

Staff Subcommittee on
Rate Design
and
Staff Subcommittee on
Water



Rate-Design Issues for Utility Service in the Era of Declining Consumption and Growing Infrastructure Needs

NARUC Staff Subcommittee on Water
Joint with the Staff Subcommittee on Rate Design
Scottsdale, AZ, July 9, 2018

Stephen St Marie, Moderator
California Public Utilities Commission





Today's Panel

- **James Armstrong**, Arizona Corporation Commission, Utilities Division Assistant Director
- **Shawn Bradford**, Vice President, Corporate Services, EPCOR Utilities
- **Elizabeth Rose Triscari**, Deputy Advocate, Pennsylvania Office of Small Business Advocate
- **Honorable Ann Pongracz**, Nevada Public Utilities Commission



The Disclaimer

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Water infrastructure is a TOP PRIORITY for voters.



4 of 5 voters say rebuilding America's infrastructure is extremely or very important.

95%

of voters say it is at least somewhat important.

Ratepayers will do their share. Congress should do the same.

When informed that some of the costs would be borne by ratepayers:

78%

of Americans continue to support reinvestment in our water infrastructure, and...

75%

would be willing to pay a modest increase in local water rates to fund improved service.

Third Annual Value of Water Index

Value of Water
CAMPAIGN



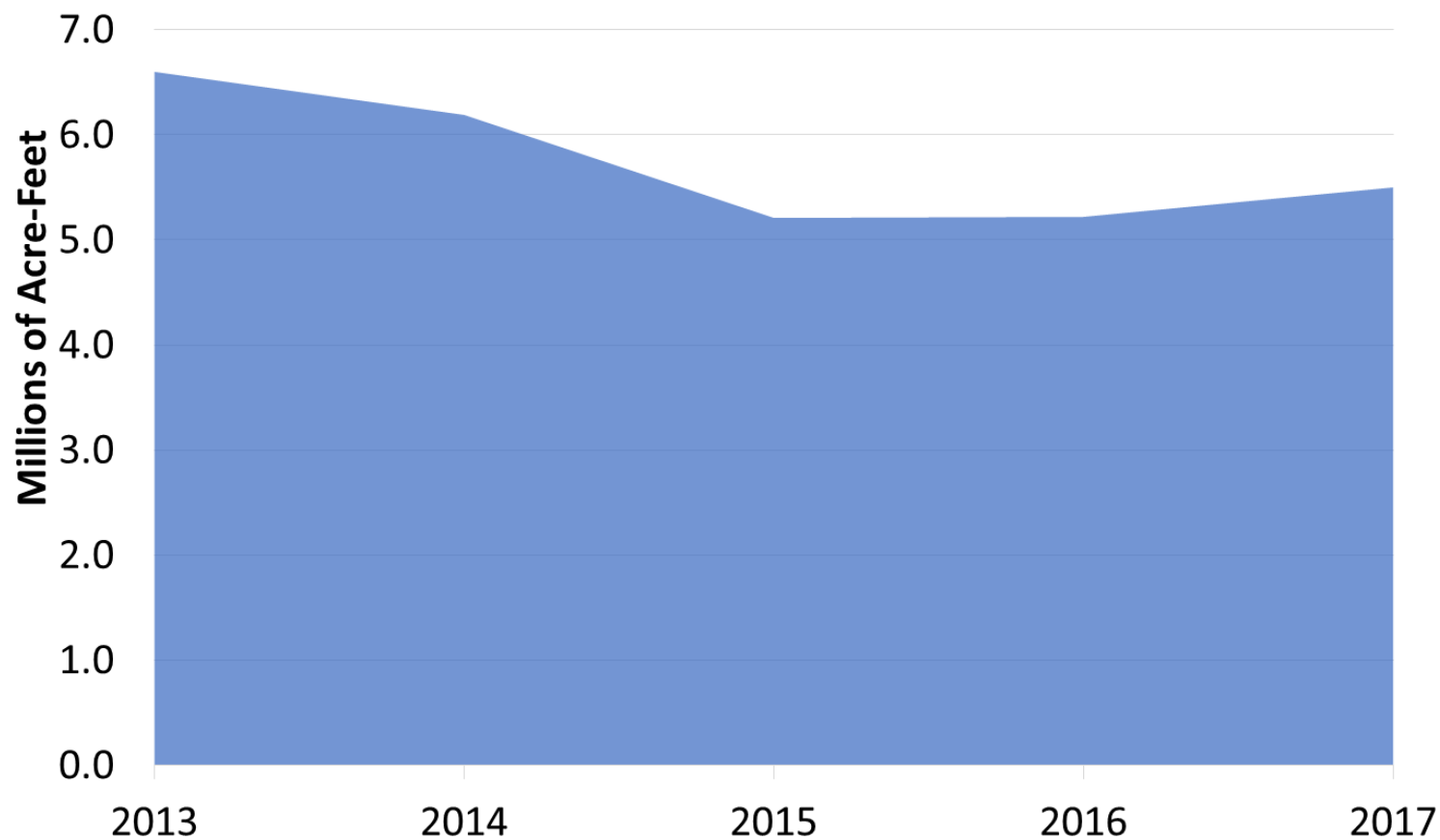


Anecdote from Madison Wisconsin

- “Low-flow appliances and water conservation efforts ...Single-family homes would use about 75 gallons per-person per-day 15 years ago ...but now the average is just over 55 gallons.”
- “It appears I will be paying more for my water, while I continue to do the right thing...”
 - *“Madison Utility Wants Biggest Rate Hike in its History”* by Sara Jerome, **Water OnLine**, May 24, 2018.

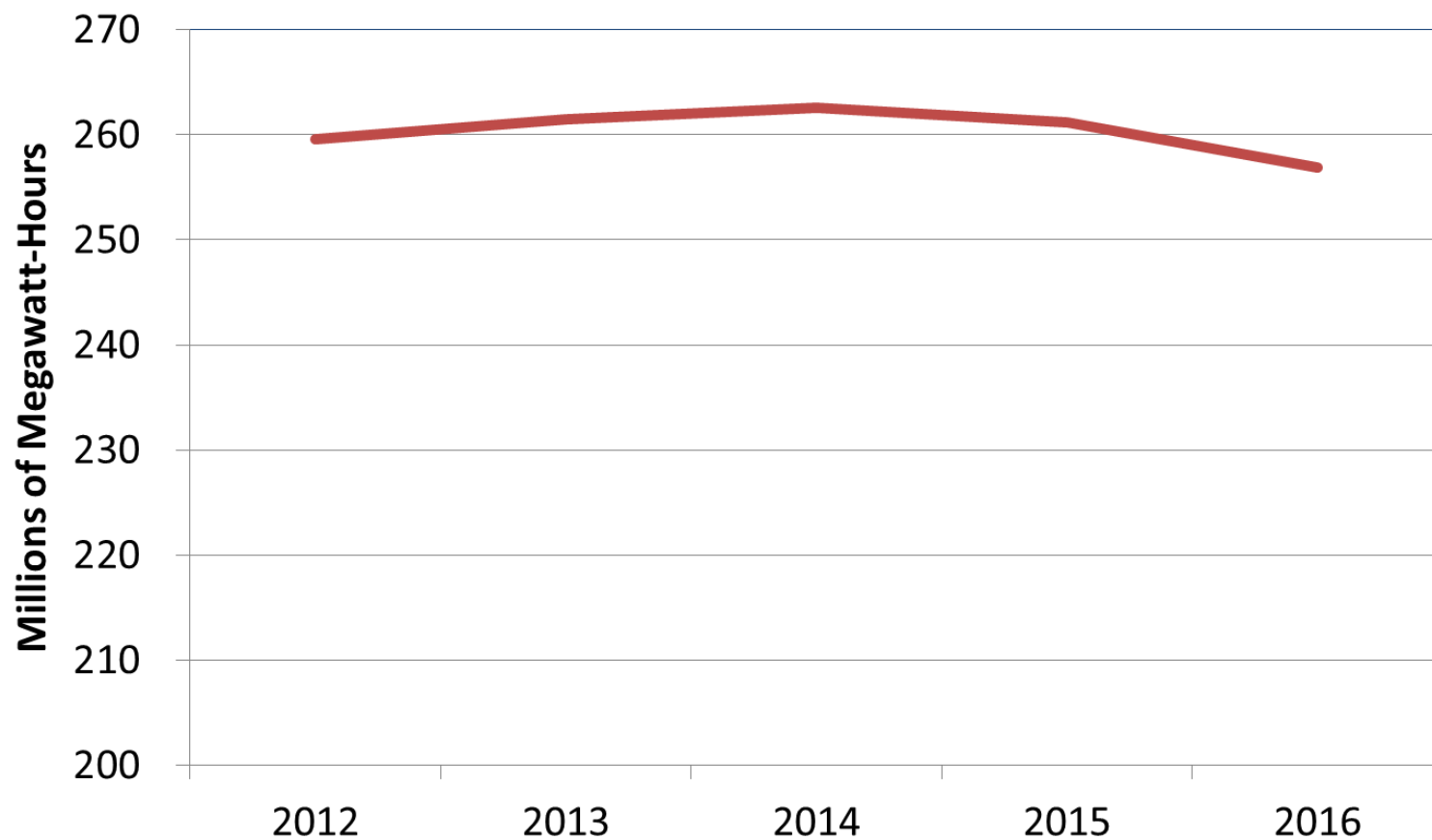


California Total Urban Water Usage Drought Years and Some Rebound





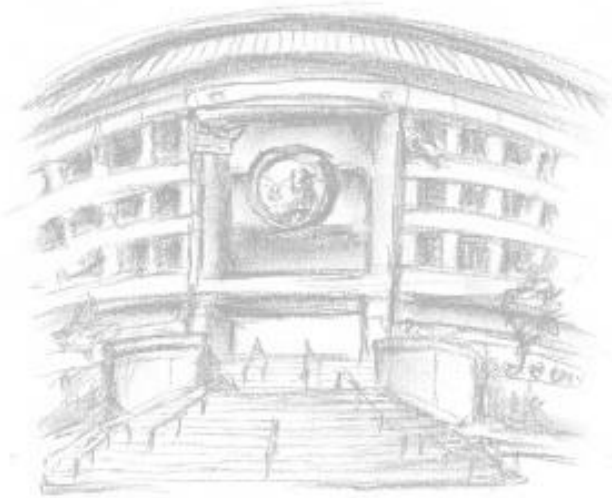
California Total Electric Retail Sales Declining from 2014 peak





Thank you!
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Power Sector Program
Bureau of Energy Resources
U.S. Department of State



National
Association of
Regulatory
Utility
Commissioners

NARUC Presentation: Committee on Water Policy

Rate Design Issues for Utility Service in the Era of Declining Consumption
and Growing Infrastructure Needs

The ACC's Initiatives for Small Water Utilities in Arizona

Assistant Director - Jim Armstrong
Arizona Corporation Commission





Background

AZCC's investigation to adopt improvements to its Water Policies

- Focus was on barriers hampering small water utilities (Class D and E)

AZCC's Proactive Steps towards Effective Water Policies

- Decision No. 75626 (July 25, 2016)
- Decision No. 75743 (September 19, 2016)



Water Policy Initiatives

- I. Establishing a Commission Ombudsman for Small Water Companies
 - Directly assist the Class D and E water and wastewater utilities.
 - Pull together the financial data needed to support the utility's revenue requirement.
 - Assure rate change requests get filed and processed to completion.
- II. Water Emergency Team (WET)
 - A collaborate team of stakeholders and governmental agencies that respond in the case of a 'water emergency'.
 - Establish protocols and potential regulatory and statutory changes that will provide immediate, short-term, and long-term relief to troubled water providers.
- III. Simplifying Regulatory Burdens on Class D and E Utilities
 - Engaging small water systems through education regarding compliance items.
 - Working with stakeholders to evaluate adopting less burdensome regulations .
 - Simplifying the rate case process and annual reporting requirements.



Water Policy Initiatives (cont.)

These Two Policy Decisions addressed such topics as:

- I. Encouraging small system consolidation.
- II. The Emergency Rate Application Process.
- III. Approval of purchased power and purchase water cost adjustor mechanisms;
- IV. A Small System Drinking Water Fund.
- V. Specific directives regarding rate design preferences to assure that more small utility revenues were collected through the monthly minimum and first rate-tier block and less revenues collected through the high usage level block.
- VI. Allowing water companies to include water use conservation adjustments in rate increase filings.
- VII. Approval of a System Improvement Surcharge as a part of a rate case filing.



THANK YOU

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A high-speed photograph of water being poured into a clear glass. The water is captured mid-pour, creating a dynamic splash and numerous bubbles. The background is a solid, light blue color. A dark grey horizontal band is superimposed over the middle of the image, containing the event title and subtitle in white text.

NARUC Summer Policy Summit

Rate Design Issues

Shawn Bradford, Vice President, EPCOR USA

EPCOR USA

More than
215,000 service
connections serving
360,000+
customers








 **300** Employees

 **58** million gallons of water sold daily

 **94** safety and operational excellence awards

Three states > 15 counties > 37 communities
1 natural gas, 2 wastewater, and 14 water districts

EPCOR OPERATIONS

 Water Facilities  Water/Wastewater Facilities  Wastewater Facilities  Water Transmission  Natural Gas

RATE DESIGN = STRIKING A BALANCE

- Formal Process
- Prioritize and balance objectives
- Recovery of costs
- Utility (in conjunction with its customers and regulator) must decide on objectives
- Design rate structure that reflects priorities



Alternative Ratemaking Approaches

- Revenue Stabilization
- Adjustor Mechanisms
- Defined timeframes
 - Reduces lag
- Forward-looking test year
- Affordability options
 - Low income
- Single tariff price
 - Provides economy of scale
 - Supports acquisition of troubled utilities



REVENUE STABILIZATION

■ Decoupling

- Separates revenue from sales
- Revenue target is set
- Provides path forward to achieve revenue

■ WRAM

- Tracks authorized vs. actual revenue
- Ensures recovery of fixed costs
- May include a cap & balancing account
- Widespread use in Gas and Electric
 - Gas: 31 States³
 - Electric: 27 States³
 - Water: 7 States



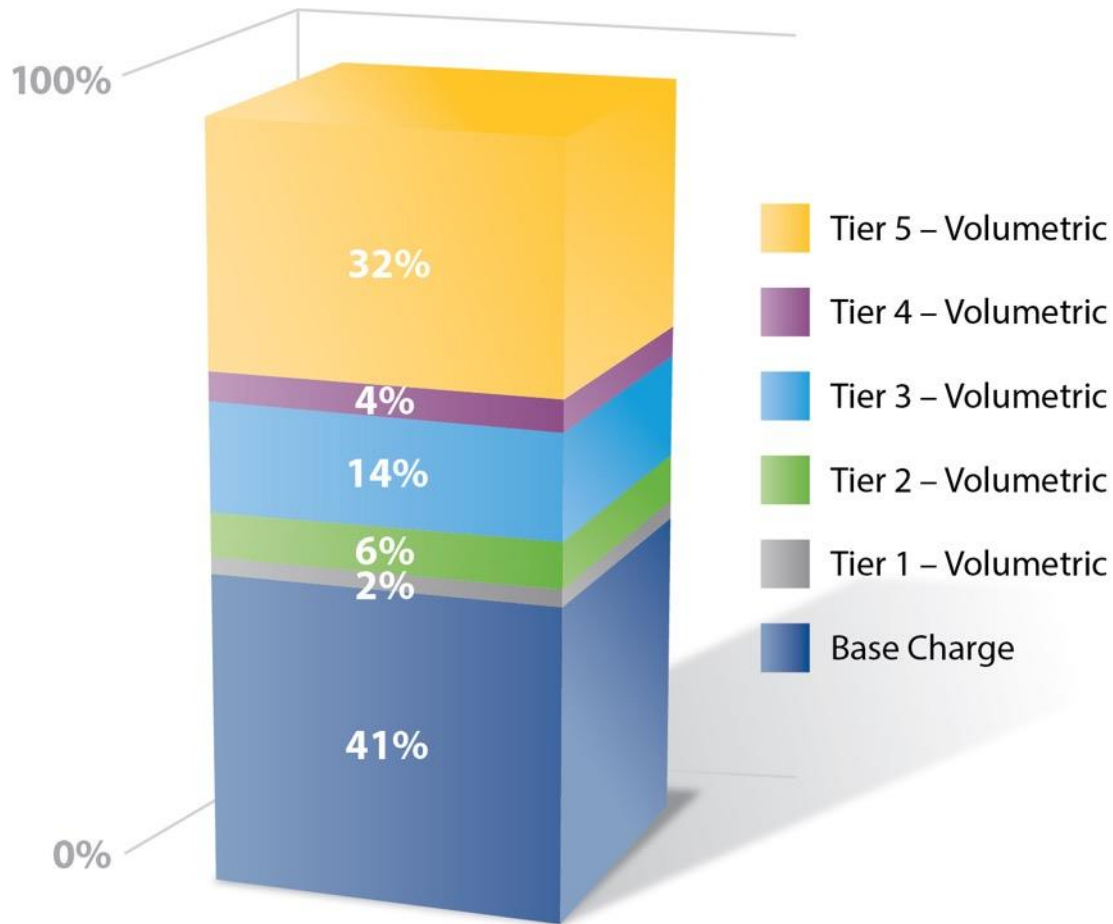
REVENUE STABILIZATION

- **Fixed Variable Rate Design**
 - Another way to decouple revenues
 - Rates set to recover large proportion of fixed costs (70-90%)
 - Established in rate case
 - Volumetric charges recover the variable costs
- Provides easy path forward
- Lifeline amount of water in 1st tier



REAL WORLD EXAMPLE

Inclining Block Rate



- Imbalance in rate design
- Disproportionate amount of revenue placed in the upper tiers
- Likelihood of under-recovery is high

ARIZONA'S EFFORTS

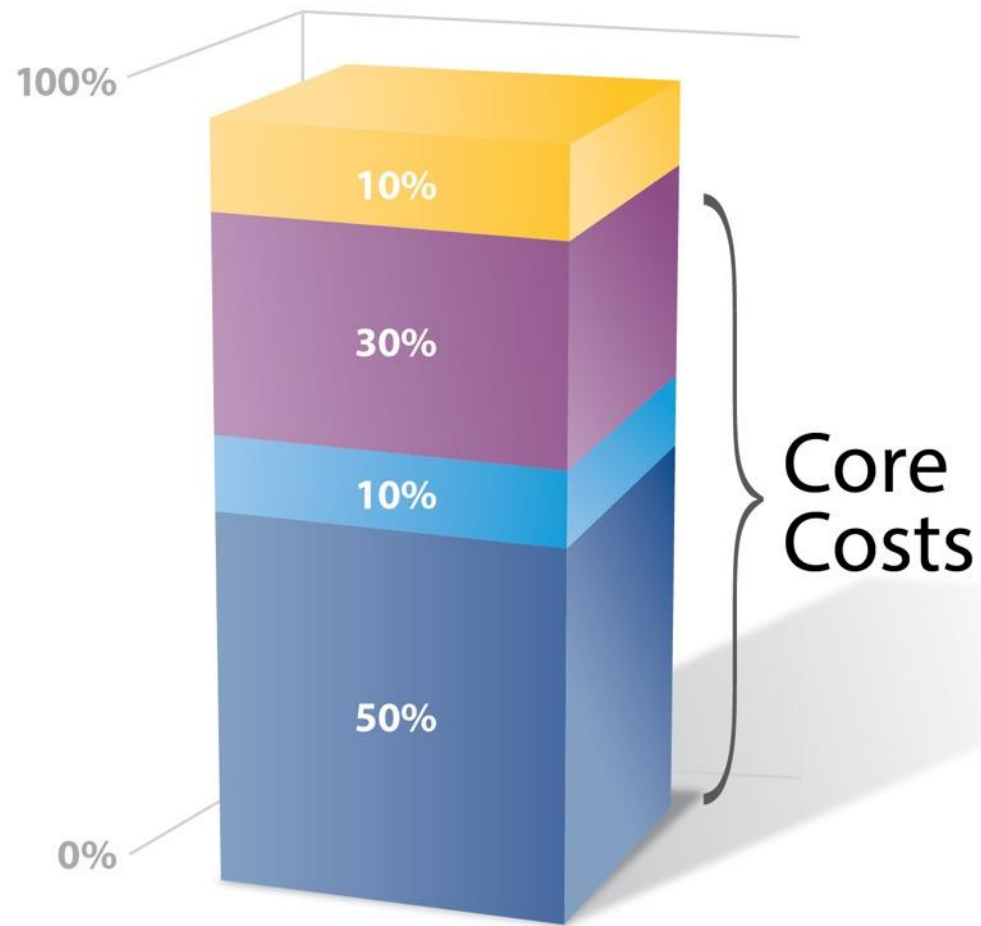
- Commission approved set of guidelines focused on:
 - Small system support
 - Rate Design
 - Cost of capital reform
 - System acquisitions
 - Consolidation

Decision #75626



ARIZONA'S RATE DESIGN

Inclining Block Rate



RATE DESIGN

- Rate level matters more than the rate structure
 - Prices artificially low send inaccurate signals
 - Overall price influences demand
- Utility methods matter
 - Accurate demand projections
 - Consider impact on consumption
- Rate awareness is critical
 - Educate (inform) customers
 - Better understanding of pricing levels and water use
 - Use pricing to achieve strategic objectives





QUESTIONS?

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NARUC 2018 SUMMER POLICY SUMMIT

Rate Design Issues for Utility Service in the Era of Declining Consumption and Growing Infrastructure Needs

ELIZABETH ROSE TRISCARI

DEPUTY SMALL BUSINESS ADVOCATE





PENNSYLVANIA OFFICE OF SMALL BUSINESS ADVOCATE

- ❑ The PA OSBA is the only one of its kind nationally; and, thus, serves as a benchmark of excellence for other states endeavoring to equitably represent the interests of their own small business ratepayers relative to utility and energy matters.
- ❑ OSBA was created by the PA Legislature in 1988 to represent the interests of PA's small business utility consumers in matters before the PA PUC, state/national regulatory agencies, and in the courts.
- ❑ OSBA is an 8-member team: Small Business Advocate (John R. Evans), Deputy Small Business Advocate, 3 Assistant Small Business Advocates, Executive Director, Executive Administrative Officer, and Legal Assistant. Expert witnesses/consultants are also contracted to support litigation.
- ❑ OSBA operates on a \$1.8 million/year budget - fully funded by annual assessments on PA's public utilities. No General Fund tax monies are utilized for OSBA operations.



PENNSYLVANIA OFFICE OF SMALL BUSINESS ADVOCATE

- ❑ As state, national, and global utility and energy-related industries continually evolve, so does Pennsylvania and its Office of Small Business Advocate ~ to ensure constant representation and protection of our small business utility ratepayers.
- ❑ As PA's utility/energy companies plan for necessary improvements in their respective utility infrastructures, and respond to legislatively-mandated energy conservation plans, etc., the OSBA anticipates a continuing high level of activity before the PA PUC and in the courts during the next several years.
- ❑ A critical goal of the OSBA is to ensure that any new "alternative" regulatory approaches guarantee that the utility services provided to PA's small business owners continue to be safe and reliable, at fair and reasonable prices, and with all necessary consumer protections.



Pennsylvania Act 11 of 2012

- ❑ On February 14, 2012, Governor Corbett signed Act 11 of 2012 amending Title 66 (Public Utilities) of the Pennsylvania Consolidated Statutes.
- ❑ This amendment allows jurisdictional water and wastewater utilities, natural gas distribution companies, city natural gas distribution operations, and electric distribution companies to petition the PUC for approval to implement a *Distribution System Improvement Charge* (DSIC).
- ❑ The DSIC must be designed to provide for "the timely recovery of the reasonable and prudent costs incurred to repair, improve or replace eligible property in order to ensure and maintain adequate, efficient, safe, reliable and reasonable services." 66 Pa.C.S. § 1353(a).



Pennsylvania Act 11 of 2012

- ❑ The petition to establish a DSIC must contain the following elements:
 - 1) initial tariff;
 - 2) testimony and exhibits to demonstrate that the DSIC will ensure the provision of adequate, efficient, safe, reliable and reasonable service;
 - 3) long-term infrastructure plan;
 - 4) certification that a base rate case has been filed within the past 5 years; and
 - 5) any other information required by the PUC.
- ❑ The petition must demonstrate that granting the petition and allowing the DSIC to be charged will accelerate the replacement of infrastructure.



Consumer Protections in PA's DSIC Legislation

- ❑ Spending Caps
 - DSIC may not exceed:
 - 5% of amounts billed for wastewater
 - 5% of distribution rates for electric or natural gas
 - 7.5% of amounts billed for water
 - Caps can be waived by the PUC “in order to ensure and maintain adequate, efficient, safe, reliable and reasonable service.”
- ❑ DSIC is reset at zero if the company's return, as reported in the PUC's quarterly earnings report, shows that the utility will earn a rate of return that would exceed the allowable rate of return.



Consumer Protections in PA's DSIC Legislation

- ❑ Base rate case must be filed within past 5 years for a utility to be eligible for a DSIC (“These provisions ensure that the DSIC process is not used to avoid the comprehensive financial review that takes place in the context of a base rate case.” (Pa PUC Tentative Implementation Order))
- ❑ Requires customer credits for over collections and collections for ineligible projects and charges to customers for under collections.
- ❑ DSIC must be applied equally to all customer classes as a percentage of each customer's billed revenue.



PA PUC Alternative Ratemaking Policy Statement

- ❑ Proposed Policy Statement Order entered May 23, 2018 (comments from stakeholders due in August).
- ❑ Issued following holding an *en banc* hearing and soliciting comments from stakeholders on the efficacy and appropriateness of alternatives to traditional ratemaking principles for public utilities.
- ❑ Views were given on whether alternative rate methodologies can encourage energy utilities to better implement energy efficiency and conservation (EE&C) programs, are just and reasonable and in the public interest, and are cost-effective.
- ❑ Methodologies specifically discussed were revenue decoupling mechanisms, lost revenue adjustment mechanism (LRA), Straight Fixed/Variable (SFV) Pricing, Multiyear Rate Plans, Demand Charges, Standby and Backup Charges, DSM Performance Incentive Mechanism.



PA PUC Alternative Ratemaking Policy Statement

□ § 69.3301. Purpose and Scope

- Due to Federal and State policy initiatives to promote the efficient use of electricity, natural gas and water, as well as policy initiatives to promote distributed energy, the fixed utilities within this Commonwealth have seen minimal, flat or even declining load growth.
- The purpose of this policy statement is to invite the proposal, within a utility's base rate proceeding, of fixed utility distribution rate designs that further promote these Federal and State policy objectives, reduce fixed utility disincentives for promoting these objectives, provide incentives to improve system economic efficiency, avoid future capital investments, and ensure that fixed utilities receive adequate revenue to maintain the safe and reliable operation of their distribution systems.
- At the same time, an alternative rate design methodology should reflect the sound application of cost of service principles, establish a rate structure that is just and reasonable, and consider customer impacts.



PA PUC Alternative Ratemaking Policy Statement

- ❑ § 69.3302. Distribution rate considerations
 - (a) In determining just and reasonable distribution rates that promote the efficient use of electricity, natural gas or water, as well as the use of distributed energy resources, the Commission will consider, among other relevant factors:
 - (1) How the rates align revenues with cost causation principles as to both fixed and variable costs.
 - (2) How the rates impact the fixed utility's capacity utilization.
 - (3) Whether the rates reflect the level of demand associated with the customer's anticipated consumption levels.
 - (4) How the rates limit or eliminate inter-class and intra-class cost shifting.
 - (5) How the rates limit or eliminate disincentives for the promotion of efficiency programs.



PA PUC Alternative Ratemaking Policy Statement

- ❑ § 69.3302. Distribution rate considerations (cont.)
 - (6) How the rates impact customer incentives to employ efficiency measures and distributed energy resources.
 - (7) How the rates impact low-income customers and support consumer assistance programs.
 - (8) How the rates impact customer rate stability principles.
 - (9) How weather impacts utility revenue under these rates.
 - (10) How the rates impact the frequency of rate case filings and affect regulatory lag.



PA PUC Alternative Ratemaking Policy Statement

- ❑ § 69.3302. Distribution rate considerations (cont.)
 - (11) If or how the rates interact with other revenue sources, such as Section 1307 automatic adjustment surcharges, 66 Pa. C.S. § 1307 (relating to sliding scale of rates; adjustments), riders such as 66 Pa. C.S. § 2804(9) (relating to universal service and energy conservation policies) or system improvement charges, 66 Pa. C.S. § 1353 (relating to distribution system improvement charge).
 - (12) Whether the alternative rate mechanism includes appropriate consumer protections.
 - (13) Whether the alternative rate mechanism is understandable and acceptable to consumers and comports with Pennsylvania law.
- (b) In any distribution rate filing by a fixed utility under 66 Pa. C.S. § 1308 (relating to voluntary changes in rates), the fixed utility shall explain how these factors impact the distribution rates for each customer class.



Act 58 Of 2018 – PA's Alternative Ratemaking Legislation

- ☐ Signed by Governor Wolf on June 28, 2018, effective in 60 days (August 27, 2018)
- ☐ Act 58 allows public utilities to petition the PUC to consider various alternative ratemaking mechanisms as part of utilities' base rate proceedings, including: decoupling mechanisms, performance-based rates, formula rates or multiyear rate plans, or a combination of those alternatives.
- ☐ PUC is working on the process of implementing the legislation (likely through an implementation order), and evaluating how to coordinate its alternative ratemaking policy statement process with implementation of the statute.



Alternative Ratemaking Consumer Protection Concerns

- ❑ Act 58 of 2018 does not include a comparable section on customer protections like the DSIC legislation.
- ❑ Recommended Alternative Ratemaking Consumer Protections – Statutory advocates (Office of Small Business Advocate and Office of Consumer Advocate) and other stakeholders were unsuccessful in their efforts requesting that specific consumer protections be added to the legislation, such as:
 - A hard cap on any adjustment permitted between base rate cases, *i.e.*, with no exception to increase the cap.
 - The utility should be required to achieve specific objectives, implement programs, or achieve specific metrics set forth in the legislation that are over and above the obligations already in place for regulated utilities in Pennsylvania.
 - The utility must be able to demonstrate that the alternative ratemaking mechanism will result in clear, specific measures of success for incremental benefits to consumers that exceed the additional costs.



Alternative Ratemaking Consumer Protection Concerns

- ❑ Recommended Alternative Ratemaking Consumer Protections (cont.)
 - The return on equity must be reduced to reflect the reduced risk to the utility from the alternative ratemaking mechanism.
 - The utility should be required to submit periodic base rate filings such as every three to five years so that a complete review can be undertaken.
 - The alternative ratemaking mechanism should not include capital costs and should not be allowed to recover a profit margin for shareholders.
 - The alternative ratemaking mechanism should apply to all customer classes.
- ❑ Consumer advocates will be looking to the PA PUC to ensure that consumer protections are afforded to ratepayers that were not specifically provided for in the legislation.



PENNSYLVANIA OFFICE OF SMALL BUSINESS ADVOCATE

QUESTIONS OR COMMENTS?





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Staff Subcommittee on
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Water

Water Utility Ratemaking in an Era of Growth AND Scarcity

Presented by
Ann C. Pongracz, Commissioner
Public Utilities Commission of Nevada
NARUC 2018 Summer Policy Summit
Scottsdale, Arizona

Water Utility Customer Concerns

- **Water comes from the sky, so it should be free, right?**
- **The water here is killing me and my kids**
- **I can't afford to pay more for my water, especially if:**
 - **My money's just lining the pockets of the utility's out-of-state holding company**
 - **My money's being used to build out the system to benefit rich folks on the golf course/with private planes/**

Pressures on Privately Owned Water Utilities

- **Water utilities have capital intensive long-term fixed assets (plant and equipment)**
- **Long-term nature of water utility assets makes it hard to cut costs**
- **Ageing infrastructure**
- **Federal state and local environmental regulations**
- **Water shortages**
- **Line extensions to serve growth**
- **Qualified personnel shortages**
- **Personnel cost increases, including costs of health care**

***HOW TO BALANCE COMPANIES'
LEGITIMATE FINANCIAL NEEDS WITH
CUSTOMERS' NEEDS FOR SAFE RELIABLE
WATER SERVICE AT REASONABLE RATES?***

Can IRPs Help?

- **Integrated Resource Plans (“IRPs”):**
 - **Filing an IRP gives water utilities the opportunity to educate Commission on needed infrastructure projects, in advance of filing General Rate Case**
 - **IRP can include request for designation of certain system improvement projects as eligible for a system improvement rate (“SIR”)**
 - **If SIR eligibility approved, rate case review can be expedited because it can be limited to question of whether water utility completed SIR projects in a prudent manner**
 - **Utility risk reduced**
 - **Nevada Administrative Code sections 704.565-704.5688 (IRP) and 704.633-704.63455 (SIR)**

Challenges of Utilizing IRPs for Small Water Utilities

- **Even regulation-savvy customers who know how to participate in a General Rate Case may be unfamiliar with IRPs:**
 - **Importance of proper notice:**
 - **NAC 704.633395: Requires the utility to provide notice of an application for designation as eligible project, to each customer individually. This notice must include:**
 - **Brief description of the need for the SIR and an estimate of its amount, and**
 - **Information re: where customers may obtain information about the SIR application from the utility and the Commission**

QUESTIONS?

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