**Annex A**

**TITLE 52. PUBLIC UTILITIES**

**PART I. PUBLIC UTILITY COMMISSION**

**Subpart C. FIXED SERVICE UTILITIES**

**CHAPTER 65. WATER SERVICE**

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**§ 65.20a. Water conservation measures.**

(a) *General*. The Commission will review a water public utility’s efforts to meet the criteria in this section when determining just and reasonable rates and may consider the water public utility’s efforts in other proceedings.

(b) *Definitions.* The following words and terms, when used in this section, have the following meanings, unless the context clearly indicates otherwise:

 *AWWA Software*—AWWA Free Water Audit Software–Version 6.0 (2020) available from Free Water Audit Software/American Water Works Association (awwa.org).

 *Apparent loss*—An inaccuracy such as associated with metering, a data handling system error, billing, fraud, theft or other cause that did not result in an actual loss of treated water.

 *Authorized consumption*—The volume of water used for permitted purposes such as billed customer use, firefighting, company use, and any other use permitted by the water public utility.

*Discrete system*—A stand-alone pipe network with boundaries that encompass all sources of water and endpoints.

*Large customer*—A nonresidential customer exceeding the consumption volume that the water public utility has designated in its tariff as large usage.

*Real loss*—A physical loss of water that has been treated and placed in the distribution system. A real loss may be a measured volume or a calculated volume.

*UFW*—*Unaccounted-for water*—The amount of water that is “lost” when comparing the volume of water that is produced with the volume of water that is sold. This amount is adjusted by taking into account a number of factors based on a formula to estimate the amount of water used but not measured. Those factors include firefighting, hydrant flushing, main flushing, building construction, theft, inaccurate meter recording, faulty meters, and leakage, among other reasons. Ongoing leakage, particularly in older systems, is the most prevalent cause of UFW. Another term for UFW is UAW.

*Water supplied*—Water that is treated, leaves the plant, and is distributed into the system.

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

(1) A Class A water public utility shall conduct an annual water loss audit to determine real water loss volumes and apparent water loss volumes and the associated costs of each and shall file an annual water loss report with the Commission. The annual water loss report must be:

(i) Completed and filed for each discrete water system;

(ii) Based on a calendar year;

(iii) Filed with the Commission by April 30th of the following year;

(iv) Provided in a working electronic format; and

(v) Verified under 66 Pa.C.S. § 504 relating to reports by public utilities and 52 Pa Code § 1.36 relating to verification.

(2) A Class A water public utility shall use a water loss audit methodology that, at a minimum, quantifies and addresses the following metrics and reporting criteria:

(i) Water supplied, in gallons.

(ii) Authorized consumption, in gallons.

(iii) Water losses, in gallons (real and apparent).

(iv) Non-revenue water, in gallons.

(v) Distribution system characteristics including:

(A) Length of mains (in miles);

(B) Number of service connections (active and inactive);

(C) Average length of customer service line;

(D) Average operating pressure (in pounds per square inch).

(vi) Operational cost data including:

(A) The total annual cost to operate the system;

(B) The cost of production per million gallons; and

(C) The composite charge that customers pay per gallon of water, including service and volumetric charges, based on a calculated weighted average of individual class rates and the number of customers per class.

(vii) Performance indicators consisting of financial calculations and operational efficiency calculations.

(viii) An explanation for each reported metric value that:

(A) Varied greater than 10% in either direction from the previous year’s reported value; and

(B) Has not improved over three years of reporting.

(ix) An indication of the statistical confidence in the validity and accuracy of the values reported for each required metric and a summation of the overall validity and accuracy of the data reported.

(x) A description of priority areas the water public utility intends to address to reduce future water loss.

(3) Use of the AWWA Software will satisfy the annual reporting requirements set forth in § 65.20a(c)(2). A Class A water public utility may petition to use an earlier or later version of the AWWA Software or an alternate methodology provided such petition is filed 60 days before the end of the calendar year for which the alternate version or alternate methodology would be used. The Petition must forth the proposed alternative methodology and software for review. The proposed alternative water audit methodology petition must address all metrics and criteria listed in § 65.20a(c)(2) and contain all the technical and engineering formulas and metrics needed to substantiate how the alternative methodology meets or exceeds the required metrics as listed in § 65.20a(c)(2).

(4) The Commission may provide instructions regarding permissible use of later versions of the AWWA software in reminder communications regarding public utility reporting.

(d) *Unaccounted-for water*. Each Class A, Class B and Class C water public utility shall report its unaccounted-for water using Schedule 500 of the water public utility’s Annual Financial Report to the Commission required under § 65.19 regarding filing of annual financial reports. Levels of UFW shall be kept within reasonable amounts. Levels above 20% have been considered by the Commission to be excessive.

(e) *Leak detection*. A water public utility shall use a system of leak detection on a regular basis, with leaks being repaired as expeditiously and economically as possible and shall provide documentation of the system to the Commission upon request.

(f) *Metering*. A water public utility shall have a metering program in place and shall provide documentation of the program to the Commission upon request. A metering program, reflecting a public water utility’s obligations under § 65.8 relating to metering, must also include metering sources of supply.

(g) *Mandatory conservation contingency plan*. A water public utility shall include its mandatory conservation contingency plan reflecting its obligations under § 65.11 relating to mandatory conservation measures in its tariff.

(h) *Efficiency plumbing fixtures*. A water public utility shall annually notify its customers that water-saving plumbing fixtures should be installed in new and remodeling construction and as a retrofit to existing plumbing. The water public utility shall consult with the Commission’s Communications Office and the Commission’s Bureau of Consumer Services regarding the initial development and subsequent revisions of efficiency materials.

(i) *Education*. At least annually, a water public utility shall provide each customer with a brochure or similar type of material that discusses efficient water use practices, the expensive waste caused by leaking plumbing fixtures, the availability of retrofitting plumbing devices to curtail unnecessary water use, and the possible savings on water and fuel bills that could ensue when conservation methods are implemented. The water public utility shall consult with the Commission’s Communications Office and the Commission’s Bureau of Consumer Services regarding the initial development and subsequent revisions of efficiency materials.

(j) *Water audit for a large nonresidential customer*. A water public utility shall annually inform each of its large, nonresidential customers of the availability of the large water user audit procedure, developed by the Department of Environmental Protection, via a printed message on or with the customer’s bill.

(k)  *Penalty*. If a water public utility fails to file the information or undertake the actions required by this section in compliance with this section, the water public utility may be subject to a penalty as provided under 66 Pa.C.S. § 3301. Continued failure to comply or to file annual reports may result in additional penalties.