

Comments of the Independent Regulatory Review Commission



Pennsylvania Public Utility Commission Regulation #57-336 (IRRC #3350)

Proposed Water Audit Methodology Regulation 52 Pa. Code 65.20a--Water Conservation Measures

December 5, 2022

We submit for your consideration the following comments on the proposed rulemaking published in the August 6, 2022 *Pennsylvania Bulletin*. Our comments are based on criteria in Section 5.2 of the Regulatory Review Act (RRA)(71 P.S. § 745.5b). Section 5.1(a) of the Regulatory Review Act (71 P.S. § 745.5a(a)) directs the Pennsylvania Public Utility Commission (PUC) to respond to all comments received from us or any other source.

1. Compliance with the provisions of the RRA or the regulations of this Commission in promulgating the regulation.

This proposal establishes water conservation measures for all water public utilities. Specifically, Class A, Class B, and Class C water public utilities and municipal corporations providing jurisdictional water service would be required to report, to the PUC, their Unaccounted-for-water (UFW). Additionally, Class A water public utilities would be required to conduct an annual water loss audit for each discrete water system. The proposal also requires water public utilities to notify and provide customers with educational materials discussing water-saving plumbing fixtures, and efficient water use practices, including informing large nonresidential water customers annually about the availability of the Department of Environmental Protection's large water user audit procedure. This rulemaking will replace and supersede the current Water Conservation Policy Statement at 52 Pa. Code § 65.20.

Section 5.2 of the RRA (71 P.S. § 745.5b) directs this Commission to determine whether a regulation is in the public interest. When making this determination, the Commission considers criteria such as economic or fiscal impacts, reasonableness, and need. To make that determination, the Commission must analyze the text of the proposed rulemaking and the reasons for the new or amended language. The Commission also considers the information a promulgating agency is required to provide under Section 745.5(a) in the Regulatory Analysis Form (RAF). The explanation of the regulations in the Preamble and the information contained in the RAF are not sufficient to allow this Commission to determine if the regulation is in the public interest.

The Preamble does not explain the need for or provide a reason for the new language in each subsection. Section 65.20a(c)(2)(viii)(relating to Water loss audit for Class A water public utility) requires an explanation for each reported metric value that has both varied greater than 10% in either direction from the previous year's reported value and has not improved over 3

years of reporting. The rationale for the 10% variation threshold that triggers an explanation is not included in the Preamble summary. Similarly, Section 65.20a(d) (relating to Unaccounted-for water) contains a statement that levels above 20% have been considered by the PUC to be excessive. But the summary provided in the Preamble does offer any additional detail as to how that benchmark was derived.

The Commission's regulations in 1 Pa. Code 305.1(b)(1) require an agency to submit a complete RAF when it delivers a proposed rulemaking. The RAF submitted by the PUC with this proposed rulemaking provides answers to all of the questions posed. However, answers to some of the questions do not provide sufficient information for this Commission to determine if the rulemaking is in the public interest. Measures other than the water loss audit for Class A water public utilities such as the alternate methodology to the American Water Works Association (AWWA) software, UFW, leak detection, metering, and mandatory conservation contingency plan, are sparsely addressed in the PUC responses.

In other instances, pertinent information is not included. For example, in response to Question #19 (relating to a specific estimate of the costs and/or savings to the regulated community), we believe it would be beneficial to know how many Class A, Class B, Class C, and municipal corporations providing jurisdictional water services comply already with each water conservation measure. The PUC's response to Question #20 (relating to a specific estimate of the costs and/or savings to the local governments associated with compliance) should specifically address municipal water authorities. Stating that most of the regulated community probably already comply with the regulation does not provide sufficient information for this Commission to determine if the rulemaking is in the public interest.

In response to Question #22a (regarding whether forms are required for the implementation of the regulation), the PUC's response is inconsistent with the language in the proposed Annex, which requires each Class A, Class B and Class C to report its UFW using Schedule 500 of the Annual Financial Reports. In response to Question #12 (relating to how this regulation compares with those of other states), the PUC does not include a detailed comparison of this proposal to other states' regulations.

In addition to the examples above, we ask the PUC to provide more information in response to the following questions in the RAF:

- Question #18, related to how the benefits of the regulation outweigh any costs and adverse effects;
- Question #19, related to a specific estimate of costs and/or savings to the regulated community and how the estimates were derived;
- Question #22, related to a statement of legal, accounting, or consulting procedures and additional reporting, recordkeeping, or other paperwork which will be required for the implementation of the regulation;
- Question #22a, related to forms required for the implementation of the regulation; and
- Question #28, related to whether data is the basis for this regulation.

2. Protection of the public health, safety and welfare and the effect on this Commonwealth's natural resources.

Unaccounted-for water

Under Section 65.20a(d), the PUC proposes that Class A, Class B and Class C water public utilities report unaccounted-for water using Schedule 500 of its Annual Financial Report to the PUC. Levels of unaccounted-for water must be kept within reasonable amounts. Levels above 20% have been considered by the PUC to be excessive. The Preamble states that “[b]y continuing to monitor unaccounted-for water and comparing it to the water loss information, we can evaluate the two measurements. Until we have a benchmark for water loss, the unaccounted-for metric provides continuity in evaluating performance without jeopardizing the reliability of systems.”

A commentator believes it is “wholly inappropriate” for the PUC to continue to employ the UFW approach and disagrees with the rationale put forth by the PUC in the above paragraph. The commentator remarks that the UFW approach under Section 65.20a(d) is “outdated and archaic.” They further assert that the UFW approach “lacks empirical and scientific legitimacy and argues that its use for many years by the PUC has not correlated with measurable and actionable reductions in Non-revenue Water.”

The commentator also contends that the UFW approach is flawed because a single performance indicator cannot reliably represent the varying types of losses and cost impacts that occur in drinking water systems. Moreover, this commentator feels that it is “misleading” to represent data of multiple water systems under a composite metric. According to the commentator, “[t]his flawed approach magnifies the peril of a water company not directing resources to small water systems—and small communities—because its remedial investments in larger systems will tend to skew the %UFW indicator closer to the benchmark. This disadvantages small communities and is not equitable.”

The commentator also points out that the PUC refers to the “uncertainty involved with the use of the unaccounted-for water method” when discussing transparency of the regulatory process. The PUC’s final Opinion and Order on January 27, 2012, in which all Class A water utilities were required to implement the Water Audit Methodology, concluded:

“Based upon this Commission’s tradition of establishing groundbreaking regulatory tools, such as the DSIC or single tariff pricing, we will order the implementation of this Water Audit methodology which will help achieve a number of public interest benefits, such as increased infrastructure reliability, help preserve water resources, limit water leakage, reduce overall company risk, and enhance customer service. **We believe that this practice is a better tool than the current unaccounted-for-water method and in the public interest.**” [Emphasis added.]

If the PUC retains this UFW approach in the final-form rulemaking, the commentator believes that it will be a “significant step backwards in the management of drinking water supplies in the Commonwealth and will result in growing costs to water suppliers and consumers.”

We ask the PUC to explain how the approach in proposed Section 65.20a(d) (relating to Unaccounted-for water) adequately protects the public health, safety, and welfare and the effect on the Commonwealth's natural resources. The PUC's response should discuss the PUC's rationale for the required reporting and 20% UFW threshold in Section 65.20(d).

3. Economic or fiscal impacts.

A commentator has raised concerns about the costs associated with the production and validation of audits for each discrete system. These costs, according to the commentator, would include: the hiring of additional staff to prepare water loss audits for each system and to locate and repair leaks; hiring consultants to validate audit results for each system and engineer solutions; and, the additional investment in systems renewal projects that were not anticipated prior to the audit.

The commentator also claims that the potential costs associated with additional staff and program implementation would diminish the savings associated with reduced avoidable water loss. For some systems, particularly for small water systems, the commentator concludes that the costs of the infrastructure upgrades would not justify the savings from making those upgrades.

We ask the PUC to work with the regulated community to ascertain the costs required to comply with the rulemaking, especially as it relates to smaller water systems.

4. Need for the regulation; Possible conflict with or duplication of statutes or existing regulations.

Commentators have identified a number of provisions as possibly being duplicative of existing regulations and therefore, question the need for their inclusion in the rulemaking. A commentator states that Sections 65.20a(a) and (k) (relating to General; Penalty) appear to be unnecessary since the PUC has the authority to enforce its regulations and impose penalties if a public utility violates a regulation. 66 Pa. C.S. § 3301(a). This commentator also states that Section 65.20a(g) (relating to Mandatory conservation contingency plan) appears to be repetitive of at least some of 52 Pa. Code § 65.11 (relating to Mandatory conservation measure) provisions and claims that the amendment would allow a water public utility to be prosecuted for violating two regulations for the same behavior. Lastly, the same commentator questions if the metering program required under Section 65.20a(f) (relating to Metering) is the same as the metering required under 52 Pa. Code 65.8 (relating to Meters).

5. Section 65.20a. Water conservation measures. – Clarity; feasibility and reasonableness of the regulation; Lack of ambiguity; Reasonableness of requirements and implementation procedures; Whether the regulation is supported by acceptable data; and Non-regulatory language.

Subsection (b) Definitions.

“Discrete system”

This term does not appear in the body of the regulation. In Section 65.20a(c)(1)(i), the phrase “discrete water system” is used. The PUC should either delete the term from the Definitions

section or revise it to be consistent with Section 65.20a(c)(1)(i) by inserting the word “water” between “discrete” and “system.”

“Large customer”

This term does not appear in the text of the Annex. However, the term “*large nonresidential customer*” is used in Section 65.20a(j). “*Large customer*” should be either deleted if it is not needed or revised to be consistent with Section 65.20(j). A commentator notes that a utility’s tariff may not designate “large usage” as described or suggested by the proposed regulation and recommends that each utility be able to determine how to designate a “large customer.” Another commentator agrees that the definition “needs further refinement.”

“Apparent loss”

The proposed definition uses the phrase “actual loss.” Is “actual loss” different than “real loss?” If it is different, “actual loss” should be defined and included in the Definitions section. If it is the same as “real loss,” it should be deleted and replaced with “real loss.”

“UFW—Unaccounted for water”

This proposed definition includes a term that is in quotations. It reads “[t]he amount of water that is “**lost**” when comparing the volume of water that is produced with the volume of water that is sold...” (Emphasis added) Section 2.11(b) of the *PA Code and Bulletin Style Manual* states that a definition should be used to avoid vagueness and ambiguity. The use of quotations around the word “lost” alludes to another meaning. The definition should be rewritten without the use of quotations.

This definition also contains substantive provisions. The inclusion of substantive or regulatory language in a definition is inconsistent with Section 2.11(e) of the *PA Code and Bulletin Style Manual*. The three sentences beyond the first should be moved to the body of the regulation. The last sentence which states that another term for UFW is UAW should be deleted and the acronym “UAW” should be added to the term, preceding the words.

Subsection (c) Water loss audit for a Class A Water public utility.

This subsection requires Class A water utilities to conduct an annual water loss audit with results reported to the PUC, by April 30th of the following year, for each discrete water system. Under this subsection, the use of the AWWA Free Water Audit Software would satisfy the annual water loss reporting requirements. However, if a water public utility seeks to use an alternative water audit methodology or a version other than the AWWA Free Water Audit Software Version 6.0 (2020), it would need to petition the PUC, prior to use, specifying the metrics and criteria, including the technical and engineering formulas, needed to substantiate how the alternative methodology meets or exceeds the requirements.

Commentators raised a number of issues regarding this subsection. A number of commentators recommended that the definitions for Class A, Class B and Class C water utilities should be included in the regulation. 52 Pa Code § 65.16 (relating to System of accounts) defines a Class A water public utility as “a public water utility having annual operating revenue of \$750,000 or more...” However, 52 Pa. Code § 56.2 (relating to Definitions) defines Class A water utility as

“[a] water utility with annual revenues greater than \$1 million.” Commentators recommend the PUC include or incorporate by reference the definitions for Class A, Class B and Class C water utilities in the final version of this rulemaking.

Under Section 65.20a(c)(1)(iv), a Class A water public utility must provide the annual water loss report in a working electronic format. Several commentators suggest that “working” needs to be clarified in the final version of this rulemaking. Commentators emphasize the need for these “live” reports to be publicly available on the PUC’s website. The PUC should revise this section by replacing this vague language with clear, concise and enforceable standards.

Section 65.20a(c)(2) requires an alternate water loss methodology to be able to quantify and address certain metrics and reporting criteria such as performance indicators (consisting of financial calculations and operational efficiency calculations) and a description of priority areas the water public utility intends to address to reduce future water loss. (Sections 65.20a(c)(2)(vii) and (x)). We believe the clarity of rulemaking would be improved if the performance indicators were defined and an explanation of how the “priority areas” are to be determined were part of the final-form regulation. There seems to be a consensus among members of the regulated community that these proposed requirements should be discussed in the context of a stakeholder workgroup. We encourage the PUC to continue its work with the regulated community to define these key provisions when developing the final version of the regulation.

We would also add that the proposal includes two variations of the same term. “Nonrevenue water” is used in Section 65.20a(c)(2)(iv) and “non-revenue water” in the Preamble. The PUC should make certain to use consistently one version throughout the Preamble, RAF and Annex. In addition, this term and its meaning should be included in the Definitions section of the Annex. We believe adding this information to the Definitions section would add clarity to the final rulemaking.

Section 65.20a(c)(2)(ix) states that a water loss methodology must provide an “indication of the statistical confidence” in the validity and accuracy of the values reported for each required metric, including a summation of overall validity and accuracy of the data reported. It is unclear what constitutes statistical confidence and how it's achieved. This vague language should be replaced with clear direction to the regulated community regarding its meaning and how statistical confidence is achieved or measured.

Sections 65.20a(c)(2)(viii)(A) and (B) requires an explanation for each reported metric value that has both varied greater than 10% in either direction from the previous year’s reported value and has not improved over 3 years. One commentator states that “[p]articularly for small “discrete systems,” such a variation is not uncommon.” The commentator recommends that a variation of 20% be used to trigger the explanation requirement. The commentator also states that it does not support requiring an explanation of each reported metric that has not improved in three years. In many cases, they claim, “explanations of why metrics have not improved in three years would be irrelevant, as many metrics are currently in good standing or are intended to maintain current levels.” Another commentator states that it does not disagree with the example provided but feels that the 10% variation, as proposed, is not unreasonable, and if metrics are truly

unimproved due to being in “good standing” then that would be the explanation provided by the water company.

The use of “and” between (A) and (B) creates confusion as to when an explanation must be provided. The use of “and” between the two clauses requires both provisions to be met before an explanation is required i.e., there must be a greater than 10% variance from the prior year and there has not been improvement in that variance over a three year period. Having a greater than 10% variance from the previous year in one reporting period would not trigger the required explanation but it would have to not improve over a three-year period before the explanation requirement is activated. Additionally, since it refers to greater than a 10% variance “in either direction,” if the variance is a drop in the particular metric, how feasible is it that a water public utility can continue showing improvement on that reduction over a three year period. We ask the PUC to explain, in the Preamble to the final rulemaking, its rationale for and the feasibility of these provisions and how it determined that the 10% variation is reasonable.

For those utilities that seek to use an earlier version of the AWWA Software, has the PUC considered publishing on its website, a list of authorized software versions that may be used to satisfy the annual reporting requirements under Section 65.20a(c)(2)?

Section 65.20a(c)(4) states that the PUC may provide instructions regarding the permissible use of later versions of the AWWA software in “reminder communications” regarding public utility reporting. This language is ambiguous. On one hand, the language seems to suggest that the communications would pertain to instructions that may come from the software company about updates to the program. On the other hand, “permissible use” could be interpreted as authorizing later versions of the software that would seem to conflict with the requirements of Section 65.20a(c)(3). We ask the PUC to clarify, in the Preamble to the final-form rulemaking, the intent of this provision and to make certain that it is consistent with Section 65.20a(c)(3) and the intent of the PUC.

Subsection (d) Unaccounted-for-water.

Under this subsection, each Class A, Class B and Class C water public utility must report its Unaccounted-for water using Schedule 500 of its Annual Financial Report to the PUC. The subsection further reads that “Levels of UFW shall be kept within reasonable amounts. Levels above 20% have been considered by the PUC to be excessive.”

The last two sentences in this subsection contain non-regulatory language. A regulation has the full force and effect of law. These two sentences do not set a clear standard of compliance for a water public utility. The PUC should replace these sentences with clear and enforceable standards.

The PUC should also explain in the Preamble to the final rulemaking how it determined that the 20% UFW threshold is reasonable and whether data was the basis for its determination.

Subsection (e) Leak detection.

This subsection requires a public water utility to use a system of leak detection on a **regular basis**, with leaks being repaired as **expeditiously and economically as possible**. (Emphasis

added) The water public utility must provide documentation of the system to the PUC upon request. We have two issues with this proposed subsection. First, the phrases “regular basis,” and “expeditiously and economically as possible” do not set a clear standard. Second, what does a leak detection system entail and where are the standards for a leak detection system set forth? The phrases “regular basis” and “expeditiously and economically as possible” are not regulatory language and do not set a binding norm that could be predicted by the regulated community. We ask the PUC to clarify these implementation timeframes in the final-form regulation.

Subsection (f) Metering.

This subsection requires a water public utility to have a metering program in place and provide documentation of the program to the PUC upon request. It further states that a metering program, reflecting a public water utility’s obligations under § 65.8 (relating to metering), must also include metering sources of supply.

A commentator states that the last sentence in the paragraph seems to be an amendment to Section 65.8. This commentator further asserts that the reference to metering of sources of supply should be deleted in this regulation since the rest of the proposal focuses on the loss of water after it has been treated. Metering the source of supply, the commentator argues, is more appropriately addressed by the Delaware River Basin Commission and the Susquehanna River Basin Commission. Other commentators strongly disagree with these assertions and feel that measurement of both source water and water consumed by customers is needed to compile a reliable water audit.

Another commentator remarks that “§65.8 appears to pertain to customer meters and therefore may be inadequate for metering of sources of supply.” This commentator recommends that the PUC consider developing metering requirements specifically for sources of supply.

These differing viewpoints expressed by commentators highlight three concerns that we have with this provision. First, the phrase “reflecting a public water utility’s obligations” is vague language. We ask the PUC to remove this phrase from the rulemaking altogether and replace it with a clear and enforceable standard. Second, we concur that the proposal appears to be adding a requirement to an existing regulation that is not part of the proposed rulemaking. We ask the PUC to clarify the intent of and explain the rationale for this provision in the Preamble to the final rulemaking. Lastly, the required elements of a comprehensive metering program are not delineated in the rulemaking. The PUC should describe what a comprehensive metering program entails in the revised final Annex or explain why it is unnecessary to do so.

Subsection (h) Efficiency plumbing fixtures.

Subsection (i) Education.

A commentator states that some water public utilities may have already developed the necessary materials under these sections. Therefore, the commentator suggests that the PUC re-phrase these provisions to permit or encourage, rather than require, water public utilities to consult with the PUC’s Communications Office and Bureau of Consumer Services about the materials. We ask the PUC to explain, in the Preamble to the final-form regulation, the rationale for the

required consult with the PUC on materials that a public water utility may have already developed.

Subsection (j)

We recommend that this language be more specific by including the Department of Environmental Protection's website, including the link to the procedure, on a printed message on or with the customer's bill.