

**BEFORE THE
INDIANA UTILITY REGULATORY COMMISSION**

**PETITION OF CWA AUTHORITY, INC. FOR (1))
AUTHORITY TO INCREASE ITS RATES AND)
CHARGES FOR WASTEWATER UTILITY SERVICE)
IN THREE PHASES AND APPROVAL OF NEW)
SCHEDULES OF RATES AND CHARGES)
APPLICABLE THERETO; (2) APPROVAL OF A)
LOW-INCOME CUSTOMER ASSISTANCE)
PROGRAM; AND (3) APPROVAL OF CERTAIN)
CHANGES TO ITS GENERAL TERMS AND)
CONDITIONS FOR WASTEWATER SERVICE.)**

CAUSE NO. 45151

**DIRECT TESTIMONY
of
ERIC P. ROTHSTEIN**

**On
Behalf of
Petitioner,
CWA Authority, Inc.**

Petitioner's Exhibit No. 3

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1 **INTRODUCTION AND BACKGROUND**

2 **Q1. PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS.**

3 A1. My name is Eric Paul Rothstein. I am a Utility Management Consultant. My
4 business address is 3300 N. Lake Shore Dr., Unit 6C, Chicago, IL 60657.

5 **Q2. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL**
6 **HISTORY.**

7 A2. I have a Bachelor's Degree from Ripon College, Ripon WI where I majored in
8 Economics & History. I have a Master's Degree in Economics from the University of
9 California, Davis and completed all coursework and qualifying examinations for a
10 PhD in economics from that institution.

11 I am a Certified Public Accountant licensed by the State of Oregon. I am also
12 a Municipal Advisor registered with the Municipal Securities Rulemaking Board and
13 Securities and Exchange Commission.

14 I worked from 1984 to 1994 for the City of Austin, Texas – for 5 years in its
15 Resource Management Department where I managed the Planning and Evaluation
16 Division responsible for technical evaluations of energy and water conservation
17 programs. In 1989, I became a Financial Manager for the City of Austin's Water and
18 Wastewater Utility where I had responsibility for managing cost-of service
19 ratemaking, capital financing and other financial analysis and reporting functions.

20 In 1994, I took a position with CH2M HILL – an international project delivery
21 company. For CH2M HILL, I conducted water and wastewater rate studies, prepared
22 engineer's feasibility studies for utility revenue bond issues and participated in a
23 variety of other utility management consulting engagements. After founding and
24 leading the Utility Management Solutions organization for CH2M HILL's Water
25 Business Group, in March 2007, I left CH2M HILL to form my own utility

1 management consulting firm marketed under a “doing business as” arrangement with
2 Debbie Galardi and Cody Stanger as the “Galardi Rothstein Group.” I have worked
3 and continue to work on a variety of consulting projects independently and with other
4 members of the Galardi Rothstein Group.

5 **Q3. WHAT PROFESSIONAL SOCIETY AND INDUSTRY RESEARCH**
6 **PROJECTS ENHANCE YOUR QUALIFICATIONS TO OFFER TESTIMONY**
7 **IN THIS CASE?**

8 A3. I have been active in the water and wastewater industry’s various professional
9 societies including the American Water Works Association (AWWA), Water
10 Environment Federation (WEF), International Water Association (IWA) and National
11 Association of Clean Water Agencies (NACWA), and I have been involved in a
12 number of Water Research Foundation (WRF – previously American Water Works
13 Association Research Foundation or AwwaRF) projects.

14 I have served on AWWA’s Rates and Charges Sub-Committee, which is
15 responsible for promulgating AWWA’s *Principles of Water Rates, Fees and Charges*,
16 M1 manual of practice, for more than 20 years. During my tenure with the Rates and
17 Charges Committee, I chaired task forces that developed the *Water Rates Structures*
18 *and Pricing* manual of practice, which was a precursor manual to sections of the M1
19 Manual dealing with rate design issues. Recently, I chaired a task force that
20 developed revisions to the M1 Manual chapters dealing with outside-City and
21 wholesale rates chapters, which was published in 2012 in the 6th edition of the
22 AWWA M1 Manual. Also for that publication, I co-authored revisions to Appendix
23 A: “Development of Peaking Factors by Customer Class.” For the 7th Edition of M1

1 Manual of Practice, published in 2017, I chaired the work group that authored a new
2 chapter on Emerging Trends.

3 For WEF's Utility Management Committee I served as Task Force Chair for
4 development of WEF's *Financing and Charges for Wastewater Systems* manual of
5 practice (No. 27) (2005), which promulgated standard practices for wastewater
6 service ratemaking. For the update of that manual of practice, I contributed to the
7 chapter on wet weather cost allocation and co-wrote a new chapter on Emerging
8 Trends in wastewater rate making.

9 In 2011, for the Halifax Regional Water Commission (HRWC), I developed
10 (in collaboration with G. A Isenor Limited and W. H. Gates Utility Consultants
11 Limited) a Cost-of-Service and Rate Design Methodology Review and
12 Recommendations report that proposed standard practices for the development of
13 cost-of-service based water, wastewater and stormwater rates. This report was
14 required by order of the Nova Scotia Utility and Review Board (NSUARB-W-
15 HRWC-R-11) for its future consideration of HRWC rate applications. HRWC is the
16 first combined and regulated water, wastewater and stormwater utility in Canada.

17 For the Water Research Foundation, I have been on research project teams
18 that have addressed evaluation of public-private partnership (PPP) options, asset
19 management, capital project prioritization, and water conservation program
20 evaluation. For NACWA, I have prepared white papers on Financial Capability
21 Assessment methods used to structure wastewater Consent Decrees.

22 In 2017, I was appointed to serve on the U.S. Environmental Protection
23 Agency's Environmental Finance Advisory Board (EFAB) and am co-chairing a work
24 group to develop a report on utility regionalization and consolidations.

1 **Q4. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

2 A4. I have been asked by CWA Authority, Inc. ("CWA") to provide expert testimony
3 addressing primarily CWA's capital investment financing plan and affordability
4 initiatives.

5 **Q5. WHAT HAVE YOU DONE TO EVALUATE CWA'S FINANCIAL POSITION,**
6 **PETITION TO INCREASE RATES, AND APPROACHES TO ADDRESSING**
7 **AFFORDABILITY TO PREPARE TESTIMONY IN THIS CASE?**

8 A5. As early as June 2017, in conjunction with strategic planning efforts for Citizens
9 Energy Group (sometimes referred to herein as "Citizens") and CWA, I have
10 participated in several meetings with CWA leadership team members to discuss
11 concerns about financing the Consent Decree driven capital program. These
12 discussions also addressed options for CWA to not only expand its low-income
13 customer assistance programs and measures but also support a larger community
14 engaged initiative to address troubling poverty trends in CWA's service area.

15 Beginning in the spring of 2018, I reviewed various documents, participated in
16 meetings, and visited CWA wastewater facilities in preparation for filing of this
17 testimony. Documents included Citizens Energy Group's recent annual reports,
18 relevant Indiana legislation, CWA's wastewater system Consent Decree, and
19 comparative reviews of CWA's capital program relative to other Midwest Consent
20 Decree communities. Financial documents included CWA's financial statements,
21 bond offering statements, and rating agency reports, as well as testimony and exhibits
22 prepared by John Brehm. Information on water affordability considerations included
23 U.S. Census data, selected Brookings Institute Metropolitan Policy Program reports

1 from their Inclusive Economic Development Lab initiative¹, local news coverage
2 related to regional poverty, and CWA presentations on its at-risk customer analyses.

3 **Q6. WHAT CONSULTING PROJECT EXPERIENCE, PARTICULARLY**
4 **RECENT PROJECTS, SUPPORT YOUR QUALIFICATIONS TO OFFER**
5 **TESTIMONY IN THIS CASE?**

6 A6. My detailed resume is offered as Attachment EPR-1. This documents more than 30
7 years of work in water, wastewater and stormwater utility finance during which I have
8 managed a diverse range of projects. Many of these projects have involved the
9 subjects of my testimony and matters at issue in this case. Several others provide
10 unique perspective on the imperatives of addressing what I have referred to in my
11 writings and consultancy as the industry's affordability dichotomy (to be discussed
12 later). Among the most recent of these projects was work with several financially
13 distressed communities, including Jefferson County, Alabama and Detroit, Michigan,
14 both of which filed for bankruptcy protection; and Flint, Michigan, which suffered a
15 system-wide water quality crisis leading to lead exposure. I am currently engaged by
16 the City of Detroit and the American Water Works Association to, among other
17 matters, advance measurement of water affordability as well as methods for funding
18 and implementation of low-income affordability programs.

19 My experience, industry engagement, and credentials qualify me to provide
20 expert witness testimony in this matter.

21 **SUMMARY OF ISSUES**

22 **Q7. WHAT ISSUES WILL YOU ADDRESS IN YOUR EXPERT TESTIMONY?**

¹ Specifically, "Opportunity For Growth: How Reducing Barriers To Economic Inclusion Can Benefit Workers, Firms, And Local Economies", by Joseph Parilla, September 2017 and "Committing To Inclusive Growth: Lessons for metro areas from the Inclusive Economic Development Lab", by Ryan Donahue, Brad Mcdearman, and Rachel Barker, September 2017.

1 A7. In broad terms, my testimony will address (1) the merits of CWA's system financing
2 plan and (2) evolving perspectives and options to address water affordability in the
3 interest of mitigating the burden of increasing wastewater bills on low-income
4 residents. With respect to CWA's system financing plan, I will address both CWA's
5 proposed annual rate increases and its approach to capital financing. In this context,
6 my testimony supports that of CWA CFO John Brehm, though in some respects I
7 have come to similar conclusions based on different logic and perspectives.

8 **Q8. HOW WOULD YOU CHARACTERIZE THE DIFFERENCES IN YOUR**
9 **LOGIC AND PERSPECTIVES RELATIVE TO JOHN BREHM'S?**

10 A8. I think I would characterize the differences as deriving from different experiences and
11 responsibilities. Mr. Brehm has profound responsibilities for ensuring CWA's
12 financial health and integrity as it implements federally mandated requirements and
13 assumes responsibility for delivery of water and wastewater services critical to
14 protection of public health and the environment. These responsibilities require
15 effective financial management to navigate an array of risks and challenges ranging
16 from assuaging investor concerns to implementing industry best management
17 practices. Mr. Brehm must maintain allegiance to financial practices that will serve
18 CWA's long-term interests by ensuring adequate financial flexibility and access to
19 borrowing on reasonable terms.

20 My work with many Consent Decree and financially distressed communities,
21 and on rate trends and affordability policies, lends me a different vantage point.
22 While I concur with Mr. Brehm that CWA faces an enormous capital financing
23 challenge, I see the financing and project delivery challenges and the need for
24 consequent rate adjustments as typical of those communities placed under federal

1 wastewater Consent Decrees. How those financing and project delivery challenges
2 are met will be critical to the success of the Consent Decree and the magnitude of the
3 rate adjustments necessary to enable its financing. For that reason, as I address later
4 in my testimony, the need for CWA to be staffed with experienced, highly qualified
5 personnel cannot be overstated.

6 Mr. Brehm and I both agree that CWA's resultant, highly leveraged, capital
7 structure is problematic and warrants more revenue-funding of E&R projects in this
8 case. I tend to believe that CWA's proposed \$72 million/year revenue funding in step
9 one, \$76 million/year revenue funding in step two and \$80 million/year E&R revenue
10 funding in step three may require additional increases in a subsequent rate case to
11 enable an appropriate level of revenue funding in later years of the consent decree
12 construction period. Moreover, it may require additional increases following
13 completion of the consent decree to enable and sustain revenue-funding of all annual
14 E&R spending needs, which in my opinion is an appropriate goal for CWA.

15 **Q9. WHAT DO YOU MEAN BY THE TERM "WATER AFFORDABILITY"?**

16 A9. The term "water affordability" is used herein to relate to the general issue of the
17 ability of customers, particularly low-income customers, to pay water and wastewater
18 related bills without incurring undue economic hardship. This term is one of an
19 important and often times confusing lexicon that has evolved in the water and
20 wastewater industry.² Water affordability focuses on issues related to individual
21 customers where impacts on households are the subject of concern.³ In contrast, the

² The term "water and wastewater industry" itself is used herein to refer to U.S. water and wastewater utilities regulated by the U.S. EPA under the federal Safe Drinking Water Act and Clean Water Act. These utilities are subject to evaluations of financial capabilities and measures of household affordability using common metrics and methodologies across water and wastewater services.

³ See, for example, "Measuring Household Affordability for Water and Sewer Utilities" by Manuel P. Teodoro, Journal - American Water Works Association, Volume 110, Issue 1, February 6, 2018.

1 term "Financial Capability" is used to refer to a community's ability to finance
2 mandated water and wastewater system improvements required to comply with
3 federal and state regulations.⁴

4 **Q10. PLEASE SUMMARIZE YOUR POSITION WITH RESPECT TO CWA'S**
5 **PROPOSED RATE INCREASE PLAN.**

6 A10. CWA's proposed three-step increase plan is a sensible way to navigate the
7 fundamental need for CWA to implement annual rate increases that are characteristic
8 of Consent Decree communities nationwide. This type of paced, sustained rate
9 increase program is entirely consistent with approaches used successfully to structure
10 Consent Decree program financing within communities' financial capabilities (per
11 Clean Water Act requirements and EPA guidance).

12 **Q11. PLEASE SUMMARIZE YOUR REVIEW OF CWA'S CAPITAL FINANCING**
13 **PLAN – IN PARTICULAR ITS PROPOSED MIX OF DEBT AND CURRENT**
14 **REVENUE FINANCING.**

15 A11. As CWA CFO Brehm highlights in his testimony, due to the imperatives of consent
16 decree program financing, CWA has carried and will continue to carry a profound
17 debt burden that will limit its flexibility and degrade selected financial performance
18 metrics. Its highly leveraged position warrants concern and should be addressed
19 through a sustained remedial strategy. CWA's planned use and proposed levels of
20 current revenue financing to fund a portion of its capital spending requirements is a
21 prudent, and equitable, component of such a strategy.

⁴ Like household affordability, Financial Capability Assessments have been the subject of considerable recent scrutiny and, in fact, the USEPA both addressed FCA options in its 2012 Integrated Planning Framework and is currently in the process of revising its Financial Capability Assessment methodology. Critiques of the 1997 USEPA guidance include, for example: "The Evolving Landscape for Financial Capability Assessment: Clean Water Act Negotiations and the Opportunities of Integrated Planning", NACWA, May 2013 and "Affordability Assessment Tool for Federal Water Mandates", U. S. Conference of Mayors, AWWA, WEF, 2013.

1 **Q12. HOW WOULD YOU SUMMARIZE YOUR PERSPECTIVES REGARDING**
2 **CWA'S APPROACH TO ADDRESSING LOW-INCOME WATER**
3 **AFFORDABILITY?**

4 A12. By way of analogy, I would reference baseball's A. Bartlett Giamatti who said: "On
5 matters of race, on matters of decency, baseball should lead the way." As a provider
6 of multiple utility services in a service area plagued by rising poverty, CWA is in a
7 uniquely important position to lead the way in Indiana on matters of water
8 affordability. Citizens and CWA have and propose to continue developing programs,
9 in collaboration with other community service providers, to ensure that minimal
10 levels of water and wastewater service required for health and sanitary needs are
11 universally accessible.

12 Perhaps more fundamentally, Citizens and CWA have recognized that water
13 affordability issues are part of an extraordinarily complex set of community issues
14 related to poverty, social equity and inclusion. They have recognized that
15 development of sound public policy and cost-effective programmatic measures has
16 been frustrated, in part, by data limitations on both the characteristics of local
17 economic challenges, and on opportunities for community stakeholders and advocates
18 to coordinate their efforts. As an initial step, Citizens and CWA are working to mine
19 their own data sets to better understand the nature of local water affordability
20 challenges. For example, they have analyzed characteristics of at-risk customers⁵ to
21 help identify and engage customers that may face distress and are eligible for
22 assistance programs. They have also reached out to establish and build relationships

⁵ For purposes of Citizens and CWA's initiative to develop means and methods to identify and engage at-risk customers, they have defined an at-risk household as any active residential customer who, based on observed billing system attributes and characteristics, displays similar behavior to customers that were provided any Citizens accepted assistance program funds.

1 among a diverse set of stakeholders and advocates dealing with the region's larger
2 poverty issues. These efforts are in some senses embryonic but reflect a laudable
3 direction that warrants support as Citizens and CWA accept and act upon their social
4 responsibilities as providers of utility services critical for protection of public health.

5 For this, the Indiana Utility Regulatory Commission has an opportunity to be a
6 true partner in serving the public interest, and in providing guidance to utilities on
7 how to effectively navigate water affordability imperatives while ensuring that water
8 and sewer service providers generate adequate revenues to meet increasing needs
9 related to reinvestment, regulatory compliance, and service delivery.

10 **NATIONAL CONSENT DECREE FINANCING EXPERIENCE**

11 **Q13. YOU STATED YOUR POSITION ON CWA'S ANNUAL RATE INCREASE**
12 **REQUEST IS GIRDED BY YOUR KNOWLEDGE OF, AND EXPERIENCE**
13 **WITH, CONSENT DECREE COMMUNITIES NATIONALLY. PLEASE**
14 **EXPLAIN.**

15 A13. From an Indiana perspective, the substantial recent increases⁶ in CWA's rates that
16 have been approved by, and are being requested of, the Commission may be
17 unprecedented. Yet, from a national perspective, they are characteristic of many
18 major metropolitan centers that have been placed under wastewater Consent Decrees.
19 For example, among several utilities for whom I participated in Consent Decree
20 negotiations - including Atlanta, Cleveland (NEORSD), and St. Louis - double-digit
21 system-wide rate increases were imposed over multiple years. These major rate
22 increase programs were required to service debt obligations, meet coverage targets,
23 and fund increasing annual O&M expenses. Taken in this context, CWA's

⁶ IURC Cause No s. 44305 and 44685 and approved increases.

1 wastewater rate increase pattern has been less onerous than many, and it has been
2 complemented by CWA's successful (and under-budget) project delivery.
3 Comparable Midwestern cities that have been placed under consent decrees include
4 Cincinnati, Columbus, and Omaha.⁷ CWA's program requirements are estimated to
5 cost less (both in terms of total cost and per capita) and require lower general service
6 rates upon completion of their mandated improvements.

7 Notwithstanding industry comparisons, the prior approved rate increases and
8 current requested annual rate increases are also important for at least two reasons.
9 First, they provide for a measure of gradualism that is increasingly important as
10 wastewater charges claim increasing shares of customers' income. The prior approved
11 and current requested increases will enable customers to adjust to new bill levels and
12 establish new budgeting practices. They will help redefine expectations so that in the
13 future, particularly beyond completion of the Consent Decree, modest wastewater rate
14 increases – like price increases for other products and services subject to inflationary
15 pressures – are considered more a norm rather than exception. This gradualism is
16 inherently preferable to more pronounced, intermittent rate increases that would be
17 required in the absence of the Commission's approval of stepped increases.

18 Second, CWA's proposed annual rate increases are necessary to build the
19 financial strength and integrity required for CWA to not only continue its wastewater
20 Consent Decree program but also provide adequate foundation to ultimately entirely
21 revenue fund annual system Extensions & Replacements. While CWA's Consent
22 Decree obligations have imposed and will continue impose an enormous cost for

⁷ See Citizens Energy Group presentation titled "Water & Sewer Rate Survey Update – All Surveyed Utilities", September 8, 2015 slide titled: "Select Surveyed CSO Utilities – Total Consent Decree Cost (shown in 2015 dollars) and Customer Accounts".

1 Clean Water Act compliance, they must be viewed in many respects as remedial
2 measures addressing consequences of long-deferred system Extensions &
3 Replacements. CWA must be provided the means to avoid in the future the hard
4 learned lessons⁸ of Indianapolis' buried infrastructure history. CWA's prospective
5 asset management approach must be girded by adequate financial capacity to
6 sustainably fund system Extensions & Replacements that will be driven in part by the
7 age and materials of CWA's pipeline inventory. At least 35% of this inventory was
8 installed over 50 years ago, already exceeding the useful life estimate of these types
9 of assets. Also, at least 35% of this inventory is vitrified clay or brick pipes.⁹

10 While these points echo those offered in John Brehm's testimony in Cause
11 No. 43936, which he cites again for this case,¹⁰ they also echo the common
12 experience of Consent Decree communities. Annual rate increases, often quite
13 substantial in initial years of a compliance program, are necessarily the norm, not the
14 exception.

15 **EQUITABLE, EFFICIENT CAPITAL FINANCING**

16 **Q14. WHAT FACTORS SHOULD CWA CONSIDER IN DEFINING ITS**
17 **APPROACH TO CAPITAL FINANCING, SPECIFICALLY WITH RESPECT**
18 **TO THE MIX OF DEBT VS. REVENUE FUNDING?**

19 A14. CWA is called upon to strike an exceptionally difficult balance in defining its
20 approach to capital financing. These challenges are echoed in Indiana code related to

⁸ Hard learned and all too common among water and wastewater systems as evidenced by numerous industry publications including, for example: EPA's *Clean Watersheds Needs Survey 2012 Report to Congress*, the American Society of Civil Engineers' *2017 Wastewater Infrastructure Report Card*, and the American Water Works Association's "*Buried No Longer: Confronting America's Water Infrastructure Challenge*", Feb. 2012.

⁹ See 2011 AWWA Benchmarking report, page 22, and slide 5 of a presentation titled "Citizens Energy Group Sewer System Rehabilitation and Renewal" dated August 24, 2018 presented by: Jeffrey A. Harrison – President and CEO, Citizens Energy Group, Jeffrey A. Willman – Vice President, Water Operations and Mark C. Jacob – Vice President, Capital Programs & Engineering.

¹⁰ Direct testimony of John R. Brehm in Cause No. 43936 at page 16 and for this case at page 14.

1 utility regulation that references “State policy to promote utility investment in
2 infrastructure while protecting affordability of utility service.”¹¹ Use of debt increases
3 overall costs but spreads expenses over the term of the borrowing, thereby mitigating
4 nearer term rate impacts but resulting in higher long-term rates than revenue funding.
5 Revenue funded Extensions and Replacements (E&R) result in lower total cost of
6 financing (by avoiding interest charges) but impact revenue requirements earlier when
7 compared to debt funding. Faced with these tradeoffs, it is critically important for
8 policy makers to avoid a short-term perspective, especially for utilities with already
9 large debt burdens. Singular focus on rate relief today -- as highlighted by our
10 national experience with deferred investment in buried infrastructure – can result in
11 undue costs for future generations. In defining an appropriate balance prospectively
12 between debt and revenue funding of capital investments for CWA, several factors
13 are important to take into account. As highlighted in John Brehm’s testimony, CWA
14 is highly leveraged with a large proportion of its debt incurred recently to finance
15 Consent Decree mandated projects.¹² Going forward, CWA has the need not only to
16 complete its Consent Decree requirements on schedule by 2025 (as mandated) but
17 also to fund sustained renewal and replacement of a (much larger) asset base and
18 continue to develop and upgrade system facilities. To do so as cost-effectively as
19 possible, it will need to be able to access the credit markets on as favorable terms as

¹¹ Indiana Code 8-1-2-0.5. “The general assembly declares that it is the continuing policy of the state, in cooperation with local governments and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to create and maintain conditions under which utilities plan for and invest in infrastructure necessary for operation and maintenance while protecting the affordability of utility services for present and future generations of Indiana citizens.”

¹² CWA relied near entirely on debt in the years immediately following acquisition of the wastewater system to “help customers transition to higher wastewater rates.” This approach reflected CWA’s recognition that a more balanced capital financing strategy at that time would require unduly onerous rate increases given the unprecedented (\$2.4 billion) magnitude of the EPA mandated capital program. (Brehm, at page 15-17 of 45).

1 practicable. Accordingly, CWA must be mindful of how its financial performance
2 metrics compare to other municipal debt issuers.¹³

3 **Q15. WHAT SHOULD BE CWA'S OBJECTIVES IN DEFINING ITS APPROACH**
4 **TO CAPITAL FINANCING?**

5 A15. CWA's strategy to meet these needs should not be simply aimed at minimizing short-
6 term rate adjustments, but rather at equitably distributing cost responsibilities across
7 current and future users. In doing so, CWA should (gradually) reconstruct the
8 wastewater system's financial foundation to provide long-term financial sustainability
9 and equitable, efficient capital financing.

10 **Q16. HOW DOES DEBT COMPARE TO REVENUE FUNDING IN TERMS OF**
11 **BENEFITS, COSTS, AND DISTRIBUTIONAL IMPACTS?**

12 A16. Revenue bond debt is most equitably employed for large, long-lived (a.k.a. "lumpy")
13 capital investments whose benefits will accrue to system users generally.¹⁴ Debt
14 spreads costs across current and future users for the duration of the long-term debt
15 service periods. The resultant mitigation of near-term rate pressure and more
16 equitable distribution of costs (across current and future users) is generally viewed as
17 worth the additional capital financing costs incurred (interest, transaction fees).
18 Revenue-funded Extension and Replacement (E&R) projects impose costs entirely on
19 current users, though the funded capital assets may be long-lived and convey benefits
20 to both current and future users.

21 Importantly, this is not to say that all or even most long-lived capital assets
22 should be debt financed. To the extent that the system requires a recurring level of

¹³ As discussed in John Brehm's testimony, pp. 11 -13 and 17-22 of 45.

¹⁴ Other forms of capital financing, both via debt or targeted revenue sources (e.g., special assessments, development fees, tax-increment financing, etc.), may be employed for discrete, limited scope project types.

1 annual system investment/reinvestment, financing these expenditures through debt
2 rather than on a cash-basis would be inefficient, costly and convey no material benefit
3 to ratepayers. The ratepayer benefit of debt funding of capital projects is the
4 spreading of costs over the associated debt amortization period. However, if certain
5 expenditure requirements are already level – as in an annual requirement – debt
6 financing will only impose undue costs (i.e., interest expenses, transactions costs)
7 relative to current revenue funding.

8 **Q17. IF REVENUE FUNDING IMPOSES NEAR-TERM COSTS FOR ASSETS**
9 **THAT ARE LONG-LIVED, SHOULDN'T CWA FUND ALL OR NEAR ALL**
10 **OF ITS CAPITAL PROGRAM THROUGH DEBT?**

11 A17. No. In fact, just the opposite is true, though the reasons to eventually eschew the use
12 of debt¹⁵ are not necessarily immediately obvious or intuitive. These reasons become
13 apparent when one considers the attributes of an effectively managed utility. Among
14 other attributes, CWA should (and does) engage in effective asset management and
15 establish predictable rates that are “adequate to recover costs, provide for reserves,
16 maintain support from bond rating agencies, and plan and invest for future needs.”¹⁶

17 As a utility with a substantial (and dramatically increasing) wastewater asset
18 base, CWA must anticipate that it will need to make consistent annual investments to
19 both renew and rehabilitate its asset base, and to invest in system development –
20 effectively the entirety of its E&R investment requirements.

¹⁵ With the exception of intermittent lumpy investments (e.g., new treatment works or major upgrades) that represent atypical increases in projected capital spending under steady state conditions.

¹⁶ See Effectively Managed Utilities: A Primer for Water and Wastewater Utilities, June 2008, issued by USEPA, AMWA, APWA, AWWA, NACWA, NAWC, WEF. p. 5.

1 When one recognizes that CWA will need to make annual investments, which
2 will be the vast majority of such spending once CWA is in a sustainable, steady state
3 condition, the merit of debt financing all or near all capital spending is expunged.
4 There is no reason to use debt – a mechanism to level costs – when CWA already
5 faces a relatively level annual capital funding requirement. There is no reason to
6 incur debt issuance costs when disciplined current revenue funding of annual capital
7 funding needs will accomplish the same cost levelization objective more efficiently.

8 **Q18. HOW CAN EQUITY OVER THE LONG TERM BE BEST ACHIEVED WITH**
9 **RESPECT TO CWA'S APPROACH TO CAPITAL FINANCING?**

10 A18. To mitigate the exceptional rate increases that would have resulted from more
11 revenue funding of CWA's Consent Decree obligations, CWA necessarily relied
12 primarily upon debt. This imbalance should be viewed as an exceptional expedient,
13 not a model for future capital financing. In general, equity and efficiency over the
14 long term is best achieved by using current revenues to fund annual and predictable
15 requirements, and relegating debt issuances to fund lumpy investments. For CWA,
16 where Consent Decree compliance has represented the lumpiest of investment
17 needs¹⁷, these principles hold.

18 Moreover, these principles are reinforced by the immutable mechanics of
19 CWA's inordinate debt burden and the need to maintain support from bond rating
20 agencies. By incurring an extraordinary amount of debt over the period since system
21 acquisition, CWA has significantly increased the amount of revenue necessary to

¹⁷ CWA's initial Consent Decree investment was more substantial (a.k.a. "lumpy") to expedite improved environmental performance but, over the Consent Decree term, will become more sustained, regular and increasing as infrastructure built under the Consent Decree ages. Consent Decree E&R needs are different from more traditional E&R due to the fact that EPA and IDEM require this infrastructure to continue to perform, subject to penalties for non-compliance, even after the Consent Decree projects are constructed and performance verification completed.

1 achieve acceptable levels of debt service coverage. While parties may differ on the
2 merit of specific debt service coverage targets, CWA's burgeoning debt burden has
3 without question increased the amount of revenue required to achieve adequate
4 coverage (however defined). These coverage dollars can and should be used to
5 revenue fund prospective capital spending requirements. In so doing, levels of
6 revenue funded E&R are aligned to indebtedness, and the sources of capital funding
7 reviewed by bond rating agencies are appropriately balanced.

8 **RISK MANAGEMENT AND FINANCIAL SUSTAINABILITY**

9 **Q19. IF RELIANCE ON DEBT ENABLED A DEGREE OF RATE MITIGATION**
10 **FOR THE INITIAL YEARS OF CWA'S CONSENT DECREE**
11 **IMPLEMENTATION PERIOD, WHY NOT DEFER CWA'S PROPOSED**
12 **INCREMENTAL MOVE TO A MORE BALANCED FUNDING STRATEGY**
13 **AND CONTINUE TO MITIGATE RATE INCREASE REQUIREMENTS?**

14 A19. While short-term rate minimization can have considerable appeal, it is incumbent on
15 CWA (and the Commission) to manage associated risks and adopt a perspective that
16 balances short-term relief with long-term financial sustainability, equity, and
17 efficiency. CWA's proposed capital financing approach strikes an appropriate
18 balance and works toward establishing a strong and sustainable capital structure. In so
19 doing, it provides for more efficient and ultimately equitable system development by
20 minimizing capital financing costs and incrementally stepping toward alignment of
21 current revenue financing of capital with annual E&R needs. It also provides CWA
22 with a stronger financial foundation on which to manage the profound risks involved
23 in developing wastewater assets and service delivery.

24 **Q20. WHAT ARE THE RISKS THAT CWA IS REQUIRED TO MANAGE?**

1 A20. While all utility system development and operations involve management of
2 noteworthy risks, CWA's acquisition of the City's wastewater system is among the
3 most risk-laden initiatives undertaken by the Citizens family of utilities. The most
4 salient risks can be placed into (at least) 6 categories:

5 **1. Compliance risks** – the risks associated with failure to comply with the terms
6 of the Consent Decree, which carries stipulated penalties, as well the more
7 general risk of failure to comply with the myriad of environmental, safety, and
8 other regulations governing wastewater system operations and development in
9 the United States.

10 **2. Project delivery risks** – the risks associated with the complexities of such a
11 massive construction program, costs of infrastructure renewal or development
12 projects exceeding estimates, the construction of projects that may fail to meet
13 asset performance requirements. These may include the risks of costly
14 disputes with engineers and construction contractors in the event of project
15 delivery failures.

16 **3. Asset / infrastructure integrity risks** – the risks associated with built asset
17 failures or under-performance (which typically increase with asset age).
18 These risks are specifically the subject of asset management initiatives calling
19 upon utilities to maintain and enhance asset conditions to maintain service
20 levels and minimize life-cycle costs. These risks are highlighted by recent
21 sewer failures in downtown Indianapolis that imposed notable repair costs and

1 had the potential to be significantly more disruptive than the community
2 experienced save for CWA's response.¹⁸

3 **4. Operating risks** – the myriad of risks involved in ensuring high quality of
4 service delivery over a broad range of operating conditions including, for
5 example, extreme weather events. Operating risks may also relate to daily
6 activities (e.g., facility maintenance, service connections) where (potentially
7 significant) losses may occur due to unforeseen events.

8 **5. Financial performance risks** – risks that could result in the utility failing to
9 meet or exceed its target financial performance levels. These risks may
10 include revenue generation being below projections due to lower than
11 projected water use or account growth or collections levels. Similarly, these
12 risks may reflect incurrence of unforeseen O&M expenses or the need to fund
13 unplanned capital expenditures.

14 **6. Capital financing risks** – the risks associated with the inability to access the
15 capital markets on favorable terms. These risks are particularly important for
16 capital-intensive enterprises like wastewater utilities, and may manifest in
17 several ways. For particularly troubled enterprises, the ability to offer and
18 successfully market debt obligations may be compromised. More commonly,
19 unfavorable risk assessments lead to lower credit ratings and higher costs of
20 borrowing. These higher costs often are not simply in interest costs on
21 outstanding obligations but also the cost of bond insurance or sureties. More
22 generally, it must be recognized that general market conditions may change to

¹⁸ See, for example: <https://www.wfyi.org/news/articles/downtown-sinkhole-caused-by-century-old-sewer-line>
and presentation titled "Citizens Energy Group Sewer System Rehabilitation and Renewal" dated August 24,
2018.

1 impose more adverse borrowing conditions. This is particularly true in the
2 current municipal debt market that has experienced a relatively long period of
3 historically low interest rates.

4 **Q21. HOW DO CWA'S PROPOSED RATE INCREASES AND CAPITAL**
5 **FINANCING PLAN IN THIS CASE - THAT INVOLVES SIGNIFICANT**
6 **CURRENT REVENUE FUNDING OF E&R PROJECTS - MANAGE THESE**
7 **RISKS?**

8 A21. CWA's approach to capital financing, and in particular its proposed gradual
9 movement to a more balanced capital structure, manages risks by: (1) ensuring CWA
10 has adequate resources to fund capital projects necessary for compliance; (2)
11 incorporating asset management initiative delineated E&R projects in its capital
12 program; and (3) ensuring financial performance levels that will allay potential credit
13 rating agency concerns (that are already heightened due to CWA's debt portfolio).

14 A similar summary of risks to the ones discussed by Mr. Brehm and me is
15 offered in the AWWA M1 rate manual where four categories of risk are
16 enumerated:¹⁹ (1) Business Risk²⁰, (2) Interest Rate Risk, (3) Financial Risk, and (4)
17 Liquidity Risk. Notably, 3 of the 4 risk categories relate to access to, and the costs of,
18 capital. AWWA's discussion of Financial Risk in particular underscores CWA's
19 concerns, and the merit of its commitment to limit future debt issuances given the
20 exceptional size of its outstanding portfolio.

¹⁹ See American Water Works Association (AWWA) M1 Manual of Practice: Water Rates, Fees and Charges, 7th Edition, (2017), pp. 282 – 284. Note that while this discussion appears in the section on Outside-City Customer Rates, it outlines the inherent risks faced by water utilities (assumption of which by inside-City municipal utilities are compensated by outside-City customers through allowed returns)

²⁰ Regulatory risks described above would fall within AWWA's general category of business risks.

1 *With higher levels of debt, the local government may be more*
2 *heavily leveraged due to the cash-flow claims associated with*
3 *repayment of debt obligations (i.e., principal and interest*
4 *payments), resulting in an increased amount of fixed costs. This*
5 *higher fixed cost increases the risk that a local government*
6 *may not have adequate cash flow to meet its financial*
7 *obligations and may dampen the ability to issue future debt due*
8 *to increased capital financing requirements (e.g., higher*
9 *financial risk may result in a credit agency rating downgrade,*
10 *which would increase the cost of borrowing or the requirement*
11 *to fund a debt-service reserve fund from bond proceeds as a*
12 *hedge against nonpayment of the debt payments). AWWA M1*
13 *7th Ed. p.283.*

14 CWA's risks would, in fact, be heightened, rather than more effectively
15 managed, with greater reliance on debt than outlined in its proposal. In such an event,
16 there is not adequate recognition of and movement toward annual revenue funding of
17 regular system investments. By more substantially increasing the extent to which
18 CWA is leveraged, CWA's financial flexibility is all the further constrained. An
19 increasing share of revenue requirements would be dedicated to debt repayment,
20 which in turn would limit the availability of funds to manage risks, would drive debt
21 service coverage metrics further below industry benchmarks, and would exacerbate
22 rate pressures in subsequent rate setting periods.

23 **Q22. GIVEN THAT A BALANCE OF DEBT AND REVENUE FUNDING OF**
24 **CAPITAL SPENDING IS NEEDED TO EFFECTIVELY MANAGE RISKS**

1 **AND ATTRACT CAPITAL ON FAVORABLE TERMS, WHAT IS THE**
2 **RIGHT BALANCE OR CAPITAL STRUCTURE TARGET?**

3 A22. The right balance is a matter of judgment and not a specific value that may be derived
4 by calculation. It is also a matter of the specific conditions facing a given utility.
5 Nevertheless, industry benchmarks are instructive. In general, water and wastewater
6 utilities that are able to raise capital on favorable terms have a relatively balanced
7 capital structure. In Wisconsin, where both public and private water utilities are
8 subject to rate regulation, the debt-to-equity ratios among larger water utilities
9 averaged 31.0 percent in 2017.²¹

10 For CWA, recognizing that its risk profile is more problematic than other
11 water sector issuers, the appropriate long-term target is likely marginally weighted
12 toward use of revenue funding. Accordingly, advancing CWA's long-term financial
13 sustainability will require an eventual reversal of the capital financing approach
14 required for Consent Decree compliance. In the future, CWA must limit borrowing
15 and build equity through revenue funding of Extensions and Replacements. It's
16 proposed current revenue funding of \$72 million in step one, \$76 million in step two
17 and \$80 million in step three of E&R projects begins alignment with that long-term
18 goal. In so doing, though the current generation of CWA customers will be served by
19 a debt-laden enterprise, future generations will benefit by having CWA achieve a
20 more sustainable, and ultimately equitable capital structure.

²¹ Public Service Commission of Wisconsin e-portal - Water Statewide Statistical Benchmarks: <http://apps.psc.wi.gov/vs2015/Benchmarks/statewide.aspx> accessed on May 19, 2018. Debt to equity ratio, defined as long-term debt and notes payable divided by municipal equity. Reporting for Class A and Class B utilities.

1 **RATE INCREASES AND THE AFFORDABILITY DICHOTOMY**

2 **Q23. GIVEN YOUR WORK ON WATER AFFORDABILITY, ARE YOU**
3 **CONCERNED THAT CWA'S PROPOSED RATE INCREASES, ON TOP OF**
4 **ITS RECENT INCREASES, WILL EXACERBATE WATER**
5 **AFFORDABILITY PROBLEMS FOR LOW-INCOME CUSTOMERS?**

6 A23. Water affordability is my greatest concern with respect to CWA's rates, programs,
7 and financial plan. Here, perhaps more importantly than with respect to capital
8 structure, CWA should implement policies that demonstrate a long-term commitment
9 to the economic sustainability and well-being of the community. In so doing, it is
10 important for Citizens and CWA to build a foundation of more substantive
11 community engagement, leverage their unique position as a combined utility services
12 enterprise, and recognize the evolving landscape related to water affordability. This
13 concern for low-income water affordability does not translate to a narrow strategy of
14 system-wide rate minimization. It must recognize what I have referred to as the
15 "affordability dichotomy" that confronts communities throughout the country.

16 **Q24. WHAT IS THE WATER AFFORDABILITY DICHOTOMY?**

17 A24. Put simply, the water affordability dichotomy centers on the fact that water and
18 wastewater utilities must increase their rates to serve their communities, while at the
19 same time recognizing that such rate increases may unduly burden a portion of their
20 service population – and that all customers require continuous access to at least
21 minimum levels of service.

22 **Q25. WHAT FACTORS NEED TO BE CONSIDERED IN ADDRESSING THE**
23 **WATER AFFORDABILITY DICHOTOMY?**

1 A25. First and foremost, it is important to recognize that general service rate levels, and
2 even rate designs applied on a customer class basis, are relatively blunt instruments.²²
3 Residential rates, by definition, apply charges to all residential accounts based on
4 billing determinants related to water service connections and usage.²³ These pricing
5 structures employ standard measures of the services being provided without regard to
6 the demographic characteristics of the customers served or the conditions of the
7 housing stock beyond the service meter.

8 Second, it is important to recognize that while industry standard rate design
9 may necessarily impose pricing uniformly across customers within a customer class,
10 these classes are characterized by profound diversity. There is typically a broad array
11 of socio-economic conditions among a utility's residential customers and
12 unfortunately in Indianapolis, as is increasingly true nationally, some low-income
13 customers face water affordability challenges.

14 Third, it is important to acknowledge that water service, perhaps more so than
15 any other utility service, is essential for public health and sanitary needs. As such,
16 policies and programs that help ensure universal access to service are an important
17 attribute of water and wastewater utilities' service delivery.

18 Fourth, it is important to recognize that there is a compelling business case for
19 water affordability, irrespective of one's position on water utilities' social
20 responsibilities. Helping to ensure the continuity of customer relationships makes
21 business sense, particularly for enterprises like water and wastewater utilities with
22 exceptionally high fixed, and relatively limited variable, cost structures.

23 **Q26. IF RATES ARE A BLUNT INSTRUMENT, HOW SHOULD CWA ADDRESS**
24 **WATER AFFORDABILITY?**

²² This is not to suggest that rate designs may not contribute to advancing water affordability objectives. For example, inclining block rate designs may set prices for water usage levels necessary for basic health and human sanitary needs at levels that the vast majority of residential customers may pay without undue hardship.

²³ A notable deviation from this general statement is a rate form used in selected electric utility jurisdictions and being piloted by Philadelphia Water referred to Percentage of Income Pricing. This involves indexing water service charges to income levels for eligible low-income customers.

1 A26. As noted, rate design may play a role but water affordability is not simply, or even
2 necessarily primarily, about the cost of water service for poor people. It is a complex,
3 multi-faceted, set of issues that requires substantial, inclusive community engagement
4 and a set of programs and policies that are responsive to the needs of the community.
5 Citizens Energy Group and CWA, more so than single service utility providers, are
6 exceptionally well positioned to demonstrate leadership in advancing this community
7 conversation and have already acted to do so. Their efforts to conduct and underwrite
8 research on water affordability challenges – as exemplified by their analysis of billing
9 data to identify at-risk customers – should be expanded so that engaged parties are
10 working with relevant, accurate information. Similarly, Citizens Energy Group and
11 CWA's continuing participation and commitment to community initiatives to address
12 poverty should continue to be acknowledged and advance as a critically important
13 aspect of their corporate citizenship.

14 **EVOLVING LANDSCAPE OF WATER AFFORDABILITY**

15 **Q27. IF CWA IS TO DEMONSTRATE LEADERSHIP ON WATER**
16 **AFFORDABILITY, WHAT SHOULD BE NOTED ABOUT WHAT YOU**
17 **REFERRED TO AS THE “EVOLVING LANDSCAPE OF WATER**
18 **AFFORDABILITY”?**

19 A27. The water affordability dichotomy confronting Indianapolis is by no means unique.
20 Nationally, water and wastewater rates have been increasing, and will continue to
21 increase, at levels well above the pace of inflation as utilities address the need for
22 system reinvestment.²⁴ As water and wastewater service rates necessarily increase,
23 water affordability challenges have rightly come to the forefront. These challenges

²⁴ See, for example, the National Association of Clean Water Agencies' (NACWA) 2017 Cost of Clean Water Index or the American Water Works Association's (AWWA) 2016 Water and Wastewater Rate Survey.

1 have been highlighted in several communities – like Detroit and Flint, Michigan, in
2 my recent experience – where water affordability challenges have become defining
3 issues of community concern.

4 These concerns are sculpting an evolving landscape of policies, programs,
5 regulations and potentially legislative changes related to water affordability that can
6 provide guidance and direction for how CWA may approach its water affordability
7 conundrum. Several aspects are particularly noteworthy:

8 • **Customer Assistance Programs (CAP)** designed to render assistance to
9 qualifying low-income customers, are increasingly being implemented by
10 water and wastewater service providers in recognition of the emerging water
11 affordability challenge.²⁵ These programs, often delivered in collaboration
12 with local social service agencies, may have a broad array of features
13 including most notably various forms of bill assistance (e.g., monthly support,
14 crisis intervention) and water use efficiency assistance (e.g., audits and
15 education, fixture replacements, plumbing repairs). Citizens' Warm Heart
16 Warm Home Foundation and the Citizens Gas Universal Service Program²⁶
17 provide a solid foundation for establishment of additional customer assistance
18 programs or features to address water affordability challenges (that typically
19 also beset customers eligible for energy assistance).

20 • **Customer service policies and procedures** are being revised by many
21 utilities to provide customers more notice of both the potential for service
22 interruptions due to non-payment, and options to maintain access. They also
23 are making it easier for customers to make payments (without incurring undue

²⁵ In contrast to CAPS implemented by energy companies where the federal Low-Income Home Energy Assistance Program (LIHEAP) catalyzed program development in the energy sector.

²⁶ Citizens' Warm Heart Warm Home (WHWH) program is a 501(c)(3) foundation established to assist low-income families with utility bill assistance, weatherization and health & safety. The Citizens Gas Universal Service Program provides bill discounts to income eligible (200% of poverty or below) gas customers.

1 additional costs) by, for example, employing remote kiosks and smart phone
2 technologies, and providing levelized budget billing options. Citizens and
3 CWA have again already made important strides in this direction in
4 conjunction with their system-wide customer service enhancements. They
5 have, for example, provided a number of convenient ways to make payments
6 timely, and to establish eligibility for assistance programs.²⁷

- 7 • **Service and revenue requirement definitions** are also changing – evolving
8 from the traditional perspective that water and wastewater is a commodity
9 service measured by drops through a water meter to the recognition that these
10 utilities fundamentally protect public health and enable economic
11 development and vitality. As such, an increasing number of utilities are
12 viewing CAPs as a core component of their business model²⁸ rather than an
13 ancillary activity and expense. These changes are also prompting changes to
14 industry guidance and policies that call on water and wastewater service
15 providers to play a more expansive role in addressing low-income water
16 affordability.²⁹

17 **Q28. HAVE THESE ASPECTS AFFECTED THE WATER AFFORDABILITY**
18 **LANDSCAPE IN INDIANA?**

19 A28. Yes. These aspects were manifest in Indiana, in part, with the enactment of Senate
20 Enrolled Act 416 that among other provisions:

²⁷ See Citizens' web site at: <http://www.citizensenergygroup.com/My-Home/Billing-Payments>

²⁸ See, for example, "Navigating Legal Pathways to Rate-Funded Customer Assistance Programs: A Guide for Water and Wastewater Utilities," University of North Carolina Environmental Finance Center, 2017.

²⁹ For example, the EPA has announced that it will be revising its Financial Capability Assessment guidance to, among other aspects, explicitly address impacts of Clean Water Act compliance programs on low-income customers. AWWA is developing a policy statement on water affordability that, among other aspects, acknowledges CAPs as an appropriate component of system revenue requirements. See "EPA Plans Revision, Expansion of Water Utility Affordability Guidance", Water Policy Report, March 5, 2018 and the draft "AWWA Policy Statement: Affordability" posted for comment on August 3, 2018 (with comments due on September 3rd, 2018).

1 Authorizes the IURC, upon request by a water or wastewater utility in
2 a general rate case, to permit the utility to voluntarily establish a
3 customer assistance program. Provides that an IURC-approved
4 customer assistance program may not be deemed a discriminatory
5 utility regulation.³⁰

6 They also gain significance in the context of troublesome increasing income
7 inequality in Indianapolis³¹ given that rising water and wastewater bills exacerbate the
8 economic dislocations of this trend.

9 **Q29. GIVEN THESE ASPECTS, HOW SHOULD CWA APPROACH WATER**
10 **AFFORDABILITY CONCERNS FOR ITS SERVICE AREA?**

11 A29. As noted, CWA should not seek rate increase approvals that amount to short-term rate
12 minimization at the expense of long-term equity and efficiency. In fact, like other
13 utilities that are successfully implementing their Consent Decree programs, CWA
14 should pursue annual rate increases that build sustainable revenue capacity.

15 More significantly, CWA has an opportunity to lead the state in leveraging the
16 opportunities presented by enactment of Senate Enrolled Act 416. It has the
17 opportunity to more substantively engage the Indianapolis community, and to more
18 clearly understand and assess the City's water affordability challenges. And,
19 ultimately, it has the opportunity to build the foundation for establishing affordability
20 programs that provide meaningful relief. In doing so, CWA will need to tailor its
21 approach to the attributes of Indianapolis's low-income communities and its social
22 services infrastructure.

23 **INITIAL STEPS – PROGRAMMATIC MEASURES**

24 **Q30. WHAT SPECIFIC STEPS WOULD YOU RECOMMEND FOR CWA?**

³⁰ Indiana General Assembly, 2017 Session, Senate Bill 416 digest accessed on May 20, 2018:
<https://iga.in.gov/legislative/2017/bills/senate/416#digest-heading>

³¹ See, for example, "National Report Shows Indiana Income Inequality Rising" by Samantha Hortony posted July 20, 2018 on Indiana Public Media citing an Economic Policy Institute report: "Income inequality in the U.S. by state, metropolitan area, and county" by Estelle Sommeiller, Mark Price, and Ellis Wazeter, June 16, 2016.

1 A30. Given the fact that water affordability is an emerging issue in Indianapolis, a three-
2 pronged approach is recommended. First, Citizens Energy Group should continue
3 convening and coordinating, to the extent practicable, community organizations
4 dedicated to providing a safety net for economically disadvantaged members of the
5 community. Second, it should continue to leverage its own data and data analysis
6 capabilities, in combination with service area research, to develop additional
7 information about the scope, causes, and most viable strategies to address
8 affordability challenges. Third, CWA could build upon the foundation of Citizens'
9 existing customer assistance programs and community engagement efforts to
10 facilitate the design and eventual implementation of more expansive and effective
11 water affordability programs that will be viewed favorably under regulatory review.

12 The first prong – community engagement – is important because water
13 affordability is inextricably intertwined with issues of poverty, public health,
14 economic dislocation and environmental justice. CWA's role, even as it demonstrates
15 concern and commitment, can only be as one contributor to a larger community
16 response to these endemic issues. Yet, it also involves conveying a broader
17 understanding of the principles and constraints of utility rate regulation

18 The second prong – water affordability research – is particularly important
19 (and too often overlooked) because there is limited understanding of the dynamics of
20 water affordability issues generally, and of specific attributes in the CWA service
21 area. In part because utilities are not custodians of income data, there is often limited
22 information or analysis of, for example: low-income residents':

- 23 • water usage and associated bill patterns
- 24 • account holder status (e.g., owner, renter)
- 25 • payment mechanisms (mail, walk-in), histories, and arrearages
- 26 • frequency of service interruptions

- 1 • household income and cost trends
- 2 • condition of housing stock and specifically interior plumbing
- 3 • consumer choice dynamics (e.g., decisions regarding water bill
- 4 payment vs. other essentials)
- 5 • geographic distribution of water affordability challenges

6 Yet it is through understanding of this type of information that CWA, along
7 with engaged community groups, may design effective policies, procedures and
8 programs. It involves a change in the character of CWA's relationship with its
9 customer base. It furthers CWA's efforts to move from serving paying or non-paying
10 accounts to understanding the challenges customers face on the other side of the
11 utility meter.

12 The third prong – water affordability program development - involves
13 defining additional, community-directed, approaches to CWA sponsored programs.
14 Options may include various forms of bill assistance – perhaps initially limited to
15 customer crisis response or piggybacking on income eligibility qualification of energy
16 assistance programs funded through federal LIHEAP allocations. These initial water
17 affordability targeted program efforts may be implemented to limit or navigate
18 potential legal or regulatory concerns by being funded through any one of a number
19 of potential non-rate revenue sources (e.g., revenues from non-tariff services,
20 unregulated enterprises, customer donations, philanthropy). These limited initial
21 water affordability programs would be important not only for the relief provided –
22 optimally targeted to CWA's most vulnerable customers - but would provide critical
23 practical experience for administrators and contractors responsible for designing and
24 implementing efficient and effective programs.

1 **Q31. HOW WOULD THIS THIRD, MORE EXPENSIVE-SOUNDING PRONG OF**
2 **PROGRAM IMPLEMENTATION AFFECT CWA REVENUE**
3 **REQUIREMENTS?**

4 A31. As noted, water affordability program funding could be derived through non-rate
5 revenue sources. While one could argue that this would be a diversion of revenues
6 that may reduce the overall amount of revenue required from service rates, industry
7 experience suggests that even mature, relatively expansive programs amount to
8 limited claims on total revenue requirements. For example, Detroit's successful
9 Water Residential Assistance Program, which features bill assistance, water
10 conservation and even plumbing repairs, is funded at 0.5 percent of system revenues.
11 In this case, an embryonic program could be funded with barely discernible impact on
12 non-participants' rates or bills.

13 It must also be noted that the ultimate impact on CWA's revenue requirements
14 is not defined by the program's budgeted costs. There is a business case for
15 affordability programs that, in some communities like Detroit, suggest that long-term
16 revenue requirements can be positively affected. The benefits to CWA could be
17 varied ranging from reduction of costs associated with service terminations and
18 account delinquency management to efficiently advancing CWA's public relations
19 and customer education agenda.

20 **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

21 **Q32. WOULD YOU SUMMARIZE YOUR TESTIMONY REGARDING CWA'S**
22 **PROPOSED RATE INCREASES AND APPROACH TO CAPITAL**
23 **FINANCING?**

24 A32. Yes. In doing so, I draw upon experience with wastewater systems that have adopted
25 both sound and short-sighted financial strategies – with all too predictable results. Of

1 the good, the bad and the ugly – Jefferson County's spiral into bankruptcy through
2 over-reliance on variable rate debt instruments that failed following the 2008 credit
3 crisis is legendarily and uniquely ugly. Yet the wastewater utility landscape is littered
4 with other communities that have deferred needed system reinvestment and fallen into
5 non-compliance. Many have become over-leveraged. And many, if not most, utilities
6 are only now - with the advent of asset management - building adequate revenue
7 capacity to current revenue fund annual reinvestment needs. The best managed
8 utilities, from a financial perspective, are those that adopt and implement strategies to
9 efficiently and equitably ensure full cost recovery.

10 CWA's capital financing program, while necessarily difficult following
11 acquisition, reflects a sound, sustainable and ultimately equitable financial strategy.
12 Prior and proposed rate increases have been necessitated to achieve consent decree
13 compliance but also support a sustainable long-term strategy that will ensure full cost
14 recovery and long term environmental compliance. CWA's proposed balanced use of
15 debt and current revenue funding of E&R expenditures, that recognizes needs for
16 annual system reinvestment, is efficient and equitable.

17 CWA's proposed rates and capital financing strategy honor the joint
18 commitment made by the City, CWA and the Commission – reflected in the entry of
19 the Consent Decree and approval of CWA's system acquisition – to work
20 collaboratively toward more effective, efficient utility governance. CWA's prior and
21 prospective rate and capital financing proposals daylight the immutable math with
22 which this responsibility is undertaken.

1 **Q33. WOULD YOU SUMMARIZE YOUR TESTIMONY REGARDING HOW CWA**
2 **SHOULD ADDRESS WATER AFFORDABILITY CONCERNS IN LIGHT OF**
3 **REQUIRED SYSTEM-WIDE WASTEWATER RATE INCREASES?**

4 A33. Yes. CWA is in a unique position to demonstrate concern and commitment on water
5 affordability and work collaboratively with community groups (and indirectly the
6 Commission) to navigate the practical applications of the authority granted under
7 Public Law 233.

8 Nationally, attention to water affordability arises out of the need for water and
9 wastewater utilities to address a utility finance dichotomy. Utilities, like CWA, must
10 increase system-wide rates to fund O&M expenses that are subject to inflationary
11 pressures, and capital spending that must address system extension and replacement
12 requirements. At the same time, these rate increases have the potential to impose
13 acute burdens on low-income customers, and undue billing and collection costs on
14 utility providers. As anchor institutions in the communities they serve, utilities are
15 increasingly working with local social service agencies, community organizations,
16 and philanthropic groups to address affordability concerns. These efforts and
17 programs generally do not represent significant financial claims, the funding for
18 which reflects the legal and regulatory framework and freedom to act that prevail in
19 individual states and communities.

20 For CWA, I recommend a three pronged approach that contemplates
21 community engagement, research and analysis, and advancing of CWA's customer
22 assistance program elements.

23 **Q34. DOES THIS CASE PRESENT IMPORTANT OPPORTUNITIES FOR THE**
24 **INDIANA UTILITY REGULATORY COMMISSION (IURC) TO**

1 **DEMONSTRATE LEADERSHIP AND PROVIDE PRACTICAL GUIDANCE**
2 **ON HOW IT WILL CARRY OUT THE INTENT OF SEA 416 THAT**
3 **AUTHORIZES THE IURC “TO PERMIT A UTILITY TO VOLUNTARILY**
4 **ESTABLISH A CUSTOMER ASSISTANCE PROGRAM.”³²**

5 A34. Yes. CWA’s proposed three prong approach to water affordability represents a
6 measured yet substantial initiative to execute on the state policy adopted in 2017.
7 CWA is seeking to voluntarily establish a customer assistance program (as discussed
8 in Korlon Kilpatrick’s testimony) and, in doing so, demonstrate that the IURC-
9 approved customer assistance program may not be deemed a discriminatory utility
10 rate.

11 CWA’s customer assistance initiative will dedicate needed resources to
12 address the most vexing issues that beset economically disadvantaged customers. It
13 will provide the outreach, assistance and protections for CWA’s low-income water
14 and sewer customers – particularly vulnerable populations. Moreover, it would help
15 build a foundation for community engagement on how to further assess and evaluate
16 water affordability challenges and design effective measures to render meaningful
17 assistance.

18 **Q35. DO YOU BELIEVE THE LOW-INCOME CUSTOMER ASSISTANCE**
19 **PROGRAM PROPOSED BY CWA IN THIS CASE IS IN THE PUBLIC**
20 **INTEREST?**

21 A35. Yes. For all the foregoing reasons, as well as the reasons discussed by Mr. Harrison
22 and Mr. Kilpatrick, I believe the rate funded Low-Income Customer Assistance

³² SEA 416 Digest. <http://iga.in.gov/legislative/2017/bills/senate/416#digest-heading> accessed on September 27, 2018.

1 Program proposed by CWA, including both the bill discount and infrastructure fund,
2 is in the public interest and should be approved.

3 **Q35. DO YOU HAVE ANY FINAL POINTS FOR THE PARTIES TO CONSIDER?**

4 A35. Yes. In preparation for filing this testimony, I had the opportunity to review other
5 CWA witnesses' testimony related to Citizens Energy Group's efforts to attract,
6 develop and retain high quality personnel. While I am not opining on specific human
7 resource matters, I can offer perspectives on the importance of highly qualified
8 personnel in financing and delivering major Consent Decree and infrastructure
9 development programs, and in managing complex water and wastewater utility
10 systems.

11 CWA is implementing, below budget and on schedule, an extraordinary
12 program tantamount to replumbing the entire City of Indianapolis. Talent to deliver
13 such success is rare, not typical of the general municipal finance and construction
14 project delivery market, and in high demand across the full spectrum of position
15 classifications. The incremental costs involved in structuring personnel compensation
16 and benefit packages to engage highly qualified personnel is de minimis relative to
17 the overall costs of capital programs and general system operation. And, the adverse
18 consequences of not having highly qualified personnel engaged in making decisions
19 on how to finance and deliver programs and sound system operations could not be
20 more profound.

21 For example, Jefferson County, Alabama's spiral into the 2nd largest
22 municipal bankruptcy in U.S. history was occasioned in part by poor wastewater
23 system capital project delivery compounded by poor financial management

1 decisions.³³ There, decisions – to defer rate adjustments, limit financial management
2 staffing, and use short-term auction rate securities financing – proved catastrophic.
3 Ironically, this is the same type of financing vehicle that precipitated the financial
4 emergency that beset Indianapolis' Department of Waterworks in (2009) as
5 mentioned in John Brehm's testimony.³⁴

6 It is only through engaging experienced, highly qualified personnel that a
7 utility has the wherewithal to finance and deliver a Consent Decree program of the
8 magnitude required of CWA, and to sustain high quality, reliable service delivery
9 over the long-term. Experienced talent is not distracted or swayed to assume
10 unmanageable risks; they understand the need for forbearance.

11 The theme of CWA's rate filing calling upon all parties to "stay the course"
12 could not be more apt and is fundamental to the issues I have addressed. Balancing
13 use of debt and current revenue financing, and addressing water affordability, are
14 ways for CWA to stay the course while building a sustainable financial foundation.

15 **Q36. DOES THIS CONCLUDE YOUR PRE-FILED TESTIMONY FOR THIS**
16 **CASE?**

17 A36. Yes.

³³ The Jefferson County bankruptcy, including attributes that led to criminal convictions, are well documented in numerous court filings as well as news coverage. A particularly concise review is contained in the Jefferson County Commission's rate resolution adopting the sewer rates contemplated in the Plan of Adjustment approved by the US Federal bankruptcy court in December 2013.

³⁴ See discussion in John Brehm's testimony at pp. 24-26.

VERIFICATION

The undersigned affirms under the penalties for perjury that the foregoing testimony is true to the best of his knowledge, information and belief.

A handwritten signature in black ink, appearing to read "Eric Rothstein", with a stylized flourish at the end.

Eric P. Rothstein