



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

IN REPLY PLEASE  
REFER TO OUR FILE

June 29, 2022

Docket No. M-2022-3033054

ALL CLASS A WATER PUBLIC UTILITY COMPANIES

Re: Policy Statement on Public and Private Fire Protection  
At Docket No. M-2022-3033054

On June 16, 2022, the Public Utility Commission (Commission) adopted the Motion of Commissioner Ralph V. Yanora (Motion) at the above captioned Docket Number. The Motion directed the Commission's Bureau of Technical Utility Services (TUS), in conjunction with the Law Bureau, to solicit input from Class A water public utility companies (Class A water companies) on the development of a policy statement reflecting a best practices approach to those aspects of fire protection services subject to Commission oversight. The Motion noted that the development of standards under which regulated fire protection services are offered to the public represents a worthwhile investment of effort and resources on the part of jurisdictional water utilities and the Commission.

Fire service assets are expected to provide safe, adequate, and reliable fire protection service. The Commission's role in the provision of this service is to ensure that jurisdictional water utilities take the necessary steps to meet their obligation to furnish and maintain adequate, efficient, safe, and reasonable service and facilities. Specifically, the Commission requires that jurisdictional water utilities make repairs, changes, alterations, substitutions, extensions, and improvements in or to such service and facilities as shall be necessary or proper for the accommodation, convenience, and safety of its patrons, employees, and the public.<sup>1</sup> As such, the Commission seeks to enhance the execution of its role by clarifying its policy on the provision of public and private fire protection service.

The Commission recognizes that the Commonwealth's uniform construction code has been amended over time to expand the topic of fire protection to aspects of regulated water service well beyond the provision of adequate numbers of functional fire hydrants.<sup>2</sup> Internal fire protection services in the form of sprinkler systems have long been a requirement for commercial and industrial buildings. Municipal building codes and insurance requirements also increasingly mandate the installation of sprinkler systems in

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<sup>1</sup> See 66 Pa.C.S. § 1501.

<sup>2</sup> Pennsylvania Construction Code Act of Nov. 10, 1999 (P.L. 491, No. 45). This Act directed the Pennsylvania Department of Labor and Industry to oversee statewide application and periodic review of certain international building and mechanical codes known collectively as the Uniform Construction Code, last amended effective February 2022. 52 Pa.B. 971. See also National Fire Protection Association (NFPA) 13, Section 8.2.6.6.4 (2022)

various types of residential construction as well. Lives and property depend on these emergency systems to work at a moment's notice. In turn, sophisticated water distribution system design, construction, management, and operations are required to accommodate and serve this type of high-volume instantaneous demand. The Commission should take an affirmative role in the coordination of this aspect of jurisdictional water service for the accommodation, convenience, and safety of the public.

To foster the development of transparent and readily available fire protection guidelines the Commission should coordinate the development of a policy statement reflecting a best practices approach to those aspects of fire protection services subject to Commission oversight. While fire protection services are often provided by Class A water companies, all jurisdictional water utilities will benefit from a clear understanding of up-to-date expectations regarding fire protection service. Further, the coordination and consistent application of safe, adequate, and reliable fire protection service offers a tremendous benefit to public safety, emergency fire protection organizations, and associated personnel. To achieve this goal, the Commission should, as an initial step, implement a policy statement addressing fire protection services provided by Class A water companies.

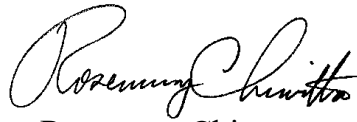
To best inform such a policy statement, the Commission seeks comment from Class A water companies on two areas of a proposed policy statement: 1) the use of hydraulic distribution system modeling required for fire protection; and 2) fire protection service afforded by current system design requirements. The Commission specifically seeks responses to the directed questions related to these two areas as identified in the attached list.

Class A water companies are invited to submit written comments for inclusion in the record with the Secretary of the Commission within sixty (60) days of the date of this letter. The Commission strongly encourages submission of comments through efilings with the Secretary of the Commission by opening an efilings account through the Commission's website and accepting eservice at <https://efiling.puc.pa.gov>. Any comments that are not efiled shall be mailed to the address, below, and must reference the Docket Number listed above.

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

The Commission contact persons for this matter are Assistant Counsel Stephanie Wilson, (717) 787-1859, [stepwilson@pa.gov](mailto:stepwilson@pa.gov), in the Law Bureau and Fixed Utility Valuation Engineer Clinton McKinley, (717) 783-6161, [cmckinley@pa.gov](mailto:cmckinley@pa.gov) in TUS.

Sincerely,

A handwritten signature in black ink, appearing to read "Rosemary Chiavetta". The signature is written in a cursive style with a large initial "R".

Rosemary Chiavetta  
Secretary

Enclosure: Directed Questions

cc: Patrick Cicero, Office of Consumer Advocate (w/ enclosure), [pcicero@paoca.org](mailto:pcicero@paoca.org)  
Teresa Wagner, Office of Small Business Advocate (w/ enclosure), [tereswagne@pa.gov](mailto:tereswagne@pa.gov)  
Richard Kanaskie, BIE (w/ enclosure), [rkanaskie@pa.gov](mailto:rkanaskie@pa.gov)

Bureau of Technical Utility Services  
Directed Questions  
Policy Statement on Public and Private Fire Protection  
Docket No. M-2022-3033054

**A. Hydraulic Distribution System Modeling Required for Fire Protection**

The Commission expects that Class A jurisdictional water utilities operate with a sophisticated level of technical expertise, which includes utilizing modern water industry tools such as computerized hydraulic modeling software. A computerized hydraulic model of a distribution system empowers utility management to understand system operating parameters and components with both accuracy and precision. This includes forecasting system behavior under the operating conditions imposed by the instantaneous demand requirements of fire protection. Further, a computerized hydraulic model can and should be a key component, along with maintenance and other system data, in decision making for capital expenditures to maximize system reliability for fire protection services offered to the public. Regarding the computerized hydraulic modeling useful for that purpose the Commission seeks input on the following questions:

1. What are the most effective methodologies/computerized hydraulic models that are currently utilized by utilities to implement a computerized hydraulic model of water distributions systems? Which are most effective for the modeling of system requirements related to fire protection service?
2. Based upon a concerted effort, what is a reasonable timeframe and the estimated incremental one-time and ongoing expenditures for a utility to identify all the system facilities and water main data required to develop such a computerized hydraulic model?
3. What are the expected ongoing maintenance requirements for existing models? Are these models a one-and-done investment or are they subject to ongoing incremental costs owing to updates?

**B. Fire Protection Service Afforded by Current System Design Requirements.**

While the Commission does not currently have a policy statement specific to the provision of regulated fire protection service, the Pennsylvania Department of Environmental Protection (DEP) has established some system design requirements to serve fire protection service in its Public Water Supply Manual – Part II, Community System Design Standards, effective May 6, 2006 (PWS Manual).

The PWS Manual’s Section VIII. Distribution Systems, B.3. Fire Protection, indicates that “[w]hen fire protection is to be provided, system design should be such that fire flows and facilities are in accordance with the requirements of the State Insurance Services Office.” The PWS Manual’s Section VIII, D. Hydrants, outlines specific guidelines for hydrants including location and spacing, hydrant valves and nozzles, hydrant leads, and hydrant drainage. While the Commission should not replicate the design standards of DEP or the State Insurance Services Office, it should consider whether and how Class A water providers have interpreted and applied these design standards in terms of the actual fire protection services provided to the public. That is, the aspect of fire protection service within the exclusive sphere of Commission jurisdiction rather than that of DEP or the State Insurance Services office. The Commission seeks input on

the following questions related to the uniformity of these interpretations and how utility application of these standards has shaped public expectations regarding fire protection service, including:

1. What standards should public water utilities attain for the provision of regulated public fire protection service including, but not limited to flow, pressure, and duration of flow and pressure?
2. What costs and timeframes might the public expect to improve or upgrade facilities not now providing public fire protection service in accordance with DEP or State Insurance Services Office requirements?
3. What procedures should a public fire service provider employ should a fire protection connection not meet minimum requirements? For example, what customer notifications or public/private fire hydrant markings would be effective to denote expected levels of service from any fire protection facility?
4. Whether new policies concerning minimum expectations would be implemented differently for new as compared to existing fire protection facilities, public and/or private fire hydrants, private fire protection connections other than private fire hydrants (i.e., sprinkler systems), etc.?
5. What potential adjustments to revenue requirement, cost allocation, and rate design would fire service providers require to accurately and reasonably reflect proposed changes in service conditions and management performance?