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VIA E-FILING

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

Re: Policy Statement on Public and Private Fire Protection; Docket No. M-2022-3033054
Comments of the National Association of Water Companies - Pennsylvania Chapter

Dear Secretary Chiavetta:

Enclosed for filing with the Pennsylvania Public Utility Commission (“Commission”) are the comments of the National Association of Water Companies – Pennsylvania Chapter on the Policy Statement on Public and Private Fire Protection.

Please contact me if you have any questions or concerns about this filing.

Sincerely,

COZEN O'CONNOR

BY: DAVID P. ZAMBITO
Counsel for *National Association of Water Companies*

DPZ:kmg
Enclosure

cc: Stephanie Wilson, Esq. (*Law Bureau*)
Clinton McKinley (*Bureau of Technical Utility Services*)
Mark Lucca, President, NAWC

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

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

COMMENTS OF THE NATIONAL ASSOCIATION OF WATER
COMPANIES – PENNSYLVANIA CHAPTER

AND NOW COMES the National Association of Water Companies – Pennsylvania Chapter (“NAWC”), in response to the Secretarial Letter issued in this matter on June 29, 2022, requesting that Class A water companies provide comments regarding a proposed policy statement pertaining to public and private fire protection. NAWC respectfully submits the following comments for consideration by the Pennsylvania Public Utility Commission (“Commission”).

I. INTRODUCTION

NAWC is a trade organization whose members are investor-owned water utilities in Pennsylvania that are regulated by the Commission.¹ Among other functions, NAWC provides members with a vehicle for expressing their position on legislative and regulatory developments before the General Assembly, the Commission and other regulatory agencies, as well as the courts. NAWC thanks the Commission for this opportunity to file comments.

NAWC commends the Commission for taking the initiative to address this topic through a forward-looking policy statement, rather than through case-by-case adjudications or an inflexible,

¹ The members of NAWC are: Aqua Pennsylvania, Inc.; Columbia Water Company; Newtown Artesian Water Company; Pennsylvania-American Water Company; The York Water Company; and, Veolia Water Pennsylvania, Inc. (f/k/a SUEZ Water Pennsylvania Inc.). Newtown Artesian Water Company is a Class B water utility; the remaining members of NAWC are Class A water utilities. In addition to water operations, several members operate Commission-regulated wastewater systems.

“one size fits all” rulemaking.² NAWC thanks the Commission for soliciting comments from the industry.

This topic is important to regulated utilities because of its wide-ranging implications for the safety, reasonableness, adequacy and efficiency of water service. For example, if the Commission establishes fire protection guidance suggesting that water utilities should construct additional storage facilities to ensure fire flows of a certain duration, there could be an impact on utilities’ revenue requirements. There also could be an impact on water quality, due to additional aging of water that is held in storage facilities for longer periods.

A policy statement on public and private fire protection could also impact the civil liability of public utilities; water companies are too often sued for damages suffered as a result of fires. Pursuant to the primary jurisdiction doctrine, the courts look to the Commission to determine whether public utilities complied with the applicable standard of care in providing service to the public. *Elkin v. Bell Tel. Co. of Pa.*, 420 A.2d 371 (Pa. 1980). Courts also look to utilities’ Commission-approved tariff provisions regarding the limitation of liability. NAWC asks that the Commission take all of these factors into consideration when deciding whether, and what, new guidance should be announced for public and private fire protection.

Several members of NAWC will provide their individual comments on the Commission’s proposed policy statement; NAWC submits these comments to supplement the comments of individual companies. It is hoped that these comments from the water industry are helpful for informing the Commission’s decisions.

² A regulation establishes a binding norm and has the full force and effect of law, whereas a statement of policy “merely serves as an announcement to the public of a policy which the agency hopes to implement in future rulemaking or adjudications.” *Manor v. Dep’t of Pub. Welfare*, 796 A.2d 1020, 1026 (Pa. Cmwlth. 2002).

II. COMMENTS

The Commission requested comments responding to several specific questions. NAWC will respond to each question in turn.

A. Hydraulic Distribution System Modeling Required for Fire Protection

1. **What are the most effective methodologies/computerized hydraulic models that are currently utilized by utilities to implement a computerized hydraulic model of water distribution systems? Which are most effective for the modeling of system requirements related to fire protection service?**

Several computerized hydraulic models are widely used in the water industry, including Bentley WaterGEMS and EPANET. Additional resources include AWWA Manual 32 “Computer Modeling of Water Distribution Systems” and the Water Research Foundation’s “Guidelines for Developing, Calibrating and Using Hydraulic Models.”

Several of these software packages are comparable, accurate and use similar calculation engines. A water utility should be permitted to choose the one that best suits its needs; the Commission should not mandate the use of any particular model – particularly considering the need for the policy statement to keep up with the evolving marketplace.

Finally, although hydraulic models are a helpful tool for predicting available fire flows, they are only one tool that should be used. Water utilities should use hydraulic models in conjunction with other tools, such as asset management tools³ and criticality studies.⁴

2. **Based upon a concerted effort, what is a reasonable timeframe and the estimated incremental one-time and ongoing expenditures for a utility**

³ Asset management tools help utilities determine when to replace assets.

⁴ In a criticality study, assets are assigned a criticality rating based on their potential risk.

to identify all the system facilities and water main data required to develop such a computerized hydraulic model?

The cost and time-frame for developing a computerized hydraulic model vary considerably, depending on such factors as: the size and complexity of the system being modeled, the availability of accurate and thorough data, and the intended uses of the model. For a moderately-sized system with available, reasonably good data, a hydraulic model could be developed in two months or less. For a large system, or a system that requires the collection of extensive data, the development of a computer model can take over a year. For a company that owns multiple water systems in different parts of the state, developing a hydraulic model for every separate system can take years.

Calibrating a hydraulic model is data intensive, time consuming, and expensive. The cost to calibrate a model rises as a company attempts to increase the model's accuracy. One of NAWC's member companies reported that the cost of consultants to lead the work of building hydraulic models (not including the cost of company staff time to collect information, assist in calibrations, and verify accuracy of the models) ranged from approximately \$46,000 for a system with about 1,500 service connections to almost \$81,000 for a system with over 10,000 service connections.

For many small systems (including small systems owned by a large utility), NAWC questions whether the benefits of a computerized hydraulic model justify the resources required to build, calibrate and maintain the model. Consequently, NAWC respectfully submits that the Commission should not mandate that all water systems use a computer model. Alternative tools, including asset management and field verification, can be enough for some systems.

After acquiring a small system, NAWC members typically tend to manage those systems based on their assets and their unique operational history, together with the experience of a

professional water system operator, in order to optimize the system for overall quality of service. Over-investing in assets (including computerized models) without improving overall service quality is not in the public interest.

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?

Although much of the cost of a hydraulic model is for the development of the original model, there are on-going requirements to ensure that a hydraulic model stays up to date and remains calibrated to existing conditions. Modeling is a dynamic process that never stops. Updates are required due to: replacement of water mains, changes to pumps, changes to storage facilities, or changes in operating parameters. In addition, water utilities constantly receive updated information from materials suppliers (such as updated friction factors), that need to be inputted into the hydraulic model.

Consequently, periodic reviews are necessary, during which the model is updated, rebuilt or recalibrated. The recommended timeframe for these reviews varies. Some systems rarely change, requiring only occasional periodic reviews. Other systems are constantly changing, requiring frequent periodic reviews.

The costs of maintaining a model vary for many of the same reasons discussed in response to Question 2 above (regarding the development of a model). Small companies would need to use outside consultants to maintain a model. One of our large member companies reported that it currently has a two-person team that works full-time to calibrate and maintain the hydraulic models for its various systems. If additional models are developed, for its systems that do not currently have hydraulic models, additional staff and other resources will be necessary.

B. Fire Protection Service Afforded by Current System Design Requirements

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?

NAWC questions whether the Commission can establish any “standards” for the provision of regulated public fire protection service through a statement of policy, which does not have the force and effect of law. NAWC recommends caution in establishing “standards” because of the possible implications for the civil liability of water utilities; a court could find that a utility’s failure to meet a Commission-approved “standard” constitutes negligence *per se*. See, e.g., *Wagner v. Anzon, Inc.*, 684 A.2d 570 (Pa. Super. 1996).

NAWC further questions the need for the Commission to establish “standards” for the provision of regulated public fire protection service because other entities already perform that function, creating the possibility that water utilities will be required to comply with inconsistent mandates. For example, the Pennsylvania Department of Environmental Protection (“DEP”) and the State Insurance Services Office already play an important role in this area. In addition, municipal agencies and ordinances already play an important role in this area; some municipalities and fire departments have specific fire protection requirements. Most municipalities will not issue certificates of occupancy for buildings if local ordinance requirements (including fire protection) have not been met. Finally, Insurance Services Office, Inc. (“ISO”) standards play an important role in this area.

NAWC also notes that Senate Bill 597 (currently pending in the Senate Environmental Resources and Energy Committee) would require moderate and large water systems to: identify and map hydrants, annually inspect at least 33% of their hydrants, formulate a plan for flushing hydrants, and more. This legislation could obviate the need for Commission-approved public and private fire protection “standards.”

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?

The costs and timeframes associated with improving facilities not now providing public fire protection service in accordance with DEP or State Insurance Services Office requirements are difficult to quantify. The lack of recommended fire flows can result from multiple conditions, each with a different timeframe and cost for resolution. For example, a faulty hydrant can be replaced quickly and at moderate cost, while building a required storage tank can take several years and hundreds of thousands of dollars (or more) to acquire land, design and construct the project.

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?

If a fire protection connection cannot meet minimum requirements, the utility should notify the owner of the property, the municipality and the local fire department, preferably in writing. NAWC also recommends that the utility follow-up with the customer, possibly through meetings to discuss ways to resolve the issue. The discussions could involve required customer contributions in aid of construction (“CIAC”) to install facilities necessary to improve water pressure for fire protection purposes.

If the issue is related to improper backflow prevention, the utility should – following the procedures contained in its tariff and Commission regulations – notify the customer that failure to remedy the situation could result in termination of service.

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.?

Please see the response to question B.1, above (*inter alia*, questioning whether the Commission can set new “standards” in a policy statement). To the extent that the Commission provides guidance in its policy statement, the Commission should consider making any new guidance effective on a going forward basis. If new Commission guidance applies to existing facilities, the policy statement should provide guidance on what a utility is to do if its existing facilities do not meet the applicable guidance. For example, if a hydrant does not maintain adequate flow and fire pressure, must it be upgraded to meet the new guidance or can the utility mark it or remove it from service?

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?

If the Commission proposes changes in service conditions and management performance, water utilities will have greater revenue requirements; there will be cost implications for main replacement, storage requirements, and pumping requirements. There would also be issues regarding which customers or public entities should be responsible for CIAC associated with installation of facilities necessary to improve fire protection service. NAWC is concerned about the potential for cross-subsidization because, under many existing rate structures, a portion of fire protection costs is included in the rates of customers without fire service. Additionally, Section 1328 of the Code states that municipalities cannot be charged for more than 25% of the costs of service for public fire hydrants. The Commission should consider whether legislative changes

may be appropriate if new Commission guidance increases the costs of providing public fire protection services.

NAWC is also concerned about the potential implications for utilities and their ratepayers if water utilities are found liable because of a failure to comply with the Commission's new "standards" for public and private fire protection – especially if a court does not give effect to the limitation of liability provisions in the water utility's tariff.

III. CONCLUSION

NAWC thanks the Commission for the opportunity to submit these comments on the important topic of public and private fire protection.

Respectfully submitted,



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