

out and for how long? What if they go out of business on the coldest day in the winter or the hottest day in the summer? Will you be able to get gas or electricity then? At what price?

Change is not always good. Massive change can really confuse things.

I started in this business in 1983 and these questions were unthinkable. We were worried about new power plants and rate increases and ways to keep service affordable and the breakup of the Bell system. A utility shutting down on 1 days' notice? Absolutely unthinkable.

What else happens with deregulation? Someone does better and someone else does worse. There are winners and losers. Where's our second contestant?

I've got a few multiple-choice questions for you.

[overheads]

- Within 5 years after the deregulation of airlines, how many communities in the U.S. lost all of their commercial air service? A - less than 25, B - 25-50, C - 50-100, D - more than 100. [116]
- From 1990 to 1998, how much did the average airfare (cents per passenger mile adjusted for inflation) change on average in the U.S.? A - decreased more than 25%, B - decreased between 0 and 25%, C - increased between 0 and 25%, D - increased more than 25% [decreased 26%]
- From 1990 to 1998, how much did the average airfare (again, cents per passenger mile adjusted for inflation) change on average from the Pittsburgh Airport? A - decreased more than 25%, B - decreased between 0 and 25%, C - increased between 0 and 25%, D -

increased more than 25% [decreased 1.0%; Pennsylvania has 6 major airports - 4 of them had decreases of 6% or less; only Erie had a decrease of more than 20%, but still below the national average]

- From 1978 to 1998, what was the average increase in the number of airline seats available at medium-large airports in the U.S.? A - 0-25%, B - 25-50%, C - 50-75% D - > 75% [average increase 85%]
- Pennsylvania has 3 airports in this size category - Allentown, Harrisburg, and Wilkes-Barre/Scranton. How many of them saw an increase of 85% or more in the number of available seats? [Harrisburg - 88%; Allentown - 38%; WB/Scranton - decrease of 20%]
- And, your last question - we'll make it an easy, yes/no question. Was the 20% decline at Wilkes-Barre/Scranton airport the worst decline in number of airline seats in Pennsylvania? [no - Erie had a 26% decline]

The transition from regulation to competition creates winners and losers. Residents of large communities in expanding areas are winners from airline deregulation. Their choices have increased and their fares have gone down. Residents of small communities in less desirable areas, particularly the Northeastern United States, have been losers. Their choices have gone down and their fares have stayed about the same. Assuming, that is, that they still have air service at all.

Competitive markets have winners and losers. Small depositors - those are people who don't make a lot of money - have been hurt by deregulation in the banking industry. They pay fees for checking accounts and earn almost no interest on their passbook savings accounts. In many communities, small

depositors end up paying more in fees than they earn in interest. But big depositors are doing just fine. They get lots of benefits and can take advantage of money market accounts that earn a lot more interest than the typical passbook savings account. Their benefits far exceed any fees that they have to pay.

Long distance telephone service is the same way. The big long distance companies want you to pay either a very high rate - about 25 cents per minute - or they want you to pay a monthly fee to get a lower rate. If you're a business and you make a lot of calls, you can get rates as low as 5 or 6 cents per minute. Even small businesses and astute homeowners can get 9 or 10 cent per minute rates. But if you're a small consumer and you don't know any better, you can end up paying 25 cents per minute. We used to call that price discrimination. Now we call it competition. You better get used to it because that's what competition means. One phrase I've seen that captures it: "Big dogs eat first." That's the way competition works. Us little dogs get the leftovers.

Where's our last contestant? I don't have a lot of questions for you, but these are tough ones. Ready?

[overheads]

- Who is the largest customer of Bell Atlantic? [AT&T]
- What has happened to the rates that AT&T has paid to Bell Atlantic and the other local phone companies since

1984 when the Bell system was broken apart? [declined about 60%]

- Since 1984, what has happened to the rates that residential consumers pay for local phone service? [increased about 25%]
- Since 1984, what has happened to the total bill for phone service - local and long distance - for the typical residential customer? [increased a lot]
- What about AT&T's total bill? [decreased a lot]

Big dogs eat first, and we get to pick up the tab.

Take a look at the effects of deregulation on airlines, trucking, banking, railroads, buses, and long distance telephone. You'll see the same patterns emerge over and over again. Economically desirable customers - usually big customers in growing communities - do great. Prices go down, service options increase, competitors fawn all over each other to get their business. Less desirable customers may stay about the same. And undesirable ones pick up the tab - they pay higher prices, have fewer - or even no - choices, and get lower quality of service.

Change is not always good.

One of the big buzz words in the utility industry today is "convergence." Convergence means that different industries are coming together. Long distance phone companies are merging with local phone companies. Phone companies are buying cable companies. Equipment companies are buying service companies. Electric companies are buying gas

companies, and even water companies. And everybody is buying something to do with the Internet.

Convergence. What does it mean for the small consumer? It means that everybody is going to converge ... somewhere else. No one cares about you because you're small and you have a low income. No one cares about you because they can't use their "converging" to sell you more stuff on one bill. No one cares about you because you live in a small town. No one cares about you because you don't have a cell phone and you don't have a pager and you get your Internet access through the local library or community center or - perish the thought to the convergers - not at all, and you only make about 5 long distance calls a month. So do you know what you'll get? You'll get to pick up the tab for the big dogs. Unless you do something about it.

What's a consumer to do? And, perhaps more to the point, what's a consumer advocate or consumer service organization to do? How can you make sure that your clients and constituents don't become the victims of convergence, or as one commentator put it, "road kill on the information superhighway."

My suggestion to you is to fight convergence with convergence. To protect consumers against the big dogs, the little dogs need to work together. And I have three suggestions for where you can get started.

First, in order for consumers to make it through deregulation, you need to find ways to educate and inform consumers about what's going on. They need to understand how to shop for electricity, natural gas, and telephone service. It's not like shopping for other products or services - we need different skills, different types of information, and we need to ask different questions.

So, your number one priority must be to educate consumers about what's going on and how they can be smart consumers of utility services. Don't consumers know how to do this? No, they don't.

People have been able to choose their long distance telephone company for almost 15 years. Yet about two-thirds of residential customers still use AT&T, often at rates that are at least twice as high as another rate that's available. Let's say you make just 6 calls a month and each call lasts only 10 minutes. If you pay 25 cents a minute, you're paying \$15 per month for long distance. If you switch long distance companies, you can get a rate of 9 cents a minute. Those same calls would cost you \$5.40 per month. That's a savings of almost \$10 per month, if you make only 6 calls. You know as well as I do that there are a lot of people out there for whom \$10 a month can mean the difference between eating decent dinners for a week or not. There's a lot of money to be

saved, but consumers have to know what to do, what questions to ask, and where to turn for help.

So, number 1: consumer education.

Number 2: consumer protection. The other type of convergence that comes with deregulation is the convergence of scam artists. Consumer fraud, misinformation, misleading advertising, promises that aren't kept - they're all part of competitive markets, too. One of my first cases as a very green, 24-year old lawyer, involved someone who paid a few thousand dollars for a new garage. The contractor came, built part of the garage, took all of the money, and was gone. That's what happens in competitive markets. Most of the consumer protection procedures we have aren't designed to deal with utility problems.

What makes utilities different? There are two major differences. First, utility services are essential to public health and safety. Second, they can't be stored - utility services must be delivered instantaneously and on demand. This combination of an essential service that must be instantly available makes it one that existing consumer protection methods are not well suited to. When you're out of electricity, you don't have months to investigate and negotiate. When your gas company failed to deliver in the middle of February, and you had to move into a motel for a

couple of days, that's not your ordinary consumer protection problem. Particularly when it's multiplied by hundreds or thousands, or even millions, of consumers.

Number 3: Do the policy work, too. You can be sure that the utilities and the big-dog customers will have their lawyers and policy people involved in setting the rules for the transition to competition. You need to be there, too.

When convergence starts to happen - when the giant utility companies want to merge to become mammoth, you need to be there. Look what's happened in Pennsylvania in the last couple of years. PP&L bought the Penn Fuel Gas companies. AT&T bought TCI's cable systems. Bell Atlantic wants to buy GTE. Allegheny Energy and Duquesne thought about merging. Out of state energy companies want to buy Peoples Gas and PG Energy. GPU and Duquesne are selling off all their power plants to giant, out of state energy companies. And we're just getting started.

You need to be there. You need to be there to find out what's happening so you can help educate consumers. But you also need to be there to try to protect consumers and, maybe just maybe, to get some benefit for consumers from all of this.

In short, utility consumer advocates, and consumer service organizations, will need to do things differently than



they have in the past. The number one priority must be to educate and inform consumers about what is happening and what they can do to benefit from the changes taking place in the industry. Second, work together to find ways to protect consumers from fraudulent, misleading, and other improper business practices. Third, get involved on the policy side of things. Help to write the rules that will govern these industries. Help to make sure that mergers, acquisitions, and other forms of convergence work for the benefit of small consumers.

Because change is not always good, and massive change can really confuse things.

And how do you make this happen? I'll suggest that it's only possible for this to happen if you work together. Form alliances of community groups, state agencies, local governments, labor unions, and other consumer groups. Pool your resources and your expertise.

To be blunt: Big dogs can eat first only if the little dogs let them.

I'll give you one quick example. The state of Maine has one of the more balanced electric restructuring laws in the country. There are protections for small consumers, utility workers, electricity suppliers; and there are reasonable opportunities for utilities and large industrial customers to

benefit from more competition. How did Maine achieve such a balanced approach? By forming a broad-based consumer coalition that made some very tough choices, but above all realized the importance of sticking together and speaking with one voice. The coalition includes local and statewide consumer groups, government, large companies, environmentalists, and others. And they stayed together not only to influence the legislation, but they're still together to make sure that the legislation gets implemented in a way that makes sense.

Fight convergence - the mergers, takeovers, and sales - with convergence - coalitions of community groups, government, and others with similar interests. Change is not always good. But it can be good if you work together.

Thank you again for having me hear today. I'd be happy to answer any questions that you may have.

# Opflow™

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## Ten Practices of Highly Effective Water Utilities

by Janice A. Beecher and Scott J. Rubin

**H**ighly effective water utilities do not just comply with drinking water standards. They do not merely meet the minimum requirements for demonstrating technical, managerial, and financial fitness. To be highly effective, a water utility will strive for *continuous improvement*, implementing practices on an ongoing basis that promote not just service but service *excellence*. The concept of continuous improvement complements the idea of developing water systems' capabilities over time to ensure safe and reliable water service.

The benefits of becoming a highly effective water utility are self-evident. Highly effective utilities are responsible and responsive. They win not only the approval of regulators but also recognition from industry peers and customer support.

Various tools are available to help water



utilities improve their effectiveness. Effective utilities do not necessarily use every specific capacity development tool, but they engage in recognized practices in a number of key performance areas that can be summarized in 10 categories, within which a number of specific tools can be identified.

The following list of categories and specific tools is not meant to be all-inclusive. Rather,

*continued on page 6*

**Inside  
Opflow ...**

**Question of the Month**  
..... see page 4  
**New Product Place**  
..... see pages 17-20

### PAHS May Help Achieve D/DBP Compliance

An emerging coagulant, polyaluminum hydroxy sulfate, is proving effective in reducing turbidity and removing organic matter and has the advantage of being produced on-site, on demand. In this article, Canadian researchers discuss the coagulant and the results of their pilot tests at small river-water plants.

..... see page 8



# Ten Practices of Highly Effective Water Utilities

(from page 1)

## About the Authors

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AWWA actively supports the capacity development initiatives of the Safe Drinking Water Act through various research, training, and educational efforts, including the Capacity Assistance Program (CAP). This essay highlights a number of specific tools identified in the program that water utilities—especially smaller water utilities—can use to improve their technical, financial, and managerial capabilities.

it is meant to highlight some key information processes that highly effective utilities undertake.

## 1. Prepare Reports

Highly effective water utilities know a lot about themselves; they will prepare regular reports on their operations. Reporting is a very basic function, and a building block for many in-depth planning and managerial activities. Financial reports usually are provided to oversight bodies, including regulators, boards of directors, and shareholders. Technical reports are used to keep track of a utility's inventory and compliance with standards.

Reporting tools include

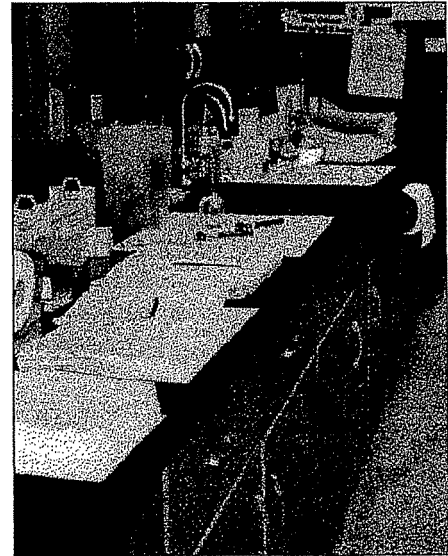
- ❖ Financial report—a thorough picture of a utility's financial condition
- ❖ Shareholder report—a summary of a utility's operations and finances (also known as an annual report)
- ❖ Credit report—a detailed analysis of credit risks
- ❖ Technical inventory—a thorough assessment of a utility's physical capabilities
- ❖ Compliance assessment—a legal assessment of past and current compliance with government regulations
- ❖ Consumer Confidence Report—a required annual report to a system's customers about its water quality

## 2. Manage Information

Highly effective water utilities use modern information systems to maintain and track data, which facilitates planning. Information systems, including geographic information systems (GIS), can be used for technical monitoring. Information systems also can be used for financial and managerial purposes, and they play an essential role in maintaining customer metering and billing records.

Information systems tools include

- ❖ Computer hardware—basic computer equipment to run the software described below
- ❖ Information management system—a comprehensive package to track and manage utility operations (often includes management and financial modules)
- ❖ Technical software—could include computer-aided design, SCADA, flow monitoring, and other software to monitor a utility's physical operations



**Sometimes it takes reams of paper to keep track of all that is done at a water utility.**

- ❖ Management software—to track information about personnel, customer complaints, billing, and related information
- ❖ Financial software—to track capital investment, expenses, revenues
- ❖ GIS—a computer system that integrates customer and technical system information (such as location of valves, pipe sizes, flow rates)

## 3. Follow a Budget

Highly effective water utilities practice accepted budgeting practices. Budgeting involves keeping track of revenues and expenditures in major categories. Budgeting also involves analysis of trends and anticipated changes within categories, such as operations and capital expenditures. Preparation of a relatively detailed budget is a key element in improving a utility's effectiveness.

Budgeting tools include

- ❖ Budget preparation
- ❖ Budget analysis
- ❖ Capital-improvement budget
- ❖ Operation and maintenance budget

## 4. Practice Self-Improvement

Highly effective water utilities embark on various paths to self-improvement. These range from simple self-assessments to a broad range of training opportunities for staff and board members. Self-improvement processes should be highly participatory and include staff members' ideas for improvement.

- Self-improvement tools include
- ❖ Self-assessment checklist—a process to highlight utility strengths and weaknesses
  - ❖ Technical training
  - ❖ Management training
  - ❖ Board member training
  - ❖ Public official training

### 5. Conduct Audits

Highly effective water utilities conduct routine and special audits, as needed, to identify opportunities for improvement. Audits can be performed on an in-house basis, but also by outside experts. Audits can address various aspects of a utility's operations. Audit results can serve as a guide to other improvement strategies.

Auditing tools include

- ❖ Technical audit—a review of a utility's technical operations (treatment plants, water sources, pumping, storage, distribution, fire protection)
- ❖ Financial audit—a review of a utility's financial condition
- ❖ Management audit—a review of utility management practices (labor practices, customer service, billing, metering, regulatory compliance)
- ❖ Energy audit—a review of energy uses and costs
- ❖ Comprehensive audit—a combination of some or all of the above

### 6. Perform Studies

Highly effective water utilities conduct analytical studies of various aspects of their operations. Studies or assessments are used to gain in-depth knowledge that will be useful for management and planning. Some studies may require data collection, research, statistical analysis, or assistance from outside experts. Studies at individual utilities can be undertaken as part of research conducted through governmental agencies and trade organizations.

Analytical study tools include

- ❖ Cost-of-service study—to ensure that rates are designed to recover utility costs in a manner that is fair to all customers
- ❖ Valuation study—to ensure that a utility understands the value of its system

- ❖ Demand analysis—to evaluate how, when, and where water is used
- ❖ Source-water assessment—to determine quality and adequacy of water sources
- ❖ Customer satisfaction survey—to ascertain if a utility is meeting its customers' expectations
- ❖ Needs assessment—to estimate future utility capital requirements
- ❖ Regionalization study—to understand the needs and resources of a utility's neighbors
- ❖ Options analysis—to outline strategic options for meeting future utility needs

### 7. Seek Revenue Enhancements

Highly effective water utilities explore opportunities for revenue enhancements. An analysis of revenues and rates, along with a cost-of-service study, can point to the need for modifications to a utility's rate structure. Special funding, such as the State Revolving Loan Fund, can provide additional opportunities for revenue enhancement.

Revenue enhancement tools include

- ❖ Revenue analysis—to analyze each source of revenues
- ❖ Rate-structure modification—to determine the effect of changing rates
- ❖ Loan application
- ❖ Grant application

### 8. Accept Peer Review

Highly effective utilities engage in processes that build capacity through shared expertise and comparisons with similar utilities, including processes that encourage constructive peer review and benchmarking to evaluate performance in a noncompetitive format. Professional associations, such as AWWA through its QualServe program, can encourage these processes and partnerships. Other processes that lead to improvement include those that encourage ongoing stakeholder involvement and participation to provide a utility with performance feedback.

Review process tools include

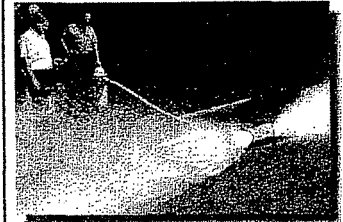
- ❖ Shared expertise—a utility works with at least one other utility to find areas where they might be able to assist one another

*continued on page 16*

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# Ten Practices of Highly Effective Water Utilities

(from page 7)

- ❖ Peer review—personnel from other utilities evaluate a utility's effectiveness
- ❖ Benchmarking—determining how a utility compares to a broad cross-section of similar utilities
- ❖ QualServe participation—participating in AWWA's comprehensive utility assessment program
- ❖ Stakeholder involvement—involving customers, water resource users, governments, and other interested parties in the utility assessment process

## 9. Plan Strategically

Highly effective water utilities are dedicated to strategic planning, although plans can be flexible to allow for modifications in response to changing conditions. Planning can address specific areas of operations, such as water-resource management and capital improvements, or can be more broad-based, such as developing a comprehensive business plan. The ability to prepare a basic business plan is a key indicator of a utility's effectiveness because planning encourages self-assessment, goal-setting, and strategic thinking.

Planning tools include

- ❖ Financial plan

- ❖ Management plan
- ❖ Water resource plan
- ❖ Conservation plan
- ❖ Emergency-response plan
- ❖ Capital-improvement plan
- ❖ Operation and maintenance plan
- ❖ Energy plan
- ❖ Watershed plan
- ❖ Strategic business plan—a combination of most, if not all, of the above plans

## 10. Explore Restructuring

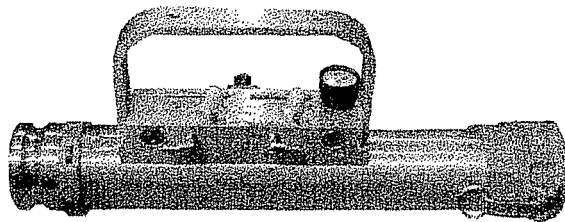
Highly effective water utilities are open to restructuring options that can enhance their ability to provide safe and reliable water service to customers. Restructuring is not necessary or desirable for all water utilities. However, for many smaller utilities restructuring may provide significant opportunities to enhance capacity and improve service performance. Highly effective water utilities explore opportunities to engage in strategic restructuring with nearby and other utilities in order to expand markets and address the needs of other water utilities.

Restructuring tools include

- ❖ Change of ownership—selling a utility to, or merging it with, another entity
- ❖ Satellite management—contracting with another entity to operate and manage some or all of a utility's operations
- ❖ Regional agreements—cooperating with neighboring utilities on various aspects of operations or management
- ❖ Partnering with public agencies
- ❖ Partnering with private companies

As a practical matter, not all of these tools can be implemented at once. Fortunately, resources are available to help water systems evaluate and improve their effectiveness. By collecting information, assessing the utility's strengths and weaknesses, and planning for the future, utility managers will be able to improve performance, achieve financial and service goals, meet consumers' expectations, and help their utilities to become more effective in all aspects of their operations.

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### Write for Opflow

Tell your story through the pages of *Opflow*. Contact Editor Gay Porter DeNileon, AWWA, 6666 W. Quincy Ave., Denver, CO 80235 or [gporter@awwa.org](mailto:gporter@awwa.org).

# Consumer Protection in the Water Industry

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Tuesday, August 14, 2001, 1:30 - 3:00

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## Objective

- ◆ To understand and discuss five major issues of concern to customers of water utilities throughout the United States



## Five major consumer issues

- ◆ Safety of drinking water (quality)
- ◆ Adequacy of water supply (quantity)
- ◆ Quality of utility service
- ◆ Billing and metering issues
- ◆ Affordability of service

We'll spend about 15 minutes discussing each issue  
(and I do mean DISCUSS!)

## **Safety of drinking water (quality)**

- ◆ The public outcry over arsenic
- ◆ Tremendous expansion of quality regulation
- ◆ Increased visibility of waterborne disease
- ◆ Reports about carcinogens in water
- ◆ Annual “consumer confidence reports”
- ◆ Explosion of bottled water and home treatment
- ◆ Aging of distribution systems

## **Adequacy of water supply (quantity)**

- ◆ Continued population growth, particularly in semi-arid regions
- ◆ Prolonged economic growth
- ◆ Global climate change
- ◆ Pressure on water resource from others (including power plant development)
- ◆ Old habits die hard

## Quality of utility service

- Customer service and communication
- Main extension policies and charges
- Impact / tapping / standby fees
- ◆ Adequacy of fire service
- Frequency of main breaks or outages  
(distribution system quality)

## **Billing and metering issues**

- ◆ **Frequency of meter reading**
- ◆ **Accuracy of meter reading**
- ◆ **AMR**
- ◆ **Budget billing**
- ◆ **Perceived fairness of charges**
- ◆ **Billing for other services**

## Affordability of service

- ◆ Ability to pay
- ◆ Billing method
- ◆ Prepayment meters
- ◆ Targeted usage reduction
- ◆ Third party programs
- ◆ Rate changes (lifeline, PIPP, discount)

# Legal Perspective on Water Regulation

August 6, 2002

1:30 pm – 3:00 pm

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## Outline

- Why do we regulate?
- What do we regulate?
- Who do we regulate?
- How do we regulate?

## Why Do We Regulate?

- Essential public service
- Natural monopoly
- Highly inelastic demand for certain uses
- Important natural resource
- Quality impact on public health

## What Do We Regulate?

- Quality
- Withdrawal / use / quantity
- Price



## Quality Regulation

- Federal
  - Safe Drinking Water Act (SDWA), 42 USC § 300f, *et seq.*  
Link: [Full text SDWA](#)
- State
  - 49 states have “primacy” to enforce SDWA – all but WY
  - Some local health departments

## Standard-Setting Process

- EPA establishes maximum contaminant levels (MCL) or treatment techniques (TT)
  - More than 100 separate MCLs or TTs:  
40 CFR Part 141  
Link: [List of all MCLs and TTs](#)
- EPA also lists secondary standards (SMCL) related to aesthetics of water – not enforceable standards
  - Link: [List of all SMCLs](#)

## State Implementation

- States required to adopt federal – or more stringent – standards (MCLs and TTs)
  - Specific requirements: 40 CFR Part 142
- Some states have also made SMCLs enforceable standards

## Key Economic Issues in Standard-Setting Process

- Cost-benefit analysis
  - Health Risk Reduction and Cost Analysis (HRRCA)  
42 USC § 300g-1(b)(3)
- Affordability for small systems
  - 42 USC § 300g-1(b)(4)(E)
  - 42 USC § 300g-1(b)(15)

## EPA Affordability Criterion

- 2.5% of median household income is affordable for customers of small water systems
- Using this criterion, no regulations have been found to be unaffordable for any category of small systems

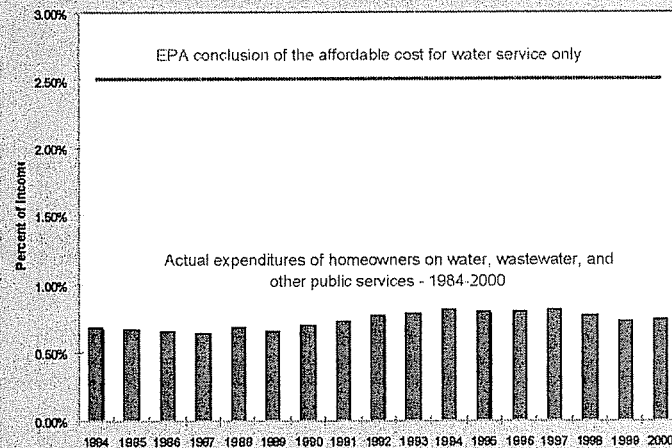
## EPA Affordability Review

- Recommended by NDWAC
- Mandated by Congress
  - EPA appropriations bill for FY 2002  
Link: [Excerpt from Conference Report](#)
- Begins June 2002 and involves:
  - SAB
  - NDWAC
  - Stakeholders
  - Link: [EPA Report to Congress, March 2002](#)

## Key Issues

- Alternatives to median income
- Alternatives to 2.5% as threshold
- Separate criteria for groundwater and surface water systems
- Impact of financial assistance
- Regional vs. national analysis

## EPA Affordability Threshold Compared to Actual



Source: Consumer Expenditure Survey

## Why Should PUCs Care About Quality Regulation?

- Cost of compliance
- Impact on ability to pay for other utilities (especially telephone)
- and ... believe it or not ...

## Potential Tort Liability

- Hartwell v. Superior Court  
27 Cal.4<sup>th</sup> 256, 38 P.3d 1098 (2002)
  - PUC-regulated utilities can be liable for damages only if fail to comply with SDWA
  - Non-PUC-regulated utilities have no protection against civil suit for damages
  - Link: [Full text of Hartwell decision](#)
- New Ohio law- compliance with SDWA complete defense
  - S.B. 65, signed into law 3/18/02
  - Link: [Full text of S.B. 65](#)

## Quantity Regulation

- Varies throughout the country
- Interstate compacts
  - Delaware River basin
  - Colorado River basin
  - Great Lakes
- State quantity regulation
  - Riparian rights (land rights)
  - Allocation (permits)
  - Unregulated (e.g., groundwater)

## Price Regulation

- Federal
  - Essentially none
- State
  - 45 states regulate at least some water rates
- Local
  - In most states, local governments set own prices for government-owned water utilities
- Unregulated
  - Many wholesale transactions
  - Many government-owned corporations
  - Some public-private partnerships

## Who Do We Regulate? Who Should We Regulate?

- Investor-owned utilities
- Homeowner associations
- Cooperatives
- Government-owned utilities
- Landlords

## Does Size Really Matter?

- SDWA
  - Water systems serving 25 people or 15 service connections
- PUC annual reports
- Different rate case procedures
- Should size matter more?
- What's more important – safety of drinking water or its price?

## Serving the Public?

- Is landlord serving only tenants serving "the public"?
  - Regulation of sub-metering
  - In absence of specific statutory authority, what can you do?
- Links:
  - California submetering decision, 209 PUR4th 497 (May 14, 2001)
  - California submetering modification, Dec. 01-10-068 (Oct. 25, 2001)
  - Connecticut submetering decision, 210 PUR4th 466 (May 16, 2001)

## Drawing the Line

- Can one factory sell water to another factory? Five? Apartment buildings?
- One end user not "the public"  
Bethlehem Steel Corp. v. PUC, 713 A.2d 1110 (Pa. 1998)  
Link: Copy of Pa. Supreme Court's decision



## How Do We Regulate?

- Public-private partnerships
- International water transactions
- Water utility holding companies

## Public-Private Partnerships

- Joint undertaking by government-owned utility and privately owned company
  - Operations and maintenance (O&M)
  - Design, build, operate (DBO)
- Is there (should there be) economic regulation of public-private partnerships?
- If so, by whom?
- Link: [NJ privatization statute](#)

## International Issues

- International water transfers
  - Great Lakes
  - Canada – U.S.
  - Mexico – U.S.
- International ownership
  - RWE / Thames
  - Suez Lyonnaise des Eau
  - Vivendi
  - Nuon
  - Kelda

## Impact of Treaties

- NAFTA
  - “Expropriation” compensation  
Methanex Corp. v. U.S. (NAFTA arbitration)  
Link: [Methanex press release](#)
  - Unclear if water is a “commodity”
  - Great Lakes transfers  
Link: [Paper: C. Elwell, NAFTA Effects on Water](#)  
(published in *Toledo Journal of Great Lakes’ Law, Science & Policy*, Spring 2001, pp. 151-212)
- GATT
  - Merger impacts

## Holding Companies

- No federal regulation or restrictions
- Multi-state water holding companies
  - American Water Works Co.
  - Philadelphia Suburban Corp.
  - Utilities, Inc.
  - AquaSource, Inc.
  - BHC Corp.

Thinking Outside the Hearing Room:  
Alternatives to Traditional Water Regulation

By Scott J. Rubin, Esq.

## **I. TRADITIONAL REGULATION**

Most water utilities that are regulated by the Public Utility Commission (PUC) have their rates set by using the traditional rate base / rate of return approach. Using this rate-setting method, utility rates are established to allow the utility an opportunity to recover a market-based return on the utility's prudent investment that is used and useful in serving the public. In addition, utility rates should be sufficient to enable the utility to recover its prudently incurred expenses, taxes, and depreciation.

### **A. Advantages**

Traditional rate base / rate of return regulation has several advantages, but also a number of potential disadvantages. Advantages include:

1. Traditional rate regulation provides a forum for balancing competing interests. Rates are set through trial-type hearings or negotiations that can involve a broad range of interests, including the utility, various groups of customers, and others who are interested in the outcome of the case (including, for example, environmental organizations, labor unions, investors, and others).
2. Allowing utilities to recover market-based rates of return on all of their prudent investment tends to encourage long-term investment in the utility's infrastructure. The disadvantage, though (as discussed below) is that a formal proceeding is required in order to recognize new investment in the utility's revenue requirement.
3. The process has established rules and procedures. Rate base / rate of return regulation has been used for more than 100 years. The process is generally perceived as being equitable, allowing all interested parties an opportunity to participate.
4. Rate base / rate of return regulation produces fairly stable results. It is unusual for rates to fluctuate dramatically over time. While it is possible for rates to decline under this approach, it is rare for that to occur.
5. The process is open to the public. Rates are set in on-the-record proceedings that are open to the public. Transcripts of hearings and written opinions provide a permanent,

public record of the process. This is valuable not only for attorneys and participants in future cases, but also for the general public, allowing the decision-making process to be scrutinized and evaluated.

6. When properly applied, all elements of the utility's operations are examined and synchronized. That is, the rate base, rate of return, revenues, expenses, and taxes all are calculated for the same time period.

## **B. Disadvantages**

Despite its widespread use, rate base / rate of return ratemaking also has several disadvantages, including:

1. By basing the utility's profits on its level of investment (the rate base), traditional regulation includes a potential incentive for over-investment by the utility. For example, assume that a utility is faced with a choice of two technologies to accomplish a particular goal. Technology A has high capital costs and low operating costs. Technology B has low capital costs and high operating costs. The rate base / rate of return methodology would provide an incentive for the utility to choose Technology A because it would generate a much larger profit for the utility than would the option with lower capital costs.
2. Rate base / rate of return is, by its nature, backward-looking. That is, the approach is based on what has happened historically. Even where a future test year, or other projected information, is used, there is often a tendency to see how projections for the future compare to the past.
3. Without aggressive auditing and regulation, utilities under traditional regulation often lack incentives for controlling costs or developing innovative solutions. If a utility knows with a high degree of certainty that it will be able to recover its costs and a return on its investment, then it might not be as aggressive as it could be in controlling or minimizing those costs.
4. The traditional rate-setting process is time-consuming and costly. It is not unusual for the expense of a rate case to

amount to a sizeable percentage of the amount of the rate increase ultimately received by the utility. This is especially the case when the costs incurred by all participants are included.

## **II. AUTOMATIC ADJUSTMENT MECHANISMS**

### **A. Introduction**

The Pennsylvania Public Utility Code has long recognized the need for a partial exception to rate base / rate of return rate-setting. Section 1307 of the Code, 66 Pa. C.S. § 1307, allows a portion of a utility's rates to be set using an automatic adjustment mechanism. The PUC, and other state utility commissions, have considered various types of automatic rate adjustment mechanisms for water utilities.

### **B. Loan Repayment Surcharge**

A PUC policy statement encourages utilities with loans from the Pennsylvania Infrastructure Investment Authority (PENNVEST) to use an automatic adjustment mechanism to recover the debt service from customers. 52 Pa. Code §§ 69.361, *et seq.*

The policy statement notes that the automatic adjustment mechanism will be limited to the recovery of interest and principal on the PENNVEST loan. Any other capital costs not funded by PENNVEST, and any operating and maintenance expenses, will be eligible for recovery only if the utility files a traditional, base rate case under 66 Pa. C.S. § 1308.

In addition, the policy statement recognizes that hearings may be necessary if a customer files a complaint against the recovery of the loan costs alleging, for example, that the facilities constructed are not used and useful in serving the public or that the investment was not prudent. This requirement is consistent with a Commonwealth Court decision holding that the traditional tests for inclusion of costs in rates (such as the used and useful requirement) must be met for projects funded by PENNVEST or its predecessor the Water Facilities Loan Board. *Barasch v. Pa. PUC*, 127 Pa. Commonwealth Ct. 544, 562 A.2d 414 (1989).

### **C. Purchased Water Adjustment Clause**

In Pennsylvania, water utilities with total annual revenues less than \$250,000 are permitted to establish a purchased water adjustment clause. 52 Pa. Code § 53.54(c). The automatic adjustment mechanism can be

used only to “recover the cost of purchased water obtained from municipal authorities or entities which are not affiliated interests” of the utility. The utility also must agree to file for a decrease in the rate within 60 days after the purchased water costs decrease. Each year, the utility must file a report and reconciliation of the clause.

Other jurisdictions allow larger utilities to use automatic adjustment mechanisms for purchased water (and purchased wastewater treatment) costs. For example, New Jersey allows a water utility of any size to implement a purchased water adjustment clause if two conditions are met: (1) purchased water costs total more than 10 percent of its operating and maintenance expenses, and (2) the utility has had a base rate proceeding within the previous three years. N.J. Admin. Code §§ 14:9-7.1, *et seq.*

#### **D. Purchased Energy Adjustment Clause**

Pennsylvania’s regulations do not specifically address a water utility’s ability to implement an automatic adjustment mechanism for changes in energy costs. Such an adjustment might be difficult to implement in Pennsylvania because of the deregulated market for energy supply. That is, rather than simply purchasing electricity or natural gas from its local, regulated (or municipal) supplier at a defined price, the water utility has the ability to purchase from a number of potential suppliers at negotiated prices. The reconciliation of energy costs, therefore, could involve a review of the prudence of the water utility’s energy purchase decisions, which would complicate the automatic adjustment process.

Other states, however, do permit water utilities to use automatic adjustment mechanisms for energy costs. For example, Florida allows water utilities to automatically adjust their rates for changes in electricity costs. Fla. Stat. § 367.081(4)(b). The water utility’s filing must include documentation of the cost increase as well as a statement explaining its attempts to conserve energy. Fla. Admin. Code § 25-30.425.

#### **E. Weather Normalization Clause**

Water consumption is weather sensitive. In Pennsylvania, and in most parts of the country, water consumption is significantly higher in the summer months than it is during cooler, wetter seasons. Some water utilities have attempted to implement an automatic adjustment clause that would adjust revenues based on changes in weather. For example, if a summer were wetter and cooler than normal, the adjustment mechanism would result in an increased rate (the utility sold less water, and collected fewer revenues, than it expected).



We are not aware of any water utility in Pennsylvania that has attempted to use a weather normalization clause, but the PUC recently approved a settlement that institutes a weather normalization adjustment clause for Philadelphia Gas Works, a city-owned natural gas utility subject to the PUC's jurisdiction. *Pa. PUC v. Philadelphia Gas Works*, Docket No. R-00017034 (Aug. 8, 2002). Several parties that supported the settlement noted the distinction between a government-owned utility and an investor-owned utility, particularly concerning the government-owned utility's absence of equity investors to bear the risk of abnormal weather conditions.

A water utility in Florida has proposed a weather normalization clause, but it was rejected by the regulatory commission. *Southern States Utilities, Inc.*, Docket No. 950495-WS; Order No. PSC-96-1320-FOF-WS, 1996 Fla. PUC LEXIS 2074. The Florida commission concluded that while the idea of a weather normalization clause had some merit, its administrative complexity would be likely to lead to customer confusion. That commission also found that there were other ratemaking mechanisms that could achieve the clause's primary purpose of revenue stability.

#### **F. Distribution System Improvement Charge (DSIC)**

Pennsylvania was one of the first states in the country to permit a water utility to implement an automatic adjustment clause for capital investments; in this instance, distribution system improvements (such as main replacement and rehabilitation). In 1996, the PUC approved a petition filed by Philadelphia Suburban Water Co. (PSWC) to implement an automatic adjustment mechanism for distribution system improvements. *Petition of Philadelphia Suburban Water Company for Approval to Implement a Tariff Supplement Establishing a Distribution System Improvement Charge*, Docket No. P-00961036, 1996 Pa. PUC LEXIS 211. In approving the mechanism, the PUC stated that such a ratemaking mechanism "would enable the company to address, in an orderly and comprehensive manner, the problems presented by its aging water distribution system, and would have a direct and positive effect upon water quality, water pressure and service reliability."

While the PUC found an automatic adjustment mechanism for capital costs to be lawful under 66 Pa. C.S. § 1307, the water industry and others recognized that the PUC's interpretation might result in a legal challenge. Consequently, the Public Utility Code was amended to specifically allow the PUC to permit water utilities to implement a distribution system improvement charge as an automatic adjustment mechanism. 66 Pa. C.S. § 1307(g).

### **III. LINKING RATES AND SERVICE QUALITY**

#### **A. Traditional Linkage Between Rates and Service**

Traditional rate regulation involves an implicit agreement between the utility and its customers. Specifically, the utility agrees to provide the customer with safe, adequate, and reliable service. In exchange, the customers agree to provide the utility with revenues that would be sufficient to cover the utility's costs and to permit the utility to earn a reasonable return on the utility's capital investment, assuming that the utility makes prudent business decisions.

In "normal" times, this mutual agreement works fine. The utility makes the investment that is necessary to provide its customers with a reasonable level of service, and that results in rates that the customers are willing and able to pay.

When things start to fall apart, however, the agreement becomes a classic "chicken and egg" problem. Which comes first – the utility's obligation to provide service or the customer's obligation to provide the utility with sufficient revenues? If service deteriorates, the utility may argue that it cannot raise sufficient capital to solve the problem unless it can increase its rates. But, of course, the customers do not want to see their rates increase until the quality of service improves.

The Public Utility Code resolves the "chicken and egg" problem, at least on paper, by making the quality of service a factor that the PUC is allowed to consider when setting the level of rates. 66 Pa. C.S. § 523. The Code also specifically gives the PUC the authority to reject a rate increase request, in whole or in part, if it finds that "the service rendered by the public utility is inadequate in that it fails to meet quantity or quality for the type of service provided." 66 Pa. C.S. § 526.

These provisions of the Code create an express linkage between the quality of service and the level of rates that a utility is permitted to charge. One major concern, though, is that the linkage comes into existence only when a utility seeks to change its rates. Between rate cases, it is considerably more difficult to ensure that a utility is meeting its obligation to provide adequate and reliable service. (While the PUC has the power to order remedies and improvements if it finds that service is deficient (66 Pa. C.S. § 1505), that power will be used, in practice, only when service has deteriorated significantly.)

## **B. Performance-Based Rates**

During the past decade, many telecommunications and energy utilities found that they no longer needed to file regular rate cases in order to earn a reasonable return on their investment. At the same time, regulatory commissions and others were becoming concerned that traditional regulation may not provide utilities with appropriate incentives to improve the level of service provided to the public. The result is a new category of ratemaking known as performance-based rates (PBR).

PBR can include several different ratemaking mechanisms. For example, price caps or indexed rates (rates that adjust automatically based on inflation or other exogenous factors) establish rate levels without regard to the utility's going-forward level of costs. This is the method of ratemaking used for telecommunications utilities under Chapter 30 of the Public Utility Code, 66 Pa. C.S. Ch. 30.

In addition to capping or indexing rates, though, PBR plans require the utility to measure various aspects of the quality of service that it provides to the public. PBR plans may include penalties for substandard performance, bonuses for exemplary performance, or a combination of the two. Performance measures should be designed to ensure that the utility's quality of service and long-term maintenance do not deteriorate.

The utilities where PBR has been used tend to be utilities that are not making sizeable capital investments, meaning that rate cases would be infrequent or might even lead to rate reductions if new investment is less than the depreciation on existing investments. Thus, PBR plans can provide a method to stabilize rates, but ensure that the utility continues to make investments that are necessary to provide reliable service.

We are not aware of any instance where PBR has been used for a water utility. It does not appear that the predicates for the use of PBR – declining levels of investment and infrequent rate cases – are present in the water industry. It is possible, however, that proposals could be made to implement performance measures for water utilities as a supplement to, instead of a replacement for, traditional rate base / rate of return regulation.

For a comprehensive discussion of PBR, including its history, uses, rate design issues, regulatory practices, and potential applications, see M. R. Schmidt, *Performance-Based Ratemaking: Theory and Practice* (Public Utility Reports 2000).

#### **IV. SPECIAL PROCEDURES FOR SMALL UTILITIES**

Several states, including Pennsylvania, have implemented special ratemaking procedures and methods for small water utilities. *See, e.g., Investigation on the Commission's own motion into the financial and operational risks of Commission regulated water utilities, and whether current ratemaking procedures and policies require revision*, 43 Cal. PUC2d 568 (1992); 170 Ind. Admin. Code §§ 14-1-1, *et seq.*; 52 Pa. Code § 53.54. The following discussion briefly highlights some of the special ratemaking methods and procedures that are used for small water utilities in Pennsylvania and elsewhere.

##### **A. Generic Rate of Return**

Some states have a single proceeding, usually held annually, to establish a standard rate of return on common equity that all small water utilities can use. This obviates the need for small utilities or public advocates to hire rate of return consultants for small rate cases. *See, e.g.,* 228 Code of Mass. Regs. § 31.01.

##### **B. Operating Ratio**

Pennsylvania's small water utility ratemaking options include the use of an operating ratio. 52 Pa. Code § 53.54(b). An operating ratio sets the utility's allowable level of profit to be a percentage of the utility's operating and maintenance expenses, rather than a percentage of its rate base. An operating ratio is designed to provide some level of net revenues to a utility that has a very small rate base (for example, when a large percentage of the utility's property was contributed by developers).

##### **C. Reserve Accounts**

Pennsylvania also permits small utilities to establish two types of customer-funded reserve accounts.

1. An Emergency Maintenance and Operation Fund (EMOF), can be provided in lieu of a cash working capital allowance. The PUC's regulations require that the EMOF be kept in a segregated cash account. Disbursements from the fund can be used only for extraordinary repairs or to respond to emergencies such as droughts, floods, contamination, and the like. Any use of the fund must be reported to the PUC within 10 days. 52 Pa. Code § 53.54(d)

2. A small water utility can ask the PUC for approval to establish a customer-funded reserve account. The account can be used only “for the purpose of making capital improvements to utility plant pursuant to a long-range plan developed in conjunction with the Commission or the Department of Environmental Protection.” Any property purchased with funds from a customer-funded reserve account will be treated as a contribution in aid of construction, thereby being deducted from the utility’s rate base. 52 Pa. Code § 53.54(e).

## V. DEREGULATION

### A. Deregulation by Statute

Five states (Georgia, Michigan, Minnesota, North Dakota, and South Dakota) do not regulate the rates of investor-owned water utilities. In those states, consumer concerns about the rates or quality of service usually would involve filing a civil complaint in a trial court.

### B. Deregulation by Change in Ownership

In Pennsylvania, a water utility regulated by the PUC can become deregulated only through a change in ownership. The PUC does not regulate water utilities that are owned by a municipal government and that provide service only within the boundaries of that municipality. The PUC also does not regulate authorities established under the Municipal Authorities Act. 53 Pa. C.S. §§ 5601, *et seq.* Municipal authorities can provide service anywhere in Pennsylvania, unless the authority’s articles of incorporation specifically limit its activities to a particular geographic area.

## VI. GENERIC OR AREA-WIDE RATES

In 1968, the United States Supreme Court decided a case under the federal Natural Gas Act that upheld a procedure that established rates generically for an entire region. *Permian Basin Area Rate Cases*, 390 U.S. 747 (1968). In the Permian Basin cases, the Federal Power Commission (FPC) established rates for small natural gas producers within particular geographic locations. The commission thereby avoided hundreds of small, site-specific rate cases; it also created greater uniformity in the pricing of natural gas at the wellhead. In upholding this generic rate-setting, the Supreme Court held: “we see no objection to [the FPC’s] use of a variety of regulatory methods. Provided only that they do not together produce arbitrary or unreasonable consequences, the Commission

may employ any ‘formula or combination of formulas’ it wishes, and is free ‘to make the pragmatic adjustments which may be called for by particular circumstances.’” (quoting *FPC v. Natural Gas Pipeline Co.*, 315 U.S. 575 (1942))

We are not aware of any instance where generic rate-setting has been attempted at the state level. It may be an “out of the box” approach to establishing reasonable and timely rates for small water utilities – potentially avoiding the need for the dozens of small rate cases that are filed each year with the PUC. Of course, any generic approach must consider the impacts on consumers and utility investors, and must meet the “just and reasonable” standard for utility rates under 66 Pa. C.S. § 1301. The Supreme Court’s *Permian Basin* decision, though, indicates that there may be innovative ways to set “just and reasonable” utility rates for large groups of small utilities providing a similar type of service.



2. Reference Mr. Rubin's testimony at page 3, lines 12-26. Produce a copy of Mr. Rubin's testimony in each of these four proceedings, and a copy of any commission order in such proceedings which relates or refers to Mr. Rubin's testimony.

Answer:

Mr. Rubin's pre-filed testimony in each of the proceedings is attached. He does not have copies of the transcripts or commission orders from those cases. (The *Hope Gas* case was settled before Mr. Rubin was cross-examined.)

Responsible witness: Scott J. Rubin



BEFORE THE  
STATE OF MAINE  
PUBLIC UTILITIES COMMISSION

OLDE PORT MARINER FLEET, INC.

Complaint Regarding Casco Bay Island Transit District's  
Tour and Charter Service

Docket No. 98-161

Rebuttal Testimony of  
**Scott J. Rubin**

on Behalf of  
Maine Public Advocate and  
Olde Port Mariner Fleet, Inc.

September 3, 1998

1 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

2 A. My name is Scott J. Rubin. My business address is 3 Lost Creek Drive, Selingsgrove, PA  
3 17870-9357. I previously submitted direct testimony in this case.

4 Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

5 A. In this rebuttal testimony, I will respond to several statements made by Dr. Silkman in his  
6 testimony on behalf of Casco Bay Island Transit District (the District).

7 Q. DOES ANY OF THE TESTIMONY THAT THE DISTRICT FILED LEAD YOU TO CHANGE ANY ASPECT  
8 OF YOUR DIRECT TESTIMONY?

9 A. No, it does not.

10 Q. TURNING TO DR. SILKMAN'S TESTIMONY, IS HE CORRECT THAT A MARGINAL COST ANALYSIS  
11 SHOULD BE PERFORMED ON THE DISTRICT'S UNREGULATED SERVICES?

12 A. No, he is not correct, at least not as a matter of sound regulatory policy. As a matter of basic  
13 economics, he is correct that a perfectly competitive market will see the price reach equilibrium  
14 at the marginal cost of providing the service. But that economic concept has little to do with the  
15 appropriate way of allocating costs and pricing services when a regulated monopoly seeks to  
16 enter a competitive market. The use of fully allocated costs is required in order to prevent the  
17 monopoly's regulated customers from unwittingly subsidizing the company's entry into  
18 competitive markets. Such subsidies harm consumers of the regulated service (by requiring  
19 them to bear the fixed costs of providing competitive services) and competitors (by depressing  
20 prices in the competitive market). In other words, there is a big difference between pricing

1 theory and the practical problems for consumers and competitors of a regulated monopoly using  
2 some of its assets and other fixed costs to enter a competitive market.

3 Q. HAS THE MAINE COMMISSION PREVIOUSLY ADDRESSED THIS ISSUE?

4 A. Yes, it has. In the case of *Cochrane v. Bangor Hydro-electric Company*, No. 96-053 (Jan.  
5 28, 1997), the Commission required an electric utility to use fully allocated costs, among other  
6 requirements, to separate the costs of its regulated and unregulated operations. The  
7 Commission stated, as follows, the benefits of using the fully allocated costing methodology:  
8 “This methodology protects ratepayers from subsidizing competitive ventures, allows ratepayers  
9 to participate in the economies of scale and scope that may result from the utility and its  
10 subsidiary, and encourages cost reductions that benefit ratepayers.” Slip op. at 11. In that  
11 case, the Commission specifically rejected the utility’s request to use incremental cost.

12 The Commission also adopted the use of the fully allocated cost methodology for  
13 transactions between a utility and its unregulated affiliates in its regulations on Utility  
14 Requirements for Non-Core Activities and Transactions Between Affiliates. Chapter 820,  
15 section 4(A).

16 Q. HAVE OTHER REGULATORY COMMISSIONS ADDRESSED THIS ISSUE?

17 A. Yes, they have. I will give just a few examples. The Federal Communications Commission  
18 (FCC) requires that regulated telecommunications utilities price services that they provide to  
19 unregulated affiliates (who are engaged in competitive enterprises) at the higher of fair market  
20 value or fully allocated cost. 47 C.F.R. § 32.27(c). In addition, the FCC’s cost allocation  
21 requirements are quite explicit about the need to fully allocate costs between regulated and

1 unregulated parts of the same corporation. See 47 C.F.R. §§ 64.901-64.904.

2 Similarly, the Iowa Utilities Board has conducted investigations into the requirements for  
3 allocating costs between regulated and unregulated lines of business within the same  
4 corporation. That agency also concluded that costs must be fully allocated in order to prevent  
5 cross-subsidization. *Re Non-utility Activities - Record Keeping and Cost Allocation*, 147  
6 PUR 4<sup>th</sup> 330 (Ia. Util. Bd. 1993), *Re Affiliate Transactions*, 163 PUR 4<sup>th</sup> 227 (Ia. Util. Bd.  
7 1995).

8 Earlier this year, the Maryland Public Service Commission reached the same  
9 conclusion. In so doing, that commission specifically rejected a request to use incremental (or  
10 marginal) cost instead of fully allocated cost, stating:

11 If an incremental cost methodology were used, affiliates could be charged little  
12 or nothing for use of these utility assets, equipment, and personnel.<sup>32</sup> This  
13 would mean that utility ratepayers would be subsidizing affiliate activities with no  
14 offsetting benefit to them. Accordingly, we find that a fully distributed cost  
15 methodology should be used in allocating joint costs between a utility and its  
16 affiliates.

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<sup>32</sup> For example, a utility's computer system may have a certain level of unused capacity which could be utilized by an affiliate. Using an incremental cost methodology, the affiliate's contribution could be de minimus; under a fully distributed cost method, the affiliate would pay its proportional share for the capacity it actually used.

26 *Re Affiliated Transactions and Affiliate Standards of Conduct of Companies Providing*  
27 *Gas or Electric Service*, 183 PUR 4<sup>th</sup> 277 (Md. PSC 1998).

28 Finally, a recent treatise on utility ratemaking reaches the same conclusion, stating:  
29 "Fully allocated or fully distributed costing is commonly used to segregate the unregulated,

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1 nonjurisdictional services from the regulated, jurisdictional services. Fully allocated costing  
2 prevents ratepayer subsidization of the unregulated services by the regulated services.” Leonard  
3 S. Goodman, *The Process of Ratemaking* (Public Utility Reports, Vienna, VA 1998), at 432.

4 Q. DR. SILKMAN ANALOGIZES THE USE OF MARGINAL COST IN THIS CASE TO THE ALTERNATIVE  
5 RATE PLAN (ARP) THAT THE COMMISSION ADOPTED FOR CENTRAL MAINE POWER  
6 COMPANY (CMP). DO YOU AGREE WITH HIS ANALOGY?

7 A. No, I do not. The ARP is designed to allow CMP to continue to provide regulated services to  
8 its existing customers, particularly when those customers face energy alternatives that may be  
9 less costly than using electricity. While there are elements of competition in the ARP, it is really  
10 a load-retention program designed to help a utility retain its existing, regulated customers.  
11 Moreover, the ARP is structured so that any discounts that are provided off of the full tariffed  
12 rate must be borne by the utility and not by remaining customers. Thus, there is no element of  
13 cross-subsidization in the ARP – regulated customers are protected against providing any of the  
14 discount that is used by the utility to keep customers on regulated service.

15 This is not at all similar to the situation in the present case. The District is engaging in a  
16 wholly competitive service (tour and charter) that is not regulated in any fashion by the  
17 Commission. If the District does not fully allocate costs to that unregulated business, then the  
18 remaining costs will be borne by customers of its regulated (ferry) service. Thus, here there is a  
19 direct threat of ratepayer cross-subsidization of a competitive, market-based service. In  
20 contrast, the ARP insulated ratepayers from any cross-subsidization and did not involve a  
21 market-based service.