, through:

- Reporting water quality information to regulatory agencies and the public
- Communication of progress against metrics in key performance areas, both internally and externally
- Production of a Comprehensive Annual Financial Report
- Increased social media and web-based customer and stakeholder interaction
- Creation of community outreach and education materials
- Conducting an annual customer satisfaction survey
- Communication of OSHA and other safety compliance information
- Conducting an employee satisfaction survey every three years

Overall, enhanced communications will be a major initiative at all levels of PWSA to assure employee commitment and to facilitate various teams and individuals working toward the same vision and mission, regardless of which goals or initiatives are their primary focus.



MOVING TO THE FUTURE

PWSA recognizes that the status quo cannot continue, and that the organization's challenges must be addressed with a sense of urgency. While this Organizational and Compliance Plan has only recently been formalized, many of the initiatives and actions contained within are already underway. A plan alone, however, is not sufficient to address the magnitude of the work that must be completed.

Key hires have already been made, and rates will increase by approximately 28% in FY 2018, which will allow for essential investment in PWSA's critical infrastructure and funding for many of the initiatives included in this plan.

PWSA is also realigning its organizational structure to ensure that sustained progress continues, with the creation of a Strategy and Performance Office. This office will provide needed support in the areas of business process optimization, strategic planning and implementation, and overall performance management. Ultimately, the office will have responsibility for ensuring that PWSA adopts processes and methods to continuously evaluate and improve the organization's operations. Central to this responsibility is the requirement that proven approaches such as LEAN and Six Sigma process improvement analysis methods be deployed as necessary to assist with the organization's overall optimization objectives.

Making progress on the initiatives contained within this plan, continuing to staff key positions with qualified employees, moving toward revenue sufficiency, and reorganizing to support continuous improvement will allow PWSA to achieve its ultimate goal of:

**Supporting
community vitality
by protecting
public health and
the environment
through safe,
reliable and cost-
effective delivery
of drinking water,
wastewater, and
stormwater services.**



WWW.PGH2O.COM
1200 PENN AVE, PITTSBURGH, PA 15222