



COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA PUBLIC UTILITY COMMISSION
COMMONWEALTH KEYSTONE BUILDING
400 NORTH STREET, HARRISBURG, PA 17120

BUREAU OF
INVESTIGATION
&
ENFORCEMENT

September 30, 2019

Via Electronic Filing

Secretary Rosemary Chiavetta
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

Re: Implementation of Chapter 32 of the Public Utility
Code Re Pittsburgh Water and Sewer Authority
Docket No. M-2108-2640802 (Water)
Docket No. M-2018-2640803 (Wastewater)
I&E Statement in Support of Joint Petition for Partial Settlement

Dear Secretary Chiavetta:

Enclosed for filing, please find the Bureau of Investigation and Enforcement's
(I&E) **Statement in Support of Joint Petition for Partial Settlement** for the above
captioned proceeding.

Copies are being served on parties as identified in the attached certificate of
service. Should you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

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GLM/ac

cc: Honorable Mark A. Hoyer (*ALJ Pittsburgh*)
Honorable Conrad A. Johnson (*ALJ Pittsburgh*)
Per Certificate of Service

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

| | | |
|--|---|-----------------------------|
| Implementation of Chapter 32 of the Public | : | Docket Nos. |
| Utility Code Re Pittsburgh Water and | : | M-2018-2640802 (Water) |
| Sewer Authority | : | M-2018-2640803 (Wastewater) |

CERTIFICATE OF SERVICE

I hereby certify that I am serving the foregoing **Statement in Support of Joint Petition for Partial Settlement** dated September 30, 2019, in the manner and upon the persons listed below, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a party):

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**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

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| Implementation of Chapter 32 of the Public | : | M-2018-2640802 |
| Utility Code Regarding Pittsburgh Water | : | M-2018-2640803 |
| and Sewer Authority – Stage 1 | : | |

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| Petition of The Pittsburgh Water and Sewer | : | P-2018-3005037 |
| Authority for Approval of Its Long-Term | : | P-2018-3005039 |
| Infrastructure Improvement Plan | : | |

**BUREAU OF INVESTIGATION AND ENFORCEMENT
STATEMENT IN SUPPORT OF
JOINT PETITION FOR PARTIAL SETTLEMENT**

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Dated: September 30, 2019

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| Infrastructure Improvement Plan | : | |

**BUREAU OF INVESTIGATION AND ENFORCEMENT
STATEMENT IN SUPPORT OF
JOINT PETITION FOR PARTIAL SETTLEMENT**

**TO DEPUTY CHIEF ADMINISTRATIVE LAW JUDGE MARK A. HOYER AND
ADMINISTRATIVE LAW JUDGE CONRAD A. JOHNSON:**

The Bureau of Investigation and Enforcement (“I&E”) of the Pennsylvania Public Utility Commission (“Commission”), by its Prosecutors Gina L. Miller and John M. Coogan, respectfully submit that the terms and conditions of the foregoing *Joint Petition for Partial Settlement* (“Joint Petition” or “Partial Settlement”)¹ are in the public interest and should be approved by Deputy Chief Administrative Law Judge Mark A. Hoyer and Administrative Law Judge Conrad A. Johnson (collectively “the ALJs”) and the Public Utility Commission (“Commission”) without modification for the following reasons.

¹ Implementation of Chapter 32 of the Public Utility Code Regarding Pittsburgh Water and Sewer Authority Stage 1, M-2018-2640802 et al., *Joint Petition for Partial Settlement* (September 13, 2019).

I. INTRODUCTION AND PROCEDURAL BACKGROUND

Introduction

I&E is responsible for representing the public interest in Commission proceedings and enforcing compliance with the Pennsylvania Public Utility Code (“Code”).² Representing the public interest includes balancing the interests of ratepayers, the regulated utility, and the regulated community as a whole.³ I&E’s role in this case was to investigate and develop a record of Pittsburgh Water and Sewer Authority’s (“PWSA”) Compliance Plan. As a newly Commission-regulated utility, Chapter 32 of the Code requires PWSA to file a plan to come into compliance with the Code and Commission rules, regulations, and orders.⁴ After the plan is filed, the Commission will evaluate whether PWSA’s plans to comply will ensure and maintain its provision of adequate, efficient, safe, reliable and reasonable service.⁵

The Joint Petition identifies the issues resolved and this Statement in Support of the Joint Petition provides I&E’s rationale for supporting such resolution. The Joint Petition represents I&E’s and other parties’ diligent and good-faith efforts to resolve a number of complex, challenging issues in a manner that promotes the goals of Chapter 32 and is in the public interest. Although a handful of issues are reserved for litigation,⁶ the parties were able to reach consensus on a majority of issues. Each of the terms

² See Docket No. M-2008-2071852, Final Procedural Order entered on August 11, 2011, p. 10; 66 Pa. C.S. § 308.2(a).

³ *Pa. P.U.C. v. Bell Atlantic-Pennsylvania, Inc.*, Docket Nos. R-00953409, *et al.*, 1995 Pa. PUC LEXIS 193 (Order entered September 29, 1995); I&E St. No. 1, p. 5.

⁴ 66 Pa. C.S. § 3204(b).

⁵ 66 Pa. C.S. § 3204(c).

⁶ *Joint Petition*, pp. 57-58., ¶¶ IV(51)(a)-51(e)(2) (September 13, 2019).

comprising the Joint Petition encompasses commitments that either are now consistent with PWSA's obligation to ensure and maintain its provision of adequate, efficient, safe, reliable and reasonable service, or are necessary steps that PWSA must take to facilitate its ability to provide and maintain such service. Accordingly, and, for the reasons more thoroughly explained below, I&E supports the Joint Petition for Partial Settlement filed in this case on September 13, 2019.

Procedural Background

On December 21, 2017, Governor Wolf signed Act 65 of 2017 into law, creating Chapter 32 of the Code. Pursuant to Chapter 32, on April 1, 2018, the Code became applicable to PWSA.⁷ Also pursuant to Chapter 32, within 180 days of April 1, 2018, PWSA was required to file a Compliance Plan to bring its operations into compliance with the Code, as well as applicable rules, regulations and orders of the Commission.⁸ Accordingly, the Commission entered its Final Implementation Order on March 15, 2018 to establish procedures to implement Chapter 32, including the requirement PWSA file its water and wastewater compliance plans no later than September 28, 2018.⁹

On September 28, 2018, PWSA filed a Petition for Approval of Compliance Plan, including the Chapter 32-mandated Compliance Plan and Long-Term Infrastructure

⁷ 66 Pa. C.S. § 3202(a)(1). Chapter 32 does not specifically reference PWSA but applies to "Water and Sewer Authorities in Cities of the Second Class." In effect, Chapter 32 only applies to PWSA because it is the only water and sewer authority of a second-class city.

⁸ 66 Pa. C.S. § 3204(b).

⁹ Pa. P.U.C. Docket Nos. M-2018-2640802 et al., Final Implementation Order (March 15, 2018), p. 8.

Improvement Plan (“LTIP”).¹⁰ On October 18, 2018, the Office of Consumer Advocate (“OCA”) filed an Answer, Notice of Intervention, and Public Statement in this case. On October 22, 2018, I&E entered its appearance,¹¹ and on November 14, 2018, the Office of Small Business Advocate (“OSBA”) entered its appearance. Petitions to Intervene were filed by Pennsylvania American Water Company and UNITED on October 30, 2018 and November 1, 2018, respectively.

On November 28, 2018, the Commission issued a secretarial letter (“November Secretarial Letter”), assigning PWSA’s Compliance Plan to the PUC’s Office of Administrative Law Judge for an on-the-record contested proceeding, culminating in a recommended decision eight months from issuance of the letter.¹² The November Secretarial Letter also established two stages of review for the PWSA Compliance Plan. Stage 1 was to prioritize health and safety issues, and Stage 2 would focus on Chapter 56 billing and collection issues and development of a storm water tariff. Accompanying the November Secretarial Letter was Technical Staff Initial Report and Directed Questions -

¹⁰ Three appendices were included with the Compliance Plan document. Appendix A is a 20-page document titled “Focusing on the Future”, that PWSA characterizes as an “Organizational and Compliance Plan.” Compliance Plan, p. 8 (not to be confused with the Chapter 32-mandated Compliance Plan). Appendix B includes the 1995 Cooperation Agreement between PWSA and the City of Pittsburgh and 2011 amendment thereto. Appendix C includes PWSA’s LTIP, which was required to accompany PWSA’s Compliance Plan. 66 Pa. C.S. § 3204(b). The LTIP was separately docketed at Docket Nos. P-2018-3005037 and P-2018-3005039. The LTIP and Compliance Plan proceedings were consolidated on February 21, 2019 by the ALJs in their *Final Interim Order Granting Motion for Consolidation of Proceedings*.

¹¹ I&E also filed a corrected Notice of Appearance on November 28, 2018.

¹² Pa. P.U.C. Docket Nos. M-2018-2640802 & M-2018-2640803, Corrected Secretarial Letter, Assignment of the Pittsburgh Water and Sewer Authority Compliance Plan to the Office of Administrative Law Judge, (November 28, 2018).

Stage 1 (“Directed Questions”).¹³ Parties were directed to address these questions as part of Stage 1.

This proceeding was assigned to ALJs. A prehearing conference was held on December 20, 2018, and on December 27, 2018, the ALJs issued a Prehearing Order, granting the petitions to intervene, and establishing a procedural schedule for hearings and submission of testimony and briefs. On February 1, 2019, PWSA filed a Compliance Plan Supplement pursuant to the settlement in PWSA’s 2018 rate case proceeding.¹⁴

On May 13, 2019, the parties filed an Expedited Motion for Extension of Commission-Created Deadlines (“Expedited Motion”), requesting a three-month extension of deadlines, and that consumer service issues be moved from Stage 1 to Stage 2 to allow the Commission’s Bureau of Consumer Services (“BCS”) engage those issues in an informal workshop setting to address PWSA’s Chapter 56 compliance. As described in detail in the Expedited Motion, the purpose of the extension request was for parties to continue discussions and attempt to settle as many issues as possible. To ensure the request would not adversely impact the health and safety of PWSA’s customers, parties required certain commitments from PWSA related to addressing lead service line replacements, the commitment to expedite repair and replacement of the Aspinwall Clearwell, and agreement regarding transitioning certain customer service issues to Stage 2.¹⁵

¹³ Pa. P.U.C. Docket Nos. M-2018-2640802 & M-2018-2640803, Corrected Technical Staff Directed Questions (November 28, 2018).

¹⁴ Pa. P.U.C. Docket Nos. R-2018-3002645 & R-2018-3002647.

¹⁵ Joint Petition, ¶ 15.

In a Secretarial Letter issued May 15, 2019, the Commission granted the Expedited Motion.¹⁶ Accordingly, the ALJs scheduled a new prehearing conference for June 7, 2019, after which a new procedural schedule was established.¹⁷ Parties conducted numerous, lengthy, in-person settlement discussions over the course of the three-month extension. On August 2, 2019, parties submitted to the ALJs a Master List of Stipulations, which identified numerous terms parties had agreed to settle during the extension period. Parties reserved a few, discrete issues for litigation, that are subjects of separate briefing. An evidentiary hearing was held by the ALJs in Harrisburg on August 21, 2019. On September 13, 2019, parties filed the Joint Petition for Partial Settlement. On September 19, 2019, I&E timely filed its Main Brief in support of its positions on the litigated issues; however, separate and apart from the litigated issues, I&E fully supports the Partial Settlement as explained below.

I&E's Approach to this Case

As in its Main Brief,¹⁸ I&E's approach to this case is directly aligned with its charge to represent the public interest in ratemaking and service matters, and to enforce compliance with the Code.¹⁹ I&E opines that this case exemplifies the need to protect the public interest, as PWSA's ability to ensure and maintain the provision of adequate,

¹⁶ Pa. P.U.C. Docket Nos. M-2018-2640802 & M-2018-2640803, Grant of Expedited Motion for Extension of Deadlines (November 28, 2018).

¹⁷ Pa. P.U.C. Docket Nos. M-2018-2640802 & M-2018-2640803, Fourth Interim Order Amending the Litigation Schedule (June 18, 2019).

¹⁸ I&E Main Brief, pp. 1-2.

¹⁹ 66 Pa. C.S. §§ 101 *et seq.*, and Commission regulations, 52 Pa. Code §§ 1.1 *et seq.* See *Implementation of Act 129 of 2008; Organization of Bureaus and Offices*, Docket No. M-2008-2071852 (Order entered August 11, 2011)

efficient, safe, reliable and reasonable service directly impacts each element of the public interest equation, which includes PWSA, its ratepayers, and the regulated community.²⁰ Specifically, (1) PWSA and its employees are both impacted by the challenges of PWSA's existing operations and the work necessary to transition its operations to compliance; (2) captive ratepayers are impacted because they receive and pay for PWSA's service; and (3) the regulated community is impacted because it has an interest in ensuring that the Commission evenly and uniformly applies the Code, Commission regulations, orders, and rules to all jurisdictional Pennsylvania utilities, including PWSA.

Due to the vast number of issues, I&E's approach to this complex and novel case required hundreds of hours investigating PWSA's Compliance Plan, along with its supporting documents and testimony, undertaking the discovery process, and submitting three rounds of its own testimony from four I&E expert witnesses. In an attempt to develop a comprehensive record, I&E's case attempted to include information responsive to the Commission's Directed Questions. In an effort to present the voluminous information necessary to support this case, I&E organized its testimony in a manner that for uniformity, adopted PWSA's numbering system, which is based upon PWSA's numbering of the Commission's Directed Questions.²¹ Additionally, where I&E's testimony addressed topics included in the Directed Questions, I&E provided a corresponding reference to the question(s) at issue for ease of reference.

²⁰ *Pa. P.U.C. v. Bell Atlantic-Pennsylvania, Inc.*, Docket Nos. R-00953409, *et al.*, 1995 Pa. PUC LEXIS 193 (Order entered September 29, 1995); I&E St. No. 1, p. 5.

²¹ PWSA Exhibit RAW/C-1.

Finally, in recognition of the administrative hurdles that would result from attempting to determine whether each of the 186 issues raised²² were resolved during the course of this proceeding or remained outstanding for litigation, I&E raised the prospect of parties creating a master list of issues for tracking purposes, which could be updated on dates tied to the litigation schedule.²³ During the Prehearing Conference on June 7, 2019, PWSA and other parties agreed to this plan and the ALJs approved.²⁴ Thereafter, PWSA's counsel took the lead on creating the document, incorporating feedback and edits from other parties in both in the initial development and as the case progressed and updates were necessary. I&E appreciates the efforts that PWSA's counsel devoted to draft the initial checklist, track updates, and incorporate I&E's multiple rounds of feedback and edits. I&E notes that the final tracking document, entitled Checklist Status of Issues" is incorporated as "Exhibit 1" to the Joint Petition, and I&E believes that parties' efforts in providing this tracking document will benefit the ALJs and the Commission in their review of the voluminous record.

From a wholistic view, I&E approached this case with the acknowledgment that that the plain language of Chapter 32 does not require that PWSA come into immediate compliance with the Code, Commission regulations, and orders. Instead, PWSA need only present a plan for compliance that will adequately ensure and maintain the provision of adequate, efficient, safe, reliable, and reasonable service. This distinction is important because I&E notes that PWSA's transition to Commission jurisdiction is a vast and

²² *Joint Petition*, p. 16, ¶ 47.

²³ Hearing Tr. at. 26-29.

²⁴ *Id.*

complex undertaking that undoubtedly requires prioritization and devotion of resources and redevelopment of operations. During the unprecedented negotiation process that parties undertook almost on a weekly basis from May through August, PWSA witnesses, engineering experts, and counsel met with interested parties in efforts to understand PWSA's operational realities and the efforts it was making to transition to compliance. I&E attended and heavily participated in each of the sessions.

I&E commends PWSA's witnesses, experts, and counsel for their countless efforts to provide information, answer questions, provide documents, answer discovery requests, and participate in discussions designed to find solutions to operational problems and resolve compliance issues. These efforts, and the efforts of all parties are enshrined in the fact that parties were able to resolve an estimated 75% of the 186 issues raised.²⁵ I&E notes that in some cases, the solutions discussed and ultimately adopted necessarily require PWSA to take a series of steps for implementation or are tied to a timeline that will not result in instant compliance. However, as reflected in the Partial Settlement, where adoption of a plan targeted to achieve future compliance represented PWSA's best available or only plausible course of action,²⁶ I&E did not reject the plan because it fell short of instant compliance, which is not required. Instead, I&E recognized the steps as being consistent with or promoting PWSA's ability to meet its obligation to ensure and maintain its provision of adequate, efficient, safe, reliable and reasonable service.²⁷

²⁵ *Joint Petition*, p. 47, ¶ 47.

²⁶ I&E notes that for the litigated issues not addressed through the Partial Settlement, these standards were not met.

²⁷ 66 Pa. C.S. § 3204(c).

Overall Reasons in Support of Partial Settlement

I&E asserts the Partial Settlement is a reasonable resolution of the vast majority of issues raised by the Commission and parties for Stage 1 of PWSA's Compliance Plan proceeding. The terms are the product of multiple rounds of extensive testimony, and numerous in-depth settlement discussions held between the parties. The terms of the Partial Settlement include, but are not limited to, the parties' attempt to address issues raised through the Commission's Directed Questions. Only a few, discrete issues, remain for briefing.

Bringing PWSA into compliance with the Code and Commission regulations, rules, and orders is an enormous undertaking. PWSA's first rate case presented numerous challenges. However, the scope of this proceeding is even greater, i.e., compliance of the largest combined water and sewer authority in Pennsylvania with the Code and Commission regulations, rules, and orders. As the sponsors of Chapter 32 recognized, the only precedent is in 1999, when similar legislation placed the nation's largest municipally owned natural gas distribution company, Philadelphia Gas Works, under the oversight of the PUC.²⁸ Given the need to prioritize the most important issues facing PWSA within Stage 1's procedural schedule, I&E is satisfied the Partial Settlement presents a reasonable roadmap to address many of the most challenging health and safety issues facing PWSA. With respect to areas for which immediate compliance

²⁸ Reps. Turzai and Readhsaw, *Legislation to place the Pittsburgh Water and Sewer Authority under the oversight of the Public Utility Commission*, House Co-Sponsorship Memoranda (May 24, 2017).

could not be achieved, PWSA has undertaken a series of commitments to achieve compliance, and in many cases, agreed to provide updates by way of periodically-filed Compliance Plan Progress Reports.²⁹ With respect to the Partial Settlement terms addressed below, and while specifically excluding the litigated terms, I&E submits that the Partial Settlement meets the applicable standard of adequately ensuring and maintaining PWSA's provision of adequate, efficient, safe, reliable and reasonable service.³⁰ Accordingly, I&E fully supports this Partial Settlement, and avers its approval is in the public interest.

II. REASONS FOR SUPPORT OF SPECIFIC ISSUES

A. Financial, Accounting Practices, and Commission Required Reports

1. System of Accounts (52 Pa. Code §65.16)

At the outset, 52 Pa. Code §65.16(a) requires that a public utility providing water service, having an annual operating revenue of \$750,000 or more (average of the last three consecutive years) shall keep its accounts in conformity with the most recent Uniform System of Accounts ("USOA") for Class A Water Utilities, as prescribed by the National Association of Regulatory Utility Commissioners ("NARUC").³¹ As part of the guidance provided for this proceeding vis a vis its Final Implementation Order for Chapter 32, the Commission concluded that "[t]he chart of accounts specified under

²⁹ *Joint Petition*, pp. 53-54., ¶¶ III(ZZ) (September 13, 2019).

³⁰ 66 Pa. C.S. § 3204(c).

³¹ 52 Pa. Code § 6516(a); I&E St. No. 2, pp. 3-4.

USOA is fundamental to ratemaking.”³² As a result, the Commission directed PWSA to develop a schedule to convert its accounts to the NARUC USOA and to present that schedule as part of its September 2018 Compliance Plan.³³

In its Compliance Plan, PWSA explained that it had begun a mapping exercise in the last quarter of fiscal year 2018 in order to map its current chart of accounts to the NARUC chart and conduct a gap analysis.³⁴ After that, and during its 2020 budgeting process, PWSA anticipated filing all Commission-required financial reports for 2019 based on the NARUC USOA using a manual process, and then incorporate additional general ledger codes into its budget and to begin tracking those codes to fill in the voids identified in the gap analysis. Additionally, PWSA indicated that it was procuring a new Enterprise Resource Planning (ERP) system to fully convert all individual accounts to the NARUC USOA in Stage II, which will take place after PWSA implements its new ERP system. PWSA did not anticipate preparing its financial reports using the NARUC USOA until an identified time during Stage 2 of PWSA’s Compliance Plan.³⁵

As a result of I&E’s investigation into this area of PWSA’s operations, I&E witness D.C. Patel recommended that PWSA (1) should revise its Compliance Plan to provide more information about the status of its selection of an ERP contractor, projected ERP system cost, and a detailed implementation schedule; (2) should provide periodic

³² *Implementation of Chapter 32 of the Public Utility Code re Pittsburgh Water and Sewer Authority*, M-2018-2640802 et al. Final Implementation Order, p. 35 (March 15, 2018).

³³ Id. at pp. 35-36; I&E St. No. 2, p. 4.

³⁴ PWSA Compliance Plan, p. 63.

³⁵ PWSA Statement No. C-3, pp. 7-8.

updates on the ERP system development to the Commission on a quarterly basis; and (3) should strive to complete the ERP project enabling full conversion of its system of account to NARUC USOA no later than December 31, 2020.³⁶ PWSA responded by indicating that it provided all of the information presently available about the status of its NARUC USOA conversion project, but that it would be willing to provide periodic reporting on its conversion efforts as long as it did not overburden PWSA staff.³⁷

After continued negotiation and through settlement discussions, the parties reached an agreement that PWSA would convert its accounting system to full NARUC USOA compliance in two phases. The first phase involves PWSA's plan to map its chart of accounts to the NARUC USOA to confirm and reply with reporting requirements so that required future reporting will use the NARUC USOA. The second phase is comprised of PWSA issuing a Request for Proposals to hire a contractor to implement the ERP system in order to enable full account conversion. PWSA anticipates that the contract will be awarded in early 2020 and thereafter involve an 18-22-month implementation timeframe. Finally, PWSA will issue quarterly reports to the Commission and parties on a quarterly basis to include milestone dates and information, including the date when an RFP is issued, notice of contractor selection, contractor projected cost, and a detailed implementation schedule.³⁸

³⁶ I&E St. No. 2, p. 7.

³⁷ PWSA St. No. C-3R, p. 4.

³⁸ *Joint Petition*, pp. 17-18., ¶¶ III(A) (September 13, 2019).

I&E submits that these terms represent a reasonable and good-faith plan for PWSA to transition its account to NARUC USOA, which is fundamental to ratemaking. First, PWSA meets the applicable standard of adequately ensuring and maintaining its provision of adequate, efficient, safe, reliable and reasonable service, because there is no evidence that affording PWSA needed time to facilitate its transition will harm operations, service, or ratepayers, and PWSA's plan is reasonable. PWSA's plan is reasonable because although its resources are limited and being significantly diverted to many other operational obligations, it is still taking important steps towards compliance by implementing its plan to map its chart of accounts to NARUC USOA as a starting point. Additionally, PWSA has articulated a clear plan to conform to the NARUC USOA, complete with an action plan and a commitment to keep the Commission and parties informed of its progress through quarterly reporting. Although ideally, PWSA would immediately conform to the NARUC USOA, immediate compliance was not possible because PWSA needs additional time to convert from its current system and no party contested that the transition time was unwarranted. Accordingly, I&E submits that PWSA's timeline and plan to transition to the NARUC USOA is in the public interest because it will enable PWSA to come into compliance within a reasonable period while its operations are still transitioning and its resources are being devoted to critical infrastructure and safety and service-related issues. At the same time, PWSA's plan protects ratepayers by ensuring that through reporting obligations, there are measurable goalposts to gauge progress and to hold PWSA accountable for coming into compliance

with an accounting mechanism necessary to enable evaluation of PWSA's finances. Accordingly, this term should be approved without modification.

2. Annual Depreciation Reports (52 Pa. Code §73.3)

Under 52 Pa. Code § 73.3, as a water utility which has gross intrastate revenue in excess of \$20 million per year, PWSA is required to file an annual depreciation report with the Commission.³⁹ In its Compliance Plan, PWSA indicated that it did not intend to provide annual depreciation reports in compliance with the Commissions regulations at this time.⁴⁰ Instead, PWSA explained that while it did not currently have the capability to produce a report that includes the details required by the Commission, it would do so within five years. In the meantime, PWSA proposed compliance in the form of commissioning a fixed asset study in 2019, to be completed by no later than 2021, and thereafter by filing its first annual depreciation report in April 2024 for future year 2023.⁴¹

In response, I&E opined that PWSA's proposed 5-year transition period was reasonable because PWSA is currently a cash flow company, meaning that its rates do not have a rate of return component, an annual depreciation is not vital at this time. However, I&E witness Ethan Cline noted that because PWSA is proposing to vastly increase its capital improvement spending over the next few years, rates may increase significantly, necessitating additional oversight. On this basis, I&E witness Cline recommended that beginning in 2020, PWSA should file a partial annual depreciation

³⁹ 52 Pa. Code § 73.7.

⁴⁰ PWSA Compliance Plan, p. 87.

⁴¹ PWSA St. No. C-3, pp. 8-9.

report, on the same schedule as an annual depreciation report, detailing known and newly constructed plant additions and retirements. The basis for I&E witness Cline's recommendation was that it would allow the Commission to remain apprised of the progress PWSA is making on its various capital projects each year.⁴²

The Partial Settlement both incorporates PWSA's 5-year plan to transition to filing annual depreciation reports in compliance with 52 Pa. Code § 73.3 and commits PWSA to adopting witness Cline's recommendation.⁴³ I&E submits that the Partial Settlement terms represent a reasonable and good-faith plan for PWSA to transition to annual depreciation reporting. First, PWSA's plan is not inconsistent with its ability to adequately ensure and maintain the provision of adequate, efficient, safe, reliable and reasonable service, because there is no evidence that affording PWSA needed time to facilitate its transition will harm operations, service, or ratepayers. Additionally, the plan is in the public interest because it provides a measured timeline for PWSA's transition to this type of reporting, for which it does not presently have the capability to comply. I&E submits that it is in the public interest to honor PWSA's reasonable timeline for compliance when service and safety are not being jeopardized, and at a time when PWSA's resources are greatly being taxed by competing priorities. At the same time, ratepayers are protected because in the absence of annual depreciation reports, PWSA will face rate accountability in the form of partial annual depreciation reports that will track PWSA's progress on capital projects, which will allow parties and the Commission

⁴² I&E St. No. 3, p. 50.

⁴³ *Joint Petition*, p. 18., ¶¶ III(B) (September 13, 2019).

to evaluate the progress in conjunction with any rate proceedings that PWSA may initiate in the future as full compliance is pending. Accordingly, this term should be approved without modification.

3. Capital Investment Plan Report (52 Pa. Code §§73.7-73.8)

Under 52 Pa. Code § 73.7, as a water utility which has gross intrastate revenue in excess of \$20 million per year, PWSA is required to file a capital investment report with the Commission every 5 years.⁴⁴ PWSA's capital investment report must include, *inter alia*, (1) a summary with an overview of plans for major project expansion, modification or alteration of current and proposed facilities; (2) a discussion of each major project expansion, modification, or alteration expected to commence before the next capital investment plan report; (3) an explanation of the needs that will be met; and (4) a summary of alternatives considered.⁴⁵ PWSA's Compliance Plan proposed to comply with its obligations under 52 Pa. Code §§ 73.7.-73.8 by filing an LTIIP in place of a capital investment plan report.⁴⁶

I&E witness Anthony Spadaccio testified that PWSA's plan to substitute an LTIIP filing for its capital investment plan report was non-compliant. Specifically, I&E witness Spadaccio indicated that he was advised by counsel that there are different requirements for an LTIIP and a capital investment plan report.⁴⁷ Furthermore, PWSA did not provide testimony or any other support for the premise that its LTIIP filings would be an adequate

⁴⁴ 52 Pa. Code § 73.7.

⁴⁵ 52 Pa. Code § 73.8.

⁴⁶ PWSA Compliance Plan, p. 90.

⁴⁷ I&E St. No. 1, p. 20.

substitution.⁴⁸ Accordingly, I&E recommended that PWSA refile its Compliance Plan to indicate a plan for filing capital investment plan reports in conformity with the Commission's regulations.⁴⁹

As a condition of the Partial Settlement, PWSA has adopted I&E's recommendation by committing to file capital investment plan reports in accordance with 52 Pa. Code §§ 73.7.-73.8 beginning in 2020 and every five years thereafter. I&E submits that this term provides a measured plan that will further PWSA's provision of adequate, efficient, safe, reliable and reasonable service, because it commits PWSA to complying with Commission regulations that enable the Commission to be informed of critical capital investment projects that may implicate its operations and rates. Additionally, this term is in the public interest because while it will afford PWSA additional time, until 2020, to gather information and implement processes necessary to prepare the capital investment plan report, it will also ensure that information necessary to evaluate and track PWSA's capital projects is available so that it can be accountable to the Commission and ratepayers for those projects. Accordingly, this term should be approved without modification.

4. PWSA Risk and Resilience Assessment and Updated Emergency Response Plan as required by the America Water Infrastructure Act (AWIA) (42 U.S.C. §300i-2)

I&E notes that emergency planning is paramount to the safety of PWSA's operations, employees, ratepayers, and the surrounding community. I&E witness Israel

⁴⁸ Id.

⁴⁹ Id.

Gray, an engineer in I&E's Pipeline Safety Division, explained that a utility's emergency response plan outlines the steps it must take when an abnormal operating condition exists. Having an emergency plan means having a defined course of action for unplanned events, and it is essential to ensuring that the utility acts quickly and uses best practices to ensure the safety of its employees, customers, and the surrounding community. At the outset, it is important to note that PWSA does have a plan for emergency response, but that plan simply does not currently meet all regulatory requirements.⁵⁰ Therefore, with the safety of PWSA's employees, customers, and the community in mind, and in accordance with the Commission's regulation that requires jurisdictional utilities to develop and maintain an emergency response plan and to provide a Self-Certification Form documenting compliance,⁵¹ I&E recommended that PWSA strive to complete its Emergency Response Plan and provide certification of compliance as soon as possible. I&E notes that the plan must include, at a minimum, (1) identification and assessment of the problem; (2) mitigation of the problem in a coordinated, timely and effective manner; and (3) notification of the appropriate emergency services and emergency preparedness support agencies and organizations.⁵² To that end, I&E additionally recommended that if necessary, PWSA involve the Commission's Bureau of Technical Utility Services ("TUS") in its planning efforts to obtain TUS's expertise and guidance,⁵³ and that PWSA

⁵⁰ PWSA St. No. C-2R, p. 4.

⁵¹ 52 Pa. Code § 101.

⁵² 52 Pa. Code § 101.3(4).

⁵³ PWSA indicated that it welcomed TUS input (PWSA St. No. C-2, pp. 7-8).

provide a more detailed timeline for its anticipated completion date of the Emergency Response Plan.⁵⁴

In the Partial Settlement, PWSA committed to undertaking a series of actions and to adhering to a timeline necessary so that by September 30, 2020, it will be able to file an Emergency Response Plan, as required by the American Water Infrastructure Act (“AWIA”).⁵⁵ In order to fulfil its commitment, PWSA must, and has agreed to, conduct a risk and resiliency assessment (“RRA”) by March 31, 2020, and to incorporate pending newly-issued guidance from the Environmental Protection Agency (“EPA”) regarding the requirements. Pending final completion of its Emergency Response Plan, PWSA will develop internal processes and procedures to comply with Commission regulations and requirements, and to incorporate those into its Emergency Plan. In order to inform the Commission and parties of its progress in achieving its targets, PWSA has agreed to provide RRA and Emergency Response Plan status updates a part of its filed Compliance Plan Progress Reports.

I&E supports PWSA’s commitment to develop a compliant Emergency Response Plan and the corresponding timeline, as outlined in the Partial Settlement, for several reasons. First, it is important to recognize that PWSA already has a plan to address emergencies, and although it is not compliant with the layers of regulations PWSA must now adhere to, an interim plan is now in place to address emergencies. Furthermore, for

⁵⁴ I&E St. No. 4, pp. 21-22.

⁵⁵ 42 U.S.C. § 300-i-2)

purposes of meeting the Commission's regulatory requirement, PWSA intends to complete that facet of its Emergency Response Plan by October 31, 2019.⁵⁶ Additionally, after continued discussions with PWSA, and in recognition of the several areas of regulatory compliance implicated in emergency planning, including EPA guidance issued only a month ago, I&E concludes that PWSA's RRA and Emergency Response Plan timeline represents its best efforts to comply. I&E notes the complexity of developing a comprehensive Emergency Response plan, and that the steps PWSA has committed to taking are anticipated to result in a robust plan that will be completed in as timely a manner as possible. Because PWSA has committed to providing periodic reporting to the Commission and parties, its efforts and progress in plan development and meeting milestone targets will be measurable, promoting accountability and continued Commission oversight of progress. I&E submits this term memorializes PWSA's commitment and measured strategy to adopt an Emergency Response Plan as soon as possible, which is consistent with its obligation to provide adequate, efficient, safe, reliable and reasonable service. Accordingly, I&E submits that this term is in the public interest and it should be approved without modification.

5. Security Planning and Readiness (52 Pa Code §§101.1 to 101.7)

The above-referenced regulations outline PWSA's requirement to develop and maintain appropriate written physical, cyber security, emergency response, and business continuity plans.⁵⁷ Under Commission regulations, PWSA must certify, through the

⁵⁶ *Joint Petition*, p. 19, ¶ III(E)(2)(c) (September 13, 2019).

⁵⁷ 52 Pa. Code § 101.3. I&E notes that it addressed PWSA's emergency response plan above and therefore will address only the remaining plan in this section.

filing of a Self-Certification Form to the Commission, that its plans meet regulatory standards. PWSA's physical security plan must, at a minimum, include specific features of a mission critical equipment or facility protection program and company procedures to follow based upon changing threat conditions or situations.⁵⁸ PWSA's cyber security plan must, at a minimum, include critical functions requiring automated processing, appropriate backup for application software and data, alternative methods for meeting critical infrastructure responsibilities in the absence of information technology capabilities, and recognition of the critical time period for each information system before the utility could no longer continue to operate.⁵⁹ PWSA's business continuity plan must, at a minimum, include guidance on the system restoration for emergencies, disasters and mobilization and mitigation of the problem in a coordinated, timely, and effective manner.⁶⁰

At the outset of this case, I&E noted the importance of the plans that PWSA must develop and certify. Specifically, I&E witness Gray, noted that PWSA's adoption of a physical security plan is important because of the infrastructure in its system that is critical to safe and reliable operations, and the need to keep unauthorized persons away from areas of the water distribution system that are susceptible to damage or to contaminants being introduced into the water system.⁶¹ I&E witness Gray also noted that PWSA's adoption of a cyber security plan is critical to assuring that its operations can

⁵⁸ 52 Pa. Code § 101.3(a)(1).

⁵⁹ 52 Pa. Code § 101.3(a)(2).

⁶⁰ 52 Pa. Code § 101.3(a)(3).

⁶¹ I&E St. No. 4, p. 18.

continue by protecting computers, software, and PWSA's communication network necessary to continue normal operation during and immediately following an emergency situation.⁶² Finally, I&E witness Gray noted that PWSA's adoption of a business continuity plan is necessary to ensure that during and following an emergency event or disaster, it has a plan to restore system operations and to return business operations back to normal in a timely manner.⁶³

At the time of its Compliance Plan filing, PWSA anticipated that its physical security plan would be complete by December of 2019.⁶⁴ Further, it was taking steps to develop its cybersecurity plan by hiring additional personnel to facilitate the planning,⁶⁵ and it anticipated that its business continuity plan would be completed by June 30, 2019.⁶⁶ Although I&E witness Gray recognized PWSA's planning efforts, he noted that while PWSA's plan development was pending, it remained out of compliance with important Commission regulations critical to ensuring the safety and integrity of PWSA's operations.⁶⁷ As a result, I&E recommended that PWSA provide a more detailed timeline for the anticipated completion of PWSA's physical, cyber security, and business continuity plans so that a date for plan certification could be confirmed. I&E also recommended that, to the extent necessary, PWSA should involve TUS's expertise in the development of its plans.⁶⁸

⁶² 5Id.

⁶³ Id.

⁶⁴ PWSA St. No. C-2, p. 6.

⁶⁵ Id.

⁶⁶ PWSA St. No. C-2, p. 7.

⁶⁷ I&E St. No. 4, pp. 21-22.

⁶⁸ Id.

Through the Partial Settlement, PWSA has honored I&E's recommendations by (1) agreeing to consult with TUS, as well as the Department of Homeland Security and the Federal Bureau of Investigation, in the development of its physical, cyber security, and business continuity plans,⁶⁹ and (2) by providing updated timelines for plan completion and certification dates.⁷⁰ Specifically, PWSA indicates that, subject to the results of its pending Risk and Resilience Assessment, it will complete its business continuity plan by October 31, 2019, and its physical security plan by December 31, 2019. Additionally, while I&E is uncertain whether PWSA may still need to incorporate Risk and Resilience Assessment into its cyber security plan, PWSA represents that it has completed its cyber security plan on August 31, 2019. Finally, PWSA anticipates filing its Self-Certification Form by February 28, 2020, and it has agreed to report its progress in meeting these timeline targets in the form of an October 31, 2019 Compliance Plan Progress Report.⁷¹

I&E supports the Partial Settlement terms with respect to PWSA's security and readiness planning, because PWSA has a targeted timelines and comprehensive plans that are necessary to facilitate each required plan. PWSA has adopted the recommendations that I&E set forth as necessary to ensure the development and timeliness of physical, cyber security, and business continuity plans. Additionally, I&E submits that PWSA's commitment to involve TUS, the Department of Homeland Security and the Federal

⁶⁹ Although I&E did not identify all of these entities in its recommendation, I&E supports and applauds PWSA's involvement of each of these necessary and relevant agencies' input.

⁷⁰ *Joint Petition*, pp. 19-20, ¶III(E) (September 13, 2019).

⁷¹ *Id.*

Bureau of Investigation in its planning efforts will improve the integrity and effectiveness of planning efforts. I&E notes that PWSA has identified that its cyber security plan is complete, and I&E recognizes the important protections that such plan will provide to PWSA and its ratepayers by providing an action plan geared to ensure continuity of operations. Finally, because PWSA has committed to reporting the status of its planning efforts to the Commission and parties on October 31, 2019, its ability to meet its milestone targets will be measurable, promoting accountability and continued Commission oversight of progress. I&E submits these terms memorialize PWSA's commitment and comprehensive plan to comply with the Commission's security and readiness guidelines as soon as possible, which is consistent with its obligation to provide adequate, efficient, safe, reliable and reasonable service. Accordingly, I&E submits that these terms are in the public interest and they should be approved without modification.

6. Notices Regarding Accident, Death, Service Interruptions/Outage, Physical or Cyber Attack and Low-Pressure Incidents Required to be Reported to DEP (52 Pa. Code §§65.2, 65.5, 67.1, and 69.1601-69.1603)

Upon review of PWSA's Compliance Plan and supporting materials, I&E recommended that PWSA filed a revised Compliance Plan to update its Incident Investigation Policies to comply with its obligations under 52 Pa. Code § 65.2(d) regarding telephone reports. The section of the regulation at issue requires PWSA to contact the Commission by telephone within 24 hours of becoming aware of the occurrence of a reportable incident.⁷² Reportable incidents include (1) the death of a

⁷² 52 Pa. Code § 65.2(d).

person; (2) injury to a person sufficient that the injured person requires immediate treatment at a hospital emergency room or in-patient admittance to a hospital, or both; (3) 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 (4) 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.⁷³

At the outset of this case, PWSA indicated that it would contact the Commission immediately after becoming aware of an accident involving a fatality, and by telephone within 24 hours after becoming aware of accidents not involving a fatality.⁷⁴ I&E noted that PWSA's plan failed to adopt a plan to contact the Commission by telephone immediately upon becoming aware of (1) the death of a person, (2) 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 (3) an occurrence of an unusual nature that is a physical or cyber-attack, including attempts against cyber security measures which cause an interruption of service or over \$50,000 in damages, or both.⁷⁵ Therefore, I&E recommended that PWSA update its Incident Investigation Policies to comply with these obligations.

⁷³ 52 Pa. Code § 65.2(b).

⁷⁴ PWSA St. No. C-1, p. 45; PWSA St. No. C-2, p. 4.

⁷⁵ I&E St. No. 4, p. 11.

On another front, I&E examined PWSA's compliance with 52 Pa. Code § 69.1601, which is the Commission's policy statement that provides guidance to the water industry regarding unscheduled water service interruptions. While I&E noted that PWSA had an 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,⁷⁶ upon requesting additional information, I&E identified that it was unclear whether PWSA's target date for revising its protocol to include the Commission would be met.⁷⁷ As a result of its review, I&E recommended that PWSA provide additional information regarding whether PWSA revised its protocol, and that PWSA also revise its Compliance plan to commit to notifying the Commission of any low-pressure incident or service interruption for which it notifies the PA Department of Environmental Protection ("PA DEP").⁷⁸

Through the Partial Settlement, PWSA indicates that it has adopted I&E's recommendation by revising its Internal Investigation Policy and Procedures to adopt the procedures to telephonically report to the Commission as fully required by 52 Pa. Code § 65.2(d).⁷⁹ Additionally, PWSA revised its communication protocols to provide appropriate notice to the Commission to comply with 52 Pa. Code § 69.1601 regarding unscheduled water service interruptions and to notify the Commission of any low pressure incident or other service interruption for which it notifies PA DEP.⁸⁰ As an

⁷⁶ PWSA Compliance Plan, p. 70).

⁷⁷ I&E St. No. 4, pp. 15-16.

⁷⁸ I&E St. No. 4, p. 17.

⁷⁹ *Joint Petition*, p. 20, ¶III(F) (September 13, 2019).

⁸⁰ *Joint Petition*, pp. 20-21, ¶III(F) (September 13, 2019).

additional step beyond I&E's recommendations, PWSA also indicated that it is soliciting applicants for an environmental Health and Safety professional to be hired in 2019 to assist in developing and communicating a Standard Operating Procedure for communicating emergency service disruptions to the Commission. I&E avers that PWSA's adoption of its recommendations, which are intended to ensure that the Commission is aware of PWSA's reportable accidents, critical service interruptions, and low-pressure incidents, are consistent with its regulatory obligations and, therefore, consistent with its obligation to provide adequate, efficient, safe, reliable and reasonable service. Additionally, I&E submits that it is in the public interest for the Commission, as a regulator, to have timely and full access to PWSA's accident and service-related incidents so that it can take any action warranted to protect public safety and enforce the Code, and the Commission's order and regulations. Accordingly, I&E submits that this term is in the public interest and it should be approved without modification.

B. Metered Service and Meter Testing

1. Plan to Identify Unmetered/Unbilled and Flat Rate Properties 52 Pa. Code § 65.7

PWSA estimates 1,000 to 1,300 properties, comprised of approximately 500-800 municipal buildings and 500 flat rate customers in its service territory are unmetered,⁸¹ and proposes to install meters at these locations by December 31, 2024.⁸² The Commission asked parties to discuss whether and how the 5-year time horizon for

⁸¹ *Joint Petition*, pp. 21-22, ¶III(G) (September 13, 2019). This amount includes 200-400 municipal buildings; 500 flat rate customers; and 300-400 municipally owned fountains, pools, etc.

⁸² PWSA Compliance Plan, p. 110.

metering municipal buildings can be accelerated.⁸³ I&E acknowledged PWSA's timeline, but advocated for PWSA to complete its metering as soon as possible.⁸⁴ This was in part based on PWSA's own assertion that "if City resources are mobilized to provide all interior building plumbing upgrades prior to scheduling meter installation" that the metering of municipal buildings could be completed within two to three years.⁸⁵ I&E's concern was also based on PWSA's refusal to bill the City before meters are installed, depriving the Authority of a source of revenue that could be used to fund high-priority projects.⁸⁶

Pursuant to the Partial Settlement, PWSA intends to complete metering of all unmetered properties within 5 years or by December 31, 2024, but will accelerate the timeframe, if possible.⁸⁷ Although December 31, 2024 is the outside date for metering of all properties, I&E supports this settlement term, as it memorializes PWSA's commitment to accelerate the timeline for metering. Accordingly, I&E asserts this settlement term is consistent with the public interest and should be approved.

2. Installation Costs of Metering Unmetered or Converting Flat Rate Properties That Are Not Municipal Properties Located Within the City of Pittsburgh

In its Directed Questions, the Commission asked parties to address:

Whether the Public Utility Code provides for any proposed charge for meter installation and other related appurtenances (i.e.,

⁸³ Directed Questions, p. 6.

⁸⁴ I&E St. No. 1, pp. 20-21;

⁸⁵ PWSA St. No. C-1, p. 20.

⁸⁶ I&E St. No. 1-SR, p. 10. I&E does not support PWSA's step-billing plan for unmetered and unbilled municipal properties. This issue is addressed in I&E's Main Brief.

⁸⁷ *Joint Petition*, pp. 21-22, ¶III(G) (September 13, 2019).

additional plumbing, meter pits, backflow prevention devices, etc.) and if PWSA's proposed tariff adequately addresses requirements for meter installation and other related appurtenances.⁸⁸

I&E asserted PWSA should be responsible for costs related to meter installation.⁸⁹

This is because Section 65.7 generally requires a utility be responsible for metering costs.

PWSA originally proposed to maintain its current tariff, which includes charges for meters and their installation.⁹⁰

The Partial Settlement provides that, for non-municipal properties,⁹¹ PWSA will pay for the meter and meter installation, but customers will be responsible for any plumbing changes. I&E supports this settlement term because it is consistent with its original position and Commission regulations. Accordingly, the Commission should approve this settlement term.

3. Implementing Rates for Unmetered and/or Unbilled Properties That Are Not Municipal Properties Located Within the City of Pittsburgh

As explained above, over a thousand properties in PWSA's service territory are unmetered. The Commission's directed questions and parties' testimony regarding charges for unmetered and unbilled properties primarily addressed PWSA's "step-billing" proposal for municipal properties.⁹² However, in addition to 500-800 municipal buildings, this includes 500 flat rate customers. The Partial Settlement provides that,

⁸⁸ Directed Questions, p. 6.

⁸⁹ I&E St. No. 3, pp. 22-23.

⁹⁰ PWSA St. No. C-1, p. 25.

⁹¹ PWSA's cost-splitting proposal for municipal property metering costs remains a litigated issue that parties have briefed.

⁹² PWSA's step-billing proposal for municipal properties remains a litigated issue that parties have briefed.

once unmetered or unbilled non-municipal properties are metered, PWSA will bill the account in full pursuant to the applicable tariff rate.⁹³ However, there are certain properties that may not be able to be separately metered because of configuration of their service lines.⁹⁴ As part of this evaluation, PWSA has hired consultants to identify all unmetered and/or unbilled locations by June 29, 2020.⁹⁵

I&E asserts this settlement term is in the public interest and should be approved. This term recognizes that, pursuant to the Code, all properties able to be metered should be metered and thereafter charged for usage in accordance with PWSA's tariff.

4. PWSA's Meter Replacement and Testing

PWSA's Compliance Plan filing states PWSA may have as many as 50,000 meters not in compliance with the meter testing requirements under 52 Pa. Code § 65.8. As a result, the Commission asked parties to address how PWSA may come into compliance with Commission regulations.⁹⁶

I&E is satisfied that PWSA has presented an adequate plan to bring PWSA into compliance with 52 Pa. Code § 65.8.⁹⁷ Generally, this was a non-contentious topic, but required PWSA to provide sufficient information to answer the Commission's directed questions. I&E is satisfied PWSA has done so, and therefore approval of this term is consistent with the public interest.

⁹³ *Joint Petition*, pp. 21-22, ¶III(H)(1)(b) (September 13, 2019).

⁹⁴ *Id.* at ¶III(H)(1)(c).

⁹⁵ *Id.* at ¶III(G)(1)(b).

⁹⁶ *Directed Questions*, pp. 6-7.

⁹⁷ *Joint Petition*, pp. 21-22, ¶III(G)(2)(September 13, 2019).

C. Allocation of Public Fire Hydrants Costs (Does Not Include the Billing Plan for Public Fire Hydrants Within the City of Pittsburgh)

The Commission directed parties to discuss how PWSA plans to address and implement charges for public fire hydrants.⁹⁸ PWSA stated it plans to address public fire hydrant charges in its next base rate proceeding.⁹⁹ I&E objected to PWSA's deferment, noting in the 2018 rate case settlement, PWSA agreed it would "consider the proposal to assess the City a separate rate for public fire hydrant service and the timeframe for doing so" during the Compliance Plan proceeding.¹⁰⁰

The Partial Settlement provides that, in its next rate case, PWSA will provide a class cost of service study reflecting all public fire hydrant costs and a rate design reflecting allocation of 25% of all public fire hydrant costs to the City. PWSA reserves the right to propose a phase-in period at that time.¹⁰¹ I&E supports these settlement terms for several reasons. First, these terms commit PWSA to specific action regarding implementation of a separate fire hydrant rate for the City. Second, allocation of 25% of all public fire hydrant costs to the City is consistent with Section 1328 of the Code.¹⁰² Third, it is reasonable to allow PWSA the right to propose a phase-in period. As discussed in a separate brief, I&E is opposed to PWSA's proposed "step-billing" approach where the City, including public fire hydrants, is only charged a portion of its

⁹⁸ Directed Questions, p. 16.

⁹⁹ PWSA St. No. C-1, p. 31.

¹⁰⁰ I&E St. No. 1, p. 58.

¹⁰¹ *Joint Petition*, p. 23, ¶III(I)(September 13, 2019).

¹⁰² Section 1328 reads, in part: "...the commission shall as part of a utility's general rate proceeding provide for the recovery of the costs of public fire hydrants in such a manner that the municipalities in which those public fire hydrants are located are not charged for more than 25% of the cost of service for those public fire hydrants, as such cost of service is reasonably determined by the commission." 66 Pa. C.S. § 1328(b)(1).

tariffed rates. However, PWSA's right to propose a "phase-in period" is different.

Charging the City less than a 25% allocation is possible under the Code and, any proposal accepted by the Commission should culminate in rates charged consistent with a future water tariff. For these reasons, approval of these settlement terms is consistent with the public interest.

D. Water Conservation Measures, Unaccounted-For Water and Leak Detection (52 Pa Code §§65.11 And 65.20)

1. Water Conservation Measures

Under 52 Pa. Code § 65.11, PWSA, as a jurisdictional water utility, is, *inter alia*, required to file a plan of its contingent mandatory water conservation measures with the Commission as part of its tariff. The water conservation plan must set forth the process that a public utility will use to request conservation of inside water uses and mandatory imposition of conservation measures to reduce or eliminate non-essential uses of water that will be used in the event that the utility experiences a short-term supply shortage of water. Aside from including the plan in its tariff, PWSA is also required to provide notice of the plan by radio, television and newspaper advertisements.¹⁰³

In its Compliance Plan, PWSA did not propose a water conservation plan, but instead it indicated that it was committed to developing procedures and protocols for situations that require mandatory conservation measures and it anticipated compliance with 52 Pa. Code § 65.11 by 2020.¹⁰⁴ Additionally, PWSA noted that in the past 10 years

¹⁰³ 52 Pa. Code § 65.11(a).

¹⁰⁴ PWSA Compliance plan, p. 60.

it had not had any situations that required mandatory conservation measures, and it asserted that it is in a water-rich location.¹⁰⁵ While I&E acknowledged that PWSA's claims were accurate, it denied that they provided an adequate basis for delaying implementation of water conservation measures, the absence of which could result in a public health and safety hazard.¹⁰⁶ I&E also noted that water restriction procedures are a key component of an Emergency Response Plan, and that PWSA has not provided an explanation for its proposal to delay implementation of the procedures until 2020.¹⁰⁷ For these reasons, I&E witness Israel Gray recommended that PWSA (1) develop mandatory water conservation procedures by no later than the close of 2019; (2) incorporate water restriction procedures into its Emergency Response Plan; and (3) pursue interconnections with other regional water suppliers to enhance resiliency. Although PWSA did not argue against the merit I&E's recommendations, it simply indicated that it had not yet developed Standard Operating Procedures ("SOPs") for periods of mandatory conservation, despite having developed general water system emergency procedures. However, PWSA indicated that it was advertising for an Environmental Health and Safety professional who would be essential to PWSA's development of SOPs for periods of mandatory conservation.¹⁰⁸

During the course of negotiations, I&E acknowledged the operational challenges that PWSA is facing in complying with 52 Pa. Code § 65.11. After continued

¹⁰⁵ PWSA St. No. C-1, p. 35.

¹⁰⁶ I&E St. No. 4, p. 13.

¹⁰⁷ Id.

¹⁰⁸ PWSA St. No. C-1R, p. 30.

discussions, I&E and PWSA agreed upon terms that I&E submits will culminate in PWSA's best effort for timely compliance. Specifically, PWSA has agreed that it will develop a preliminary SOP for situations that require mandatory conservation measures, to include communication and response protocols, by no later than February 28, 2020. PWSA's SOP will include a provision indicating that in the event that conservation measures are required, customers would be notified through traditional lines of communication to include automated telephone calls, social media, and the PWSA website. Additionally, PWSA has committed to incorporating the water conservation SOP into its Emergency Response Plan, which is due to be filed on September 30, 2020. To the extent that PWSA's SOP requires the approval of any non-PWSA entities, if necessary, PWSA will revise its preliminary SOP by no later than December 31, 2020 to incorporate any further revisions required by those entities. In addition, PWSA has also agreed to evaluate the feasibility of pursuing interconnections with other regional water suppliers in order to enhance its system resiliency and to incorporate any results into its SOP. Finally, PWSA has committed to updating its progress in developing and implementing its SOP for water conservation measures in quarterly Compliance Plan Progress Reports.¹⁰⁹

Although PWSA does not propose to comply with 52 Pa. Code § 65.11 by the close of this proceeding, I&E avers that PWSA's plan for future compliance is reasonable and presents a good-faith, measurable, goal-driven timeline for compliance.

¹⁰⁹ *Joint Petition*, pp. 25-26., ¶¶ III(K) (September 13, 2019).

Additionally, there is no evidence that affording PWSA needed time to solidify and communicate will harm operations, service, or ratepayers, as PWSA has represented that it does have water system emergency procedures, but that it needs additional time to expand, confirm, and memorialize them into a compliant SOP. Additionally, the plan is in the public interest because it provides a measured timeline for PWSA's transition to compliance at a time when PWSA's resources are greatly being taxed by competing priorities. At the same time, ratepayers are protected because PWSA will face accountability for its development of water conservation plan procures through quarterly Commission compliance reports and through PWSA's obligation to incorporate its plan into its Emergency Response Plan, which is due February 28, 2020. Finally, ratepayers will benefit from PWSA's new commitment to evaluate the feasibility of pursuing interconnections with other regional water suppliers in order to enhance its system resiliency, which PWSA had not originally proposed. Accordingly, this term should be approved without modification.

2. Standards of Design 52 Pa. Code § 65.17(b)

Commission regulations at 52 Pa. Code § 65.17, *Standards of Design*, articulate standards for water plant quality, including standard for a water utility's distribution system, transmission system, service lines, water supply requirements, and materials and specifications.¹¹⁰ After reviewing PWSA's Compliance Plan, I&E witness Cline

¹¹⁰ 52 Pa. Code § 65.17; I&E St. No. 3, p. 35.

recommended that PWSA be required to revise its Compliance Plan to include a timeline and projected date for the replacement of all 4-inch diameter water mains.

Specifically, I&E witness Cline opined that PWSA has not complied with 52 Pa. Code § 65.17(b) which prescribes that “pipe of a diameter of less than 6 inches shall not be used for distribution mains except in cul-de-sacs where the mains are not subject to being extended and are not more than 250 feet in length.” While PWSA’s Compliance Plan indicated that it was actively working to replace all 4-inch diameter mains in its system, there were still 27 miles of those mains left in the system.¹¹¹ Other than PWSA’s vague indication that for 2019 and 2020, it would prioritize 4-inch diameter mains for replacement, no schedule or plans for replacement were available.¹¹² Because PWSA did not appear to have a comprehensive plan to target 4-inch diameter mains for replacement, it did not have a plan that would achieve compliance with 52 Pa. Code § 65.17. In response to I&E, PWSA indicated that it planned to address replacement of all 4-inch water mains as part of its Master Plan,¹¹³ and then to incorporate design requirements, specifications, and standards into a formalized design manual.¹¹⁴ PWSA explained that it was prioritizing replacement of 4-inch mains because they experience frequent breaks and are often located in areas where lead service lines predominate.¹¹⁵

¹¹¹ PWSA Compliance Plan, p. 64; PWSA Ex. No. RAW/C-20; I&E St. No. 3, p. 36.

¹¹² PWSA St. No. C-1, p. 17; I&E St. No. 3, p. 37.

¹¹³ PWSA’s Master Plan was admitted to the record as PWSA Ex. No. RAW-C-36. Among other things, the Master Plan will assess and prioritize renewal of PWSA’s buried water assets.

¹¹⁴ PWSA St. No. C-1R, p. 8.

¹¹⁵ PWSA St. No. C-1R, p. 8.

By way of the Partial Settlement, PWSA has committed to prioritizing the replacement of 4-inch diameter water mains to achieve compliance with 52 Pa. Code § 65.17. First, PWSA has agreed to prioritize the replacement of these mains as part of its Master Plan,¹¹⁶ which is set to be completed between late 2019 and mid-2020. PWSA's Master Plan will develop a detailed process to identify and address needed improvements, including the prioritized replacement of 4-inch mains.¹¹⁷ Finally, PWSA has committed to reporting its timeline and projected completion dates for the replacement of all 4-inch diameter water mains as part of its quarterly compliance plan reporting obligation.¹¹⁸

Although ideally, PWSA would have been able to set forth a comprehensive timeline for replacement of 4-inch diameter mains as part of this proceeding, I&E submits that an allotment of additional time is warranted here where replacement of such mains both impacts and is impacted by PWSA's Master-Planning effort, which is underway but not yet complete. Although PWSA cannot yet comply with 52 Pa. Code § 65.17, evidence supports its position that full compliance is pending. I&E asserts that PWSA is making a good faith and best-effort approach to compliance that will promote its ability to provide adequate, efficient, safe, reliable and reasonable service. Additionally, the plan is in the public interest because it provides a measured timeline for PWSA's transition to compliance, for which it does not presently have the capability to comply. I&E submits that it is in the public interest to honor PWSA's reasonable

¹¹⁶ *Joint Petition*, p. 27, ¶ III(L)(2)(b) (September 13, 2019).

¹¹⁷ *Id.* at ¶¶ III(L)(1)-(L)(2)(b)

¹¹⁸ *Id.* at ¶ III(L)(2)(c).

timeline for compliance when service and safety are not being jeopardized, and at a time when PWSA's resources are greatly being taxed by competing priorities. At the same time, ratepayers are protected because PWSA will face accountability for main replacement in the form of quarterly compliance reports that will track PWSA's progress on replacing all 4-inch mains. Accordingly, this term should be approved without modification.

3. Unaccounted-for (Non-Revenue) Water – 52 Pa. Code §65.20(4)

52 Pa. Code § 65.20(4) outlines the Commission's policy on water conservation measures specific to unaccounted for water. Specifically, "levels of unaccounted-for water should be kept within reasonable amounts." Additionally, levels above 20% have been considered by the Commission to be excessive.

After reviewing PWSA's Compliance Plan, I&E witness Cline noted that PWSA defines unaccounted for water as "water treated at a treatment facility, but which is not billed, measured or estimated through accepted American Water Works Association ("AWWA") practices."¹¹⁹ This differs from the Commission's definition of unaccounted for water, which is as follows: "the difference between the total system output and the amount of metered water that is billed, plus an estimate used for fire service, testing, main flushing and company use."¹²⁰ I&E witness Cline explained that the difference between the Commission's and PWSA's definition of unaccounted-for water is that the Commission definition includes a certain amount of water loss allowances (an estimate

¹¹⁹ PWSA Compliance Plan, p. 121.

¹²⁰ I&E St. No. 3, p. 60, quoting *PUC v. Total Environmental Solutions, Inc.*, Docket No. R-00072493, et al., Opinion and Order entered July 30, 2008; 2008 Pa. PUC LEXIS 1227.

used for fire service, testing, main flushing and company use) in its calculation for unaccounted-for water. In contrast, PWSA's definition is simply the calculation of treated water less water billed to customers.¹²¹ I&E noted that the distinction is relevant because Section 500 of the Annual Report that PWSA will file with the Commission is the calculation of accounted-for-water. Because the report includes a section for unauthorized unmetered usage, if PWSA does not include estimates for fire service, testing, main flushing and company use as permitted in the Commission's definition, then its unaccounted-for water percentage will be higher and may lead to expense adjustments in future base rate cases.¹²²

In its Rebuttal Testimony, PWSA articulated specific actions it planned to take to begin to accurately reflect its levels of unaccounted-for water. These actions included making efforts to record water use for street sweeping, firefighting uses, and other public works uses, as well as to meter incidental uses, in an attempt reduce its reportable levels of unaccounted-for water.¹²³ PWSA also indicated that as part of its Master Plan it would address master metering set to be completed in late 2019, it would include a water audit that follows AWWA guidance using available data.¹²⁴

¹²¹ I&E St. No. 3, p. 61

¹²² I&E St. No. 3, p. 61. Additionally, I&E witness Cline noted that aside from PWSA defining unaccounted-for water, p. 121 PWSA's Compliance Plan included a definition for non-revenue water. Specifically, PWSA defined "non-revenue water" as water that "has been treated at a water treatment facility but is not billed to customers." PWSA's Compliance Plan indicated that it has not been able to make a meaningful assessment of its non-revenue water because it lacks accurate means of determining flows into and out of the water distribution system. At issue were PWSA's lack of reliable filter meters for pump stations, and lack of residential metering, which I&E addresses respectively, in Sections (B)(1) and (D)(5). Therefore, I&E's discussion of PWSA's efforts to address those challenges is not addressed here.

¹²³ PWSA St. No. C-1R, p. 22.

¹²⁴ PWSA St. No. C-1R, p. 31.

The Partial Settlement incorporates and expands upon the actions that PWSA indicated it would take in its Rebuttal Testimony to accurately track and account for its unaccounted-for water.¹²⁵ Specifically, the Partial Settlement includes PWSA's commitment to use the AWWA Water Loss Control Methodology and free software to evaluate non-revenue water. Additionally, PWSA will adopt the AWWA definition of non-revenue water to incorporate such items as firefighting, testing, and flushing, and it has committed to submitting its first AWWA audit to the Commission prior to April 30, 2020.¹²⁶ The Partial Settlement also indicates that PWSA has instructed the City to meter water taken by the Pittsburgh Department of Public Works, which is necessary to record water use for street sweeping and paving activities that encompass reportable unaccounted-for water. Consistent with the intent to track reportable unaccounted-for water, PWSA has also begun estimated and recording water used for blow-offs, street sweeping, flushing, and firefighting¹²⁷

I&E submits these actions are important steps for PWSA, as at the inception of its jurisdiction, its floor-level practices had little to no protocol or plan to track, let alone mitigate levels of unaccounted-for water. I&E submits that the commitments outlined in the Partial Settlement are important first steps towards PWSA not only tracking, but also mitigating its levels of unaccounted-for water, which is essential to ensuring that ratepayers are not bearing the cost of high levels of unaccounted-for water. Although

¹²⁵ *Joint Petition*, pp. 27-28, ¶ III(M) (September 13, 2019). I&E notes that the Joint Petition uses unaccounted-for and non-revenue water interchangeably.

¹²⁶ *Id.* at p. 27, ¶ III(M)(1).

¹²⁷ *Id.* at p. 28, ¶ III(M)(2).

PWSA cannot comply with 52 Pa. Code § 65.2, because its levels of unaccounted-for water are not yet measured and therefore cannot be kept within reasonable amounts, evidence supports its position that full compliance is pending, but not yet possible. I&E asserts that PWSA is making a good faith and best-effort approach to compliance that will promote its ability to provide adequate, efficient, safe, reliable and reasonable service. Additionally, the unaccounted-for water terms of the Partial Settlement will benefit the public interest because they impose obligations upon PWSA that will increase its ability to measure its levels unaccounted-for water, which is a crucial first step needed to control those levels. Accordingly, these Partial Settlement terms should be approved without modification.

4. Leak Detection and Leak Survey – 52 Pa. Code §65.20(5)

The Commission regulation at 52 Pa. Code §65.20(5) imposes an obligation upon PWSA to employ a system of leak detection that should be utilized on a regular basis, with leaks being repaired as expeditiously and economically as possible.¹²⁸ In this case, I&E's investigation indicated that PWSA did not have leak surveying procedures in place; instead, the procedures were being drafted, with an anticipated completion date of April 1, 2019.¹²⁹ Later during the proceeding, PWSA indicated that it developed a leak surveying plan that would be implemented throughout 2019, and consistent with AWWA standards and procedures by 2020.¹³⁰ Additionally, PWSA stated that as part of its efforts, it started to install 210 fixed base permaloggers throughout its system and it was

¹²⁸ 52 Pa. Code §65.20(5).

¹²⁹ I&E Ex. No. 3, Sch. 11.

¹³⁰ PWSA St. No. C-1, pp. 39-40.

in the process of purchasing new correlators to expedite the leak detection survey.

PWSA explained that such actions, along with consultations with vendors identified as 540 Technologies and LB Water, would be key components of its leak detection plan and distribution crews would be made aware of technology deployment.¹³¹ After collecting data for a period of up to 8 months, PWSA would then evaluate it for leaks. Pending the results, PWSA estimated that each section of detection could take more than 12 months to complete, resulting in the estimation that the leak detection program would be completed in 3-4 years.¹³² In order to meet its goal, PWSA planned to hire a new Senior Manager-Leak Detection to facilitate data gathering and analysis, and an additional six staff members. PWSA estimated that the cost of the program, including staff and equipment, would be \$2.5- \$3 million over a 3-4-year period.¹³³

In response to PWSA's leak detection plan, I&E witness Cline recommended that PWSA provide the Commission with annual reports, which break down costs and timelines, and which summarize the progress of its efforts. I&E witness Cline opined that the reporting is necessary to ensure that PWSA's leak detection efforts are efficient, cost-effective, and yield results.¹³⁴ Although PWSA initially opposed I&E's recommendation, as part of the Partial Settlement, PWSA agreed that until its leak detection program is fully implemented, it will provide the following information on an

¹³¹ PWSA St. No. C-1, p. 40.

¹³² PWSA St. No. C-1, p. 40.

¹³³ PWSA St. No. C-1, p. 41.

¹³⁴ I&E St. No. 3, p. 42.

annual basis: (1) a breakdown of historical costs related to the program; and (2) an updated timeline for full implementation of the leak detection program.¹³⁵

In addition to providing reporting on its leak detection costs and efforts, in substantial compliance with I&E's recommendation, the Partial Settlement provides additional information about its efforts to achieve end-state compliance with 52 Pa. Code §65.20(5). Specifically, PWSA indicates that it now has a leak detection team comprised of a team manager and four leak detection specialists to ensure continuity of system knowledge and standard operating procedures for future operations. PWSA also explains that its leak detection program was launched in April 2019 to modernize leak detection equipment and improve detection accuracy. Finally, PWSA anticipates that its leak detection program will be in compliance with AWWA standards and procedures by 2020, and that it will be completed in 3-4 years.¹³⁶

I&E applauds PWSA's continued development and refinement of a comprehensive leak detection plan, as evidenced by the progress PWSA has made during the course of this proceeding, including hiring essential staff, articulating a plan for continuity of staff and planning, and identifying essential equipment needs. Although a substantial amount of work is needed in this area and end-state compliance appears to be 3-4 years on the horizon, PWSA has articulated a targeted plan and has taken important steps towards its execution. I&E submits that these efforts are consistent with PWSA's obligation to provide adequate, efficient, safe, reliable and reasonable service.

¹³⁵ *Joint Petition*, p. 29, ¶ III(N)(1)(e) (September 13, 2019).

¹³⁶ *Joint Petition*, p. 27, ¶¶ III(N)(1)(a)- III(N)(1)(d) (September 13, 2019).

Additionally, I&E avers that the public interest is protected by adoption of the leak detection program terms of the Partial Settlement because developing a program to identify leaks is imperative to ensuring that PWSA operates safely and cost-effectively. Finally, while the Partial Settlement respects PWSA's need for additional time to comply with 52 Pa. Code §65.20(5), because immediate compliance is not possible, PWSA remains obligated to provide annual reports about the costs and timeline for implementation, ensuring accountability to the Commission and ratepayers. Accordingly, this term should be approved without modification.

5. Source of Supply Measurement 52 Pa Code §§65.14 and 65.20(6)

After investigating PWSA's Compliance Plan, I&E determined that PWSA needed to take further action to comply with the Commission's regulations regarding source of supply measurement.¹³⁷ Specifically, the regulations require PWSA to (1) install a suitable measuring device at each source of supply in order that a record may be maintained of the quantity of water produced by each source;¹³⁸ and (2) transmit to the Commission, as part of its annual report, monthly records of the quantity of each source of supply and the twelve-month total.¹³⁹ I&E determined that PWSA had not met its goal of having operational meters at its Ross, Aspinwall, Fox Chapel and Bruecken Pump Stations by the end of 2018, nor did it update its timeline or plans for making those meters operational.¹⁴⁰ Additionally, I&E witness Cline reviewed PWSA's 40-year plan

¹³⁷ 52 Pa. Code § 65.14.

¹³⁸ 52 Pa. Code § 65.14 (a).

¹³⁹ 52 Pa. Code § 65.14 (b).

¹⁴⁰ I&E St. No. 3, pp. 30-31, referencing PWSA St. No. C-1, p. 43.

of 2012,¹⁴¹ which presented an analysis of the accuracy of PWSA's raw and finished water meters, and he determined that meters on raw intakes were not operational and therefore could not be tested. I&E witness Cline also noted that of eighteen tested meters that deliver treated water to various parts of the PWSA system, only two were determined to have passed the audit.¹⁴² As a result, I&E recommended that PWSA be required to provide a revised Compliance Plan to provide details and a timeline regarding how and when each of the meters listed on Table 4-3 of PWSA 40-year plan of 2012 will be operational and accurate.¹⁴³

With regard to PWSA's adherence to the Commission's policy statement for water conservation measures at 52 Pa. Code § 65.20,¹⁴⁴ after its review of PWSA's Compliance Plan, I&E recommended that PWSA revise its Compliance Plan to provide a detailed timeline and start date for which PWSA can commit to begin providing the required educational information to customers.¹⁴⁵ Such action was necessary for PWSA to adhere to the water conservation policy's requirement that PWSA should annually provide each customer with a brochure or similar type of material which (1) discusses efficient water use practices, (2) the expensive waste caused by leaking plumbing fixtures, (3) the availability of retrofitting plumbing devices to curtail unnecessary water use, (4) and the possible savings on water and fuel bills that could ensue when these conservation

¹⁴¹ PWSA Ex. RAW/C-7.

¹⁴² I&E St. No. 3, p. 32.

¹⁴³ I&E St. No. 3, p. 34.

¹⁴⁴ I&E did not address the portions of the policy that apply to unaccounted-for-water in this section because they were addressed above.

¹⁴⁵ I&E St. No. 3, p. 40.

methods are implemented.¹⁴⁶ Other annual notification requirements at issue relate to water audits for large users, and efficiency plumbing fixtures.¹⁴⁷ PWSA had not provided any indication of when it planned to distribute proposed educational materials.¹⁴⁸

Through the Partial Settlement, PWSA has recognized I&E's concerns with respect to source of supply measurement and with respect to the water conservation policy education materials. First, with respect to source of supply, PWSA has committed to identify where additional meters may be needed and to adopt a target date for completion of a meter operability and measurement plan in late 2019.¹⁴⁹ Additionally, PWSA spoke directly to I&E's flow meter concerns by clarifying that it installed a flow meter at Fox Chapel, and that all flow meters at the Aspinwall Pump Station, and Bruecken Pump Station for flow to Highland 2 Reservoir are operational, while the flow meters at Bruecken Pump Station for flow to Highland 1 Reservoir are being rehabilitated.¹⁵⁰ Additionally, PWSA provided updated information regarding its flow metering program testing and calibration, and also agreed to provide a table similar to Table 4-3 of its 40-year plan of 2012, and by way of PWSA Ex. RAW/C-40, it provided the most current System Flow Meter Operation Status available as of July 31, 2019.¹⁵¹ I&E submits that these Partial Settlement commitments are consistent with and, in some cases, exceed the actions it recommended. I&E submits that by taking steps to ensure

¹⁴⁶ 52 Pa. Code § 65.20 (1).

¹⁴⁷ Id. at § 65.20 (1)- § 65.20(3).

¹⁴⁸ I&E St. No. 3, p. 40.

¹⁴⁹ *Joint Petition*, p. 29, ¶ III(O)(1) (September 13, 2019).

¹⁵⁰ Id. at ¶ III(O)(2)

¹⁵¹ Id. at p. 30, ¶¶ III(O)(3)- ¶¶ III(O)(5).

that its source of supply measuring is accurate and will enable measurement of the quantity of water produced, PWSA is taking action that is consistent with its obligation to provide adequate, efficient, safe, reliable and reasonable service. Accordingly, I&E avers that Source of Supply Measurement terms¹⁵² are in the public interest and they should be approved without modification.

Additionally, with respect to water conservation education materials, PWSA has committed to begin taking steps during this calendar year to comply with the requirements of 52 Pa. Code §§ 65.20(1)-65.20(3) to include the provision of educational brochures at least annually, provision of annual water audits for large users, and customer notification regarding water-saving plumbing fixtures.¹⁵³ I&E notes that PWSA will need to continue to work towards fully developing and implementing a plan for distribution of educational materials outlined in the Commission's policy statement. Nonetheless, I&E submits that PWSA's commitment to begin these efforts at time when its resources are being heavily taxed by infrastructure repair and remediation and critical operations transitions represents an important step that is consistent with its obligation provide adequate, efficient, safe, reliable and reasonable service. Accordingly, I&E submits that this term of the Partial Settlement should be approved without modification.¹⁵⁴

¹⁵² *Joint Petition*, p. 29, ¶ III(O) (September 13, 2019).

¹⁵³ *Joint Petition*, p. 25, ¶ III(K)(1) (September 13, 2019).

¹⁵⁴ *Joint Petition*, p. 25, ¶ III(K)(1) (September 13, 2019).

E. Contracts/Agreements with Customers, Other Municipalities & City

1. City Cooperation Agreement

The record of PWSA's 1995 Cooperation Agreement and any new Cooperation Agreement is addressed extensively in I&E's brief.¹⁵⁵ In short, no new Cooperation Agreement was finalized as of the date of hearings and PWSA's Board extended the termination date of the 1995 Cooperation Agreement to October 3, 2019. However, pursuant to Partial Settlement terms, once a new Cooperation Agreement is finalized, PWSA will file it with the Commission. PWSA also agreed it will be filed no later than upon PWSA's next base rate filing, subject to the Commission's review and approval process in accordance with 66 Pa. C.S. §§ 507 and 508. With its filing, PWSA will make a request for a formal on-the-record proceeding before the Office of Administrative Law Judge.¹⁵⁶

As discussed in brief, I&E believes PWSA remains non-compliant with the Code until the 1995 Cooperation Agreement is terminated and the Commission has either approved a new Cooperation Agreement, or PWSA is transacting with the City on an arms-length, as-needed basis.¹⁵⁷ To ensure any new Cooperation Agreement will result in just and reasonable rates for PWSA ratepayers, I&E supports these settlement terms. As discussed in brief, the 1995 Cooperation Agreement has numerous terms inconsistent with the Code. To ensure the new Cooperation Agreement does not include the same onerous terms as the 1995 Cooperation Agreement, I&E asserts a full, on-the record

¹⁵⁵ I&E Main Brief, pp. 22-32.

¹⁵⁶ *Joint Petition*, p. 30, ¶III(P)(1)(September 13, 2019).

¹⁵⁷ I&E Main Brief, pp. 22-32.

proceeding under Section 507 is unnecessary, possibly culminating in the Commission's exercise of its powers to reform contracts under Section 508 should it find terms to be inconsistent with the Code. I&E therefore supports the Partial Settlement terms regarding the principles that should guide any future City Cooperation Agreement and recommends their approval by the Commission.

2. Capital Lease Agreement

PWSA is party to a 30-year Capital Lease Agreement with the City, expiring September 1, 2025. Pursuant to clause 3(b) of the lease agreement, PWSA has the option to acquire/purchase all the City's leased property (i.e., the water and wastewater system) for one dollar at the end of the lease term. The lease agreement stipulated minimum lease payments of approximately \$101 million, all of which were paid during the initial three years of the lease.¹⁵⁸ I&E agreed with PWSA's intention to purchase the system for one dollar when eligible in 2025 or renegotiate a new arrangement with the City, allowing PWSA to acquire the assets sooner.¹⁵⁹ The primary purpose of I&E's testimony was to make the Commission aware that PWSA had fulfilled its obligations under the 1995 Capital Lease Agreement and any efforts by the City to renege on its obligations should be highly scrutinized.¹⁶⁰ These concerns stemmed from legislation introduced in Pittsburgh City Council in 2018 that would remove PWSA's option to acquire the leased property at the end of the lease.¹⁶¹ Although this legislation has stalled in Pittsburgh City

¹⁵⁸ I&E St. No. 2, p. 33.

¹⁵⁹ I&E St. No. 2-SR, p. 9.

¹⁶⁰ I&E St. No. 2-SR, pp. 9-10.

¹⁶¹ I&E Ex. No. 2, Sch. 6, p. 10.

Council,¹⁶² it is unclear whether the City will renew its efforts to terminate PWSA's purchase option. I&E therefore supports and recommends approval of the Partial Settlement term memorializing PWSA's commitment to purchase the water and wastewater system in 2025, unless a new arrangement is renegotiated and approved by the Commission prior to 2025.¹⁶³

3. Bulk Water: Sales for Resale

The Commission directed parties to discuss why unfiled bulk water sales for resale agreements should not immediately be filed pursuant to 66 Pa. C.S. §§ 505 and 507, and whether unfiled agreements adhere to PWSA tariffs and are valid under the Code.¹⁶⁴ PWSA did not believe it was necessary to file wholesale contracts with the Commission, and additionally PWSA believed agreements entered into prior to April 1, 2018 were valid even if not filed because Section 507 of the Code is not applicable to them.¹⁶⁵ I&E recommended the Commission order PWSA to file all of its bulk water contracts within 120 days of the final Commission Order in this proceeding so the Commission can investigate their compliance with the Code.¹⁶⁶ I&E also asserted, although bulk water sales contracts entered into prior to April 1, 2018 may not need to be filed pursuant to 66 Pa. C.S. § 507, they may still contain provisions in violation of the Code and need to be reformed under 66 Pa. C.S. § 508.¹⁶⁷

¹⁶² I&E Ex. No. 2, Sch. 6. The legislation was introduced in Pittsburgh City Council on March 30, 2018, and was last subject of public hearing on July 18, 2018, with no action thereafter.

¹⁶³ *Joint Petition*, p. 31, ¶III(Q)(September 13, 2019). Any new agreement must be submitted for Commission review pursuant to 66 Pa. C.S. § 507.

¹⁶⁴ Directed Questions, pp. 18-19.

¹⁶⁵ PWSA St. No. C-2, pp. 20-21.

¹⁶⁶ I&E St. No. 3, p. 64.

¹⁶⁷ I&E St. No. 3, p. 63.

I&E supports the Partial Settlement terms, which are consistent with its testimony. PWSA will file all future contracts as required by 66 Pa. C.S. §§ 507 and 508, and within 120 days of the final Commission Order, PWSA will file its bulk water sales contracts, entered into both before and after April 1, 2018. Additionally, no party waives its right to raise its position regarding Commission authority to exercise its powers under 66 Pa. C.S. § 508 for contracts entered into prior to Commission assuming jurisdiction over PWSA on April 1, 2018.¹⁶⁸ Although I&E maintains its position that the Commission does have the power to reform such contracts,¹⁶⁹ I&E also believes it is reasonable to reserve the issue until PWSA's bulk water sales contracts are filed and the parties and/or Commission seek reform, if appropriate. Accordingly, I&E avers these settlement terms are in the public interest and should be approved by the Commission.

4. Bulk Wastewater Conveyance Agreements

The Commission directed parties to discuss whether PWSA must file its bulk wastewater conveyance agreements pursuant to 66 Pa. C.S. §§ 505 and 507.¹⁷⁰ PWSA did not directly answer this question, but stated PWSA's position is that agreements entered into prior to April 1, 2018 are not required to be filed with the Commission.¹⁷¹ I&E asserted PWSA must file bulk wastewater conveyance agreements under Section 507, and recommended the Commission order PWSA to file all of its bulk wastewater

¹⁶⁸ *Joint Petition*, p. 32, ¶III(S)(September 13, 2019).

¹⁶⁹ *See, e.g., Apollo Gas Co. v. Heilman*, 1994 WL 932354 (Pa. P.U.C. 1994) (Commission holding 66 Pa. C.S. § 508 may be applied retrospectively).

¹⁷⁰ Directed Questions, pp. 19-20.

¹⁷¹ PWSA St. No. C-2, p. 23.

contracts within 120 days of the final Commission Order in this proceeding so the Commission can investigate their compliance with the Code.¹⁷²

I&E supports the Partial Settlement terms, which are consistent with its testimony. PWSA will file all future contracts as required by 66 Pa. C.S. §§ 507 and 508, and within 120 days of the final Commission Order, PWSA will file its bulk wastewater conveyance contracts, entered into both before and after April 1, 2018. Additionally, no party waives its right to raise its position regarding Commission authority to exercise its powers under 66 Pa. C.S. § 508 for contracts entered into prior to Commission assuming jurisdiction over PWSA on April 1, 2018.¹⁷³ Although I&E maintains its position that the Commission does have the power to reform such contracts,¹⁷⁴ I&E also believes it is reasonable to reserve the issue until PWSA's bulk wastewater conveyance agreements are filed and the parties and/or Commission seek reform, if appropriate. Accordingly, I&E avers these settlement terms are in the public interest and should be approved by the Commission.

5. Pennsylvania American Water Company (PAWC) Contract

PWSA's agreement to terminate its "discount" payment to PAWC was an essential Partial Settlement term for I&E. By way of further context, PWSA pays a rate subsidy, which the partial Settlement refers to as a discount, to PAWC that offsets water

¹⁷² I&E St. No. 2, pp. 56-57.

¹⁷³ *Joint Petition*, p. 32, ¶III(S)(1)(September 13, 2019).

¹⁷⁴ *See, e.g., Apollo Gas Co. v. Heilman*, 1994 WL 932354 (Pa. P.U.C. 1994) (Commission holding 66 Pa. C.S. § 508 may be applied retrospectively).

rates for about 27,000 of the Authority's sewer only customers.¹⁷⁵ PWSA acknowledged rates collected to fund this subsidy violate Section 1301 of the Code because the subsidy is not related to provision of water service to PWSA customers.¹⁷⁶ I&E agrees that this subsidy violates the Code.¹⁷⁷ I&E witness Patel explained the significant impact of the subsidy by noting that PWSA claimed a water rate subsidy expense of \$4,800,000 as other operating expense in the FPFTY in its recently concluded base rate case.¹⁷⁸ The impact was illustrated by the fact that the \$4,800,000 translated to an annual cost of approximately \$65.78 per water customer.¹⁷⁹

In its Compliance Plan, PWSA originally proposed the subsidy payment should be eliminated in PWSA's next base rate case for water service.¹⁸⁰ Thereafter, the Commission directed parties to discuss the feasibility of setting a date certain to eliminate or phase out the subsidy.¹⁸¹ However, in PWSA's direct testimony, it claimed that there was no way to establish a date certain to eliminate the subsidy, as PWSA claimed that resolution would be contingent upon the timing and level of PWSA's rate increases. Instead of targeting a date to eliminate the subsidy, PWSA now proposed to address it as part of its pending Cooperation Agreement¹⁸² or to wait until a time that PWSA and

¹⁷⁵ Compliance Plan, pp. 112-113.

¹⁷⁶ PWSA St. No. C-2, pp. 18-19.

¹⁷⁷ I&E St. No. 2, p. 52.

¹⁷⁸ I&E St. No. p. 49, referencing I&E Statement No. 2, p. 31 at Docket Nos. R-2018-3002645 and R-2018-3002647.

¹⁷⁹ I&E St. No. 2, p. 50, referencing I&E Exhibit No. 2, Schedule 8, p. 7 at Docket Nos. R-2018-3002645 and R-2018-3002647.

¹⁸⁰ Compliance Plan, p. 112.

¹⁸¹ Directed Questions, p. 17.

¹⁸² PWSA St. No. C-2, p. 19.

PAWC rates would equalize and functionally terminate the subsidy.¹⁸³ I&E rejected each of these approaches, as they provided an insufficient and uncertain resolution to continued and costly non-compliance. Therefore, I&E recommended that PWSA terminate payment of the PAWC subsidy on or before the time of its next base rate case or by no later than December 31, 2019, whichever occurred first.¹⁸⁴

During multiple negotiation sessions that took place in this case, I&E, PWSA, and PAWC had extensive discussions about termination of the subsidy payments. All parties involved devoted substantial efforts to find a path forward, and those efforts culminated in the terms outlined in the Partial Settlement. The settlement terms provide that the discount shall be eliminated by December 31, 2019. Additionally, PAWC will provide billing notice to customers before the discount is eliminated.¹⁸⁵ I&E supports these Partial Settlement terms as it sets a timely date certain for the end of PWSA's subsidy, thereby alleviating the burden to PWSA and its ratepayers at a time when resources are being challenged, but also provides important and ample notice to impacted customers that the subsidy is ending. Accordingly, I&E avers this Partial Settlement term is in the public interest and is consistent with PWSA's compliance obligations; therefore, it should be approved without modification.

¹⁸³ I&E EX. No. 2, Sch. 8, p. 1.

¹⁸⁴ I&E St. No. 2, pp. 52-53.

¹⁸⁵ *Joint Petition*, p. 32, ¶III(T)(September 13, 2019).

6. Billing Arrangement for ALCOSAN Charges

The Allegheny County Sanitary Authority (“ALCOSAN”) is Pittsburgh’s regional sewage treatment facility. Twenty-four communities use PWSA’s trunk sewers to convey their wastewater to ALCOSAN.¹⁸⁶ ALCOSAN bills each PWSA wastewater conveyance customer a charge for wastewater treatment, which is passed through on PWSA’s bills.¹⁸⁷ In its Compliance Plan, PWSA stated ALCOSAN customers were not paying the full cost of wastewater treatment because they are not paying the cost of uncollected revenue or all billing costs.¹⁸⁸ Accordingly, PWSA proposed the addition of a surcharge to be included with the ALCOSAN portion of the charges billed to PWSA customers on behalf of ALCOSAN.¹⁸⁹ The proposal would be part of PWSA’s next rate case and PWSA claimed it would be revenue neutral as the same amount of costs will be removed from the wastewater conveyance cost of service.¹⁹⁰

Regarding PWSA’s proposal, the Commission directed parties to discuss why PWSA is responsible for ALCOSAN receivables if it merely serves as a billing agent, and whether and why it is reasonable for PWSA to purchase ALCOSAN receivables at 100% of the outstanding balance.¹⁹¹ PWSA stated these arrangements with ALCOSAN are required pursuant to a 2004 amendment to the 1995 agreement between the City and ALCOSAN.¹⁹²

¹⁸⁶ Compliance Plan, p. 13.

¹⁸⁷ Compliance Plan, p. 111.

¹⁸⁸ Compliance Plan, p. 111.

¹⁸⁹ Compliance Plan, p. 112.

¹⁹⁰ Compliance Plan, p. 112.

¹⁹¹ Directed Questions, p. 16.

¹⁹² PWSA St. No. C-2, pp. 16-18.

Under the Partial Settlement, PWSA reserves the right to develop and propose a service charge related to ALCOSAN charges in its next wastewater base rate filing. All parties retain their rights to review, support or challenge the proposal in that proceeding.¹⁹³ I&E supports this settlement term because one of I&E's central recommendations was that PWSA should develop wastewater and stormwater tariff rates for current wastewater customers and future stormwater customers that accurately reflect the costs of paying for contracted treatment services and capturing the impact of uncollectibles in its own rates.¹⁹⁴ I&E also notes a full resolution of ALCOSAN issues is best suited for the next rate case filing, in part because all issues related to ALCOSAN have yet to be developed, i.e., Stage 2 will address development of a storm water tariff. I&E therefore avers PWSA's right to develop and propose its charges related to ALCOSAN with the next wastewater base rate filing is reasonable and should be approved by the Commission.

F. Tariff and Other Miscellaneous Issues (Not Addressed Elsewhere)

1. Limitations on Liability (52 Pa Code §69.87)

PWSA water and wastewater tariffs include provisions on limitation on liability. The Commission requested parties discuss the dollar-amount limitation, including its reasonableness and how it was calculated.¹⁹⁵ PWSA responded it is not proposing any specific dollar amounts related to injury or damages as a result of negligence or

¹⁹³ *Joint Petition*, p. 32, ¶III(U)(September 13, 2019).

¹⁹⁴ I&E St. No. 2, p. 47; I&E St. No. 2-SR, p. 17.

¹⁹⁵ Directed Questions, p. 11.

intentional torts.¹⁹⁶ This is because, as a municipal authority, PWSA is generally immune from suits under the Tort Claims Act, i.e., 42 Pa. C.S. §§ 8541-8564, except under limited circumstances, and with the damages award limited to \$500,000.¹⁹⁷ I&E agrees with PWSA's analysis that PWSA's tort liability is controlled by the Tort Claims Act, including maximum liability of \$500,000. Because PWSA's plans are in compliance with the Tort Claims Act, I&E asserts this Partial Settlement term is in the public interest and should be approved by the Commission. I&E notes this analysis does not impact the Commission's ability to assess penalties for violations under Chapter 33 of the Code.¹⁹⁸

2. Residential Fire Protection and Standby Charges (52 Pa. Code §69.169)

In its Compliance Plan, PWSA claimed its private fire protection charge is not an impermissible "standby charge."¹⁹⁹ Nonetheless, the Commission directed parties to discuss whether PWSA's charge conforms to 66 Pa. C.S. § 1326 and 52 Pa. Code § 69.169, and whether residential customers are served by separate domestic and fire service lines.²⁰⁰ I&E opined that, without further information,²⁰¹ PWSA's tariff did appear to include impermissible standby charges, i.e., private fire service customer

¹⁹⁶ PWSA St. No. C-4, pp. 34-35.

¹⁹⁷ PWSA St. No. C-4, p. 35.

¹⁹⁸ See, e.g., *Feingold v. Bell of Pennsylvania*, 477 Pa. 1, 10 (Pa. 1977) ("It is clear that the remedial and enforcement powers vested in the PUC by the Public Utility Law were designed to allow the PUC to enforce its orders and regulations but not to empower the PUC to award damages or to litigate a private action for damages on behalf of a complainant").

¹⁹⁹ Compliance Plan, pp. 74-75.

²⁰⁰ Directed Questions, p. 11.

²⁰¹ Specifically, I&E witness Cline stated Part I, Section B of PWSA's water tariff was unclear whether residential customers are not served by separate lines. If residential customers are not served by separate lines, it is unclear whether customers are charged a customer charge for both non-fire protection and fire protection use. If customers with a common line are only charged a non-fire protection customer charge, PWSA may not be charging impermissible standby charges. I&E St. No. 3, pp. 47-48.

charges for owners of residential buildings indefinitely.²⁰² The Commission previously found a similar charge to be permissible only where it was to recoup over a period of time a utility's one-time costs of its investment in customers' residential private fire protection systems.²⁰³ PWSA responded that 49 accounts are charged a separate fire protection pursuant to PWSA's tariff and, to the extent PWSA identifies accounts that are residential, it will no longer assess the private fire protection charge, and will retroactively remove the private fire protection customer charge assessed to those accounts since April 1, 2018.

The Partial Settlement terms report PWSA has already reviewed the 49 customers and identified four affected residential customers. PWSA has already removed the separate fire protection customer charge for the four affected customers and contacted them regarding refunds.²⁰⁴ In its next base rate case, PWSA will include a separate rate for residential, fire protection service that excludes standby costs, and will provide evidence of its investment in facilities for residential customers with automatic fire protection systems.²⁰⁵ PWSA also filed a pro forma tariff with its supplemental testimony removing prohibited residential fire protection service customer charge.²⁰⁶

I&E supports these settlement terms because they ensure PWSA is not charging residential customers impermissible standby charges. Accordingly, I&E avers PWSA has

²⁰² I&E St. No. 3, p. 47.

²⁰³ Pa. P.U.C. v. Philadelphia Suburban Water Co., Docket No. R-911892, pp. 67-68 (Order entered October 18, 1991).

²⁰⁴ *Joint Petition*, p. 33, ¶III(X)(1)(September 13, 2019).

²⁰⁵ *Joint Petition*, p. 33, ¶III(X)(3)(September 13, 2019).

²⁰⁶ PWSA Exh. JAQ/C-17.

provided an adequate plan to comply with 66 Pa. C.S. § 1326 and 52 Pa. Code § 69.169 and these Partial Settlement terms should be approved by the Commission.

3. Ownership of Wastewater Laterals

The OCA expressed concern regarding PWSA's wastewater tariff requiring a property owner to own and maintain the sewer lateral up to and including the connection to the sewer main.²⁰⁷ The OCA therefore recommended PWSA study the feasibility of owning and maintaining sewer laterals within public rights-of-ways and easements, as it claimed is the norm for other wastewater utilities.²⁰⁸ The Partial Settlement provides that PWSA will conduct such a study, to be shared with all parties by January 15, 2021.²⁰⁹ I&E did not submit any testimony regarding ownership of wastewater laterals. However, I&E was involved in the discussion of this issue, which was vetted during settlement negotiations. Additionally, in recognition of the need for more information on this topic, and with the knowledge that the results of PWSA's study will be available on or by January 15, 2021, I&E supported this term because the ability to have a more informed understanding of the realities of PWSA's potential ownership of the sewer laterals will benefit all parties and the Commission. Therefore, I&E supports this term.

4. Commission Staff Requested Documents

The Commission directed PWSA to introduce a variety of documents PWSA relied upon to support its Compliance Plan.²¹⁰ Although PWSA initially provided some

²⁰⁷ OCA St. No. 5, p. 7.

²⁰⁸ OCA St. No. 5, p. 9.

²⁰⁹ *Joint Petition*, p. 34, ¶III(Z)(September 13, 2019).

²¹⁰ Directed Questions, p. 2-3.

of the thirteen (13) requested documents,²¹¹ others were omitted.²¹² I&E was the only party that offered testimony regarding missing documents, and I&E witness Spadaccio recommended that PWSA immediately provide the omitted documents so that the review the Commission requested would be possible.²¹³ PWSA disagreed with I&E's position on the basis that the list of Commission-requested documents was comprised of documents that are beyond the scope of those PWSA was relying upon to support its Compliance Plan.²¹⁴

I&E notes that during the course of the negotiation sessions in this case, PWSA advised I&E that the documents it believed related solely to Stage 2 issues were voluminous and would create a costly administrative burden to produce. In consideration of PWSA's position, and through settlement, I&E agreed that it would support PWSA's position that certain documents requested by the Commission would not be introduced, as they relate to Stage 2 issues. However, I&E's agreement to this term was conditioned upon a built-in protection that would ensure that the Commission would not be deprived of such documents if it determined that they were critical to its analysis and decision in Stage 1. Specifically, the Partial Settlement provides that PWSA will file the documents within 30 days of the final order if the Commission directs otherwise.²¹⁵ Because the Partial Settlement either provides the documents requested by the Commission or a

²¹¹ PWSA provided the following documents as exhibits to PWSA St. No. C-1: Organizational Plan; PWSA Capital Improvement Plan for years 2017 – 2021; October 25, 2017 Administrative Order of the PA DEP; PWSA 40 Year Plan; 12-year plan "Pittsburgh's Water Future 2030 and Beyond."

²¹² I&E witness Spadaccio identified the list of omitted documents at I&E St. No. 1, pp. 11-12.

²¹³ I&E St. No. 1, p. 12.

²¹⁴ PWSA St. No. C-1R, pp. 6-7.

²¹⁵ *Joint Petition*, p. 35, ¶III(BB)(2)(September 13, 2019).

reasonable explanation why certain documents were not filed, with a caveat that the Commission's determination will prevail, I&E asserts the Commission should approve these terms.

G. Capital Projects/Construction/Bidding Processes

1. Construction Project Tracking and Evaluation

As part of its Directed Questions, the Commission asked parties in this case to discuss project information relative to a listing of projects that PWSA must undertake in compliance with a 2017 PA DEP Administrative Order.²¹⁶ Specifically, the Commission's Directed Questions requested that parties discuss "[t]he individual design engineer, company affiliation and the estimated cost, funding source, timeline, and milestone dates"²¹⁷ for twelve specific projects, each of which is identified in PWSA Exhibit RAW/C-1. As part of its investigation, I&E identified that PWSA failed to provide timeline information for the following six projects: Aspinwall Pump Station Improvements, Bruecken Pump Station Improvements, Aspinwall Treatment Plant Pretreatment Chemical System and Clarification Improvements, Clearwell Emergency Response Project, Highland Park Membrane Filtration Module Replacement Program, and MFP Assessment and Critical Process Improvements.²¹⁸ Additionally, I&E noted that PWSA failed to provide engineer or company affiliation for the following five projects: 2019 Large Diameter Water Main Improvements, Aspinwall Water Treatment

²¹⁶ Directed Questions, Stage 1, pp. 2-3; Exhibit RAW/C-1, Directed Questions Nos. 6.1-6.12.

²¹⁷ Directed Questions, pp. 3-4.

²¹⁸ I&E St. No. 3, pp. 4-6.

Plant High Service Pump Station, Clearwell Emergency Response Project, Clearwell Improvements, and MFP Assessment and Critical Process Improvements.²¹⁹ Finally, other than indicating that funding would be “borrowed,” PWSA failed to identify a specific funding source for any of the twelve projects at issue.²²⁰ As a result of identification of each of these deficiencies, I&E recommended that PWSA either provide the missing information as part of this case or explain why it was not available.²²¹

In response, PWSA witness Weimar indicated that not all of the information that I&E identified as missing was available;²²² however, PWSA provided a new schedule to include a listing of available project information, including current status, assigned consultant, nominal completion schedule, and current risks.²²³ Additionally, in a good faith effort to share available project information, PWSA indicated that it would be available to further discuss the status of the concept plans, costs, and schedules at the Commission’s convenience.²²⁴ I&E agreed that PWSA’s provision of all available information and the offer to provide further status information upon request, satisfied I&E’s recommendation for the timeline information.²²⁵ Later in this case, PWSA also provided updated information regarding active project operators in an attempt to add additional information regarding design engineer and company affiliation information

²¹⁹ Id. at p. 7.

²²⁰ Id. at p. 8.

²²¹ I&E St. No. 3, pp. 4-8.

²²² PWSA St. No. C-1R, p. 8.

²²³ PWSA Ex. RAW/C-29.

²²⁴ PWSA St. No. C-1R, p. 9.

²²⁵ I&E St. No. 3-SR, p. 5.

that became available for PWSA's capital projects.²²⁶ Additionally, PWSA subsequently updated its Exhibit RAW/C-10²²⁷ to provide the most updated project information available at that time.

However, because PWSA had not provided any additional information regarding funding sources, I&E continued to recommend that PWSA either provide it or, in the alternative, explain why it could not be provided.²²⁸ As of August 2, 2019, when it served its Supplemental Direct Testimony, PWSA was not able to identify the specific funding sources for its projects, but it noted that the PWSA Board's budget was still pending.²²⁹ However, PWSA has committed to providing continued updates about the funding sources that it plans to use for each project as part of its Compliance Plan Progress Reports.²³⁰

In order to continue to ensure that timely project information is conveyed, I&E notes that the Partial Settlement in this case obligates PWSA to continue to report on cost-effectiveness and performance measures for its capital projects. Specifically, within 60 days of entry of the Partial Settlement, PWSA will provide I&E with a list of the proposed metrics, and upon mutual agreement, those metrics will be reported upon in future PWSA Compliance Plan Progress Reports.²³¹ I&E submits that continued tracking and reporting of project progress and metrics is necessary to ensure PWSA will permit

²²⁶ PWSA St. No. C-1SD, p. 9; PWSA Ex. RAW/C-34.

²²⁷ PWSA Ex. Updated RAW/C-10.

²²⁸ Id. at. pp. 6-7.

²²⁹ PWSA Supplemental St. No. C-1SD.

²³⁰ *Joint Petition*, p. 36, ¶¶ III(EE)(2) (September 13, 2019).

²³¹ *Joint Petition*, pp. 35-36, ¶¶ III(CC) (September 13, 2019).

parties and the Commission an opportunity to review the progress, and if necessary, take appropriate action if deficiencies exist and are not addressed. While PWSA has been cooperative in providing project information to date, it appears that additional information is constantly being developed and updated, and tracking the status of the projects benefits PWSA, the Commission, and provides accountability to ratepayers. For these reasons, I&E submits that these terms are consistent with PWSA's provision of adequate, efficient, safe, reliable and reasonable service. Accordingly, I&E fully supports these terms as being in the public interest and they should be approved without modification.

2. Selection Processes and Existing Contractors

As part of its investigation in this case, I&E tried to obtain an approximate number or a percentage of PWSA's overall water supply, production and storage, and wastewater conveyance projects that it competitively bids. Although PWSA initially responded to I&E's request for this information by pointing to its competitive bidding processes,²³² it did not provide any estimation of the number or percentage of its competitively bid projects.²³³ As a result, I&E recommended that PWSA be required to track and provide it the number or percentage of its competitively bid projects as part of a revised Compliance Plan filing.²³⁴ In response, PWSA explained that the percentage of projects that are to be competitively bid is virtually 100% because under the Municipality

²³² PWSA St. No. C-1, pp. 14-17; I&E Ex. No. 4, Sch. 3.

²³³ I&E St. No. 4, p. 9.

²³⁴ Id. at pp. 9-10.

Authorities Act, any capital construction project or purchase of equipment/materials with a cost in excess of \$20,000 must follow an open and public bid process.²³⁵ Additionally, PWSA asserted that it has begun to monitor metrics related to cost-effectiveness and cost reporting relative to capital spending, and it continues to work to expand the metrics tracked and to use its eBuilder project management software to track project costs and progress.²³⁶ I&E supports PWSA's efforts to track and gauge these metrics.

In the Partial Settlement, PWSA agreed that it would provide, on an annual basis, a list of each construction contract in the prior year that was awarded without competitive bidding as well as information to show how that number compares with the total number of construction contracts awarded. Additionally, while PWSA will continue to comply with competitive bidding requirements arising under the Municipality Authorities Act, it reserves the right to dispense with such requirements where an exception is permitted. Additionally, PWSA has committed to provide updated design, engineer, and company affiliation for each project as part of its Compliance Plan Progress Reports.²³⁷

I&E submits that PWSA's commitment to track and report the percentage of competitively bid projects will permit parties and the Commission an opportunity to understand the realities of PWSA's operations. I&E notes that the Commission sought access to this information through its Direct Questions,²³⁸ and through this Partial Settlement, PWSA has committed to a course of action that will provide this information.

²³⁵ PWSA St. No. C-1R

²³⁶ *Id.* at p. 14.

²³⁷ *Joint Petition*, pp. 36, ¶¶ III(DD)(1) (September 13, 2019).

²³⁸ Directed Questions, p. 5; Exhibit RAW/C-1, Directed Questions No. 8-14.

Providing the Commission with information necessary to fully evaluate PWSA's operations is essential to ensuring that PWSA's operations are in conformity with the Code, Commission order, and regulations; accordingly, this term is in the public interest and it should be approved without modification.

3. Open and Active Project Information

The Partial Settlement includes an important term that commits PWSA to providing parties and the Commission with updated details about the funding sources that it plans to use for capital projects, and it outlines the fact that PWSA provided an updated Exhibit RAW-C-10 that provided updated projected information as of August 2, 2019.²³⁹ As I&E has addressed these developments and provided support for them in the previous paragraphs of this section, I&E incorporates that support here. I&E avers that PWSA's continued provision of updated and critical capital project information to parties and the Commission is necessary to enable the Commission to determine whether PWSA's capital projects are progressing in a way that will maintain PWSA's provision of adequate, efficient, safe, reliable and reasonable service. Accordingly, this term should be approved without modification.

4. Clearwell Improvements Projects

In I&E's view, one of the most important strides that PWSA has made during the course of this proceeding was developing a plan to expedite its Aspinwall Clearwell ("Clearwell") repair and replacement projects. As PWSA admitted in its Capital

²³⁹ *Joint Petition*, pp. 36, ¶¶ III(EE) (September 13, 2019).

Improvement Plan, “the Clearwell is the water system’s weakest link as there are no practical means to deliver water by bypassing the Clearwell, while maintain the required volume, quality, and contact time.”²⁴⁰ PWSA also explained the crippling impact that the Clearwell’s failure could have upon its operations: “Clearwell failure will cease all water delivery to all the Authority’s customers (residential, commercial, industrial, institutional, bulk rate customers, public health and safety providers, fire protection, governmental facilities, other water distributors, etc.), creating a public health emergency.”²⁴¹ I&E submits that the need for PWSA to take expedited and comprehensive action to protect against the Clearwell’s failure and to adopt a long-term plan to combat cessation of water service that could result from the Clearwell’s failure is at the forefront of its obligation to ensure and maintain the provision of safe, adequate, and reasonable service to its ratepayers.

By way of further context, PWSA’s Aspinwall Clearwell is a facility through which all of PWSA’s water flows. It is a structure, built in 1908, that has the functions of providing equalization storage that allows the filters to operate independently of potential fluctuations in system demands as well as providing sufficient retention contact time for disinfection agents. Significantly, at the outset of this case, the Clearwell had not undergone any major modification of upgrades since its installation in 1908.²⁴² However, as part of its case, PWSA provided information regarding its plans for a Clearwell

²⁴⁰ PWSA Ex. RAW/C-8.

²⁴¹ Id.

²⁴² I&E St. No. 3, p. 10.

improvement project,²⁴³ which consisted of five components, including 2019 Large Diameter Water Main Improvement, Aspinwall Pump Station to Lanpher Reservoir Rising Main, Bruecken Pump Station Improvements, Aspinwall Water Treatment Plant High Service Pump Station, and the Clearwell Emergency Response Project. PWSA explained that the replacement of its Clearwell would require the completion of these five projects (“Clearwell repair and replacement projects”) because they comprise the means that PWSA can use to bypass the Clearwell and continue providing service, as alternatives would require the Clearwell to be taken out of service while it was being rehabbed or replaced, an option that would not be possible because of resulting service interruptions.²⁴⁴ Therefore, the five projects comprise the necessary means in which PWSA can bypass the Clearwell and continue providing water to customers when it is taken out of service while repairs are being completed. The Clearwell Emergency Response project is the means in which the Aspinwall Clearwell will be bypassed and allow water to be delivered to the rising mains and pump stations that would then distribute the water throughout the system.²⁴⁵ However, I&E’s evaluation of the information that PWSA provided regarding its Clearwell repair and replacement projects revealed that deficiencies in the provision of certain critical information regarding preliminary assessments, designation of design firms/engineers, and in some cases, milestone completion and construction dates.²⁴⁶

²⁴³ PWSA Ex. No. RAW/C-12.

²⁴⁴ I&E Ex. No. 3, Sch. 2.

²⁴⁵ Id.; I&E St. No. 3, p. 11.

²⁴⁶ I&E St. No. 3, pp. 12-14; I&E Ex. No. 3, Sch. 3.

Additionally, as a result of I&E's investigation, I&E witness Cline expressed concern that it did not appear that PWSA would complete the Clearwell repair and replacement projects until 2024, an unacceptable and unsafe outcome considering the failure of PWSA's system resulting in a public health crisis upon Clearwell failure.²⁴⁷ Accordingly, I&E witness Cline recommended that PWSA be required to expedite its plans to bypass the Clearwell and ensure continuity of service in the events of a failure, and that the plans should evaluate all means of accelerating construction.²⁴⁸

As this case developed, PWSA agreed that the Clearwell presented a clear risk to its water system operation, but it also indicated that it was challenged to present a detailed and expedited prioritization plan for addressing the Clearwell because a pending PA DEP Order would control the schedule for key project implementation.²⁴⁹ Although I&E acknowledged that because of the pending PA DEP schedule requirements, PWSA may not have complete control over the Clearwell repair and replacement schedule, I&E nonetheless cited to the public safety risk of failure and continued to recommend that PWSA expedite its Clearwell repair and replacement projects.²⁵⁰ In response, on May, 16, 2019, PWSA took a significant step towards satisfying I&E's recommendation by issuing Board Resolution 91 which specifically identified the repair and replacement of the Aspinwall Clearwell as one of PWSA's high priority projects.²⁵¹ The resolution

²⁴⁷ I&E St. No. 3, p. 15.

²⁴⁸ I&E St. No. 3, p. 15.

²⁴⁹ PWSA St. No. C-1R, p. 10.

²⁵⁰ I&E St. No. -SR, p. 8.

²⁵¹ PWSA Ex. No. RAW/C-35.

authorized PWSA's Executive Director, currently PWSA witness Weimar, to accelerate implementation of highly critical facilities, including the Clearwell.²⁵²

After PWSA adopted Board Resolution 91, I&E and PWSA continued discussing potential ways to expedite the Clearwell repair and replacement projects during the multiple comprehensive settlement negotiation sessions held during the months of May through August of 2019. During the sessions, I&E had an opportunity to gain additional information about PWSA's plans to ensure that the integrity of PWSA's operations and water delivery would not be compromised by a failure at the Clearwell. Additionally, one informational session was devoted almost entirely to PWSA's engineering efforts to address the Aspinwall Clearwell. During that session, PWSA's engineering team presented a multi-faceted approach and contingency planning. At the time negotiations concluded, PWSA was still awaiting the DEP's issuance of an Order and Agreement that it must adhere to in order to finalize the projects and timelines for Clearwell Improvement Project. Despite the absence of the PA DEP Order, the issuance of which was beyond PWSA's control, I&E recognized that PWSA's commitment to expediting the project, combined with its engineering efforts and contingency planning, honored its recommendation for PWSA to expedite the completion of Clearwell projects to ensure continued and safe operation.²⁵³

²⁵² Id.; PWSA St. No. C-1SD, p. 9.

²⁵³ I&E St. o. 2-RS, pp. 2-4.

However, on September 6, 2019, PA DEP issued its Consent Order and Agreement, which provides for enumerated milestone commitments related to PWSA's Clearwell and related projects.²⁵⁴ These milestone targets include but are not limited to the following: (1) on or before January 1, 2023, PWSA must submit an application for a construction permit for a bypass system that will enable PWSA to remove the Clearwell from service and replace it, and (2) within 2 years of a construction permit being issued, PWSA complete construction of the bypass system in accordance with the terms and conditions of the permit and certify compliance with applicable requirements. Additionally, multiple milestone dates are included to facilitate the bypass process, including timelines for obtaining permits and completing construction of designated projects.²⁵⁵

Because of the timing of PA DEP's September 2019 Order, I&E was not able to consider the Order in its investigation or in the course of its negotiation sessions with PWSA; nonetheless, I&E supported PWSA's successful request to admit this Order into the record for the Commission.²⁵⁶ I&E also notes that as part of the settlement achieved in this case, all parties have agreed that PWSA's Clearwell-related projects, and if appropriate, and update to its LTIIP, will proceed in accordance with the PA DEP's Consent Order and Agreement.²⁵⁷ In I&E's view, this settlement commitment simply memorializes PWSA's obligation to comply with PA DEP's regulatory requirements,

²⁵⁴ PWSA Hearing Ex. 6.

²⁵⁵ PWSA Hearing Ex. 6, pp. 5-12.

²⁵⁶ PWSA Hearing Tr. at 59.

²⁵⁷ Joint Petition, p. 37, ¶ III(FF)(4)(September 13, 2019).

which I&E views as consistent with PWSA's obligation to provide adequate, efficient, safe, reliable and reasonable service.

Aside from acknowledging PWSA's PA DEP obligations for the Clearwell, the Partial Settlement also reflects that PWSA has adequately reviewed and considered a number of alternatives before developing its Clearwell repair and replacement plan.²⁵⁸ The consideration of alternatives and the corresponding analysis of project options is incorporated into the record as PWSA Ex. RAW/C-30, and I&E submits that the record reflects that PWSA has undertaken a substantial analyses of available options to choose the most expedient and comprehensive one. The selected method, encompassing the Clearwell replacement and improvement projects discussed above, is a multi-phase program approach, which PWSA has committed to undertaking on an expedited basis.²⁵⁹ As explained above, I&E supports the Clearwell Improvement Projects term of the Partial Settlement because it provides an expedited, multi-faceted approach to addressing critical infrastructure necessary for PWSA's continued operation in a manner that also recognizes PWSA's obligations to the PA DEP. Ensuring continuity of water service is critical to PWSA's obligation to provide adequate, efficient, safe, reliable and reasonable service, and with protecting the public interest. Accordingly, I&E submits that these terms should be approved without modification.

²⁵⁸ Id. at pp. 36-37, ¶ III(FF)(4).

²⁵⁹ Id. at ¶¶ III(FF)(2)-III(FF)(3)

H. Long-Term Infrastructure Implementation Plan (LTIIIP) (52 Pa Code §121)

1. Materials Report, Valves, Prioritization

Through the Partial Settlement, PWSA has committed to reporting critical infrastructure information which is necessary to inform its LTIIIP prioritization and to ensure the safety and integrity of its operations. Specifically, PWSA has committed to (1) provide a comprehensive materials report and updated information about the types and sizes of valves once its GIS system is updated; (2) provide progress reports that include additional information regarding its prioritization of main and valve replacements, and (3) notify parties when its computerized maintenance management system (“CMMS”) project is implemented.²⁶⁰

I&E submits that these commitments are critical to ensuring that PWSA’s LTIIIP is targeted and effective, maximizing the efficiency and effectiveness of each infrastructure dollar spent. As I&E witness Gray explained, PWSA’s LTIIIP is required to identify the types and ages of eligible property for which it will ultimately seek DSIC recovery, and it must also explain how aging infrastructure will be accelerated.²⁶¹ At the outset of this case, PWSA’s Compliance Plan indicated that PWSA did not initially have a well-documented method of recordkeeping of maps showing the size, character, and location of each main and valve.²⁶² Additionally, the records that were available were not adequately portrayed in PWSA’s Geographic Information Systems (“GIS”).

²⁶⁰ *Joint Petition*, pp. 37-38, ¶¶ III(GG)(1)- III(GG)(3) (September 13, 2019).

²⁶¹ I&E St. No. 4, p. 31, referencing 66 Pa. C.S. § 1352(a)(1)-(6); 52 Pa. Code § 121.3(a)(1)-(8).

²⁶² PWSA Compliance Plan, p. 51.

By way of the above terms, PWSA has proposed a plan to target the deficiencies identified in its Compliance Plan by providing reporting and updated information about the types and sizes of the valves in its system. Furthermore, PWSA has committed to report on the progress it makes in gaining information necessary to prioritize main replacements, and upon its progress in implementing a maintenance management system that will better target its resources to optimize efforts. I&E submits that taking these important steps to identify critical infrastructure and target replacement so will enable PWSA to provide safer and more cost-effective service. I&E submits that this result is both consistent with protecting the public interest and consistent with PWSA's obligation to ensure and maintain the provision of adequate, efficient, safe, reliable and reasonable service. Accordingly, this term should be approved without modification.

2. Customer Owned Lead Service Lines

This Partial Settlement term simply memorializes PWSA's commitment to, if determined necessary, amend its LTIP once it is able to estimate the number of customer-owned lead service lines, and the expected expenditures for the replacement.²⁶³ I&E notes that PWSA is under a mandate to inventory its estimated 71,000 residential service line connections system-wide and to identify all lead lines by December 21, 2020.²⁶⁴ Additionally, as reflected in I&E's Main Brief, I&E supports requiring PWSA to set forth a plan that provides for it to replace customer-owned service lines and thereafter pursue cost recovery permitted under Section 1311(b) of the Code.²⁶⁵ Because

²⁶³ *Joint Petition*, pp. 38, ¶¶ III(HH)(1) (September 13, 2019).

²⁶⁴ I&E St. No. 4, p. 24, referencing PWSA Compliance Plan, p. 120.

²⁶⁵ I&E Main Brief, pp. 88-94.

a resolution of I&E's and other parties' recommendations on this issue will necessarily impact PWSA's LTIP planning, I&E supports PWSA's commitment to amend its LTIP consistent with the final resolution of this issue.

3. Metering Unmetered Properties

I&E expressed significant concerns regarding the metering plan that PWSA proposed in its LTIP. Specifically, PWSA proposed a 5-year plan to complete its Unmetered and Flat Rate Properties meter installation program.²⁶⁶ As I&E witness Gray summarized, the intent of the meter installation is, in part, to address the fact that the City did not have meters on municipal and government buildings in the past.²⁶⁷ Additionally, there are an estimated 200 to 400 sites that are currently unmetered, and an additional 500 flat rate customers that also need to have meters installed.²⁶⁸

I&E witness Gray testified that PWSA's 5-year metering plan is too back-loaded to meet its compliance obligation to ensure adequate, efficient, safe, reliable, and reasonable service. The plan is too back loaded because although PWSA estimates spending \$18,697,143 to complete its metering plan, its investment does not ramp up until the mid-late part of the five years. I&E witness Gray explained that PWSA intended to spend nothing in 2018 and to only spend \$345,000 in 2019, while for years 2020 through 2023, spending levels were estimated to increase to \$3,148,310, \$4,934,833, and \$5,021,500 respectively. I&E also noted that the highest year for spending was the final

²⁶⁶ PWSA Compliance Plan, Appendix C, p. 25, Section 2.3.7.

²⁶⁷ I&E St. No. 4, pp. 32-33.

²⁶⁸ PWSA Compliance Plan, Appendix C, p. 25, Section 2.3.7.

year, supporting the need for PWSA to provide a revised LTIIIP with a plan to expedite metering. Additionally, I&E recommended that PWSA's revised LTIIIP should explain why and how PWSA proposes and supports its expedited metering plan.²⁶⁹

As a result of the settlement discussions in this case, it became clear to I&E that, aside from revising its metering plan, PWSA will need to file an amended LTIIIP on several fronts as more critical information becomes available through improved and more targeted infrastructure identification and investigation. At the hearings in this case, PWSA entered an updated LTIIIP dated August 21, 2019.²⁷⁰ Although PWSA has not yet proposed to materially alter its metering spending plan, PWSA has committed to prioritizing identification of unmetered/unbilled locations to provide that all such locations would be identified by June 29, 2020.²⁷¹ Additionally, PWSA will identify all newly-metered and/or previously unbilled properties in the form of status updated provided in the quarterly reports it has agreed to provide through this Partial Settlement.²⁷² Therefore, I&E supports the Partial Settlement term that memorialized PWSA's commitment to include more information about its plan and the timeline for its metering plan.²⁷³

Although this interim resolution does not adopt I&E's specific recommendation, I&E notes that PWSA has taken significant strides to address unmetered properties,

²⁶⁹ I&E St. No. 4, pp. 33-34.

²⁷⁰ PWSA Hearing Ex. No. 3.

²⁷¹ PWSA Ex. RAW-C-43, p. 26.

²⁷² Id.

²⁷³ *Joint Petition*, pp. 21, ¶¶ III(G)(1)(a) (September 13, 2019).

including engaging assistance from a professional engineering consultant to assist in identification and evaluating unmetered locations,²⁷⁴ which is a preliminary step that is necessary to support PWSA's spending plan. I&E also notes that as 2020 approaches, and likely before a final conclusion of this case, PWSA's metering spend is slated to ramp up, as the timeframes for anticipated lower spending end at the conclusion of 2019. Therefore, I&E supports the settlement term, which represents PWSA's good faith effort to identify unmetered properties, a step that is imperative to timely metering all impacted locations. I&E submits that this result is both consistent with protecting the public interest, by ensuring that metering is done timely and efficiently, and consistent with PWSA's obligation to ensuring and maintain the provision of adequate, efficient, safe, reliable and reasonable service. Accordingly, this term should be approved without modification.

4. Workforce Development

As part of its investigation into PWSA's LTIP, I&E reviewed the workforce management and training program it included and determined that the programming did not adequately address the size of the workforce needed. I&E witness Gray testified that PWSA's LTIP failed to sufficiently demonstrate how it would increase the size of its workforce or hire qualified contractors to meet the demands that would result from increased capital spending.²⁷⁵ Notably, PWSA projected that its workforce would only

²⁷⁴ *Joint Petition*, pp. 21, ¶¶ III(G)(1)(a) (September 13, 2019).

²⁷⁵ I&E St. No. 4, pp. 33-34.

increase from 301 to 524 by 2023,²⁷⁶ while its capital spending would increase from an average of \$36 million per year from 2014-2018 to \$255 million per year from 2019-2023.²⁷⁷ Aside from the disparity between the planned workforce and substantial increase in capital spending, the record also indicated that PWSA had staff retention issues including but not limited to the City residency requirement, frequent leadership turnover, compensation limitations, and an aging workforce.²⁷⁸ Because of these issues, I&E recommended that PWSA submit a revised LTIIP to (1) include a timeline to address and propose solutions for adequate staffing related to the LTIIP schedule; (2) demonstrate why its plan was reasonable and achievable in light of the planned increase in capital spending; and (3) demonstrate how it will be able to hire enough qualified employees to meet the schedule and demands of increased capital spending.²⁷⁹

During settlement discussions in this case, it became clear that while PWSA recognized I&E's concerns, it does not have the resources or information necessary to adhere to I&E's recommendations at this time. As a compromise, and with the acknowledgment that further amendment of its LTIIP will be necessary as more information becomes available, PWSA revised its LTIIP to provide the information that it does have available.²⁸⁰ Specifically, it explained that it quantified its staffing projections by evaluating then-current job openings/postings for the current and projected project demands, coupled with an understanding of PWSA staff's capacity to handle the

²⁷⁶ PWSA Compliance Plan, Appendix C, p. 48.

²⁷⁷ *Id.* at p. 42.

²⁷⁸ PWSA Compliance Plan, Appendix C, pp. 5, 8.

²⁷⁹ I&E St. No. 4, pp. 35-36.

²⁸⁰ *Joint Petition*, p. 38, ¶¶ III(JJ) (September 13, 2019).

projected workload. PWSA provided much more detailed workforce changes it made, including but not limited to hiring four Senior Managers to manage operations filed services teams. Realigning resources to ensure that key program metrics are met (including meter installation rates), hiring laborers, restructuring Engineering and hiring additional employees, and soliciting contractors.²⁸¹ Although PWSA cannot presently estimate the exact number of contractors it may need, because this information will be dependent upon the progress of building an internal workforce and final determination of needs, but it represents its commitment to build a workforce that meets the needs of its capital spending.²⁸²

While I&E believes that the best resolution of this issue may come in the form of a future LTIIP filing once more information is available, I&E supports PWSA's efforts to explain the general basis of its projections. Recognizing that PWSA's projections will be impacted through the continued realignment of PWSA's operations to achieve compliance, PWSA has unquestionably made significant strides in increasing and realigning its workforce to more effectively manage and support its operations. Therefore, I&E submits this Partial Settlement term encompasses PWSA's best and continued efforts to comply, which is consistent with PWSA's obligation provide adequate, efficient, safe, reliable and reasonable service. Accordingly, this term should be approved without modification.

²⁸¹ PWSA Ex. RAW-C-43, pp. 50-51.

²⁸² *Joint Petition*, pp. 38-39, ¶¶ III(KK) (September 13, 2019).

5. Construction Coordination with Other Utilities and Municipalities

As part of its investigation in this case, I&E identified PWSA's failure to adequately describe outreach and coordination with other utilities, department of transportation, and local government regarding planned maintenance and construction projects in accordance with 52 Pa. Code § 121.3(a)(8).²⁸³ Instead of providing an adequate description of its plan for outreach and coordination, PWSA simply stated that it would "continue proactive means to identify the opportunities to coordinate pipe replacement and road paving."²⁸⁴ After identifying the deficiency, I&E recommended that PWSA provide greater detail about how it would manage and refine its coordination efforts with local utilities and local government.²⁸⁵

During the settlement meetings in this case, I&E and PWSA discussed the importance, from both a cost-savings and efficiency standpoint, as well as from an emergency response standpoint, of utilities having outreach and coordination with other local utilities and governments. PWSA understood the importance, and had, in fact, already developed a coordination team with the City and with other utilities.²⁸⁶ PWSA identified critical coordination opportunities, including annual paving plan coordination with the City, and with local gas companies' pipeline improvements.²⁸⁷ Additionally, PWSA is working to develop a GIS-based data layer to communicate its plans with other

²⁸³ I&E St. No. 4, p. 37.

²⁸⁴ PWSA Compliance Plan, Appendix C, p. 53.

²⁸⁵ I&E St. No. 4, pp. 37-38.

²⁸⁶ PWSA Ex. RAW C-3, p. 55.

²⁸⁷ Id.

utilities, and it has also assigned coordination duties to a staff member within the Engineering Department. Finally, PWSA intends to use the Pennsylvania 811 web service application to identify opportunities for project collaboration with local utilities and local, state, county, and city government agencies.²⁸⁸ I&E supports these efforts, which present a much more detailed explanation of outreach and coordination efforts to facilitate its LTIP than PWSA was initially able to provide in its Compliance Plan. The Partial Settlement references and memorializes PWSA's updated efforts,²⁸⁹ and I&E avers that those efforts are consistent with PWSA's obligation to provide adequate, efficient, safe, reliable and reasonable service, and with the public interest, because they will promote the safe and efficient coordination of work efforts between PWSA and other impacted utilities and local government agencies. I&E also submits that coordination efforts may make PWSA's LTIP projects more cost-efficient, to the extent that shared savings may be available from coordination, which would certainly benefit PWSA and its ratepayers. Accordingly, this term should be approved without modification.

6. Distribution System Improvement Charge

As part of the Partial Settlement, PWSA outlines its intention to, *inter alia*, seek approval of a distribution system improvement charge ("DSIC") as part of its next base rate case and to seek various waivers of various Code provisions in accordance with its DSIC.²⁹⁰ Although I&E takes no position regarding PWSA's statement of future

²⁸⁸ Id.

²⁸⁹ *Joint Petition*, pp. 38-39, ¶¶ III(KK) (September 13, 2019).

²⁹⁰ *Joint Petition*, p. 39, ¶¶ III(LL) (September 13, 2019).

intentions to seek waivers, I&E notes that it has supported PWSA pursuing DSIC funding once it meets eligibility criteria.²⁹¹ I&E's support for PWSA to pursue DSIC funding is predicated upon the determination that the DSIC funding could provide funding more quickly and with more accountability to ratepayers than available through PAYGO funding.²⁹² I&E also noted that along with mitigating PWSA's debt burden, the implementation of DSIC funding could potentially lead to a reduced frequency of PWSA rate case filings and accompanying expenses.²⁹³ I&E submits that this term would provide PWSA with needed infrastructure improvement funds, promote accountability to ratepayers, and mitigate rate case expense. Each of these results is consistent with the public interest and with PWSA's obligation to provide adequate, efficient, safe, reliable and reasonable service. Accordingly, I&E supports this term, aside from the waiver provisions of the Partial Settlement, for which I&E will reserve its position until the time the request is made.

I. Customer Service, Collections and Customer Assistance Program

1. Issues Deferred to Stage 2

As I&E explained above, as a result of PWSA's Expedited Motion, certain issues that parties had been addressing in this case were requested to be deferred from this proceeding to Stage 2 of PWSA's Compliance Plan, and the Commission permitted the deferral. I&E's assent to the agreement to defer the two subject matters it addressed, PWSA's high levels of uncollectibles and its Customer Assistance Program ("CAP"),

²⁹¹ I&E St. No. 1, p. 16

²⁹² Id. at p. 17.

²⁹³ Id. at 18.

was reached after continued discussions with PWSA and predicated upon the conclusion that continued litigation of these areas would preclude PWSA from obtaining much-needed assistance in these areas. I&E submits that while the issues it raised regarding these two topics are merited and impactful to PWSA's operations, the public interest is not served by compelling PWSA to litigate issues that it does not yet appear to have the tools to address. On the contrary, such a result is unlikely to do much other than result in increased litigation costs and use of resources, and the only "successful" outcome would require PWSA to revise its Compliance Plan to address deficiencies that it appears to need assistance to address. In I&E's view, evidence demonstrates that PWSA would significantly benefit from being able to liberally discuss both residential and non-residential collections strategies and its CAP programming during collaborative sessions now underway for Stage 2.

While I&E will address its CAP position below, it is important that parties and the Commission understand I&E's position regarding its agreement to defer PWSA's plan for collections issues to Stage 2.²⁹⁴ PWSA I&E notes that it remains concerned about the high level of revenue loss, estimated to be \$8,584,827 for the fully projected future test year in PWSA's recent base rate case.²⁹⁵ Additionally, I&E remains concerned about the highest level of PWSA's uncollectibles resulting from commercial accounts.²⁹⁶ Although I&E has not abandoned its concerns, I&E considered PWSA witness Julie Quigley's

²⁹⁴ *Joint Petition*, p. 40, ¶ III(MM)(1)(c) (September 13, 2019).

²⁹⁵ I&E St. No. 2, p. 58; I&E Ex. No. 2, Sch. 7, p. 1 at Docket Nos. R-2018-3002645 and R-2018-3002647).

²⁹⁶ I&E St. No. 2, p. 58

position that permitting PWSA to address collections issues during the Stage 2 process would enable PWSA to freely discuss the issues during collaborative sessions so that views and information can be incorporated into an overall collections plan.²⁹⁷ Through the discovery process in this case, I&E provided PWSA with Management Efficiency Audit Reports that the Commission's Bureau of Audits issues in the hopes that PWSA could review the potential avenues and options other utilities use to aggressively reduce their level of uncollectibles, and PWSA has agreed to review those options.²⁹⁸ I&E notes that through the Joint Petition, PWSA has committed to seeking the help of BCS/Commission Staff to gather information about best practices for collections policies and procedures.²⁹⁹ I&E believes this type of guidance, which would be further available through the Stage 2 collaborative sessions, would benefit PWSA. I&E encourages PWSA and all parties to use the sessions as an avenue to help PWSA address its concerning level of uncollectibles that deprive it of revenue that it needs to meet operational obligations.

2. PWSA Low-Income Customer Assistance Program

At the outset of this case, and in attempt to respond to several of the Commission's Directed Questions, I&E provided testimony about the inception and type of CAP programming that PWSA has adopted.³⁰⁰ I&E noted that in its Supplemental Compliance Plan, PWSA committed to data collection regarding low income customers and CAP

²⁹⁷ PWSA St. No. C-4R, p. 27.

²⁹⁸ PWSA St. No. C-4R, pp. 27-28.

²⁹⁹ *Joint Petition*, p. 41, ¶ III(MM)(2)(b)(i) (September 13, 2019).

³⁰⁰ I&E St. No. 2, pp. 7-13.

programming, including but not limited to the following information: amount of billed revenue, amount of receipts actually billed, amount of receipts actually collected, the number of accounts in arrears, the dollars of arrears, number of accounts disconnected for nonpayment, the number of participating bill discount participants who entered the bill discount program with unpaid balances, etc.³⁰¹

I&E recommended that PWSA should continue its data collection. Additionally, I&E recommended that based on its data, analysis, and evaluation of each element of its CAP programming, PWSA should formulate and present a CAP proposal and evaluation plan to BCS for evaluation in its next base rate case.³⁰² In response, PWSA witness Quigley indicated that PWSA was still in the process of gathering data, and from a timing perspective, I&E's requirement would not be feasible. Additionally, Ms. Quigley opined that PWSA has already committed to a process to evaluate and consider revisions to its CAP, and that injecting additional feedback prior to PWSA's rate case would be unnecessary and delay feedback from BCS. After the lengthy settlement discussions that took place during the additional three months extended in this case, I&E agreed with PWSA's position and expressed agreement that permitting PWSA to pursue these issues during workshops held with BCS would be the best course of action.³⁰³ In the Partial Settlement, PWSA memorialized its agreement to develop Low Income Assistance Program Plan during Low Income Advisory Council meetings.³⁰⁴ I&E supports this

³⁰¹ PWSA Compliance Plan Supplement, p. 19;

³⁰² I&E St. No. 2, pp. 12-13; I&E St. No. 2, p. 64.

³⁰³ I&E St. No. 2-RS, pp.7- 8.

³⁰⁴ *Joint Petition*, p. 42, ¶ III(NN)(3)(b)(September 13, 2019).

resolution as being part of an effective use of PWSA's resources to address CAP issues and to keep the Commission and parties informed of developments.

J. Lead Service Line Remediation

PWSA's ability to provide safe and effective service to its ratepayers and to make repairs and improvements necessary for the safety of its customers, as required by Section 1501 of the Code is, in part, contingent upon its ability to effectively address actionable lead levels in its system. By way of further context, PA DEP regulations establish an action level for lead at 0.015 mg/L, and provide that the action level is exceeded when the concentration on more than 10% of tap water samples collected during the monitoring period (known as the 90th percentile amount) is greater than the action level.³⁰⁵ Lead is toxic to the central nervous system and to the cardiovascular system, and it damages numerous organ systems and causes permanent, irreversible injuries to children's developing brains. Lead exposure has also been associated with increased incidence of miscarriage, delays in time to achieve pregnancy, and irreversible neuropsychological and developmental effects in children.³⁰⁶ While to date, lead testing in PWSA's service territory reveals that the lead levels in PWSA's water remain actionable, the efforts and actions that PWSA has committed to undertake in the Partial Settlement for lead remediation are significant and comprehensive. I&E notes that these Partial Settlement terms were arrived at after a substantial amount of investigation and research by the parties, and the continued willingness of PWSA's lead team and counsel

³⁰⁵ 25 Pa. Code § 109.1102(a).

³⁰⁶ UNITED St. No. C-3, pp. 8-9.

to provide and update information to keep the process informed. I&E submits that the Partial Settlement's provisions for lead service line remediation are essential terms necessary to protect the safety of PWSA's ratepayers and members of the public who may be adversely impacted by elevated lead levels in PWSA's water. Accordingly, adoption and effectuation of these terms, in the aggregate, represents an imperative step for PWSA that is consistent with its obligation to provide adequate, efficient, safe, reliable and reasonable service and in the public interest, as explained more thoroughly below.³⁰⁷

a) Effective Dates of Terms

At the outset, the Partial Settlement establishes effective dates for lead remediation terms, which unless otherwise specifically noted, indicate that the provisions would take effect on the date that the Commission issues an order approving the Partial Settlement, and extend until December 31, 2026.³⁰⁸ I&E supports the applicable timeline because it will provide set expectations and certainty for PWSA's planning and budgeting purposes, provide for enough time to implement and gauge the effectiveness of lead service line replacement and corrosion control efforts, and thereafter permit PWSA, the Commission, and parties to evaluate progress and identify whether and how revised or additional efforts should be incorporated into lead remediation efforts. For these reasons, adoption of the proposed timeline is in the public interest.

³⁰⁷ I&E notes that its assent to and support for these terms should not be construed to impact its position on the litigated issues involving lead. I&E has carved those issue out specifically because PWSA has not met applicable standards with respect to those issues.

³⁰⁸ *Joint Petition*, p. 44, ¶ III(PP)(September 13, 2019).

b) Inventory of Lead Service Lines

I&E notes pursuant to a Consent Order in place with PA DEP, PWSA is obligated to provide PA DEP with an inventory of all residential service lines for which PWSA has not been able to confirm the absence of lead.³⁰⁹ At the outset of this case, I&E had significant concerns regarding PWSA's inability to accurately and completely inventory its service lines, a crucial step toward identifying and replacing lead service lines.³¹⁰ However, during the course of this case, PWSA took important strides towards assessing and improving its inventory methodology, and the Partial Settlement recognizes those steps. Notably, as PWSA has struggled with a lack of historical records, it has taken the initiative to work with the University of Pittsburgh to develop a model intended to assist in predicting the material composition of public-side and private-side service lines. After the model, which is somewhat based upon a model used in Flint, Michigan, subject to peer-review and quality assurance/quality control review, PWSA will use data from the model predictions as part of its lead service line mapping, incorporate the information into a press release once finalized, and present the information obtained to PWSA's Community Lead Response Advisory Committee ("CLRAC") for purposes of information and advisory input.³¹¹ I&E supports PWSA's innovative approach to obtain a materials composition analysis that, while predictive and not definite, will certainly present a helpful guide as PWSA continues its inventory efforts.

³⁰⁹ UNITED, St. No. C-2, Appendix C, pp. 9-15.

³¹⁰ I&E St. No. 4, p. 27.

³¹¹ *Joint Petition*, p. 45, ¶ III(QQ)(I)(September 13, 2019).

Additionally, the Partial Settlement outlines important milestone target dates for PWSA to take actions necessary with identifying and replacing lead service lines. PWSA has committed to formulating a plan and a timeline by March 31, 2021, for removing the known public-side and private side lead lines connected to a residential structure that will not be replaced by PWSA other service line replacement efforts, including its small-diameter water main replacement program. PWSA has also memorialized its goal to complete replacement of all lead service lines in its system by the end of 2026, and if determines that it is not feasible for it to meet this goal, it will identify to CLRAC a new target date and explain why the new target date represents PWSA's best efforts for replacing all lead service lines. PWSA's feasibility analysis will consider factors such as financial considerations, operational constraints, federal and state regulatory requirements and the results of its inventory.³¹² Finally, PWSA will track important replacement metrics such as the number and location of lead service lines replaced the preceding year, the mileage of small diameter water main replacements occurring in Priority Lead Neighborhoods, and other important information.³¹³

I&E fully supports the above terms, as they are comprised of commitments that provide important goal posts upon which parties and the Commission can gauge PWSA's progress in identifying and replacing lead service lines. I&E submits that PWSA's timely identification and replacement of lead service lines is consistent with its obligation to provide adequate, efficient, safe, reliable and reasonable service. Additionally, I&E

³¹² Id. at ¶ III(QQ)(2).

³¹³ Id.

supports these terms because they addressed its concern that PWSA's proposal to transition lead service line replacement program into its small-diameter water main replacement program would compromise replacement goals by extending the timeline beyond 2020.³¹⁴ In the case that PWSA cannot meet that target goal, it must now account for the reasons and thereafter provide an updated plan with new milestone target dates. I&E submits that this action represents PWSA's good faith attempt to timely identify and replace lead service lines, promotes accountability for such action, but also allows PWSA to adjust and adapt its timeline if the plan is not feasible.

c) Interior Plumbing Inspections

This Partial Settlement term memorializes PWSA's commitment that when it replaces a residential water meter, it will inspect the interior plumbing adjacent to the water meter and inform residents in writing of the materials observed. Additionally, if PWSA's plumbing is composed of galvanized steel or iron, it will inform customers of the risks of lead release from that plumbing. Along the same lines, when PWSA performs a private-side lead service line replacement without a simultaneous meter replacement, it will make efforts to document the material composition of the interior plumbing and to advise the residents in writing of the materials observed, noting that if galvanized steel or iron is observed, it will advise the customers of the risk of lead release from such plumbing.³¹⁵ I&E supports PWSA's adoption of these important terms which are intended to inform customers of plumbing-related lead release risks which they might

³¹⁴ I&E St. No. 4, pp. 15-16.

³¹⁵ *Joint Petition*, p. 47, ¶ III(RR)(September 13, 2019).

not have knowledge of and therefore the ability to protect against. To that end, I&E submits that this term is in the public interest and consistent with PWSA's obligation to provide adequate, efficient, safe, reliable and reasonable service.

d) Meter Replacements and Processes Related to Potential Lead Service Lines

As part of the Partial Settlement, PWSA has agreed that starting on September 1, 2019, and ending three months later, it would provide a free tap water lead testing kit whenever it places a water meter at a residence that has a private-side lead or galvanized service line or lead-bearing or galvanized interior plumbing adjacent to the water meters. Additionally, beginning on September 1, 2019, PWSA has agreed to undertake a three-month study to determine the potential impact of replacing a water meter at locations with a lead service line or adjacent lead-bearing or galvanized interior plumbing. By January 31, 2020, PWSA will present CLRAC with the results of its sample to demonstrate the impact. If more than 10 percent of results received exceed ten parts per billion, PWSA will provide a water filter NSF-certified to removed lead, six months of filter cartridges, and written information on how to obtain a free water testing kit when it replaces a water meter at a residence that has a private-sized lead or galvanized service line or lead-bearing or galvanized interior plumbing adjacent to the water meter. PWSA will ensure that that meter installed is lead-free.³¹⁶ I&E supports PWSA's commitment to implement a testing period in order to gauge the lead levels resulting from water meter replacement, and asserts that identifying the lead level impact is critical to protect the

³¹⁶ *Joint Petition*, p. 47, ¶ III(SS)(September 13, 2019).

health and safety of ratepayers who may not otherwise know that they are being impacted. Additionally, I&E supports PWSA's commitment to providing the NSF-certified water filters and water testing kits in the event that the testing threshold is met, because in that instance, such action is necessary to ensure the health and safety of the impacted customers. Accordingly, I&E supports these commitments as being in the public interest and consistent with PWSA's obligation to provide adequate, efficient, safe, reliable and reasonable service.

e) Tap Water Testing and Filter Distribution

Importantly, PWSA has committed that it will provide a free water lead testing kit to any resident within its service areas who requests one and to any area resident in its service area who receives a meter replacement. Additionally, in the event that water testing reveals lead levels above ten parts per billion, PWSA has committed to providing free NSF-certified water filters, six months of cartridges, and additional water lead testing kit with instructions, and it will continue such actions as long as testing kits are returned and until the resident's lead levels fall below ten parts per billion. PWSA has made similar commitments for eligible tenants³¹⁷

At the outset, I&E applauds PWSA's commitment to provide a free water lead testing kit to any resident within its service areas who requests one because by that action, it is empowering customers to self-identify elevated lead levels in their water so that action can be taken to address those levels. Absent such testing, the impacted

³¹⁷ *Joint Petition*, p. 48, ¶ III)(TT) (September 13, 2019).

customers may not become aware of harmful lead levels as is necessary to address and remediate those levels. Additionally, I&E supports PWSA's commitment to providing the NSF-certified water filters and water testing kits in the event that the testing threshold is met, because in that instance, such action is necessary to ensure the health and safety of the impacted customers. Accordingly, I&E supports these commitments as being in the public interest and consistent with PWSA's obligation to provide adequate, efficient, safe, reliable and reasonable service.

f) Bottled Water and Flushing Assistance

In the event that a residence's tap water lead test reveals lead concentrations above 50 parts per billion, PWSA will deliver to that residence at least one case of bottled water per day until it completes a meter drop and flush at the residence. After a drop and flush is received, the residents will be eligible for additional water filter cartridges and lead testing.³¹⁸ I&E notes that water testing for lead at 50 parts per billion is well above the action level of 15 parts per billion, meaning that at such level, it is not safe to drink; therefore, I&E believes PWSA's commitment to provide an alternate source of water impacted residences with at least one case of bottled water per day is essential to protecting the health and safety consumers at those residences. I&E also supports PWSA's agreement to provide follow-up testing and water filters to residences that have a drop and flush so that lead levels can be monitored and water filtration assistance will be provided until lead levels are no longer above ten parts per billion (5 parts per billion

³¹⁸ *Joint Petition*, p. 49, ¶ III(UU)(September 13, 2019).

below the actionable level). In this case, PWSA has articulated commitments it will undertake when it is not providing safe water, and while the intent of this Partial Settlement is to guard against such circumstances, I&E supports these terms as necessary health and safety protections.

g) Lead Service Line Replacement

As part of the Partial Settlement, PWSA has committed to offering private-side lead line replacement at no direct customer to property owners where PWSA replaces a public-side service line connected to a private-side lead service line, as well as at any residence with only a private-side lead line that is within the scope of its 2019 Lead Service Line Replacement Program scheduled to be completed by September of 2020. Additionally, PWSA indicates that it will not perform a partial lead service line replacement absent exigent circumstances, including where structural or sanitary conditions exist, instances where PWSA cannot obtain consent to replace a private-side lead service line, and consent cannot be obtained. PWSA commits to making a good faith effort to identify additional funding sources for lead line replacements, and it will request funding where appropriate. Furthermore, PWSA indicates that starting in 2021, it will endeavor to replace at least ten miles of small-diameter water main in Priority Lead Neighborhoods, which are designated after consideration of children's blood lead levels, prevalence of children under six year of age and women of childbearing age, income,

lead service line density, or any combination of lead related or public health-related factors recommended by CLRAC.³¹⁹

Despite, and apart from, I&E's current litigation of PWSA's newly adopted income-based reimbursement program for certain private-side lead line replacement,³²⁰ I&E nonetheless supports the lead service line replacement provisions offered here. I&E submits that the efforts outlined above are geared towards ensuring that the number of partial lead line replacements are mitigated, an outcome that is consistent with avoiding significant spikes in lead levels.³²¹ I&E supports PWSA's attempt to avoid these spikes by limiting instances of partial replacements to unavoidable circumstances like those presented by structural issues or those rejected by an informed but unwilling recipient. Additionally, I&E supports PWSA's commitment to pursue additional funding sources and its decision to adopt replacement goals, as both actions are consistent with facilitating the maximum amount of replacement possible. Finally, I&E supports PWSA's agreement to target Priority Lead Neighborhoods for replacement, as evidence shows that these areas are comprised with the most at-risk population.³²² Accordingly, I&E submits that the lead line replacement terms outlined in this Partial Settlement are in the public interest and they are necessary steps to facilitate PWSA's ability to provide adequate, efficient, safe, reliable and reasonable service.

³¹⁹ *Joint Petition*, pp. 52-53, ¶ III(VV)(September 13, 2019).

³²⁰ I&E Main Brief, pp. 67-94.

³²¹ UNITED St. No. C-3, p. 16.

³²² UNITED St. No. C-3, p. 25.

h) Community Lead Response Advisory Committee (“CLRAC”)

The Partial Settlement extends the CLRAC through December 31, 2026, unless members unanimously vote to terminate it at an earlier date.³²³ As I&E witness Gray, a current member of CLRAC, explained, as part of the 2018 rate case settlement, PWSA was required to form the CLRAC. The CLRAC consists of interested parties from the rate case, local government, and community groups. The CLRAC consults with and provides feedback to PWSA on its Lead Service Line Replacement Project and lead remediation efforts.³²⁴ Although the initial CLRAC term was set to expire in 2021, UNITED witness Dr. Bruce Lanphear recommended that PWSA extend the term through at least 2026,³²⁵ and PWSA has adopted his recommendation. Aside from extending the CLRAC term for another four years, the Partial Settlement also commits PWSA to consulting with CLRAC regarding lead remediation efforts on a quarterly basis. Additionally, the Partial Settlement outlines PWSA’s commitment to, *inter alia*, provide specific information regarding costs incurred for certain programming, updates on PWSA’s efforts to secure additional funding for lead line replacement, and lead line location information.³²⁶ I&E supports the extension of CLRAC’s term and advisory input because it provides an important role in providing feedback and advisory input regarding PWSA’s lead remediation efforts. PWSA’s lead remediation efforts are central to customer safety and reliability of service; therefore, extension of CLRAC is in the

³²³ *Joint Petition*, pp. 51-52, ¶ III(WW)(September 13, 2019).

³²⁴ I&E St. No. 4, p. 3.

³²⁵ UNITED St. No. C-3, p. 27.

³²⁶ *Joint Petition*, pp. 51-52, ¶ III(WW)(September 13, 2019).

public interest and consistent with PWSA's obligation to provide safe and effective service because it will help ensure that PWSA's lead remediation efforts are implemented efficiently and effectively.

i) Corrosion Control

The Partial Settlement memorializes PWSA's commitment to provide the Commission, parties, and CLRAC with quarterly updates regarding its progress of its orthophosphate program, including when PWSA began testing for lead levels and the results of such testing.³²⁷ The reports will continue until PWSA's obligation to report quarterly programming reports to the PA DEP. I&E notes that this term adopts I&E witness Gray's recommendation for PWSA to provide quarterly corrosion control updates,³²⁸ which PWSA agreed to during the pendency of this case.³²⁹ I&E submits that PWSA's agreement to report the results of its lead level testing as its orthophosphate program progresses is essential to gauging the program's effectiveness in addressing lead levels in PWSA's water. The effectiveness of the orthophosphate will be a critical metric in evaluating PWSA's overall success in reducing lead levels in its water, and ensuring the Commission and parties are kept apprised of testing results while lead levels are actionable and PA DEP reporting requirements remain in place is necessary to ensure safe service and protect the public interest.

³²⁷ *Joint Petition*, pp. 52-53, ¶ III(XX)(September 13, 2019).

³²⁸ I&E St. No. 4, p. 8.

³²⁹ PWSA St. No. C-1R, pp. 37-38.

j) Rate Treatment Regarding Lead Service Line Replacement Costs

PWSA has made important commitments regarding rate treatment of LSLR costs,³³⁰ which I&E submits will act to ensure that important cost information will be available in a navigable format when PWSA submits its rate filings. Specifically, PWSA has agreed to identify all projected lead service line replacement costs and details on its cost projections in its rate filings. PWSA's agreement to provide this information will ensure that parties and the Commission understand the basis and forecasting assumptions that underlie any cost recovery claims PWSA will make, which is essential to protecting ratepayers and will promote rate accountability. Additionally, PWSA has committed to continuing to provide information regarding actual replacement costs as part of the quarterly reporting obligation that it assumed as part of the settlement achieved in its 2018 rate case. I&E notes that the reporting of this information is also essential ensuring that parties and the Commission have accurate information about the actual amounts PWSA has expended to ensure rate accountability. Finally, PWSA has agreed that when it adopts the NARUC USOA, it will show projected and actual lead service line replacement costs as a sub account, which I&E submits will be essential to ensure that the information is accessible and appropriately tracked. For these reasons, I&E supports these terms and submits that they are in the public interest.

³³⁰ *Joint Petition*, p. 53, ¶ III(YY)(September 13, 2019).

K. PWSA Compliance Plan Progress Reports

If the Partial Settlement is approved, PWSA will provide quarterly Compliance Plan reports, at least through October 31, 2025.³³¹ PWSA has already provided two Compliance Plan reports.³³² In addition to providing information already presented, PWSA's next quarterly report will provide updates on items agreed-upon within other sections of the Partial Settlement.³³³ I&E supports these Partial Settlement terms because it is necessary to continuously monitor PWSA's progress in implementing various settlement terms and otherwise coming into compliance with the Code generally. I&E recognizes implementation of the compliance plan is an ongoing process, and there is no date certain such process will be "complete." Additionally, October 31, 2025 is a reasonable date to end such reporting, and may change as conditions warrant. Accordingly, I&E avers these settlement terms are in the public interest and should be approved.

III. CONCLUSION

WHEREFORE, the Commission's Bureau of Investigation and Enforcement represents that it supports the *Joint Petition for Approval of Partial Settlement*, as each of terms comprising the Joint Petition encompasses commitments that either are now consistent with PWSA's obligation to ensure and maintain its provision of adequate, efficient, safe, reliable and reasonable service, or are necessary steps that PWSA must

³³¹ *Joint Petition*, p. 53, ¶III(ZZ)(3)(September 13, 2019).

³³² PWSA Exh. RAW/C-28 & PWSA Exh. RAW/C-28(A).

³³³ *Joint Petition*, p. 53, ¶III(ZZ)(4)(September 13, 2019).

take to facilitate its ability to provide and maintain such service. Accordingly, I&E respectfully requests that Deputy Chief Administrative Law Judge Mark A. Hoyer and Administrative Law Judge Conrad A. Johnson, and the Commission, approve the terms and conditions contained in the foregoing *Joint Petition for Approval of Partial Settlement* without modification.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'G. L. Miller', is written over a light blue horizontal line.

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