

PENNSYLVANIA PUBLIC UTILITY COMMISSION
Harrisburg, Pennsylvania 17105-3265

**Policy Statement on Public and
Private Fire Protection**

Public Meeting held June 16, 2022
3032987-CMR
Docket No. M-2022-3033054

MOTION OF COMMISSIONER RALPH V. YANORA

The fire protection role of the Commonwealth's regulated public water utilities is a matter of utmost public importance. Ensuring that regulated fire protection service offerings are safe, reasonable, and adequate is likewise a matter of utmost concern to the Commission. Public and private fire protection services, whether serving the ubiquitous roadside fire hydrant or sophisticated private commercial sprinkler system, are expected to supply adequate water safely, reliably, and immediately upon demand.

Amendments to the Commonwealth's uniform construction code over the past several decades have expanded the topic of fire protection to aspects of regulated water service well beyond the provision of adequate numbers of functional fire hydrants.¹ 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 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 regulated water service for the accommodation, convenience, and safety of the public.

To that end, outlining the standards under which regulated fire protection services are offered to the public represents a worthwhile investment of effort and resources on the part of regulated utilities and the Commission. However, the resources invested should focus on a cooperative stakeholder effort to develop uniform standards for the provision of safe, reasonable, and adequate fire protection service rather than utility reporting on the status of how individual regulated water utilities offer fire protection services to 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 public water utilities, all

¹ 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).

regulated 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 public water utilities. Stakeholders should consider the following areas in the development of the policy statement.

A. Hydraulic Distribution System Modeling Required for Fire Protection

The Commission expects that Class A public 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 should seek input on the following:

- 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?
- 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?
- 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. Stakeholders should address the uniformity of these interpretations and how utility application of these standards has shaped public expectations regarding fire protection service including:

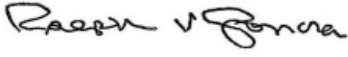
- What standards should public water utilities attain for the provision of regulated public fire protection service including, but not limited to flow, pressure, and duration of flow and pressure?
- What costs and timeframes might the public expect to improve or upgrade facilities not now providing public fire protection service in accordance with DEP or State Insurance Services Office requirements?
- 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?
- 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.?
- 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?

THEREFORE, I MOVE THAT:

1. The Bureau of Technical Utility Services, in conjunction with the Law Bureau, prepare a Secretarial Letter consistent with this Motion within thirty (30) days of adoption of this Motion.
2. Comments in response to the Secretarial Letter referenced in Paragraph 1 above shall be due within sixty (60) days following service of such Secretarial Letter on all Class A water companies.

3. The Bureau of Technical Utility Services, in conjunction with Law Bureau, prepare a Proposed Policy Statement in response to the comments received in this matter for consideration at a Public Meeting no later than October 31, 2022.

DATE: June 16, 2022



Ralph V. Yanora, Commissioner