

**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application of Duke)	
Energy Ohio, Inc., for an Increase in)	
Electric Distribution Rates.)	Case No. 12-1682-EL-AIR
In the Matter of the Application of Duke)	
Energy Ohio, Inc., for Tariff Approval.)	Case No. 12-1683-EL-ATA
In the Matter of the Application of Duke)	
Energy Ohio, Inc., for Approval to Change)	Case No. 12-1684-EL-AAM
Accounting Methods.)	

**DIRECT TESTIMONY
OF
SCOTT J. RUBIN**

On Behalf of
The Office of the Ohio Consumers' Counsel
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February 19, 2013

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ATTACHMENTS

Attachment SJR-1:	Curriculum vitae for Scott J. Rubin
Attachment SJR-2:	OCC INT 09-108
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Attachment SJR-4:	Average usage for heating and non-heating customers
Attachment SJR-5:	OCC INT 09-115

1 **I. INTRODUCTION**

2

3 ***Q1. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.***

4 ***A1.*** My name is Scott J. Rubin. My business address is 333 Oak Lane, Bloomsburg,
5 PA.

6

7 ***Q2. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?***

8 ***A2.*** I am an independent consultant and an attorney. My practice is limited to matters
9 affecting the public utility industry.

10

11 ***Q3. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS CASE?***

12 ***A3.*** I am testifying on behalf of the Office of the Ohio Consumers' Counsel ("OCC").

13

14 ***Q4. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE?***

15 ***A4.*** The purpose of my testimony is to support OCC's objections to the Report by the
16 Staff of the Public Utilities Commission of Ohio (respectively, "Staff Report" and
17 "PUCO") regarding the cost of service study, proposed tariff changes, and
18 proposed rate design filed by Duke Energy Ohio, Inc. ("Duke" or "Utility").

19

20 ***Q5. WHAT ARE YOUR QUALIFICATIONS TO PROVIDE THIS TESTIMONY?***

21 ***A5.*** I have testified as an expert witness before utility commissions and/or courts in
22 the District of Columbia, the province of Nova Scotia, and in the states of Alaska,
23 Arizona, California, Delaware, Illinois, Kentucky, Maine, Maryland, New

1 Hampshire, New Jersey, New York, Ohio, Pennsylvania, and West Virginia. I
2 also have testified as an expert witness before two committees of the U.S. House
3 of Representatives, and one committee of the Pennsylvania House of
4 Representatives. I also have served as a consultant to the staffs of two state utility
5 commissions as well as to several national utility trade associations, and state and
6 local governments throughout the country. Prior to establishing my own
7 consulting and law practice, I was employed by the Pennsylvania Office of
8 Consumer Advocate from 1983 through January 1994 in successive positions of
9 increasing responsibility. From 1990 until I left state government, I was one of
10 two senior attorneys in that Office. Among my other responsibilities in that
11 position, I played a major role in setting its policy positions on water and electric
12 matters. In addition, I was responsible for supervising the technical staff of that
13 Office. I also testified as an expert witness for that Office on rate design and cost
14 of service issues.

15
16 Throughout my career, I have developed substantial expertise in matters relating
17 to the economic regulation of public utilities. I have published articles,
18 contributed to books, written speeches, and delivered numerous presentations, on
19 both the national and state levels, relating to regulatory issues. I have attended
20 numerous continuing education courses involving the utility industry. I also
21 served as a faculty member in utility-related educational programs for the Institute
22 for Public Utilities at Michigan State University, the American Water Works

1 Association, and the Pennsylvania Bar Institute. Attachment SJR-1 to this
2 testimony is my curriculum vitae.
3

4 ***Q6. DO YOU HAVE ANY EXPERIENCE THAT IS PARTICULARLY***
5 ***RELEVANT TO THE ISSUES IN THIS CASE?***

6 ***A6.*** Yes, I do. I have testified on numerous occasions as a rate design, tariff, and cost
7 of service expert. I have also worked as a consultant to local government entities
8 on rate design issues – both to assist government-owned utilities in designing
9 rates and to help government agencies obtain reasonable rates from their utility. I
10 also served on the editorial committee for the preparation of the major rate design
11 manual for the water utility industry, the American Water Works Association's
12 Manual M1: *Principles of Water Rates, Fees, and Charges*.
13

14 In the electricity sector during the past five years, I testified on rate design, tariff,
15 and/or cost of service issues in cases involving the Ameren utilities in Illinois,
16 Commonwealth Edison Co. (Illinois), and Duke Energy Ohio.
17

18 **II. SUMMARY**
19

20 ***Q7. WHAT IS THE FOCUS OF YOUR DIRECT TESTIMONY?***

21 ***A7.*** My testimony identifies and discusses four areas where the Staff Report is in error
22 or lacks support for its conclusions, with a corresponding effect on Duke's
23 Application. I also make several recommendations for PUCO action in this case.

1 ***Q8. AS PART OF YOUR WORK, DID YOU REVIEW THE TESTIMONY AND***
2 ***EXHIBITS OF ANY DUKE WITNESSES?***

3 ***A8.*** Yes. I reviewed the testimony and exhibits of Duke witnesses Riddle, Sailers,
4 Wathen, and Ziolkowski. I also reviewed other exhibits that are part of Duke's
5 Application and numerous responses to OCC discovery and the PUCO Staff data
6 requests that were provided by these and other witnesses.

7

8 ***Q9. WHAT PORTIONS OF THE STAFF REPORT DID YOU REVIEW?***

9 ***A9.*** I conducted a detailed review of the Staff Report's Rates and Tariffs section
10 (pages 19-44). I also reviewed the supporting attachments and workpapers
11 relating to these issues.

12

13 ***Q10. PLEASE SUMMARIZE YOUR CONCLUSIONS AND***
14 ***RECOMMENDATIONS.***

15 ***A10.*** My conclusions and recommendations are summarized as follows:

16 • OCC Objection 30: The Staff erred in accepting Duke's proposed
17 changes in its Right-of-Way tariff. The proposed tariff changes
18 would require customers to give Duke a right-of-way through a
19 customer's property at no cost to Duke, and has the potential to
20 create safety hazards on a customer's property over which the
21 customer would have no control. The existing right-of-way
22 provision in Duke's tariff should remain unchanged.

- 1 • OCC Objection 28: The Commission should reject the Staff's
2 inclusion of transformer-related costs in the calculation of the Rate
3 RS customer charge. Including such costs is inconsistent with
4 Staff's traditional manner for determining a customer charge.
5 Excluding the costs from the customer charge, as I recommend,
6 would be consistent with the cost of providing service. Removing
7 the improperly included transformer costs would reduce the
8 customer charge under Duke's proposed revenue requirement to
9 \$5.69, which I would round to \$5.70 per customer per month.
- 10 • OCC Objection 29: The Staff improperly accepted the Utility's
11 proposal to charge residential electric space-heating customers
12 (Rate ORH) a higher rate in the summer than would be charged to
13 all other residential customers. The summer rates for Rate RS and
14 Rate ORH should be the same. There is no cost justification for
15 charging customers who use electricity for space heating higher
16 summer rates than are charged to other residential customers.
- 17 • OCC Objection 29: The Staff erred in recommending that
18 residential time-of-day rates (Rate TD) should be increased by a
19 higher percentage than other residential rates would be increased.
20 The Rate TD consumption charge should change by the same
21 percentage as the Commission authorizes for the consumption
22 charge in Rate RS. In the absence of specific information showing
23 that the non-customer cost to serve Rate TD customers has

1 increased more than the comparable cost to serve other residential
2 customers, there is no basis for increasing Rate TD consumption
3 charges by a different percentage.
4

5 **III. PROPOSED CHANGES IN NON-RATE TARIFF PROVISIONS: RIGHT**
6 **OF WAY (OCC OBJECTION 30)**
7

8 ***Q11. HAS DUKE PROPOSED ANY CHANGES IN THE NON-RATE TERMS AND***
9 ***CONDITIONS OF ITS TARIFF?***

10 ***A11.*** Yes, Duke has proposed several changes in tariff provisions, in addition to the
11 rate increases it proposes in this case.
12

13 ***Q12. DID THE STAFF REPORT DISCUSS ALL OF DUKE'S PROPOSED***
14 ***TARIFF CHANGES?***

15 ***A12.*** No. The Staff Report only discusses those tariff provisions with which the Staff
16 disagrees. On page 19 of the Staff Report, the Staff states: “[t]he Applicant is
17 proposing various textual changes to its tariffs. Unless noted, Staff recommends
18 approval of these changes as proposed by the Applicant.”
19

1 **Q13. ARE THERE ANY NON-RATE TARIFF PROVISIONS THAT WERE**
2 **IMPLICITLY ACCEPTED BY THE STAFF THAT SHOULD NOT BE**
3 **ACCEPTED BY THE COMMISSION?**

4 **A13.** Yes, as summarized in OCC Objection 30, there is one tariff change proposed by
5 Duke, and implicitly accepted by the Staff, that I recommend the Commission
6 reject: Duke's proposed changes in its right-of-way provision (Tariff Sheet No.
7 21.4, pages 4-5, as found on Duke Sch. E-2.1, pages 11-12).

8
9 **Q14. WHAT IS THE PURPOSE OF THE CURRENT RIGHT-OF-WAY**
10 **PROVISION IN DUKE'S TARIFF?**

11 **A14.** The existing right-of-way tariff states that a Duke customer will provide Duke a
12 right-of-way across the customer's property, at no cost to Duke, when the right-
13 of-way is needed to serve the customer. Under the existing tariff, a customer also
14 must provide a right-of-way at no cost to Duke to serve "customers beyond the
15 customer's property **when such rights are limited to installations along**
16 **dedicated streets and roads.**" (Emphasis added.)

17
18 The emboldened language in the existing tariff above is critically important. It
19 requires a customer to provide Duke with a right-of-way to serve other customers
20 only when the right-of-way is along dedicated streets and roads. It does not
21 permit Duke to cross other portions of a customer's property (such as installing a
22 power line through someone's back yard or along a private driveway or alley)

1 unless Duke negotiates for such access and pays reasonable compensation to the
2 customer.

3
4 In my experience, the current language in Duke's tariff is customary within the
5 utility industry and is consistent with general principles relating to a utility's
6 limited use of its power to take private property for providing service to the
7 public.

8
9 ***Q15. HOW IS THE UTILITY PROPOSING TO CHANGE THE RIGHT-OF-WAY***
10 ***TARIFF?***

11 ***A15.*** The Utility is proposing completely new right-of-way language in its tariff.
12 Importantly for customers, the new language includes the following provision:
13 "Additionally, the customer shall likewise furnish, without cost to the Company
14 [Duke], all necessary rights of way upon or across customer's property necessary
15 or incidental to the supplying of service to other customers who are adjacent to or
16 extend beyond the customer's property."

17
18 The proposed new language eliminates any mention of extensions along dedicated
19 streets. Instead, the new language would permit Duke to cross a customer's
20 property **at any point**, and the customer would have no redress or right to claim
21 compensation.

**Q16. ARE YOU CERTAIN OF THE MEANING OF DUKE'S PROPOSED
CHANGES IN THE RIGHT OF WAY TARIFF, AS STATED IN YOUR
PRECEDING ANSWER?**

A16. Yes. OCC propounded an interrogatory upon Duke relating to this tariff provision. Attachment SJR-2 is Duke's response to OCC INT 09-108. This response confirms what I had suspected; that the Utility is proposing these changes in order to obtain no-cost access to customers' property that is not along dedicated streets. For example, the Utility states: "The best route may be across a side yard or through the back of the customer's property." Response to OCC INT 09-108, Attachment SJR-2. While this is undoubtedly true, it does not mean that Duke should be permitted to install a power line or other facilities in the middle of a customer's yard without the customer's agreement and without compensating the customer.

The Utility claims that it requires such access for "expediency" and to save money. Again, I do not doubt that requiring customers to provide no-cost access to Duke would save the Utility time and money. But that does not make it either reasonable or consistent with limitations on the taking of private property by a utility.

**Q17. ARE THERE SAFETY CONSIDERATIONS WITH DUKE'S PROPOSED
TARIFF LANGUAGE?**

A17. Yes, there are public safety considerations associated with Duke's proposed right-of-way provision. For example, having a power line above ground on private property can pose a hazard to children (children might try to climb the pole, overhead power lines can be hazardous for some activities like flying a kite or throwing a ball). Similarly underground power lines pose potential excavation hazards when not properly marked. Duke's proposal would remove customers' ability to control where potentially hazardous infrastructure would be installed on their property. Customers may have plans for the use of their property (such as installing a patio, swimming pool, or swing set) that conflict with having an electric line – whether above ground or underground – in the middle of the property. Customers also could be subjected to liability if the existence and location of an underground line are not properly marked and disclosed.

It is one thing to have a power line running along the street where everyone expects infrastructure to be buried. It is quite another, however, to have it buried in an unexpected location, such as a side or back yard or along a private alley. Such a facility should not be installed in an unusual location on a customer's property unless the customer explicitly agrees to the installation (including an agreement concerning the marking and use of the property). Such an agreement should occur only after the customer is informed about any hazards associated with the installation of electric facilities in their backyard. Further, customers

1 should have the right to be compensated for the inconvenience, and potential
2 liability, associated with having such a facility running through their property.
3

4 ***Q18. WHAT DO YOU RECOMMEND?***

5 ***A18.*** I recommend that the Commission reject the Utility's proposed change to its
6 right-of-way tariff. The Commission should not follow the Staff's
7 recommendation for approval of the unreasonable tariff change Duke proposes.
8 The existing provision in Duke's tariff is reasonable and should remain in the
9 tariff.

10

11 **IV. RESIDENTIAL (RATE RS) CUSTOMER CHARGE (OCC OBJECTION**
12 **28)**

13

14 ***Q19. HAS THE UTILITY PROPOSED AN INCREASE IN ITS RESIDENTIAL***
15 ***(RATE RS) CUSTOMER CHARGE?***

16 ***A19.*** Yes. Duke proposes to increase the Rate RS customer charge from \$5.50 under
17 present rates to \$6.79 under Duke's proposed revenue requirement, an increase of
18 23%.

19

1 ***Q20. WHAT IS THE MAJOR REASON FOR DUKE'S PROPOSED CHANGE IN***
2 ***THE CUSTOMER CHARGE?***

3 ***A20.*** The major driver of the increase in the customer charge is Duke's proposed
4 inclusion of a minimum sized transformer in the calculation of the customer
5 charge.

6
7 ***Q21. DOES THE STAFF REPORT ADDRESS THIS ISSUE?***

8 ***A21.*** Yes. On pages 35-36 of the Staff Report, the Staff recommends a slight
9 modification in Duke's customer charge calculation, but the Staff recommends
10 accepting the inclusion of a minimum sized transformer in the customer charge
11 calculation. The Staff's minor revisions result in a customer charge of \$6.69,
12 which the Staff rounds to \$6.70 per customer per month.

13
14 ***Q22. DO YOU AGREE WITH THE STAFF'S RECOMMENDATION TO***
15 ***INCREASE THE CUSTOMER CHARGE BY 23 PERCENT?***

16 ***A22.*** No, I do not agree with the Staff's recommendation, as summarized in OCC
17 Objection 28. The Staff did not follow its traditional methodology for
18 determining a residential customer charge, which does not include any costs
19 associated with transformers. The Staff's recommendation is in error.

20

1 ***Q23. WHY DO YOU DISAGREE WITH THE INCLUSION OF A MINIMUM***
2 ***SIZED TRANSFORMER IN THE CUSTOMER CHARGE?***

3 ***A23.*** The Commission has traditionally limited the customer charge to the costs of
4 connecting a customer to the system, reading the customer's meter, and sending
5 the customer a bill (including customer service costs). I support the
6 Commission's traditional approach to determining the customer charge because it
7 is consistent with the cost of providing service. Specifically, setting the customer
8 charge in the traditional manner recognizes that most costs of an electric
9 distribution system (poles, wires, transformers, substations, and so on) are directly
10 associated with the amount of electricity used by customers, including their peak
11 demand requirements. In other words, the costs associated with transformers are
12 a cost related to the customer's use of electricity (including the customer's peak
13 demand requirements); they are not customer-related costs. Transformer costs for
14 residential customers, therefore, are properly recovered through the energy
15 (KWh) charge; not through the customer charge. Setting residential rates in this
16 manner makes most of residential customers' bills sensitive to the amount of
17 electricity used, which is not only consistent with principles of cost causation but
18 also sends customers an important price signal to encourage the wise use of
19 electricity.

20
21 ***Q24. WHAT DO YOU RECOMMEND?***

22 ***A24.*** I recommend that the Commission reject the Staff's position and remove
23 transformer-related costs from the calculation of the Rate RS customer charge.

1 Doing so would result in a customer charge of \$5.69, which I would round to
2 \$5.70 per customer per month, as I show on Attachment SJR-3.
3

4 **V. NON-STANDARD RESIDENTIAL RATES: RATES ORH AND TD (OCC**
5 **OBJECTION 29)**
6

7 ***Q25. IN YOUR OPINION, ARE THERE ANY UNUSUAL ASPECTS TO DUKE'S***
8 ***RATE DESIGN PROPOSALS FOR ANY OF THE RESIDENTIAL RATES***
9 ***OTHER THAN RATE RS?***

10 ***A25.*** Yes. I have concerns with Duke's proposed rate designs for Rates ORH and TD,
11 as discussed in OCC Objection 29 and as I will discuss in detail below.
12

13 ***Q26. DID THE STAFF REPORT ADDRESS THE DESIGN OF THESE RATES?***

14 ***A26.*** The Staff Report essentially accepted Duke's proposed design of these rates.
15 Staff Report pp. 38-39. For clarity, I will discuss the rates as shown in the Staff
16 Report, since they are essentially the same as the rates the Utility proposed.
17

18 **A. Rate ORH: Optional Residential Service with Electric Space Heating**
19

20 ***Q27. WHAT IS RATE ORH?***

21 ***A27.*** Rate ORH is a rate for residential customers who use electricity for space heating.
22

1 ***Q28. DO YOU FIND ANYTHING UNUSUAL ABOUT THE PROPOSED RATE***
2 ***DESIGN FOR RATE ORH?***

3 ***A28.*** I find it very unusual that the Staff supports a rate design for Rate ORH that has
4 higher per kilowatt-hours (“KWH”) charges in the summer months and for the
5 first 1,000 KWH per month in the “winter” months (the eight months that are not
6 summer), than are paid by Rate RS customers. I would expect the summer rates
7 to be the same for heating and non-heating customers. I also would expect the
8 first block rates in the non-summer months to be the same for all residential
9 customers.

10

11 ***Q29. WHAT ARE THE RATE DIFFERENCES THAT THE STAFF***
12 ***RECOMMENDS?***

13 ***A29.*** The Staff recommends a year-round per-KWH rate for Rate RS of 2.7410¢ per
14 KWH. In contrast, the Staff recommends a summer per-KWH rate for Rate ORH
15 of 3.2133¢ per KWH for the first 1,000 KWH and 3.8063¢ per KWH for all
16 additional usage. The Rate ORH summer rates are between 17% and 39% higher
17 than the rates paid by non-heating residential customers.
18 In the winter, Rate ORH has a rate for the first 1,000 KWH per month of 3.2133¢
19 per KWH (the same as the first block in summer). The rate then declines
20 significantly for additional winter consumption to 1.7748¢ or 1.1964¢ depending
21 on the consumption level.

22

1 ***Q30. WHY IS THERE A SEPARATE DISTRIBUTION RATE FOR CUSTOMERS***
2 ***WHO HEAT WITH ELECTRICITY?***

3 ***A30.*** On average, customers who use electricity for space heating have different cost
4 and usage characteristics than customers who do not heat with electricity. In
5 particular, space heating customers tend to use far more electricity than non-
6 heating customers. While it is likely that the average cost of facilities to serve a
7 heating customer is higher than the average cost to serve a non-heating customer
8 (because of a heating customer's higher overall level of demand), far more KWH
9 are sold to heating customers than non-heating customers on an annual per-
10 customer basis. Thus, the per-KWH cost to serve a heating customer should be
11 much lower than the average per-KWH cost to serve a non-heating customer.

12
13 ***Q31. DO YOU HAVE SPECIFIC INFORMATION FOR DUKE THAT SUPPORTS***
14 ***YOUR CONTENTION?***

15 ***A31.*** I do not have cost information for heating customers because Duke does not treat
16 Rate ORH as a separate class in its cost-of-service study. There is no question,
17 however, that Duke sells far more KWH per customer to heating customers than it
18 sells to non-heating customers. On Attachment SJR-4, I have used information
19 from Duke Schedule E 4.1 to calculate the average level of annual consumption
20 for heating and non-heating customers. As the schedule shows, the average
21 customer on Rate ORH uses almost three times as much electricity annually as the
22 average customer on Rate RS (31,936 KWH vs. 11,468 KWH).

1 ***Q32. WHAT DOES THIS INFORMATION TELL YOU ABOUT HOW RATES***
2 ***SHOULD BE DESIGNED FOR RATE ORH?***

3 ***A32.*** From this information, I conclude that the summer rates for Rate RS and Rate
4 ORH should be the same. There is no cost justification for charging higher
5 summer rates to customers who use electricity for space heating than for any other
6 residential customer. Given the greater average level of consumption – even in
7 the summer – by Rate ORH customers, it is highly likely that any difference in the
8 cost of serving heating and non-heating customers would be more than made up
9 by the greater level of consumption by Rate ORH customers.

10

11 In the winter, I recommend that the first 1,000 KWH per month used by Rate
12 ORH customers should be billed at the same rate that is charged to Rate RS
13 customers. Consumption above that level should be discounted consistent with
14 the level of discount contained in the Staff proposal.

15

16 I would emphasize that my recommendation is based on the substantial
17 differences in the level of consumption by Rate ORH customers, and the lack of
18 information about any differences in the cost to serve such customers. I am not
19 suggesting that there should be any type of preference or penalty for Rate ORH
20 customers, only that the level of revenue collection should be consistent with the
21 likely cost to serve the customers. In light of the fact that the typical Rate ORH
22 customer uses almost three times as much electricity annually as the typical Rate

1 RS customer, there is no justification for charging Rate ORH customers a higher
2 rate in the summer or for the initial block of consumption in the winter.
3

4 **B. Rate TD: Optional Time of Day Rate**
5

6 ***Q33. WHAT IS RATE TD?***

7 ***A33.*** Rate TD is a separate rate schedule for residential customers with time-of-day
8 meters. The rate schedule contains a significant discount for customers who use
9 electricity during off-peak periods. For example, the existing rates in the summer
10 for Rate TD have an on-peak charge of 4.1195¢ per KWH and an off-peak charge
11 of only 0.7186¢ per KWH.
12

13 ***Q34. WHAT DO YOU FIND UNUSUAL ABOUT THE STAFF'S PROPOSED***
14 ***RATES FOR RATE TD?***

15 ***A34.*** The Staff agreed with the Utility's recommendation to increase the per-KWH
16 rates for Rate TD by significantly more than the increase in Rate RS consumption
17 rates. Specifically, the Staff recommends increasing Rate RS consumption rates
18 by 23.9% (Staff Report p. 37), while increasing the Rate TD consumption rates by
19 35.3% (Staff Report p. 39).
20

1 ***Q35. IS THERE ANY SUPPORT IN THE STAFF REPORT OR IN DUKE'S***
2 ***TESTIMONY AND EXHIBITS FOR INCREASING THE RATE TD***
3 ***CONSUMPTION CHARGES BY SUCH A LARGE PERCENTAGE?***

4 ***A35.*** No. Duke does not attempt to justify the difference and does not provide any
5 separate cost information for Rate TD in its cost-of-service study. Attachment
6 SJR-5 is Duke's response to OCC INT 09-115. In the response, Duke states that
7 it did not prepare a cost-of-service study to determine the rates for Rate TD.
8 Thus, there is no cost justification for the significantly higher percentage increase
9 proposed in the Rate TD consumption charge.

10

11 ***Q36. WHAT DO YOU RECOMMEND?***

12 ***A36.*** I recommend that the consumption charges in Rate TD change by the same
13 percentage as the Commission authorizes for the consumption charge in Rate RS.
14 In the absence of specific information showing that the non-customer cost to serve
15 Rate TD customers increased more than the comparable cost to serve other
16 residential customers, there is no basis for increasing Rate TD consumption
17 charges by such a large percentage.

18

1 **VI. CONCLUSION**

2

3 ***Q37. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?***

4 ***A37.*** Yes. However, I reserve the right to incorporate new information that may
5 subsequently become available. I also reserve the right to supplement my
6 testimony in the event that Duke, the PUCO Staff or other parties submit new or
7 corrected information and if additional information is provided through discovery.

CERTIFICATE OF SERVICE

I hereby certify that a true copy of the foregoing *Direct Testimony of Scott J. Rubin* was served via electronic transmission to the persons listed below on this 19th day of February 2013.

/s/ Terry L. Etter

Terry L. Etter
Assistant Consumers' Counsel

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Scott J. Rubin

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Current Position

Public Utility Attorney and Consultant. 1994 to present. I provide legal, consulting, and expert witness services to various organizations interested in the regulation of public utilities.

Previous Positions

Lecturer in Computer Science, Susquehanna University, Selinsgrove, PA. 1993 to 2000.

Senior Assistant Consumer Advocate, Office of Consumer Advocate, Harrisburg, PA. 1990 to 1994.

I supervised the administrative and technical staff and shared with one other senior attorney the supervision of a legal staff of 14 attorneys.

Assistant Consumer Advocate, Office of Consumer Advocate, Harrisburg, PA. 1983 to 1990.

Associate, Laws and Staruch, Harrisburg, PA. 1981 to 1983.

Law Clerk, U.S. Environmental Protection Agency, Washington, DC. 1980 to 1981.

Research Assistant, Rockville Consulting Group, Washington, DC. 1979.

Current Professional Activities

Member, American Bar Association, Public Utility Law Section.

Member, American Water Works Association.

Admitted to practice law before the Supreme Court of Pennsylvania, the New York State Court of Appeals, the United States District Court for the Middle District of Pennsylvania, the United States Court of Appeals for the Third Circuit, and the Supreme Court of the United States.

Previous Professional Activities

Member, American Water Works Association, Rates and Charges Subcommittee, 1998-2001.

Member, Federal Advisory Committee on Disinfectants and Disinfection By-Products in Drinking Water, U.S. Environmental Protection Agency, Washington, DC. 1992 to 1994.

Chair, Water Committee, National Association of State Utility Consumer Advocates, Washington, DC. 1990 to 1994; member of committee from 1988 to 1990.

Member, Board of Directors, Pennsylvania Energy Development Authority, Harrisburg, PA. 1990 to 1994.

Member, Small Water Systems Advisory Committee, Pennsylvania Department of Environmental Resources, Harrisburg, PA. 1990 to 1992.

Member, Ad Hoc Committee on Emissions Control and Acid Rain Compliance, National Association of State Utility Consumer Advocates, 1991.

Member, Nitrogen Oxides Subcommittee of the Acid Rain Advisory Committee, U.S. Environmental Protection Agency, Washington DC. 1991.

Education

J.D. with Honors, George Washington University, Washington, DC. 1981.

B.A. with Distinction in Political Science, Pennsylvania State University, University Park, PA. 1978.

Publications and Presentations (* denotes peer-reviewed publications)

1. "Quality of Service Issues," a speech to the Pennsylvania Public Utility Commission Consumer Conference, State College, PA. 1988.
2. K.L. Pape and S.J. Rubin, "Current Developments in Water Utility Law," in *Pennsylvania Public Utility Law* (Pennsylvania Bar Institute). 1990.
3. Presentation on Water Utility Holding Companies to the Annual Meeting of the National Association of State Utility Consumer Advocates, Orlando, FL. 1990.
4. "How the OCA Approaches Quality of Service Issues," a speech to the Pennsylvania Chapter of the National Association of Water Companies. 1991.
5. Presentation on the Safe Drinking Water Act to the Mid-Year Meeting of the National Association of State Utility Consumer Advocates, Seattle, WA. 1991.
6. "A Consumer Advocate's View of Federal Pre-emption in Electric Utility Cases," a speech to the Pennsylvania Public Utility Commission Electricity Conference. 1991.
7. Workshop on Safe Drinking Water Act Compliance Issues at the Mid-Year Meeting of the National Association of State Utility Consumer Advocates, Washington, DC. 1992.
8. Formal Discussant, Regional Acid Rain Workshop, U.S. Environmental Protection Agency and National Regulatory Research Institute, Charlotte, NC. 1992.
9. S.J. Rubin and S.P. O'Neal, "A Quantitative Assessment of the Viability of Small Water Systems in Pennsylvania," *Proceedings of the Eighth NARUC Biennial Regulatory Information Conference*, National Regulatory Research Institute (Columbus, OH 1992), IV:79-97.
10. "The OCA's Concerns About Drinking Water," a speech to the Pennsylvania Public Utility Commission Water Conference. 1992.
11. Member, Technical Horizons Panel, Annual Meeting of the National Association of Water Companies, Hilton Head, SC. 1992.
12. M.D. Klein and S.J. Rubin, "Water and Sewer -- Update on Clean Streams, Safe Drinking Water, Waste Disposal and Pennvest," *Pennsylvania Public Utility Law Conference* (Pennsylvania Bar Institute). 1992.
13. Presentation on Small Water System Viability to the Technical Assistance Center for Small Water Companies, Pa. Department of Environmental Resources, Harrisburg, PA. 1993

14. "The Results Through a Public Service Commission Lens," speaker and participant in panel discussion at Symposium: "Impact of EPA's Allowance Auction," Washington, DC, sponsored by AER*X. 1993.
15. "The Hottest Legislative Issue of Today -- Reauthorization of the Safe Drinking Water Act," speaker and participant in panel discussion at the Annual Conference of the American Water Works Association, San Antonio, TX. 1993.
16. "Water Service in the Year 2000," a speech to the Conference: "Utilities and Public Policy III: The Challenges of Change," sponsored by the Pennsylvania Public Utility Commission and the Pennsylvania State University, University Park, PA. 1993.
17. "Government Regulation of the Drinking Water Supply: Is it Properly Focused?," speaker and participant in panel discussion at the National Consumers League's Forum on Drinking Water Safety and Quality, Washington, DC. 1993. Reprinted in *Rural Water*, Vol. 15 No. 1 (Spring 1994), pages 13-16.
18. "Telephone Penetration Rates for Renters in Pennsylvania," a study prepared for the Pennsylvania Office of Consumer Advocate. 1993.
19. "Zealous Advocacy, Ethical Limitations and Considerations," participant in panel discussion at "Continuing Legal Education in Ethics for Pennsylvania Lawyers," sponsored by the Office of General Counsel, Commonwealth of Pennsylvania, State College, PA. 1993.
20. "Serving the Customer," participant in panel discussion at the Annual Conference of the National Association of Water Companies, Williamsburg, VA. 1993.
21. "A Simple, Inexpensive, Quantitative Method to Assess the Viability of Small Water Systems," a speech to the Water Supply Symposium, New York Section of the American Water Works Association, Syracuse, NY. 1993.
22. * S.J. Rubin, "Are Water Rates Becoming Unaffordable?," *Journal American Water Works Association*, Vol. 86, No. 2 (February 1994), pages 79-86.
23. "Why Water Rates Will Double (If We're Lucky): Federal Drinking Water Policy and Its Effect on New England," a briefing for the New England Conference of Public Utilities Commissioners, Andover, MA. 1994.
24. "Are Water Rates Becoming Unaffordable?," a speech to the Legislative and Regulatory Conference, Association of Metropolitan Water Agencies, Washington, DC. 1994.
25. "Relationships: Drinking Water, Health, Risk and Affordability," speaker and participant in panel discussion at the Annual Meeting of the Southeastern Association of Regulatory Commissioners, Charleston, SC. 1994.
26. "Small System Viability: Assessment Methods and Implementation Issues," speaker and participant in panel discussion at the Annual Conference of the American Water Works Association, New York, NY. 1994.
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30. "Surviving the Safe Drinking Water Act," speaker at the Annual Meeting of the National Association of State Utility Consumer Advocates, Reno, NV. 1994.
31. "Safe Drinking Water Act Compliance -- Ratemaking Implications," speaker at the National Conference of Regulatory Attorneys, Scottsdale, AZ. 1995. Reprinted in *Water*, Vol. 36, No. 2 (Summer 1995), pages 28-29.
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34. Speaker and participant in the Water Policy Forum, sponsored by the National Association of Water Companies, Naples, FL. 1995.
35. Participant in panel discussion on "The Efficient and Effective Maintenance and Delivery of Potable Water at Affordable Rates to the People of New Jersey," at The New Advocacy: Protecting Consumers in the Emerging Era of Utility Competition, a conference sponsored by the New Jersey Division of the Ratepayer Advocate, Newark, NJ. 1995.
36. J.E. Cromwell III, and S.J. Rubin, *Development of Benchmark Measures for Viability Assessment* (Pa. Department of Environmental Protection 1995).
37. S. Rubin, "A Nationwide Practice from a Small Town in Pa.," *Lawyers & the Internet – a Supplement to the Legal Intelligencer and Pa. Law Weekly* (February 12, 1996), page S6.
38. "Changing Customers' Expectations in the Water Industry," speaker at the Mid-America Regulatory Commissioners Conference, Chicago, IL. 1996, reprinted in *Water* Vol. 37 No. 3 (Winter 1997), pages 12-14.
39. "Recent Federal Legislation Affecting Drinking Water Utilities," speaker at Pennsylvania Public Utility Law Conference, Pennsylvania Bar Institute, Hershey, PA. 1996.
40. "Clean Water at Affordable Rates: A Ratepayers Conference," moderator at symposium sponsored by the New Jersey Division of Ratepayer Advocate, Trenton, NJ. 1996.
41. "Water Workshop: How New Laws Will Affect the Economic Regulation of the Water Industry," speaker at the Annual Meeting of the National Association of State Utility Consumer Advocates, San Francisco, CA. 1996.

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47. Briefing on Issues Affecting the Water Utility Industry, Annual Meeting of the National Association of State Utility Consumer Advocates, Boston, MA. 1997.
48. "Capacity Development in the Water Industry," speaker at the Annual Meeting of the National Association of Regulatory Utility Commissioners, Boston, MA. 1997.
49. "The Ticking Bomb: Competitive Electric Metering, Billing, and Collection," speaker at the Annual Meeting of the National Association of State Utility Consumer Advocates, Boston, MA. 1997.
50. Scott J. Rubin, "A Nationwide Look at the Affordability of Water Service," *Proceedings of the 1998 Annual Conference of the American Water Works Association*, Water Research, Vol. C, No. 3, pages 113-129 (American Water Works Association, 1998).
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54. "Consumer Advocacy for the Future," speaker at the Age of Awareness Conference, Changes and Choices: Utilities in the New Millennium, Carlisle, PA. 1999.
55. Keynote Address, \$1 Energy Fund, Inc., Annual Membership Meeting, Monroeville, PA. 1999.
56. Scott J. Rubin, "Assessing the Effect of the Proposed Radon Rule on the Affordability of Water Service," prepared for the American Water Works Association. 1999.
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59. Janice A. Beecher and Scott J. Rubin, presentation on “Special Topics in Rate Design: Affordability” at the Annual Conference and Exhibition of the American Water Works Association, Denver, CO. 2000.
60. Scott J. Rubin, “The Future of Drinking Water Regulation,” a speech at the Annual Conference and Exhibition of the American Water Works Association, Denver, CO. 2000.
61. Janice A. Beecher and Scott J. Rubin, “Deregulation Impacts and Opportunities,” a presentation at the Annual Conference and Exhibition of the American Water Works Association, Denver, CO. 2000.
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110. Scott J. Rubin, Current Topics in Water: Rate Design and Reliability. Presentation to the Water Committee of the National Association of Regulatory Utility Commissioners, Washington, DC. 2011.
111. Scott J. Rubin, Water Reliability and Resilience Standards, *Pennsylvania Public Utility Law Conference* (Pennsylvania Bar Institute). 2011.
112. Member of Expert Panel, Leadership Forum: Business Management for the Future, Annual Conference and Exposition of the American Water Works Association, Washington, DC. 2011.
113. Scott J. Rubin, Evaluating Community Affordability in Storm Water Control Plans, *Flowing into the Future: Evolving Water Issues* (Pennsylvania Bar Institute). 2011.
114. Invited Participant, Summit on Declining Water Demand and Revenues, sponsored by The Alliance for Water Efficiency, Racine, WI. 2012.
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Testimony as an Expert Witness

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2. *Pa. Public Utility Commission v. Shenango Valley Water Co.*, Pa. Public Utility Commission, Docket R-00922420. 1992. Concerning cost allocation, on behalf of the Pa. Office of Consumer Advocate
3. *Pa. Public Utility Commission v. Pennsylvania Gas and Water Co. - Water Division*, Pa. Public Utility Commission, Docket R-00922482. 1993. Concerning rate design, on behalf of the Pa. Office of Consumer Advocate
4. *Pa. Public Utility Commission v. Colony Water Co.*, Pa. Public Utility Commission, Docket R-00922375. 1993. Concerning rate design, on behalf of the Pa. Office of Consumer Advocate

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6. *West Penn Power Co. v. State Tax Department of West Virginia*, Circuit Court of Kanawha County, West Virginia, Civil Action No. 89-C-3056. 1993. Concerning regulatory policy and the effects of a taxation statute on out-of-state utility ratepayers, on behalf of the Pa. Office of Consumer Advocate
7. *Pa. Public Utility Commission v. Pennsylvania Gas and Water Co. - Water Division*, Pa. Public Utility Commission, Docket R-00932667. 1993. Concerning rate design and affordability of service, on behalf of the Pa. Office of Consumer Advocate
8. *Pa. Public Utility Commission v. National Utilities, Inc.*, Pa. Public Utility Commission, Docket R-00932828. 1994. Concerning rate design, on behalf of the Pa. Office of Consumer Advocate
9. *An Investigation of the Sources of Supply and Future Demand of Kentucky-American Water Company*, Ky. Public Service Commission, Case No. 93-434. 1994. Concerning supply and demand planning, on behalf of the Kentucky Office of Attorney General, Utility and Rate Intervention Division.
10. *The Petition on Behalf of Gordon's Corner Water Company for an Increase in Rates*, New Jersey Board of Public Utilities, Docket No. WR94020037. 1994. Concerning revenue requirements and rate design, on behalf of the New Jersey Division of Ratepayer Advocate.
11. *Re Consumers Maine Water Company Request for Approval of Contracts with Consumers Water Company and with Ohio Water Service Company*, Me. Public Utilities Commission, Docket No. 94-352. 1994. Concerning affiliated interest agreements, on behalf of the Maine Public Advocate.
12. *In the Matter of the Application of Potomac Electric Power Company for Approval of its Third Least-Cost Plan*, D.C. Public Service Commission, Formal Case No. 917, Phase II. 1995. Concerning Clean Air Act implementation and environmental externalities, on behalf of the District of Columbia Office of the People's Counsel.
13. *In the Matter of the Regulation of the Electric Fuel Component Contained within the Rate Schedules of the Dayton Power and Light Company and Related Matters*, Ohio Public Utilities Commission, Case No. 94-105-EL-EFC. 1995. Concerning Clean Air Act implementation (case settled before testimony was filed), on behalf of the Office of the Ohio Consumers' Counsel.
14. *Kennebec Water District Proposed Increase in Rates*, Maine Public Utilities Commission, Docket No. 95-091. 1995. Concerning the reasonableness of planning decisions and the relationship between a publicly owned water district and a very large industrial customer, on behalf of the Maine Public Advocate.
15. *Winter Harbor Water Company, Proposed Schedule Revisions to Introduce a Readiness-to-Serve Charge*, Maine Public Utilities Commission, Docket No. 95-271. 1995 and 1996. Concerning standards for, and the reasonableness of, imposing a readiness to serve charge and/or exit fee on the customers of a small investor-owned water utility, on behalf of the Maine Public Advocate.
16. *In the Matter of the 1995 Long-Term Electric Forecast Report of the Cincinnati Gas & Electric Company*, Public Utilities Commission of Ohio, Case No. 95-203-EL-FOR, and *In the Matter of the Two-Year Review of the Cincinnati Gas & Electric Company's Environmental Compliance Plan Pursuant to Section 4913.05, Revised Cost*, Case No. 95-747-EL-ECP. 1996. Concerning the reasonableness of the utility's long-range

supply and demand-management plans, the reasonableness of its plan for complying with the Clean Air Act Amendments of 1990, and discussing methods to ensure the provision of utility service to low-income customers, on behalf of the Office of the Ohio Consumers' Counsel..

17. *In the Matter of Notice of the Adjustment of the Rates of Kentucky-American Water Company*, Kentucky Public Service Commission, Case No. 95-554. 1996. Concerning rate design, cost of service, and sales forecast issues, on behalf of the Kentucky Office of Attorney General.
18. *In the Matter of the Application of Citizens Utilities Company for a Hearing to Determine the Fair Value of its Properties for Ratemaking Purposes, to Fix a Just and Reasonable Rate of Return Thereon, and to Approve Rate Schedules Designed to Provide such Rate of Return*, Arizona Corporation Commission, Docket Nos. E-1032-95-417, *et al.* 1996. Concerning rate design, cost of service, and the price elasticity of water demand, on behalf of the Arizona Residential Utility Consumer Office.
19. *Cochrane v. Bangor Hydro-Electric Company*, Maine Public Utilities Commission, Docket No. 96-053. 1996. Concerning regulatory requirements for an electric utility to engage in unregulated business enterprises, on behalf of the Maine Public Advocate.
20. *In the Matter of the Regulation of the Electric Fuel Component Contained within the Rate Schedules of Monongahela Power Company and Related Matters*, Public Utilities Commission of Ohio, Case No. 96-106-EL-EFC. 1996. Concerning the costs and procedures associated with the implementation of the Clean Air Act Amendments of 1990, on behalf of the Ohio Consumers' Counsel.
21. *In the Matter of the Regulation of the Electric Fuel Component Contained within the Rate Schedules of Cleveland Electric Illuminating Company and Toledo Edison Company and Related Matters*, Public Utilities Commission of Ohio, Case Nos. 96-107-EL-EFC and 96-108-EL-EFC. 1996. Concerning the costs and procedures associated with the implementation of the Clean Air Act Amendments of 1990, on behalf of the Ohio Consumers' Counsel.
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24. *In the Matter of the Regulation of the Electric Fuel Component Contained within the Rate Schedules of Cincinnati Gas and Electric Co. and Related Matters*, Public Utilities Commission of Ohio, Case No. 96-103-EL-EFC. 1997. Concerning the costs and procedures associated with the implementation of the Clean Air Act Amendments of 1990, on behalf of the Ohio Consumers' Counsel.
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26. *Testimony concerning H.B. 1068 Relating to Restructuring of the Natural Gas Utility Industry*, Consumer Affairs Committee, Pennsylvania House of Representatives. 1997. Concerning the provisions of proposed

legislation to restructure the natural gas utility industry in Pennsylvania, on behalf of the Pennsylvania AFL-CIO Gas Utility Caucus.

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28. *In the Matter of the Petition of Valley Road Sewerage Company for a Revision in Rates and Charges for Water Service*, New Jersey Board of Public Utilities, Docket No. WR92080846J. 1997. Concerning the revenue requirements and rate design for a wastewater treatment utility, on behalf of the New Jersey Division of Ratepayer Advocate.
29. *Bangor Gas Company, L.L.C., Petition for Approval to Furnish Gas Service in the State of Maine*, Maine Public Utilities Commission, Docket No. 97-795. 1998. Concerning the standards and public policy concerns involved in issuing a certificate of public convenience and necessity for a new natural gas utility, and related ratemaking issues, on behalf of the Maine Public Advocate.
30. *In the Matter of the Investigation on Motion of the Commission into the Adequacy of the Public Utility Water Service Provided by Tidewater Utilities, Inc., in Areas in Southern New Castle County, Delaware*, Delaware Public Service Commission, Docket No. 309-97. 1998. Concerning the standards for the provision of efficient, sufficient, and adequate water service, and the application of those standards to a water utility, on behalf of the Delaware Division of the Public Advocate.
31. *In the Matter of the Regulation of the Electric Fuel Component Contained within the Rate Schedules of Cincinnati Gas and Electric Co. and Related Matters*, Public Utilities Commission of Ohio, Case No. 97-103-EL-EFC. 1998. Concerning fuel-related transactions with affiliated companies and the appropriate ratemaking treatment and regulatory safeguards involving such transactions, on behalf of the Ohio Consumers' Counsel.
32. *Olde Port Mariner Fleet, Inc. Complaint Regarding Casco Bay Island Transit District's Tour and Charter Service*, Maine Public Utilities Commission, Docket No. 98-161. 1998. Concerning the standards and requirements for allocating costs and separating operations between regulated and unregulated operations of a transportation utility, on behalf of the Maine Public Advocate and Olde Port Mariner Fleet, Inc.
33. *Central Maine Power Company Investigation of Stranded Costs, Transmission and Distribution Utility Revenue Requirements, and Rate Design*, Maine Public Utilities Commission, Docket No. 97-580. 1998. Concerning the treatment of existing rate discounts when designing rates for a transmission and distribution electric utility, on behalf of the Maine Public Advocate.
34. *Pa. Public Utility Commission v. Manufacturers Water Company*, Pennsylvania Public Utility Commission, Docket No. R-00984275. 1998. Concerning rate design on behalf of the Manufacturers Water Industrial Users.
35. *In the Matter of Petition of Pennsgrove Water Supply Company for an Increase in Rates for Water Service*, New Jersey Board of Public Utilities, Docket No. WR98030147. 1998. Concerning the revenue requirements, level of affiliated charges, and rate design for a water utility, on behalf of the New Jersey Division of Ratepayer Advocate.

36. *In the Matter of Petition of Seaview Water Company for an Increase in Rates for Water Service*, New Jersey Board of Public Utilities, Docket No. WR98040193. 1999. Concerning the revenue requirements and rate design for a water utility, on behalf of the New Jersey Division of Ratepayer Advocate.
37. *In the Matter of the Regulation of the Electric Fuel Component Contained within the Rate Schedules of Ohio Power Company and Columbus Southern Power Company and Related Matters*, Public Utilities Commission of Ohio, Case Nos. 98-101-EL-EFC and 98-102-EL-EFC. 1999. Concerning the costs and procedures associated with the implementation of the Clean Air Act Amendments of 1990, on behalf of the Ohio Consumers' Counsel.
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39. *In the Matter of the Regulation of the Electric Fuel Component Contained within the Rate Schedules of Monongahela Power Company and Related Matters*, Public Utilities Commission of Ohio, Case No. 99-106-EL-EFC. 1999. Concerning the costs and procedures associated with the implementation of the Clean Air Act Amendments of 1990, on behalf of the Ohio Consumers' Counsel.
40. *County of Suffolk, et al. v. Long Island Lighting Company, et al.*, U.S. District Court for the Eastern District of New York, Case No. 87-CV-0646. 2000. Submitted two affidavits concerning the calculation and collection of court-ordered refunds to utility customers, on behalf of counsel for the plaintiffs.
41. *Northern Utilities, Inc., Petition for Waivers from Chapter 820*, Maine Public Utilities Commission, Docket No. 99-254. 2000. Concerning the standards and requirements for defining and separating a natural gas utility's core and non-core business functions, on behalf of the Maine Public Advocate.
42. *Notice of Adjustment of the Rates of Kentucky-American Water Company*, Kentucky Public Service Commission, Case No. 2000-120. 2000. Concerning the appropriate methods for allocating costs and designing rates, on behalf of the Kentucky Office of Attorney General.
43. *In the Matter of the Petition of Gordon's Corner Water Company for an Increase in Rates and Charges for Water Service*, New Jersey Board of Public Utilities, Docket No. WR00050304. 2000. Concerning the revenue requirements and rate design for a water utility, on behalf of the New Jersey Division of Ratepayer Advocate.
44. *Testimony concerning Arsenic in Drinking Water: An Update on the Science, Benefits, and Costs*, Committee on Science, United States House of Representatives. 2001. Concerning the effects on low-income households and small communities from a more stringent regulation of arsenic in drinking water.
45. *In the Matter of the Application of The Cincinnati Gas & Electric Company for an Increase in Gas Rates in its Service Territory*, Public Utilities Commission of Ohio, Case No. 01-1228-GA-AIR, *et al.* 2002. Concerning the need for and structure of a special rider and alternative form of regulation for an accelerated main replacement program, on behalf of the Ohio Consumers' Counsel.
46. *Pennsylvania State Treasurer's Hearing on Enron and Corporate Governance Issues*. 2002. Concerning Enron's role in Pennsylvania's electricity market and related issues, on behalf of the Pennsylvania AFL-CIO.

47. *An Investigation into the Feasibility and Advisability of Kentucky-American Water Company's Proposed Solution to its Water Supply Deficit*, Kentucky Public Service Commission, Case No. 2001-00117. 2002. Concerning water supply planning, regulatory oversight, and related issue, on behalf of the Kentucky Office of Attorney General.
48. *Joint Application of Pennsylvania-American Water Company and Thames Water Aqua Holdings GmbH*, Pennsylvania Public Utility Commission, Docket Nos. A-212285F0096 and A-230073F0004. 2002. Concerning the risks and benefits associated with the proposed acquisition of a water utility, on behalf of the Pennsylvania Office of Consumer Advocate.
49. *Application for Approval of the Transfer of Control of Kentucky-American Water Company to RWE AG and Thames Water Aqua Holdings GmbH*, Kentucky Public Service Commission, Case No. 2002-00018. 2002. Concerning the risks and benefits associated with the proposed acquisition of a water utility, on behalf of the Kentucky Office of Attorney General.
50. *Joint Petition for the Consent and Approval of the Acquisition of the Outstanding Common Stock of American Water Works Company, Inc., the Parent Company and Controlling Shareholder of West Virginia-American Water Company*, West Virginia Public Service Commission, Case No. 01-1691-W-PC. 2002. Concerning the risks and benefits associated with the proposed acquisition of a water utility, on behalf of the Consumer Advocate Division of the West Virginia Public Service Commission.
51. *Joint Petition of New Jersey-American Water Company, Inc. and Thames Water Aqua Holdings GmbH for Approval of Change in Control of New Jersey-American Water Company, Inc.*, New Jersey Board of Public Utilities, Docket No. WM01120833. 2002. Concerning the risks and benefits associated with the proposed acquisition of a water utility, on behalf of the New Jersey Division of Ratepayer Advocate.
52. *Illinois-American Water Company, Proposed General Increase in Water Rates*, Illinois Commerce Commission, Docket No. 02-0690. 2003. Concerning rate design and cost of service issues, on behalf of the Illinois Office of the Attorney General.
53. *Pennsylvania Public Utility Commission v. Pennsylvania-American Water Company*, Pennsylvania Public Utility Commission, Docket No. R-00038304. 2003. Concerning rate design and cost of service issues, on behalf of the Pennsylvania Office of Consumer Advocate.
54. *West Virginia-American Water Company*, West Virginia Public Service Commission, Case No. 03-0353-W-42T. 2003. Concerning affordability, rate design, and cost of service issues, on behalf of the West Virginia Consumer Advocate Division.
55. *Petition of Seabrook Water Corp. for an Increase in Rates and Charges for Water Service*, New Jersey Board of Public Utilities, Docket No. WR3010054. 2003. Concerning revenue requirements, rate design, prudence, and regulatory policy, on behalf of the New Jersey Division of Ratepayer Advocate.
56. *Chesapeake Ranch Water Co. v. Board of Commissioners of Calvert County*, U.S. District Court for Southern District of Maryland, Civil Action No. 8:03-cv-02527-AW. 2004. Submitted expert report concerning the expected level of rates under various options for serving new commercial development, on behalf of the plaintiff.
57. *Testimony concerning Lead in Drinking Water*, Committee on Government Reform, United States House of Representatives. 2004. Concerning the trade-offs faced by low-income households when drinking water costs increase, including an analysis of H.R. 4268.

58. *West Virginia-American Water Company*, West Virginia Public Service Commission, Case No. 04-0373-W-42T. 2004. Concerning affordability and rate comparisons, on behalf of the West Virginia Consumer Advocate Division.
59. *West Virginia-American Water Company*, West Virginia Public Service Commission, Case No. 04-0358-W-PC. 2004. Concerning costs, benefits, and risks associated with a wholesale water sales contract, on behalf of the West Virginia Consumer Advocate Division.
60. *Kentucky-American Water Company*, Kentucky Public Service Commission, Case No. 2004-00103. 2004. Concerning rate design and tariff issues, on behalf of the Kentucky Office of Attorney General.
61. *New Landing Utility, Inc.*, Illinois Commerce Commission, Docket No. 04-0610. 2005. Concerning the adequacy of service provided by, and standards of performance for, a water and wastewater utility, on behalf of the Illinois Office of Attorney General.
62. *People of the State of Illinois v. New Landing Utility, Inc.*, Circuit Court of the 15th Judicial District, Ogle County, Illinois, No. 00-CH-97. 2005. Concerning the standards of performance for a water and wastewater utility, including whether a receiver should be appointed to manage the utility's operations, on behalf of the Illinois Office of Attorney General.
63. *Hope Gas, Inc. d/b/a Dominion Hope*, West Virginia Public Service Commission, Case No. 05-0304-G-42T. 2005. Concerning the utility's relationships with affiliated companies, including an appropriate level of revenues and expenses associated with services provided to and received from affiliates, on behalf of the West Virginia Consumer Advocate Division.
64. *Monongahela Power Co. and The Potomac Edison Co.*, West Virginia Public Service Commission, Case Nos. 05-0402-E-CN and 05-0750-E-PC. 2005. Concerning review of a plan to finance the construction of pollution control facilities and related issues, on behalf of the West Virginia Consumer Advocate Division.
65. *Joint Application of Duke Energy Corp., et al., for Approval of a Transfer and Acquisition of Control*, Case Kentucky Public Service Commission, No. 2005-00228. 2005. Concerning the risks and benefits associated with the proposed acquisition of an energy utility, on behalf of the Kentucky Office of the Attorney General.
66. *Commonwealth Edison Company proposed general revision of rates, restructuring and price unbundling of bundled service rates, and revision of other terms and conditions of service*, Illinois Commerce Commission, Docket No. 05-0597. 2005. Concerning rate design and cost of service, on behalf of the Illinois Office of Attorney General.
67. *Pennsylvania Public Utility Commission v. Aqua Pennsylvania, Inc.*, Pennsylvania Public Utility Commission, Docket No. R-00051030. 2006. Concerning rate design and cost of service, on behalf of the Pennsylvania Office of Consumer Advocate.
68. *Central Illinois Light Company d/b/a AmerenCILCO, Central Illinois Public Service Company d/b/a AmerenCIPS, and Illinois Power Company d/b/a AmerenIP, proposed general increases in rates for delivery service*, Illinois Commerce Commission, Docket Nos. 06-0070, et al. 2006. Concerning rate design and cost of service, on behalf of the Illinois Office of Attorney General.

69. *Grens, et al., v. Illinois-American Water Co.*, Illinois Commerce Commission, Docket Nos. 5-0681, et al. 2006. Concerning utility billing, metering, meter reading, and customer service practices, on behalf of the Illinois Office of Attorney General and the Village of Homer Glen, Illinois.
70. *Commonwealth Edison Company Petition for Approval of Tariffs Implementing ComEd's Proposed Residential Rate Stabilization Program*, Illinois Commerce Commission, Docket No. 06-0411. 2006. Concerning a utility's proposed purchased power phase-in proposal, in behalf of the Illinois Office of Attorney General.
71. *Illinois-American Water Company, Application for Approval of its Annual Reconciliation of Purchased Water and Purchased Sewage Treatment Surcharges Pursuant to 83 Ill. Adm. Code 655*, Illinois Commerce Commission, Docket No. 06-0196. 2006. Concerning the reconciliation of purchased water and sewer charges, on behalf of the Illinois Office of Attorney General and the Village of Homer Glen, Illinois.
72. *Illinois-American Water Company, et al.*, Illinois Commerce Commission, Docket No. 06-0336. 2006. Concerning the risks and benefits associated with the proposed divestiture of a water utility, on behalf of the Illinois Office of Attorney General.
73. *Joint Petition of Kentucky-American Water Company, et al.*, Kentucky Public Service Commission, Docket No. 2006-00197. 2006. Concerning the risks and benefits associated with the proposed divestiture of a water utility, on behalf of the Kentucky Office of Attorney General.
74. *Aqua Illinois, Inc. Proposed Increase in Water Rates for the Kankakee Division*, Illinois Commerce Commission, Docket No. 06-0285. 2006. Concerning various revenue requirement, rate design, and tariff issues, on behalf of the County of Kankakee.
75. *Housing Authority for the City of Pottsville v. Schuylkill County Municipal Authority*, Court of Common Pleas of Schuylkill County, Pennsylvania, No. S-789-2000. 2006. Concerning the reasonableness and uniformity of rates charged by a municipal water authority, on behalf of the Pottsville Housing Authority.
76. *Application of Pennsylvania-American Water Company for Approval of a Change in Control*, Pennsylvania Public Utility Commission, Docket No. A-212285F0136. 2006. Concerning the risks and benefits associated with the proposed divestiture of a water utility, on behalf of the Pennsylvania Office of Consumer Advocate.
77. *Application of Artesian Water Company, Inc., for an Increase in Water Rates*, Delaware Public Service Commission, Docket No. 06-158. 2006. Concerning rate design and cost of service, on behalf of the Staff of the Delaware Public Service Commission.
78. *Central Illinois Light Company, Central Illinois Public Service Company, and Illinois Power Company: Petition Requesting Approval of Deferral and Securitization of Power Costs*, Illinois Commerce Commission, Docket No. 06-0448. 2006. Concerning a utility's proposed purchased power phase-in proposal, in behalf of the Illinois Office of Attorney General.
79. *Petition of Pennsylvania-American Water Company for Approval to Implement a Tariff Supplement Revising the Distribution System Improvement Charge*, Pennsylvania Public Utility Commission, Docket No. P-00062241. 2007. Concerning the reasonableness of a water utility's proposal to increase the cap on a statutorily authorized distribution system surcharge, on behalf of the Pennsylvania Office of Consumer Advocate.

80. *Adjustment of the Rates of Kentucky-American Water Company*, Kentucky Public Service Commission, Case No. 2007-00143. 2007. Concerning rate design and cost of service, on behalf of the Kentucky Office of Attorney General.
81. *Application of Kentucky-American Water Company for a Certificate of Convenience and Necessity Authorizing the Construction of Kentucky River Station II, Associated Facilities and Transmission Main*, Kentucky Public Service Commission, Case No. 2007-00134. 2007. Concerning the life-cycle costs of a planned water supply source and the imposition of conditions on the construction of that project, on behalf of the Kentucky Office of Attorney General.
82. *Pa. Public Utility Commission v. Pennsylvania-American Water Company*, Pennsylvania Public Utility Commission, Docket No. R-00072229. 2007. Concerning rate design and cost of service, on behalf of the Pennsylvania Office of Consumer Advocate.
83. *Illinois-American Water Company Application for Approval of its Annual Reconciliation of Purchased Water and Purchased Sewage Treatment Surcharges*, Illinois Commerce Commission, Docket No. 07-0195. 2007. Concerning the reconciliation of purchased water and sewer charges, on behalf of the Illinois Office of Attorney General.
84. *In the Matter of the Application of Aqua Ohio, Inc. to Increase Its Rates for Water Service Provided In the Lake Erie Division*, Public Utilities Commission of Ohio, Case No. 07-0564-WW-AIR. 2007. Concerning rate design and cost of service, on behalf of the Office of the Ohio Consumers' Counsel.
85. *Pa. Public Utility Commission v. Aqua Pennsylvania Inc.*, Pennsylvania Public Utility Commission, Docket No. R-00072711. 2008. Concerning rate design, on behalf of the Masthope Property Owners Council.
86. *Illinois-American Water Company Proposed increase in water and sewer rates*, Illinois Commerce Commission, Docket No. 07-0507. 2008. Concerning rate design and demand studies, on behalf of the Illinois Office of Attorney General.
87. *Central Illinois Light Company, d/b/a AmerenCILCO; Central Illinois Public Service Company, d/b/a AmerenCIPS; Illinois Power Company, d/b/a AmerenIP: Proposed general increase in rates for electric delivery service*, Illinois Commerce Commission Docket Nos. 07-0585, 07-0586, 07-0587. 2008. Concerning rate design and cost of service studies, on behalf of the Illinois Office of Attorney General.
88. *Commonwealth Edison Company: Proposed general increase in electric rates*, Illinois Commerce Commission Docket No. 07-0566. 2008. Concerning rate design and cost of service studies, on behalf of the Illinois Office of Attorney General.
89. *In the Matter of Application of Ohio American Water Co. to Increase Its Rates*, Public Utilities Commission of Ohio, Case No. 07-1112-WS-AIR. 2008. Concerning rate design and cost of service, on behalf of the Office of the Ohio Consumers' Counsel.
90. *In the Matter of the Application of The East Ohio Gas Company d/b/a Dominion East Ohio for Authority to Increase Rates for its Gas Service*, Public Utilities Commission of Ohio, Case Nos. 07-829-GA-AIR, et al. 2008. Concerning the need for, and structure of, an accelerated infrastructure replacement program and rate surcharge, on behalf of the Office of the Ohio Consumers' Counsel.

91. *Pa. Public Utility Commission v. Pennsylvania American Water Company*, Pennsylvania Public Utility Commission, Docket No. R-2008-2032689. 2008. Concerning rate design, cost of service study, and other tariff issues, on behalf of the Pennsylvania Office of Consumer Advocate.
92. *Pa. Public Utility Commission v. York Water Company*, Pennsylvania Public Utility Commission, Docket No. R-2008-2023067. 2008. Concerning rate design, cost of service study, and other tariff issues, on behalf of the Pennsylvania Office of Consumer Advocate.
93. *Northern Illinois Gas Company d/b/a Nicor Gas Company*, Illinois Commerce Commission, Docket No. 08-0363. 2008. Concerning rate design, cost of service, and automatic rate adjustments, on behalf of the Illinois Office of Attorney General.
94. *West Virginia American Water Company*, West Virginia Public Service Commission, Case No. 08-0900-W-42T. 2008. Concerning affiliated interest charges and relationships, on behalf of the Consumer Advocate Division of the Public Service Commission of West Virginia.
95. *Illinois-American Water Company Application for Approval of its Annual Reconciliation of Purchased Water and Purchased Sewage Treatment Surcharges*, Illinois Commerce Commission, Docket No. 08-0218. 2008. Concerning the reconciliation of purchased water and sewer charges, on behalf of the Illinois Office of Attorney General.
96. *In the Matter of Application of Duke Energy Ohio, Inc. for an Increase in Electric Rates*, Public Utilities Commission of Ohio, Case No. 08-0709-EL-AIR. 2009. Concerning rate design and cost of service, on behalf of the Office of the Ohio Consumers' Counsel.
97. *The Peoples Gas Light and Coke Company and North Shore Gas Company Proposed General Increase in Rates for Gas Service*, Illinois Commerce Commission, Docket Nos. 09-0166 and 09-0167. 2009. Concerning rate design and automatic rate adjustments on behalf of the Illinois Office of Attorney General, Citizens Utility Board, and City of Chicago.
98. *Illinois-American Water Company Proposed Increase in Water and Sewer Rates*, Illinois Commerce Commission, Docket No. 09-0319. 2009. Concerning rate design and cost of service on behalf of the Illinois Office of Attorney General and Citizens Utility Board.
99. *Pa. Public Utility Commission v. Aqua Pennsylvania Inc.*, Pennsylvania Public Utility Commission, Docket No. R-2009-2132019. 2010. Concerning rate design, cost of service, and automatic adjustment tariffs, on behalf of the Pennsylvania Office of Consumer Advocate.
100. *Apple Canyon Utility Company and Lake Wildwood Utilities Corporation Proposed General Increases in Water Rates*, Illinois Commerce Commission, Docket Nos. 09-0548 and 09-0549. 2010. Concerning parent-company charges, quality of service, and other matters, on behalf of Apple Canyon Lake Property Owners' Association and Lake Wildwood Association, Inc.
101. *Application of Aquarion Water Company of Connecticut to Amend its Rate Schedules*, Connecticut Department of Public Utility Control, Docket No. 10-02-13. 2010. Concerning rate design, proof of revenues, and other tariff issues, on behalf of the Connecticut Office of Consumer Counsel.
102. *Illinois-American Water Company Annual Reconciliation Of Purchased Water and Sewage Treatment Surcharges*, Illinois Commerce Commission, Docket No. 09-0151. 2010. Concerning the reconciliation

of purchased water and sewer charges, on behalf of the Illinois Office of Attorney General.

103. *Pa. Public Utility Commission v. Pennsylvania-American Water Co.*, Pennsylvania Public Utility Commission, Docket Nos. R-2010-2166212, et al. 2010. Concerning rate design and cost of service study for four wastewater utility districts, on behalf of the Pennsylvania Office of Consumer Advocate.
104. *Central Illinois Light Company d/b/a AmerenCILCO, Central Illinois Public Service Company d/b/a AmerenCIPS, Illinois Power Company d/b/a AmerenIP* Petition for accounting order, Illinois Commerce Commission, Docket No. 10-0517. 2010. Concerning ratemaking procedures for a multi-district electric and natural gas utility, on behalf of the Illinois Office of Attorney General.
105. *Commonwealth Edison Company* Petition for General Increase in Delivery Service Rates, Illinois Commerce Commission Docket No. 10-0467. 2010. Concerning rate design and cost of service study, on behalf of the Illinois Office of Attorney General.
106. *Pa. Public Utility Commission v. City of Lancaster Bureau of Water*, Pennsylvania Public Utility Commission, Docket No. R-2010-2179103. 2010. Concerning rate design, cost of service, and cost allocation, on behalf of the Pennsylvania Office of Consumer Advocate.
107. *Application of Yankee Gas Services Company for Amended Rate Schedules*, Connecticut Department of Public Utility Control, Docket No. 10-12-02. 2011. Concerning rate design and cost of service for a natural gas utility, on behalf of the Connecticut Office of Consumers' Counsel.
108. *California-American Water Company*, California Public Utilities Commission, Application 10-07-007. 2011. Concerning rate design and cost of service for multiple water-utility service areas, on behalf of The Utility Reform Network.
109. *Little Washington Wastewater Company, Inc., Masthope Wastewater Division*, Pennsylvania Public Utility Commission Docket No. R-2010-2207833. 2011. Concerning rate design and various revenue requirements issues, on behalf of the Masthope Property Owners Council.
110. *In the matter of Pittsfield Aqueduct Company, Inc.*, New Hampshire Public Utilities Commission Case No. DW 10-090. 2011. Concerning rate design and cost of service on behalf of the New Hampshire Office of the Consumer Advocate.
111. *In the matters of Pennichuck Water Works, Inc. Permanent Rate Case and Petition for Approval of Special Contract with Anheuser-Busch, Inc.*, New Hampshire Public Utilities Commission Case Nos. DW 10-091 and DW 11-014. 2011. Concerning rate design, cost of service, and contract interpretation on behalf of the New Hampshire Office of the Consumer Advocate.
112. *Artesian Water Co., Inc. v. Chester Water Authority*, U.S. District Court for the Eastern District of Pennsylvania Case No. 10-CV-07453-JP. 2011. Concerning cost of service, ratemaking methods, and contract interpretation on behalf of Chester Water Authority.
113. *North Shore Gas Company and The Peoples Gas Light and Coke Company Proposed General Increases in Rates for Gas Service*, Illinois Commerce Commission, Docket Nos. 11-0280 and 11-0281. 2011. Concerning rate design and cost of service on behalf of the Illinois Office of Attorney General, the Citizens Utility Board, and the City of Chicago.

114. *Ameren Illinois Company: Proposed general increase in electric delivery service rates and gas delivery service rates*, Illinois Commerce Commission, Docket Nos. 11-0279 and 11-0282. 2011. Concerning rate design and cost of service for natural gas and electric distribution service, on behalf of the Illinois Office of Attorney General and the Citizens Utility Board.
115. *Pa. Public Utility Commission v. Pennsylvania-American Water Co.*, Pennsylvania Public Utility Commission, Docket No. R-2011-2232243. 2011. Concerning rate design, cost of service, sales forecast, and automatic rate adjustments on behalf of the Pennsylvania Office of Consumer Advocate.
116. *Aqua Illinois, Inc. Proposed General Increase in Water and Sewer Rates*, Illinois Commerce Commission, Docket No. 11-0436. 2011. Concerning rate design and cost of service on behalf of the Illinois Office of Attorney General.
117. *City of Nashua Acquisition of Pennichuck Corporation*, New Hampshire Public Utilities Commission, Docket No. DW 11-026. 2011. Concerning the proposed acquisition of an investor-owned utility holding company by a municipality, including appropriate ratemaking methodologies, on behalf of the New Hampshire Office of Consumer Advocate.
118. *An Application by Heritage Gas Limited for the Approval of a Schedule of Rates, Tolls and Charges*, Nova Scotia Utility and Review Board, Case NSUARB-NG-HG-R-11. 2011. Concerning rate design and cost of service, on behalf of the Nova Scotia Consumer Advocate.
119. *An Application of Halifax Regional Water Commission for Approval of a Cost of Service and Rate Design Methodology*, Nova Scotia Utility and Review Board, Case NSUARB-W-HRWC-R-11. 2011. Concerning rate design and cost of service, on behalf of the Nova Scotia Consumer Advocate.
120. *National Grid USA and Liberty Energy Utilities Corp.*, New Hampshire Public Utilities Commission, Docket No. DG 11-040. 2011. Concerning the costs and benefits of a proposed merger and related conditions, on behalf of the New Hampshire Office of Consumer Advocate.
121. *Great Northern Utilities, Inc., et al.*, Illinois Commerce Commission, Docket Nos. 11-0059, et al. 2012. Concerning options for mitigating rate impacts and consolidating small water and wastewater utilities for ratemaking purposes, on behalf of the Illinois Office of Attorney General.
122. *Aqua Pennsylvania, Inc.*, Pennsylvania Public Utility Commission, Docket No. R-2011-2267958. 2012. Concerning rate design, cost of service, and automatic rate adjustment mechanisms, on behalf of the Pennsylvania Office of Consumer Advocate.
123. *Golden State Water Company*, California Public Utilities Commission, Application 11-07-017. 2012. Concerning rate design and quality of service, on behalf of The Utility Reform Network.
124. *Golden Heart Utilities, Inc. and College Utilities Corporation*, Regulatory Commission of Alaska, Case Nos. U-11-77 and U-11-78. 2012. Concerning rate design and cost of service, on behalf of the Alaska Office of the Attorney General.
125. *Illinois-American Water Company*, Illinois Commerce Commission, Docket No. 11-0767. 2012. Concerning rate design, cost of service, and automatic rate adjustment mechanisms, on behalf of the Illinois Office of Attorney General.

126. *Application of Tidewater Utilities, Inc., for a General Rate Increase in Water Base Rates and Tariff Revisions*, Delaware Public Service Commission, Docket No. 11-397. 2012. Concerning rate design and cost of service study, on behalf of the Staff of the Delaware Public Service Commission.
127. *In the Matter of the Philadelphia Water Department's Proposed Increase in Rates for Water and Wastewater Utility Services*, Philadelphia Water Commissioner, FY 2013-2016. 2012. Concerning rate design and related issues for storm water service, on behalf of Citizens for Pennsylvania's Future.
128. *Corix Utilities (Illinois) LLC, Hydro Star LLC, and Utilities Inc. Joint Application for Approval of a Proposed Reorganization*, Illinois Commerce Commission, Docket No. 12-0279. 2012. Concerning merger-related synergy savings and appropriate ratemaking treatment of the same, on behalf of the Illinois Office of Attorney General.
129. *North Shore Gas Company and The Peoples Gas Light and Code Company*, Illinois Commerce Commission, Docket Nos. 12-0511 and 12-0512. 2012. Concerning rate design, cost of service study, and automatic rate adjustment tariff on behalf of the Illinois Office of Attorney General.
130. *Pa. Public Utility Commission v. City of Lancaster Sewer Fund*, Pennsylvania Public Utility Commission, Docket No. R-2012-2310366. 2012. Concerning rate design, cost of service, and cost allocation, on behalf of the Pennsylvania Office of Consumer Advocate.
131. *Aquarion Water Company of New Hampshire*, New Hampshire Public Utilities Commission, Docket No. DW 12-085. 2013. Concerning tariff issues, including an automatic adjustment clause for infrastructure improvement, on behalf of the New Hampshire Office of Consumer Advocate.

REQUEST:

Concerning the tariff provision relating to Right-of-Way (Schedule E-2.1, pages 11-12):

- A. Why has the Company proposed to replace the phrase “or customers beyond the customer’s property when such rights are limited to installations along dedicated streets and roads” with the phrase “or across customer’s property necessary or incidental to the supplying of service to other customers who are adjacent to or extend beyond the customer’s property”?
- B. Is it the intent of the Company, by the above-quoted language, to require a customer to give the Company an easement or right-of-way across property that is not “limited to installations along dedicated streets and road” in order to serve another customer? If so, why does the Company believe this change is required for the Company to serve the public?
- C. Is it the intent of the Company, by the above-quoted language, to require a customer to give the Company an easement or right-of-way at no cost to the Company and without compensation to the customer whose land is being crossed, even if the easement or right-of-way is being used to serve another customer who is not “along dedicated streets and road”? If so, why does the Company believe this change is required for the Company to serve the public?

RESPONSE:

- A. The purpose of the change is to afford the Company the opportunity to access right-of-way across a customer’s property where it is expedient to do so as opposed to along dedicated streets and roads. The best route may be across a side yard or through the back of the customer’s property.
- B. Yes. The best route may be across a side yard or through the back of the customer’s property.

- C. Yes. Such access may be necessary in situations such as rear lot situations or a neighboring property where the best way to serve the customer is not by going back out to the road. It is to go across the lot or off the rear of the property.

PERSON RESPONSIBLE: Rich Harrell

Duke Energy Ohio, Inc.
 Electric Rate Case
 Case No. 12-1682-EL-AIR, et al.

**Calculation of Rate RS Customer Charge: Staff and OCC
 Using Duke's Proposed Revenue Requirement**

Acct. No.	Account Title	Staff	OCC
Plant Accounts			
368	Transformers	\$ 43,320,426	\$ -
369	Services	25,385,314	25,385,314
370	Meters	23,260,212	23,260,212
	Total Eligible Plant	\$ 91,965,952	\$ 48,645,526
Expense Accounts			
586/597	Meter expense / maintenance	\$ 1,255,888	\$ 1,255,888
587	Customer installation	2,579,323	2,579,323
901-903	Cust. Accts. Superv., meter reads, records	30,551,388	30,551,388
908	Customer assistance	31,376	31,376
909	Customer information	75,628	75,628
	Total Eligible Expense	\$ 34,493,603	\$ 34,493,603
	Carrying Cost Rate on Plant	17.274%	17.274%
	Carrying Cost on Plant	\$ 15,886,199	\$ 8,403,028
	Total Carrying Cost and Expense	\$ 50,379,802	\$ 42,896,631
	Number of Residential Bills per Year	7,535,400	7,535,400
	Customer Cost per Bill	\$ 6.69	\$ 5.69
	Recommended Customer Charge	\$ 6.70	\$ 5.70

Source: Staff Report, p. 36 (Table 8)

Duke Energy Ohio, Inc.
 Electric Rate Case
 Case No. 12-1682-EL-AIR, et al.

Average Consumption for Residential Heating and Non-Heating Customers

	Rate RS (Non-Heating)		Rate ORH (Heating)	
Summer				
Consumption (KWH)				
First 1000 KWH	1,772,022,996		704,644	
Over 1000 KWH	840,881,093		623,198	
> 150 times demand	-		448,301	
Total Summer Consumption	2,612,904,089	KWH	1,776,143	KWH
Bills	2,416,315		803	
Summer Consumption per Bill	1,081	KWH	2,212	KWH
Winter				
Consumption (KWH)				
First 1000 KWH	3,391,964,505		1,715,309	
Over 1000 KWH	938,343,025		1,823,493	
> 150 times demand	-		1,058,948	
Total Winter Consumption	4,330,307,530	KWH	4,597,750	KWH
Bills	4,846,568		1,593	
Winter Consumption per Bill	893	KWH	2,886	KWH
Average Annual Consumption (4 x Summer + 8 x Winter)	11,473	KWH	31,937	KWH

Sources:

Rate RS: Duke Sch. E-4.1, p. 1, lines 5, 7-8, 27, 29-30

Rate ORH: Duke Sch. E-4.1, p. 3, lines 6, 8-10, 29, 31-33

REQUEST:

Has the Company performed (or had performed for it) a cost-of-service study that separately evaluates the cost of serving each residential class (Rates RS, ORH, TD, TD-2012, CUR, RS3P, and RSLI)? If not:

- A. How did the Company determine for Rate RS (i) “the revenue requirement established by the cost of service study”; (ii) the customer charge “is below the cost to serve”; and (iii) “the energy charge was increased to recover the remaining cost of service revenue requirement”, as stated on Schedule E-3, page 1?
- B. How did the Company determine for Rate ORH (i) “the revenue requirement established by the cost of service study”; (ii) the customer charge “is below the cost to serve”; and (iii) “the energy charge was increase [sic] to recover the remaining cost of service revenue requirement”, as stated on Schedule E-3, page 2?
- C. How did the Company determine for Rate TD (i) the customer charge increase is needed “to better reflect the cost of serving residential customers”; and (ii) “the energy charge was increase [sic] to recover the remaining cost of service revenue requirement”, as stated on Schedule E-3, page 2?
- D. How did the Company determine for Rate TD-2012 (i) the customer charge increase is needed “to better reflect the cost of serving residential customers”; and (ii) “the energy charge was increased to recover the remaining cost of service revenue requirement”, as stated on Schedule E-3, page 3?
- E. How did the Company determine for Rate CUR (i) “the revenue requirement established by the cost of service study”; (ii) the customer charge “is below the cost to serve”; and (iii) “the energy charge was increased to recover the remaining cost of service revenue requirement”, as stated on Schedule E-3, page 3?
- F. How did the Company determine for Rate RS3P (i) “the revenue requirement established by the cost of service study”; (ii) an increase in the customer charge is needed “to more closely align the charge with the costs associated with serving residential customers”; and (iii) “the energy charge was increased to recover the remaining cost of service revenue requirement”, as stated on Schedule E-3, page 4?

- G. How did the Company determine for Rate RSLI (i) “the revenue requirement established by the cost of service study”; (ii) an increase in the customer charge is needed “to more closely align the charge with the costs associated with serving residential customers”; and (iii) “the energy charge was increased to recover the remaining cost of service revenue requirement”, as stated on Schedule E-3, page 4?

RESPONSE:

The Company did not prepare a cost-of-service study that separately evaluates the cost of serving each residential class (Rates RS, ORH, TD, TD-2012, CUR, RS3P, and RSLI). In the cost-of-service study filed in this case, all residential rates are combined into the Residential rate class.

- A. (i) The cost-of-service study calculated the cost to serve the combined residential rates (Rates RS, ORH, TD, TD-2012, CUR, RS3P, and RSLI). The residential revenue requirement from the cost-of-service study was then allocated to each of the individual residential rates based on the ratio of current residential revenue from Schedule E-4 from that rate to the overall current residential revenue in Schedule E-4.
- (ii) The proposed customer charge for this rate is lower than the residential customer charge calculated on Schedule E-3.1 (Customer Charge Analysis / Minimum Bill Rationale).
- (iii) In the rate design process, the energy charges were established at levels necessary to achieve the allocated target revenue for the rate (discussed in (i) above) taking into account the proposed customer charge for the rate.
- B. Please see the response to A.
- C. Please see the response to A. The current and proposed customer charge for Rate TD is higher than the calculated residential charge that appears in Schedule E-3.1. The Rate TD customer charge proposed in this case was set at a level that maintains the current difference between the Rate RS and Rate TD customer charges.
- D. Please see the response to A. The distribution charges for Rate TD-2012 are identical to those contained in Rate RS.
- E. Please see the response to A. Rate CUR is essentially identical to Rate RS, but it applies to customers assigned to a non-residential revenue class. This distinction was necessary during the Market Development Period after Customer Choice went into effect from 2001 through 2005.
- F. Please see the response to A. Rate RS3P is essentially identical to Rate RS, but it applies to three phase residential service. The customer charge for RS3P is higher than the RS customer charge.

- G. Please see the response to A. Rate RSLI is essentially identical to Rate RS, but it applies to qualifying low income customers. Customers taking service under Rate RSLI receive a \$4 per month reduction in the customer charge versus Rate RS.

PERSON RESPONSIBLE: James E. Ziolkowski

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Summary: Testimony Direct Testimony of Scott J. Rubin on Behalf of the Office of the Ohio Consumers' Counsel electronically filed by Patti Mallarnee on behalf of Etter, Terry L Mr.