AG Exhibit 2.0

BEFORE THE
ILLINOIS COMMERCE COMMISSION

Commonwealth Edison Company	:	
Proposed general revision of rates,	:	
restructuring and price unbundling of	:	Docket No. 05-0597
bundled service rates, and revision of other	:	
terms and conditions of service	:	

Direct Testimony of
Scott J. Rubin

on Behalf of
the People of the State of Illinois by
Office of Illinois Attorney General

December 23, 2005

Introduction

Q. Please state your name and business address.

A. My name is Scott J. Rubin. My business address is 3 Lost Creek Drive, Selinsgrove, PA.

Q. By whom are you employed and in what capacity?

A. I am an independent consultant and an attorney. My practice is limited to matters affecting the public utility industry.

Q. What is the purpose of your testimony in this case?

A. I have been asked by the Office of Attorney General (AG) to review the cost of service study and proposed residential rate design filed by Commonwealth Edison Company (ComEd or Company).

Q. What are your qualifications to provide this testimony in this case?

A. I have testified as an expert witness before utility commissions or courts in the District of Columbia and in the states of Arizona, Delaware, Kentucky, Illinois, Maine, Maryland, New Jersey, New York, Ohio, Pennsylvania, and West Virginia. I also have testified as an expert witness before two committees of the U.S. House of Representatives and one committee of the Pennsylvania House of Representatives. I also have served as a consultant to the Connecticut Department of Public Utility Control, several national utility trade associations, and state and local governments throughout the country. Prior to establishing my own consulting and law practice, I was employed by the Pennsylvania Office of Consumer Advocate (OCA) from 1983 through January 1994 in increasingly responsible positions. From 1990 until I left the OCA, I was one of two senior attorneys in that Office. Among my other responsibilities in that position, I had a major role in

setting the OCA's policy positions on water and electric matters. In addition, I was responsible for supervising the technical staff of that Office. I also testified as an expert witness for that Office on rate design and cost of service issues.

Throughout my career, I developed substantial expertise in matters relating to the economic regulation of public utilities. I have published articles, contributed to books, written speeches, and delivered numerous presentations, on both the national and state level, relating to regulatory issues. I have attended numerous continuing education courses involving the utility industry. I also periodically participate as a faculty member in utility-related educational programs for the Institute for Public Utilities at Michigan State University, the American Water Works Association, and the Pennsylvania Bar Institute. Appendix A to this testimony is my curriculum vitae.

Q. Do you have any experience that is particularly relevant to the issues in this case?

A. Yes, I do. I have testified on numerous occasions as a rate design and cost of service expert. I also have worked as a consultant to local government entities on rate design issues – both to assist government-owned utilities in designing rates and to help government agencies obtain reasonable rates from their utility. I also served on the editorial committee for the preparation of the major rate design manual for the water utility industry, the American Water Works Association's Manual M1: *Principles of Water Rates, Fees, and Charges*, published in 2000. In addition, during 2004 I provided technical assistance, training, and analysis for the staff of the Connecticut Department of Public Utility Control on rate design, cost allocation, and related issues.

My most recent rate design work involving energy utilities was for the Office of the Ohio Consumers' Counsel in a case involving a comprehensive review of the universal service charge rate design methodology for all electric utilities in Ohio. That case was settled prior to the filing of my testimony. In the water sector, I was recently retained by the Pennsylvania Office of Consumer Advocate to review the cost of service and rate design recommendations in a complex rate proceeding involving Aqua Pennsylvania and its more than 50 separate rate areas within Pennsylvania.

Summary

Q. What is the primary focus of your direct testimony?

A. My testimony focuses on ComEd's proposal to consolidate all residential customers into a single customer class. At the present time, there are two types of classifications that are made for residential customers, resulting in four customer groups. Residential customers are classified as to whether they are in single-family or multi-family buildings (single family is defined as a building having one or two residential units); and they are classified as to whether they use electricity for space heating.

My testimony will evaluate the impact on customers of the Company's proposal to eliminate both of these classifications, which would result in all residential customers paying the same customer charge and meter charge each month, and the same rate per kilowatt-hour (KWH) of electricity.

Q. As part of your work, did you review the testimony and exhibits of any ComEd witnesses?

A. Yes. I reviewed the testimony and accompanying exhibits of ComEd witnesses Landon (ComEd Ex. 2.0), Crumrine (ComEd Ex. 9.0), Alongi and McInerney (ComEd Ex. 10.0), and Heintz (ComEd Ex. 11.0). I will discuss portions of their testimonies and exhibits as they relate to the Company's proposals for setting rates for the residential class of customers. Of course, I also reviewed other exhibits that are part of the filing and numerous responses to discovery requests that were provided by these witnesses and others.

Q. Please summarize your conclusions.

A. Briefly, I conclude that the effect of ComEd's rate design proposal on residential customers would be very severe. Under the Company's proposal, and using the same range of estimated wholesale power costs that the Company used in its testimony, tens of thousands of customers who receive bundled service would see their bundled electric bills increase by more than 100%. Additional tens of thousands of customers would face increases of more than 50% in their electric bills. Increases of this magnitude are extraordinary and are not justified by the Company's cost of providing service.

I also conclude that the enormous rate increases for some residential customers are primarily the result of the Company's decision to eliminate the two methods of classifying residential customers. Upon further examination, I determined that the elimination of the classification between customers in single- and multi-family buildings not only has a serious impact on certain multi-family customers, but it also is not cost justified. That is, there is a strong cost basis for retaining separate rates for residential

customers in single- and multi-family buildings, and I strongly recommend that those separate rates be retained.

I also conclude that there is no cost justification for eliminating the separate distribution charges for space-heating and non-space-heating customers. The Company's own cost of service study shows that there is a meaningful difference in the cost of serving these two customer types. Further, separate rates for heating and non-heating customers would appropriately recognize some of the benefits that space-heating customers provide through their higher year-round load factors.

Q. What is your overall recommendation?

A. I recommend that ComEd's residential rates should retain the distinction between customers in single-family and multi-family buildings, for both the establishment of the customer charge and the meter charge. I also recommend that ComEd retain separate distribution rates for heating and non-heating customers. Later in my testimony, I develop the specific rates that should be charged to recover ComEd's revenue requirement, under both the Company's proposed revenue requirement and the lower revenue requirement recommended by AG witness Effron. I also recommend that Staff's mitigation proposal in ComEd's procurement rate case should be applied to recognize differences between residential customers in single-family and multi-family buildings.

Customer Impact Analysis

Q. What is a customer impact analysis?

A. A customer impact analysis uses a utility's actual billing information to evaluate the combined effect of a proposed rate increase and any rate design changes on the utility's

customers. Rather than looking at changes in rates (such as a customer charge increasing by 10%), a customer impact analysis looks at the actual effect on the bills that customers receive. This takes into account customers' consumption characteristics – a critically important piece of information that cannot be evaluated from looking at a rate schedule.

Q. Can you give us an example of how looking at a customer's consumption characteristics could give us a different picture of the effects of a rate change?

A. Yes, let's take a very simple example of a utility that has only three customers. The utility has a fixed charge of $10 per month and a consumption charge of $0.10 per unit of consumption. Customer A uses 100 units in a month, and pays $20 ($10 for the fixed charge and $10 for consumption). Customer B is representative of the "average" customer and uses 500 units per month and pays $60; and Customer C uses 900 units per month and pays $100. So the utility's total revenue is $180.

Let's assume that the utility wants to increases its revenues by $18, or 10%. In the simplest case, if the utility increases both the fixed charge and consumption charge by 10%, all customers would see a 10% increase in their bills. But if the utility has different increases in its various charges, the effects on customers can be dramatically different. For example, we can assume that the utility increases the fixed charge by 50% to $15 per month and the consumption charge by 2% to $0.102 per unit. Customer A would pay $25.20 (an increase of 26%), Customer B would pay $66 (a 10% increase), and Customer C would pay $106.80 (a 6.8% increase). Total revenue increases by 10% and, of course, the average customer's bill goes up by the same percentage. But the impact on customers whose characteristics differ from the average is dramatically different.

Obviously, we could spin out different examples that shift the rate increase between the customer charge and consumption charge and that each would have different effects on high- and low-use customers. The important point, though, is that you cannot assess the impact of rate changes on customers just by looking at a rate schedule. It is important to know the customers' usage characteristics so that the real impact of a rate change can be determined.

Q. Is that how ComEd witness Landon prepared his analysis that compares the bills of ComEd's customers (before and after the proposed rate increase) to those of other utilities?

A. No, it is not how Dr. Landon conducted his analysis. Dr. Landon only looked at the effect on ComEd customers in the middle of the consumption ranges – between 500 and 1,000 KWH per month. But ComEd has hundreds of thousands of customers that fall outside of that range, as can be seen from ComEd's bill frequency analysis (ComEd Sch. E-8(a)(1)(A)). For example, out of the 11,603,881 bills that ComEd issued to multi-family, non-heating customers in 2004, 9,503,068 (82%) had consumption less than 500 KWH per month. Similarly, among single-family heating customers, ComEd issued 445,963 bills, of which 290,224 (65%) had consumption of more than 1,000 KWH per month. Thus, Dr. Landon's comparisons provide no information about the effects of ComEd's proposed increase on most multi-family non-heating customers or single-family heating customers. Just from these two groups of customers, there are more than 800,000 customers who are ignored by Dr. Landon's comparisons.

Moreover, Dr. Landon also did not consider the different levels of change in ComEd's various charges, and how those changes might affect different types of

residential customers. He just used an overall, average 16% rate increase (response to AG 4.07). Similarly, he did not conduct any analysis to determine if residential consumption between 500 and 1,000 KWH would reasonably capture ComEd's customers. Thus, the response to AG 4.09 states: "Dr. Landon did not perform analyses to determine whether these consumption levels [500, 750, and 1,000 KWH] were representative of those of Commonwealth Edison's residential customers."

Q. In your opinion, what is the proper purpose of the type of analysis that Dr. Landon performed?

A. An analysis that compares rates among utilities in different service areas can be useful to get an overall sense of the burden that a utility's rates places on its customers. I have used such analyses myself, usually coupled with information on income levels, to determine the affordability of utility service. In presenting such an analysis, however, it must be recognized that the numbers simply represent an average or typical customer. In a case like this one, where the Company's rate design proposals have highly varied impacts on different groups of customers, a comparison that uses just an overall average increase can be very misleading. As I mentioned at the outset, and as I will explain in greater detail below, some groups of residential customers will see their bills increase by more than 100% under the Company's proposal. That is vastly different than the average 16% increase used by Dr. Landon in his analysis.

Q. Did you perform a customer impact analysis of the Company's proposed changes in residential rates?

A. Yes, I did. Because nearly all residential customers receive bundled service from ComEd, I evaluated the impact of ComEd's proposals on the charges for bundled service.

This represents a "real world" comparison of the bills that a ComEd customer would receive before and after the rates change.

Q. How did you determine the cost for energy that would be included in the bundled rate?

A. Dr. Landon also looked at rates for bundled service, using a hypothetical range of wholesale energy prices between $50 and $60 per megawatt-hour (MWH). ComEd provided the detail of its calculation of how such wholesale prices would be translated into retail rates, using the methodology the Company proposed in its procurement rate case (ICC Docket No. 05-0159) (AG 4.02, AG 4.06, and AG 4.24). I am not endorsing the range of $50 to $60 per MWH as being reasonable, and as I understand it ComEd is not projecting that this will be the likely price range either. But using these prices does provide a common basis for comparing various rate design proposals, and at least some indication of the impact that residential customers might see on their electric bills in January 2007.

Q. Before you go any further, are you familiar with the mitigation proposal in ComEd's procurement rate case?

A. Yes, I am. I have reviewed the Staff and Company testimony in that case that discusses the mitigation proposal, as well as the Company's testimony in this case. The AG also conducted some discovery in this case to understand the relationship between the mitigation proposal and the rates that would be set in this case.

Q. Does your customer impact analysis reflect the effects of the mitigation proposal in the supply case?

A. Yes, it does. The retail energy prices that I used in my analysis are the energy prices that ComEd provided in response to AG 4.24, which reflects the use of Staff's mitigation proposal from the supply case. The mitigation proposal would transition heating customers onto market-based prices over several years. But that proposal does not address the impact of eliminating the single- and multi-family classification. Thus, in response to AG 4.25, Mr. Crumrine states: "ComEd currently does not intend to apply Staff's rate mitigation proposal based on whether the residential customer resides in a single-family or multi-family dwelling." In other words, any impacts associated with the unbundling of customer and meter charges for single- and multi-family customers must be addressed in this case.

Q. How did you perform your customer impact analysis?

A. I started with an expanded version of ComEd's bill frequency analysis, that provides details about residential consumption of up to 7,500 KWH per month for each of the four groupings of residential customers (AG 4.01). For each consumption range (e.g., 0-50 KWH), I calculated the midpoint of the range. I then calculated the bundled bill at the midpoint of each range for each group of customers (single-family, non-heating; etc.) under present rates, ComEd's proposed distribution rates and assuming wholesale prices of $50/MWH and $60/MWH (both with mitigation). The detailed calculations are provided in my workpapers.

The next step is to determine the percentage increase in bills under the two wholesale price scenarios. I then summarized the percent increases by range (for

example, 0 to 5%, 5 to 10%, etc.) and totaled them for all residential customer groups. The results are shown as a table on AG Exhibit 2.1 and a graph on AG Exhibit 2.2.

Q. Please describe the results of your analysis.

A. At the outset, I must reiterate that these comparisons all assume the case as ComEd filed it – the Company's proposed revenue requirement and its proposed residential rate design. With that understanding, at a wholesale price of $50 per MWH, 32.6% of residential customers would have their bills increase by 5% or less. Since ComEd's proposed increases in the unbundled portion of rates would increase the total bill by more than 5% for most customers, this would imply a level of energy costs lower than those currently included in ComEd's bundled rates or the current level of energy prices in PJM. I do not consider such an assumption to be reasonable. Nevertheless, even with what appears to be a very low energy price, 14.6% of ComEd's residential bills would increase by more than 25%.

Q. Before you continue with your description, where can we find this 14.6% figure in your schedules?

A. On AG Exhibit 2.1, in the first set of columns (Wholesale Price of $50/MWH), we would look at the cumulative percent of bills column. On line 5 (bill increases of 20% to 25%), the cumulative percent of bills is 85.4%. This means that 85.4% of residential bills would increase by 25% or less. That also means, of course, that 14.6% of bills (100% - 85.4%) would increase by more than 25%.

You also can find an estimate of this figure from the graph in AG Exhibit 2.2. The bottom (X) axis of the graph is the percentage increase in bills. The side (Y) axis is

the cumulative percent of residential bills. If you find 25% on the X axis and follow up to the dashed (top) line ($50/MWH), you will hit the line at about 85% on the Y axis. As it did in the table on AG Exhibit 2.1, this is the cumulative percentage of bills that would increase by 25% or less. So, again, about 15% of residential bills would increase by more than 25%.

Q. Please continue with your description of the results.

A. Once someone becomes familiar with how to read the table and graph, the results are easy to understand. For example, even with wholesale prices at what appears to be an unrealistically low level of $50 per MWH, 3.9 million residential bills would increase by 30% or more. Many customers would see bill increases in the 65-70% range, while more than 560,000 bills would increase by more than 115%.

Q. AG Exhibit 2.1 shows 720,048 bills increasing between 55% and 70% and 565,575 bills increasing by 115% to 125% with $50/MWH energy prices. Have you determined the characteristics of these customers?

A. Yes. These customers, obviously, are those who would be most severely impacted by the Company's residential rate design proposal. The bills that would increase by 55% to 70% are customers in multi-family buildings who use between 51 and 100 KWH per month. The bills with 115% to 125% increases are customers in multi-family buildings using less than 50 KWH per month. As the question notes, there are more than 1.2 million bills, the equivalent of 100,000 customers or about 10% of all bills to multi-family customers, that fall into this category. The impacts on these low-use, predominantly non-heating customers in multi-family buildings is the result of the

Company's proposal to eliminate the multi-family classification and impose significantly higher customer and meter charges on multi-family customers.

Q. Can you also identify the customers who would face increases of 25% to 45% under the $50/MWH price scenario?

A. Yes, bills falling in this group also are relatively low-use customers. They include multi-family heating customers using between 101 and 150 KWH; multi-family non-heating customers using between 101 and 250 KWH; and single-family customers using less than 50 KWH.

Q. It seems that most of the severely impacted bills are relatively low-use multi-family customers. Is that accurate?

A. Yes, it is accurate. I calculate that 5,820,203 bills would increase by 25% or more. Out of those, 5,351,397 are multi-family bills with consumption of less than 250 KWH. This represents 40% of all bills issued to multi-family customers.

Q. What happens to customers' bills if the price of energy is $60 per MWH instead of $50 per MWH?

A. These results also appear in AG Exhibits 2.1 and 2.2. As you can see in the graph, the whole curve basically shifts to the right. This means that instead of 32% of bills having less than a 5% increase, now only 1.6% of bills have increases that low. Most of those bills that were in the 0% to 5% range are now seeing increases in the 15% to 20% range. Similarly, those customers who were seeing bills go up by 20% are now seeing them go up by 30% or more. There are some exceptions to that, of course. Higher-use customers will see more of an impact from higher energy prices than lower-use customers. But the

extremes are still the same – the lowest-use multi-family customers will see bills increase by 75% or more.

Overall, with a $60 per MWH wholesale energy price, one out of every three of ComEd's residential bills will increase by at least 25%, with millions of bills increasing by more than 50%. This is true even after applying the supply mitigation proposal.

Q. What do you conclude from your customer impact analysis of ComEd's proposed residential distribution rates?

A. I conclude that ComEd's proposal in this case results in extraordinarily high rate increases for hundreds of thousands of residential customers. Those increases are completely out of proportion to the increase in overall revenue requirement that ComEd has proposed. Such increases are blatantly inconsistent with long-standing regulatory principles, such as the principles of gradualism and rate continuity. Moreover, as I will explain in the following section, the underlying rate changes are not based on the cost of providing service to customers.

Cost of Serving Residential Customer Groups

Q. Does the Company claim that there is no cost justification for having different rates for single-family and multi-family customers?

A. No, it does not. Mr. Crumrine acknowledges that there is a difference in the cost of serving single-family and multi-family customers, but he calls the cost difference "not significant." ComEd Ex. 9.0, lines 763-773; responses to AG 4.18 and 4.23.

Q. Does Mr. Crumrine define what he means by "significant"?

A. No, he does not. But in response to AG 4.23, the Company does give an example, stating: "While ComEd witness Mr. Crumrine cannot identify with precision the point at which a difference becomes 'significant,' he is of the opinion that the differences between the proposed Small Load Delivery Class and the Medium Load Delivery Class would be an example of a difference large enough to warrant separate classes."

Q. How large is the difference in customer-related costs, excluding metering, between multi-family and single-family residential customers?

A. According to the Company's cost of service study, multi-family space heating customers have a cost of $5.86 per month, while single-family space heating customers have a cost of $8.02 per month, a difference of 36%. ComEd Ex. 9.0, Table 5; ComEd Four Residential Classes Allocation, Workpapers to Ex. 11.1, Sch. 2a, p. 13, line 262.

Q. How large is the difference in customer-related costs, excluding metering, between the Small Load and Medium Load classes?

A. According to the Company's cost of service study, the customer-related costs, excluding metering, are $7.68 per month for the Small Load class and $12.63 per month for the Large Load class, a difference of 64%. ComEd Ex. 11.1, Sch. 2a, p. 13, line 262.

Q. In your opinion, is it reasonable to conclude that a difference in cost of 36% does not justify retaining an existing difference in rates, while a difference of 64% does justify separate rate classes?

A. No, I do not consider that to be a reasonable distinction. In my opinion, there is a sufficiently large difference in cost between single-family and multi-family residential

customers that the Company should retain different rates. This is especially true when the customer impact of moving customers to a consolidated rate is considered. As I explained earlier, there is an enormous impact on low-use, multi-family customers that is associated with the consolidation of single- and multi-family customers onto a single rate.

Q. Are you suggesting that there should not be any consolidation of the residential classes?

A. No, I am not. The results of the Company's cost of service study show that there is very little difference in customer-related costs between heating and non-heating customers. For multi-family customers, the difference is only 5 cents (less than 1%), while for single-family customers, the difference is 28 cents (less than 4%). I consider differences of that magnitude to be small enough that they warrant combining customer classes. I would recommend, therefore, that the Company establish separate customer charges for single-family and multi-family residential customers, without regard to their heating characteristics. Using the results of the Company's cost of service study, the resulting rates would be $7.75 for single-family customers and $5.91 for multi-family customers, as I show on AG Exhibit 2.3.

Q. According to Mr. Crumrine's Table 5 and the Company's cost of service study, there is no difference in metering costs for single-family and multi-family customers. Do you agree?

A. No, I do not agree. During discovery, the Company was questioned about this finding and it was asked to provide data that would enable the difference in cost to be determined. Specifically, the Company was asked to provide all documents "that concern the average cost to read a meter for a residential customer on a shared vs.

unshared service line." The Company responded: "ComEd has not calculated the average cost to read meters for residential customers on a shared and unshared line basis." AG 4.18. In addition, ComEd was asked to provide data on meter routes that contained only single- or multi-family customers, so that the cost of meter reading could be evaluated. ComEd did not provide any data or analysis, stating: "ComEd does not separately track the types of customers on its meter reading routes by tariff rate class." AG 4.19 and AG 4.20.

Q. Is there reason to believe that there is a difference in the cost of meter reading between single-family and multi-family customers?

A. Yes, there is. One of the biggest factors in the cost of reading meters is customer density; that is, how long the meter reader has to travel between customers. In a multi-family building, the travel time between customers is essentially zero – all meters are in the same location. The simplest way to think about this difference is to imagine the amount of time it would take to read 100 meters in a suburban subdivision with houses on half-acre lots, compared to the time it would take to read 100 meters in an apartment building with 100 units and all the meters in a common utility room.

There are few publicly available studies on meter reading efficiency, and even fewer that are not sponsored by automated metering companies. There is little doubt, however, that meter reading efficiency (meters read per person-day) improves greatly in densely populated areas. The most recent, and apparently most comprehensive study, was conducted by the Ascent Group.[1] The study shows that, in urban areas, utilities read

[1] *Meter Reading Profiles and Best Practices 2005* (The Ascent Group, Inc.), June 2005.

at least 450 meters per person-day. In contrast, in suburban areas, they read between 250 and 450 meters per person-day, while in rural areas the rate is less than 250 meters per person-day. Importantly, the average time to read a meter route is about the same (5.5 to 6.0 hours) in each of these areas. In other words, reading meters in densely populated areas is far more efficient than reading them in less densely populated areas.

Q. How do you recommend reflecting this difference in ComEd's rates?

A. In the absence of data from the Company, it is reasonable to assume that ComEd can read meters twice as efficiently in multi-family buildings as it does in single-family buildings. This assumption reflects the fact that most of ComEd's multi-family customers are in densely populated urban areas, while many of its single-family residential customers are in suburban or rural areas. It also reflects the added efficiency associated with reading meters in a multi-family building.

Q. How do you know that most of ComEd's multi-family residential customers are in densely populated urban areas?

A. According to the U.S. Census Bureau, in 2002 there were 1,158,142 residential housing units in the City of Chicago.[2] Of those, 618,201 were in buildings with 3 or more housing units. This represents 55% of ComEd's 1,120,064 multi-family residential customers. In contrast, there were 539,941 single- or two-family housing units in Chicago in 2002. This represents only 24% of ComEd's 2,210,530 single-family residential customers.

[2] U.S Census Bureau, American Community Survey Profile 2002 for Chicago, Illinois, Table 4: Selected Housing Characteristics. < http://www.census.gov/acs/www/Products/Profiles/Single/2002/ACS/Tabular/160/16000US17140004.htm >.

Q. How did you determine the meter reading cost difference between single-family and multi-family customers?

A. First, on AG Exhibit 2.4, I reproduce residential metering cost data from ComEd's cost of service study. The important point here, other than understanding the methodology, is that residential meter reading costs total $23,114,198, or approximately 23% of all residential meter-related costs. This is a significant portion of meter-related costs, so it is important to allocate them properly.

On AG Exhibit 2.5, I develop the specific meter reading cost allocation for single-family and multi-family customers, based on multi-family reading being twice as efficient at single-family reading. I then carry the results (from lines 18 and 19) forward to AG Exhibit 2.6, line 3. The remainder of AG Exhibit 2.6 follows the Company's methodology and develops a multi-family metering cost of $2.07 per customer per month, and a single-family metering cost of $2.75 per customer per month.

Q. What do you conclude about differences in the cost of metering single-family and multi-family residential customers?

A. I conclude that there are real differences in meter reading costs between single-family and multi-family customers. Under the Company's cost of service study, meter reading costs account for 23% of the total metering cost for the residential class.

In addition, I would expect there to be other meter-related efficiencies in serving multi-family buildings, such as lower installation costs per unit. For example, according to the Company's workpapers, approximately 29% of the investment in a typical

residential meter is the estimated travel time to the installation site.[3] Certainly, when 50 or 100 meters are being installed in the same location, there is not 50 or 100 times the amount of travel time. Thus, it would be reasonable to assume that the installation cost per meter in a multi-family building is significantly less than it is in a single-family building. To be conservative, however, I have not made a further adjustment to the metering cost to reflect such a difference.

Thus, I have only adjusted the meter reading cost, based on differences in meter reading efficiency. The result of that calculation is a metering cost of $2.07 per month for multi-family customers and $2.75 per month for single-family customers. In my opinion, this reasonably reflects the lower cost to provide metering services to multi-family customers.

Q. The third component of the Company's rates is the distribution charge. Do you agree with the Company's proposal to have the same distribution charge for all residential kilowatt-hours?

A. No, I do not. The Company's cost of service study shows that the distribution charge should be lower for residential heating customers. Specifically, the Company's study shows distribution costs ranging from 1.99 and 2.00 cents per KWH for the space-heating classes, to 2.20 and 2.29 cents per KWH for the non-heating classes, a difference of 10% to 15% between heating and non-heating customers. ComEd Four Residential Classes Allocation, Workpapers to Ex. 11.1, Sch. 2a, p. 13, line 249. This type of relationship is not particularly surprising, since it would be expected that customers who have relatively

[3] I calculated this figure from confidential Company data on the "Inputs and Monthly Lease" and "Initial Labor" worksheets of the spreadsheet file: AG 4.03(f) Attachment 3 of 3 (Confidential).xls.

high annual load factors would be able to spread the recovery of fixed costs over more KWH. That is precisely what space-heating customers do by using more electricity during the winter months.

Q. Before you discuss the residential distribution charge further, can you put that 10% to 15% difference in perspective?

A. Yes. Earlier I discussed Mr. Crumrine's response to AG 4.23 where he said that he considered the difference between the Small Load and Medium Load classes to be significant enough to justify different rates. According to the Company's cost of service study, the distribution cost for the Small Load class is 1.61 cents per KWH, and the cost for the Medium Load class is 1.54 cents per KWH. ComEd Ex. 11.1, Sch. 2a, p. 13, line 249. This is a difference of only 4.5% – far smaller than the difference between residential heating and non-heating customers.

Q. Do you recommend keeping different distribution rates for residential heating and non-heating customers?

A. Yes. The Company already will be retaining the heating classification in order to administer the supply mitigation proposal, so it will not further complicate tariff administration to have different distribution charges for heating and non-heating customers. The distribution rates, based on the Company's cost of service study, should be 1.935 cents per KWH for heating customers and 2.214 cents per KWH for non-heating customers. I show the development of these figures on AG Exhibit 2.7.

Summary of Recommended Residential Rates

Q. You have recommended that the Company retain different rates for multi-family and single-family customers and that it retain different distribution charges for heating and non-heating customers. Do your proposed rates recover the Company's cost of service?

A. Yes, they do. I have not changed the inter-class allocation of costs. My proposed rates are summarized on AG Exhibit 2.8. Also on that schedule, I show that these rates recover the Company's entire residential revenue requirement. Specifically, I show proofs of revenues for the residential class where I compare the rates the Company filed with those that I recommend.

Customer Impact Analysis of My Proposed Rates

Q. Have you prepared a customer impact analysis using your proposed rates under the Company's revenue requirement?

A. Yes, I have. AG Exhibit 2.9 is prepared in exactly the same way as AG Exhibit 2.1. It shows that my rate design reduces the impact of unbundling rates on low-use multi-family customers. Thus, for example, the highest increases under the Company's revenue requirement would be in the 90-95% range instead of the 120-125% range under the Company's rate design proposal. In other words, my proposed rate design under the Company's revenue requirement lessens the impact on low-use multi-family customers by about one-third. The remaining impact, however, is still severe for some customers.

Q. How does your proposal compare to the Company's proposed rates?

A. On AG Exhibit 2.10, I show a graph similar to the one in AG Exhibit 2.2. To make the comparison a little easier to see, I have just included the impact of the Company's rates (solid line) and my rates (dashed line) using a wholesale price of $60 per MWH. You can see that both lines have about 60% of bills receiving increases of 22% or less. This is roughly the average combined impact of the Company's proposed rate increase in this case and a wholesale price of $60 per MWH (with mitigation). The difference between the curves lies in the extremity of the impacts. The Company has some customers receiving increases as high as 130%. In contrast, my proposal has no one receiving an increase of more than 100%. The effect of my proposal is that fewer customers receive below-average increases so that fewer customers need to pay increases that are greatly above average.

I consider my proposed rate design to be far superior to the Company's, both in terms of its representation of cost causation and its impact on customers. Unfortunately, though, if customers are required to pay rates based on the combination of unbundled retail rates and market-based electricity prices, there will be some customers whose bills will increase by a high percentage, even under my proposal.

Q. Can anything else be done to alleviate the impact on customers?

A. Yes. The best approach may be to apply the Staff's mitigation methodology from the procurement rate case to the customer's total bill, taking into account the differences between single-family and multi-family residential customers.

Q. Would applying the mitigation proposal mean that your rate design proposals are irrelevant?

A. No, it certainly does not mean that. My rate design proposal produces unbundled rates that reflect real differences in the cost of serving particular groups within the residential class of customers. My proposal helps to lessen the degree to which mitigation would be necessary, and lessens the amount of costs that would need to be reallocated under a mitigation methodology. Moreover, my proposed rates are consistent with principles of rate continuity and gradualism, where the Company's proposal largely ignores those principles. Thus, with or without mitigation, my residential rate design is preferable to the Company's proposal.

Q. What do you conclude from your customer impact analysis?

A. I conclude that the residential rates I recommend are a reasonable way to recover the Company's residential revenue requirement. In my opinion, the rates I developed are fully consistent with the Company's cost of service. My rates have the added advantage of also being consistent with principles of gradualism and rate continuity. My rates retain an existing customer classification based on cost of service differences.

I also conclude that it would be unreasonable for the Company to implement the rates it filed. Those residential rates fail to reflect real differences in the cost of serving different groups of residential customers; differences that are reflected in existing customer classifications. The Company's proposed residential rates also would result in extraordinarily high rate increases for certain groups of customers, even after applying the supply cost mitigation proposal. Those increases can be partially avoided by adopting the more reasonable, cost-based set of rates that I developed. Any remaining, extreme

impacts should be addressed through an application of Staff's mitigation methodology, recognizing the differences between single-family and multi-family residential customers.

Designing Rates to Recover a Lower Revenue Requirement

Q. How would you recommend designing residential rates to recover a lower revenue requirement?

A. The easiest method to design rates to recover a lower residential revenue requirement would be to reduce each of the charges that I developed under the Company's proposed revenue requirement by an equal percentage. This method, usually called a "straight scale-back" avoids having to re-run the cost of service study to reflect each adjustment that is made to the cost of service. In my experience, in most cases the results achieved by both methods are very similar.

Q. Do you have an example of how this would work?

A. Yes, I do. I will use as an example the revenue requirement provided in AG witness Effron's testimony, which is a revenue decrease of $116,527,000. AG Exhibit 1.0. Under the Company's cost of service study, 42.70% of the revenue requirement is allocated to the residential class, as I show on AG Exhibit 2.11. On the remainder of AG Exhibit 2.11, I calculate the multiplier that would be used to reduce each of the residential rates I developed using the Company's revenue requirement. Applying this multiplier to each specific charge would result in residential rates that recover the revenue requirement in Mr. Effron's testimony. I show the resulting rates and proof of revenues on AG Exhibit 2.12.

Q. Does this conclude your direct testimony?

A. Yes, it does.

Appendix A

Scott J. Rubin
Attorney + Consultant
3 Lost Creek Drive • Selinsgrove, PA 17870

Current Position

Public Utility Attorney and Consultant, Selinsgrove, PA. 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

"Quality of Service Issues," a speech to the Pennsylvania Public Utility Commission Consumer Conference, State College, PA. 1988.

K.L. Pape and S.J. Rubin, "Current Developments in Water Utility Law," in *Pennsylvania Public Utility Law* (Pennsylvania Bar Institute). 1990.

Presentation on Water Utility Holding Companies to the Annual Meeting of the National Association of State Utility Consumer Advocates, Orlando, FL. 1990.

"How the OCA Approaches Quality of Service Issues," a speech to the Pennsylvania Chapter of the National Association of Water Companies. 1991.

Presentation on the Safe Drinking Water Act to the Mid-Year Meeting of the National Association of State Utility Consumer Advocates, Seattle, WA. 1991.

"A Consumer Advocate's View of Federal Pre-emption in Electric Utility Cases," a speech to the Pennsylvania Public Utility Commission Electricity Conference. 1991.

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.

Formal Discussant, Regional Acid Rain Workshop, U.S. Environmental Protection Agency and National Regulatory Research Institute, Charlotte, NC. 1992.

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.

"The OCA's Concerns About Drinking Water," a speech to the Pennsylvania Public Utility Commission Water Conference. 1992.

Member, Technical Horizons Panel, Annual Meeting of the National Association of Water Companies, Hilton Head, SC. 1992.

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.

Presentation on Small Water System Viability to the Technical Assistance Center for Small Water Companies, Pa. Department of Environmental Resources, Harrisburg, PA. 1993

"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.

"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.

"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.

"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.

"Telephone Penetration Rates for Renters in Pennsylvania," a study prepared for the Pennsylvania Office of Consumer Advocate. 1993.

"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.

"Serving the Customer," participant in panel discussion at the Annual Conference of the National Association of Water Companies, Williamsburg, VA. 1993.

"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.

S.J. Rubin, "Are Water Rates Becoming Unaffordable?," *Journal American Water Works Association*, Vol. 86, No. 2 (February 1994), pages 79-86.

"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.

"Are Water Rates Becoming Unaffordable?," a speech to the Legislative and Regulatory Conference, Association of Metropolitan Water Agencies, Washington, DC. 1994.

"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.

"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.

S.J. Rubin, "How much should we spend to save a life?," *Seattle Journal of Commerce*, August 18, 1994 (Protecting the Environment Supplement), pages B-4 to B-5.

S. Rubin, S. Bernow, M. Fulmer, J. Goldstein, and I. Peters, *An Evaluation of Kentucky-American Water Company's Long-Range Planning*, prepared for the Utility and Rate Intervention Division, Kentucky Office of the Attorney General (Tellus Institute 1994).

S.J. Rubin, "Small System Monitoring: What Does It Mean?," *Impacts of Monitoring for Phase II/V Drinking Water Regulations on Rural and Small Communities* (National Rural Water Association 1994), pages 6-12.

"Surviving the Safe Drinking Water Act," speaker at the Annual Meeting of the National Association of State Utility Consumer Advocates, Reno, NV. 1994.

"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.

S.J. Rubin, "Water: Why Isn't it Free? The Case of Small Utilities in Pennsylvania," *Utilities, Consumers & Public Policy: Issues of Quality, Affordability, and Competition, Proceedings of the Fourth Utilities, Consumers and Public Policy Conference* (Pennsylvania State University 1995), pages 177-183.

S.J. Rubin, "Water Rates: An Affordable Housing Issue?," *Home Energy*, Vol. 12 No. 4 (July/August 1995), page 37.

Speaker and participant in the Water Policy Forum, sponsored by the National Association of Water Companies, Naples, FL. 1995.

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.

J.E. Cromwell III, and S.J. Rubin, *Development of Benchmark Measures for Viability Assessment* (Pa. Department of Environmental Protection 1995).

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.

"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..

"Recent Federal Legislation Affecting Drinking Water Utilities," speaker at Pennsylvania Public Utility Law Conference, Pennsylvania Bar Institute, Hershey, PA. 1996.

"Clean Water at Affordable Rates: A Ratepayers Conference," moderator at symposium sponsored by the New Jersey Division of Ratepayer Advocate, Trenton, NJ. 1996.

"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.

E.T. Castillo, S.J. Rubin, S.K. Keefe, and R.S. Raucher, "Restructuring Small Systems," *Journal American Water Works Association*, Vol. 89, No. 1 (January 1997), pages 65-74.

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"Capacity Development – More than Viability Under a New Name," speaker at National Association of Regulatory Utility Commissioners Winter Meetings, Washington, DC. 1997.

E. Castillo, S.K. Keefe, R.S. Raucher, and S.J. Rubin, *Small System Restructuring to Facilitate SDWA Compliance: An Analysis of Potential Feasibility* (AWWA Research Foundation, 1997).

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Briefing on Issues Affecting the Water Utility Industry, Annual Meeting of the National Association of State Utility Consumer Advocates, Boston, MA. 1997.

"Capacity Development in the Water Industry," speaker at the Annual Meeting of the National Association of Regulatory Utility Commissioners, Boston, MA. 1997.

"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.

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).

Scott J. Rubin, "30 Technology Tips in 30 Minutes," *Pennsylvania Public Utility Law Conference*, Vol. I, pages 101-110 (Pa. Bar Institute, 1998).

Scott J. Rubin, "Effects of Electric and Gas Deregulation on the Water Industry," *Pennsylvania Public Utility Law Conference*, Vol. I, pages 139-146 (Pa. Bar Institute, 1998).

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"Consumer Advocacy for the Future," speaker at the Age of Awareness Conference, Changes and Choices: Utilities in the New Millennium, Carlisle, PA. 1999.

Keynote Address, $1 Energy Fund, Inc., Annual Membership Meeting, Monroeville, PA. 1999.

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Scott J. Rubin, "Estimating the Effect of Different Arsenic Maximum Contaminant Levels on the Affordability of Water Service," prepared for the American Water Works Association. 2000.

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"Be Utility Wise in a Restructured Utility Industry," Keynote Address at Be UtilityWise Conference, Pittsburgh, PA. 2000.

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Scott J. Rubin, "Current Developments in the Water Industry," *Pennsylvania Public Utility Law Conference*, Pennsylvania Bar Institute, Harrisburg, PA. 2000.

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Janice A. Beecher and Scott J. Rubin, "Ten Practices of Highly Effective Water Utilities," *Opflow*, April 2001, pp. 1, 6-7, 16; reprinted in *Water and Wastes Digest*, December 2004, pp. 22-25.

Scott J. Rubin, "Pennsylvania Utilities: How Are Consumers, Workers, and Corporations Faring in the Deregulated Electricity, Gas, and Telephone Industries?" Keystone Research Center. 2001.

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Scott J. Rubin, Consumer Protection in the Water Industry, NARUC Annual Regulatory Studies Program, East Lansing, MI. 2001.

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Scott J. Rubin, Issues Relating to the Affordability and Sustainability of Rates for Water Service, presentation to the Water Utility Council of the American Water Works Association, New Orleans, LA. 2002.

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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

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

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Pa. Public Utility Commission v. Dauphin Consolidated Water Supply Co. and General Waterworks of Pennsylvania, Inc., Pa. Public Utility Commission, Docket R-00932604. 1993. Concerning rate design and cost of service, on behalf of the Pa. Office of Consumer Advocate

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

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

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

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.

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.

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.

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.

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.

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.

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.

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..

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.

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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.

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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.

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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.

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.

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.

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.

In the Matter of the Regulation of the Electric Fuel Component Contained within the Rate Schedules of Dayton Power and Light Company and Related Matters, Public Utilities Commission of Ohio, Case No. 98-105-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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

Monongahela Power Co. and The Potomac Edison Co., 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.

Joint Application of Duke Energy Corp., et al., for Approval of a Transfer and Acquisition of Control, Case 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.

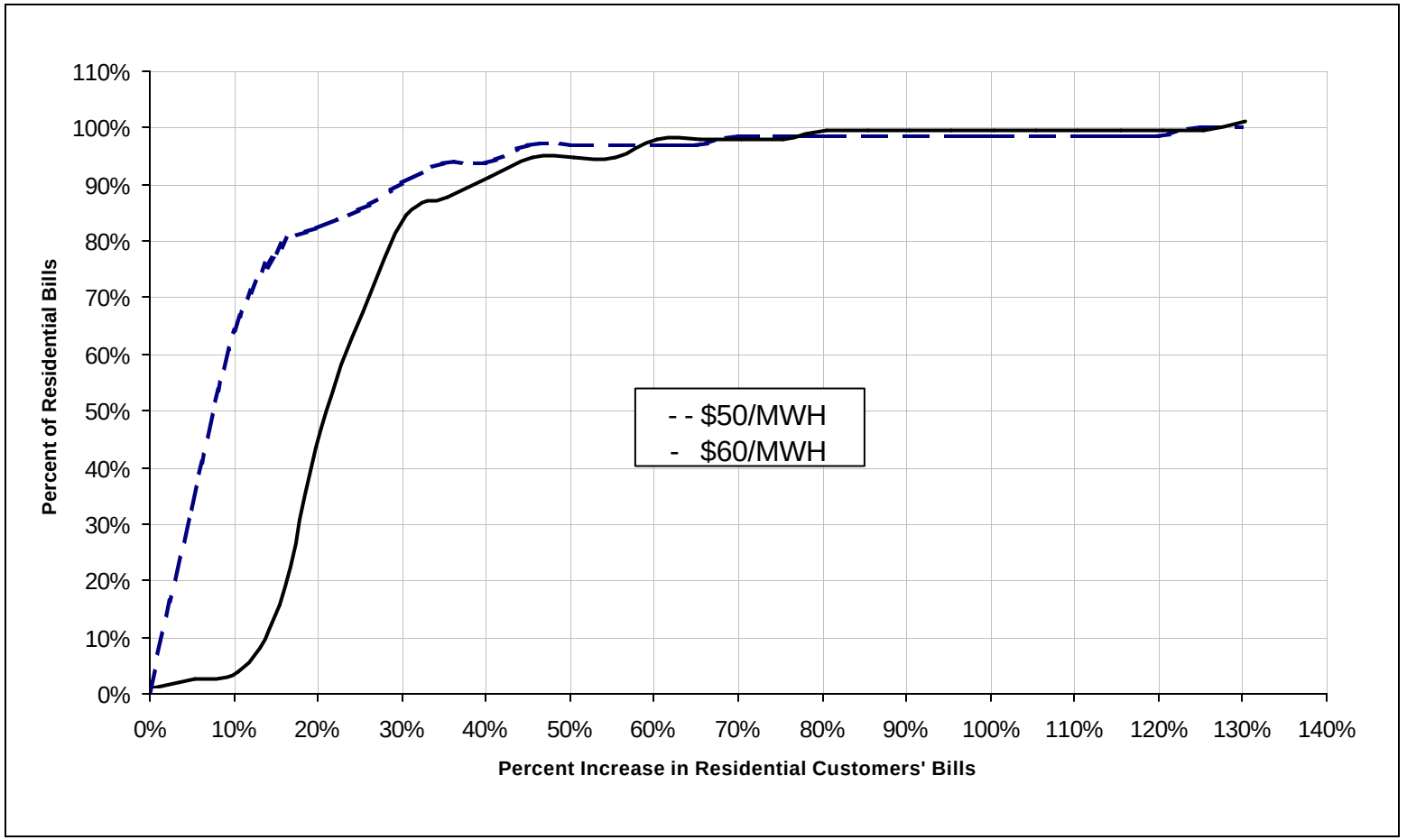
Impact Analysis on Residential Customers Taking Bundled Service
Using ComEd's Rate Design Proposal
Assuming Wholesale Electricity Prices of $50 and $60 per MWH, Both with Mitigation

		Wholesale Price of $50/MWH			Wholesale Price of $60/MWH		
	Bill Increase	Bills	Percent of Bills	Cumulative Percent	Bills	Percent of Bills	Cumulative Percent
1	0% to 5%	13,039,850	32.6%	32.6%	654,208	1.6%	1.6%
2	5% to 10%	12,599,649	31.5%	64.2%	516,964	1.3%	2.9%
3	10% to 15%	5,624,832	14.1%	78.2%	4,681,147	11.7%	14.6%
4	15% to 20%	1,625,826	4.1%	82.3%	12,505,338	31.3%	45.9%
5	20% to 25%	1,257,128	3.1%	85.4%	8,187,687	20.5%	66.4%
6	25% to 30%	1,881,940	4.7%	90.1%	6,820,273	17.1%	83.5%
7	30% to 35%	1,487,913	3.7%	93.9%	1,310,266	3.3%	86.8%
8	35% to 40%	-	0.0%	93.9%	1,413,134	3.5%	90.3%
9	40% to 45%	1,164,727	2.9%	96.8%	1,428,121	3.6%	93.9%
10	45% to 50%	-	0.0%	96.8%	-	0.0%	93.9%
11	50% to 55%	-	0.0%	96.8%	-	0.0%	93.9%
12	55% to 60%	41,109	0.1%	96.9%	1,205,836	3.0%	96.9%
13	60% to 65%	-	0.0%	96.9%	-	0.0%	96.9%
14	65% to 70%	678,939	1.7%	98.6%	-	0.0%	96.9%
15	70% to 75%	-	0.0%	98.6%	-	0.0%	96.9%
16	75% to 80%	-	0.0%	98.6%	678,939	1.7%	98.6%
17	80% to 85%	-	0.0%	98.6%	-	0.0%	98.6%
18	85% to 90%	-	0.0%	98.6%	-	0.0%	98.6%
19	90% to 95%	-	0.0%	98.6%	-	0.0%	98.6%
20	95% to 100%	-	0.0%	98.6%	-	0.0%	98.6%
21	100% to 105%	-	0.0%	98.6%	-	0.0%	98.6%
22	105% to 110%	-	0.0%	98.6%	-	0.0%	98.6%
23	110% to 115%	-	0.0%	98.6%	-	0.0%	98.6%
24	115% to 120%	33,151	0.1%	98.7%	33,151	0.1%	98.7%
25	120% to 125%	532,424	1.3%	100.0%	-	0.0%	98.7%
26	125% to 130%	-	0.0%	100.0%	532,424	1.3%	100.0%
27	Total	39,967,488			39,967,488		

Commonwealth Edison Company
Ill. C.C. Docket No. 05-0597

AG Exhibit 2.2

Impact Analysis of ComEd's Rate Design Proposal on Residential Customers Taking Bundled Service
Assuming Wholesale Electricity Prices of $50 and $60 per MWH, Both with Mitigation



Commonwealth Edison Company
Ill. C.C. Docket No. 05-0597

AG Exhibit 2.3

Calculation of Customer Charges for Single-Family and Multi-Family Residential Customers

		Single Family			Multi-Family		
		No Heat	Heat	Total	No Heat	Heat	Total
1	Services	$ 65,499,628	$ 1,175,021	$ 66,674,649	$ 7,166,043	$ 1,166,422	$ 8,332,464
2	Customer Install. Other	25,593,908	425,917	26,019,825	11,382,615	1,801,494	13,184,109
3	Billing -- Computation & Data Mang.	85,487,472	1,458,190	86,945,663	38,742,007	6,005,224	44,747,231
4	Bill Issue & Processing	19,826,383	329,937	20,156,321	8,817,571	1,395,532	10,213,102
5	Customer Information	5,596,443	93,132	5,689,576	2,488,958	393,920	2,882,878
6	Uncollectible Accounts (Customer)	3,187,313	52,690	3,240,003	1,165,656	170,233	1,335,890
7	Revenue-Related (Customer)	(3,124,573)	(50,882)	(3,175,455)	(1,152,713)	(165,453)	(1,318,166)
8	Total	$ 202,066,575	$ 3,484,005	$ 205,550,580	$ 68,610,138	$ 10,767,371	$ 79,377,508
9	Number of Customers	2,174,346	36,184	2,210,530	967,017	153,047	1,120,064
10	Monthly Customer Charge			**$ 7.75**			**$ 5.91**

Source: ComEd Four Residential Classes Allocation, Workpapers to Ex. 11.1, Sch. 2a, p. 13, lines 200-201, 204-208, and 233

Commonwealth Edison Company
Ill. C.C. Docket No. 05-0597

AG Exhibit 2.4

ComEd's Development of Residential Meter Charge

		Single family w/o space heat	Multi-family w/o space heat	Single family w/ space heat	Multi-family w/ space heat	Total Residential
1	Meter O&M	3,397,580	1,511,036	56,507	239,184	5,204,307
2	Customer Service Supervision	4,937	2,196	82	347	7,562
3	Meter Reading	15,089,880	6,711,062	251,116	1,062,140	23,114,198
4	Customer Records & Collection	3,515,780	1,563,605	58,507	247,467	5,385,359
5	Metering Services Uncollectibles	1,033,305	459,551	17,195	72,732	1,582,784
6	Pro-Forma Adjustments to Expenses	(2,860,896)	(1,272,353)	(47,605)	(201,376)	(4,382,230)
7	Total O&M Adjusted	20,180,585	8,975,097	335,803	1,420,496	30,911,981
8	A&G Expenses	24,880,672	11,065,410	414,012	1,751,331	38,111,425
9	Taxes Other than Income	1,574,533	700,257	26,202	110,828	2,411,819
10	Depreciation Expense	8,671,901	3,856,735	144,312	610,394	13,283,342
11	Return and Income Taxes	17,653,262	7,851,099	293,774	1,242,571	27,040,706
12	Revenue Credits	(7,397,269)	(3,289,856)	(123,100)	(520,676)	(11,330,902)
13	Total Metering Revenue Requirement*	65,826,096	29,275,446	1,095,368	4,633,414	100,830,325
14	Number of Customers	2,174,346	967,017	36,184	153,047	3,330,594
15	Metering Cost per Customer	30.27	30.27	30.27	30.27	30.27
16	Meter Cost per Month	2.52	2.52	2.52	2.52	2.52

* Includes revenue adjustment factor of 1.0040023933

Source: ComEd Four Residential Classes Allocation, Workpapers to Ex. 11.1, Sch. 2a

Allocation of Meter Reading Costs Between Single-Family and Multi-Family Residential Customers

1	Residential average meters read per person per day		506	AG 4.03(f) Attachment 3 of 3, Visual & Probed Reading Cost
2	Total meter reading cost per ECOSS	$	23,114,198	AG Exhibit 2.4, line 3
3	Total residential customers		3,330,594	AG Exhibit 2.4, line 14
4	Average annual meter reading cost per residential customer	$	6.94	line 2 / line 3

Assume that twice as many meters per person-day can be read in multi-family buildings than in single-family buildings

5	Total residential customers	3,330,594	/ reads per person	506		=	6,582	person days
6	Single family customers	2,210,530	/ 1.0 =	2,210,530				
7	Multi family customers	1,120,064	/ 2.0 =	560,032				
8	Total residential customers	3,330,594		2,770,562				
9	Average single family reads per person per day			2,770,562 / 6,582		=	**420.93**	
10	Average multi family reads per person per day =			420.93	x	2	**841.86**	
	Check:							
11	Single family customers	2,210,530	/ reads per person	420.93		=	5,251.54	person days
12	Multi family customers	1,120,064	/ reads per person	841.86		=	1,330.46	person days
13	Total residential customers	3,330,594		506.02			6,582.00	person days

	Percent of total person days:		
14	Single family	79.79%	line 11 / line 13
15	Multi family	20.21%	line 12 / line 13

Therefore, meter reading costs should be allocated as follows:

16	Single family	$18,442,819	line 2 x line 14
17	Multi family	4,671,379	line 2 x line 15
	Total residential	$23,114,198	

Allocation within single family and multi family classes based on number of customers, as follows:

		No. of Customers			Meter Reading Costs		
		w/o heat	w/ heat	total	w/o heat	w/ heat	total
18	Single	2,174,346	36,184	2,210,530	$ 18,140,930	$ 301,889	$ 18,442,819
19	Multi	967,017	153,047	1,120,064	$ 4,033,076	$ 638,303	$ 4,671,379

Commonwealth Edison Company
Ill. C.C. Docket No. 05-0597

AG Exhibit 2.6

Residential Meter Charge Based on Assumed Lower Cost to Read Multi-Family Meters

		Single family w/o space heat	Multi-family w/o space heat	Single family w/ space heat	Multi-family w/ space heat	Total Residential
1	Meter O&M	3,397,580	1,511,036	56,507	239,184	5,204,307
2	Customer Service Supervision	4,937	2,196	82	347	7,562
3	**Meter Reading**	**18,140,930**	**4,033,076**	**301,889**	**638,303**	**23,114,198**
4	Customer Records & Collection	3,515,780	1,563,605	58,507	247,467	5,385,359
5	Metering Services Uncollectibles	1,033,305	459,551	17,195	72,732	1,582,784
6	Pro-Forma Adjustments to Expenses	(2,860,896)	(1,272,353)	(47,605)	(201,376)	(4,382,230)
7	Total O&M Adjusted	23,231,635	6,297,111	386,576	996,658	30,911,981
8	**A&G Expenses**	**28,642,316**	**7,763,717**	**476,610**	**1,228,781**	**38,111,425**
9	**Taxes Other than Income**	**1,812,582**	**491,314**	**30,161**	**77,761**	**2,411,819**
10	Depreciation Expense	8,671,901	3,856,735	144,312	610,394	13,283,342
11	Return and Income Taxes	17,653,262	7,851,099	293,774	1,242,571	27,040,706
12	**Revenue Credits**	**(8,515,643)**	**(2,308,230)**	**(141,701)**	**(365,329)**	**(11,330,902)**
13	Total Metering Rev. Rqmt.*	71,782,209	24,047,610	1,194,493	3,806,009	100,830,321
14	Number of Customers	2,174,346	967,017	36,184	153,047	3,330,594
15	Metering Cost per Customer	33.01	24.87	33.01	24.87	30.27
16	Meter Cost per Month	**2.75**	**2.07**	**2.75**	**2.07**	2.52

* Includes revenue adjustment factor of 1.0040023933
Meter Reading expenses have been reallocated to reflect meter cost allocation on AG Exhibit 2.5
A&G Expenses, Taxes Other than Income, and Revenue Credits have been reallocated based on Total O&M Adjusted

Commonwealth Edison Company
Ill. C.C. Docket No. 05-0597

AG Exhibit 2.7

Calculation of Distribution Charge for Residential Heating and Non-Heating Customers

		Heating Customers			Non-Heating Customers		
		Single Family	Multi-Family	Total	Single Family	Multi-Family	Total
1	High Voltage ESS	$ -	$ -	$ -	$ -	$ -	$ -
2	High Voltage Dist. Substations	1,636,131	3,233,222	4,869,353	100,603,084	18,474,846	119,077,930
3	High Voltage Dist. Lines	234,684	463,767	698,451	14,430,318	2,649,997	17,080,315
4	Distribution Substations	1,335,633	2,719,366	4,054,999	30,554,034	6,042,574	36,596,607
5	Distribution Lines	12,029,545	24,492,316	36,521,861	275,188,765	54,423,204	329,611,969
6	Line Transformers	1,279,110	2,604,284	3,883,394	29,261,005	5,786,856	35,047,861
7	Uncollectible Accounts (Distribution)	265,698	563,818	829,517	7,489,098	1,569,583	9,058,681
8	Revenue-Related (Distribution)	(256,581)	(547,987)	(804,567)	(7,341,682)	(1,552,154)	(8,893,836)
9	Illinois Electricity Distribution Tax	1,044,371	2,133,074	3,177,445	24,602,958	4,990,207	29,593,165
10	Total	$ 17,568,591	$ 35,661,862	$ 53,230,453	$ 474,787,580	$ 92,385,113	$ 567,172,693
11	KWH Sales at Distribution	879,450,693	1,796,233,291	2,675,683,984	20,717,819,609	4,202,185,978	24,920,005,587
12	Initial Calculation of Charge per KWH			$ 0.01989			$ 0.02276
13	Revenue Resulting from Initial Charge			$ 53,219,354			$ 567,179,327

Calculation to Adjust Initial Charge to Match ComEd Distribution Revenues Under Proposed Rates

14	ComEd Distribution Revenue	$ 603,517,731
15	Revenue from Line 13	$ 620,398,681
16	Factor to Adjust Rates	0.97279
17	Final Calculation of Charge per KWH	**$ 0.01935**
		$ 0.02214

Sources:
ComEd Four Residential Classes Allocation, Workpapers to Ex. 11.1, Sch. 2a, p. 13, lines 191-198, 214, 231
ComEd Distribution Revenue from Section 285.5105, Sch. E-5(a), p. 6

Residential Proof of Revenues Under ComEd's Proposed Revenue Requirement

Single Family No Heat

	Billing Units	ComEd Proposed		AG Proposed	
		Rate	Revenue	Rate	Revenue
Customer Charge	26,092,154	$ 7.13	$ 186,037,058	$ 7.75	$ 202,214,194
Meter Charge	26,092,154	$ 2.52	65,752,228	$ 2.75	71,753,424
Distribution Charge	20,717,819,609	$ 0.02187	453,098,715	$ 0.02214	458,692,526
Total			$ 704,888,001		$ 732,660,144

Multi Family No Heat

	Billing Units	ComEd Proposed		AG Proposed	
		Rate	Revenue	Rate	Revenue
Customer Charge	11,604,204	$ 7.13	$ 82,737,975	$ 5.91	$ 68,580,846
Meter Charge	11,604,204	$ 2.52	29,242,594	$ 2.07	24,020,702
Distribution Charge	4,202,185,978	$ 0.02187	91,901,807	$ 0.02214	93,036,398
Total			$ 203,882,376		$ 185,637,946

Single Family With Heat

	Billing Units	ComEd Proposed		AG Proposed	
		Rate	Revenue	Rate	Revenue
Customer Charge	434,212	$ 7.13	$ 3,095,932	$ 7.75	$ 3,365,143
Meter Charge	434,212	$ 2.52	1,094,214	$ 2.75	1,194,083
Distribution Charge	879,450,693	$ 0.02187	19,233,587	$ 0.01935	17,017,371
Total			$ 23,423,733		$ 21,576,597

Multi Family With Heat

	Billing Units	ComEd Proposed		AG Proposed	
		Rate	Revenue	Rate	Revenue
Customer Charge	1,836,565	$ 7.13	$ 13,094,708	$ 5.91	$ 10,854,099
Meter Charge	1,836,565	$ 2.52	4,628,144	$ 2.07	3,801,690
Distribution Charge	1,796,233,291	$ 0.02187	39,283,622	$ 0.01935	34,757,114
Total			$ 57,006,474		$ 49,412,903

Residential Class Total

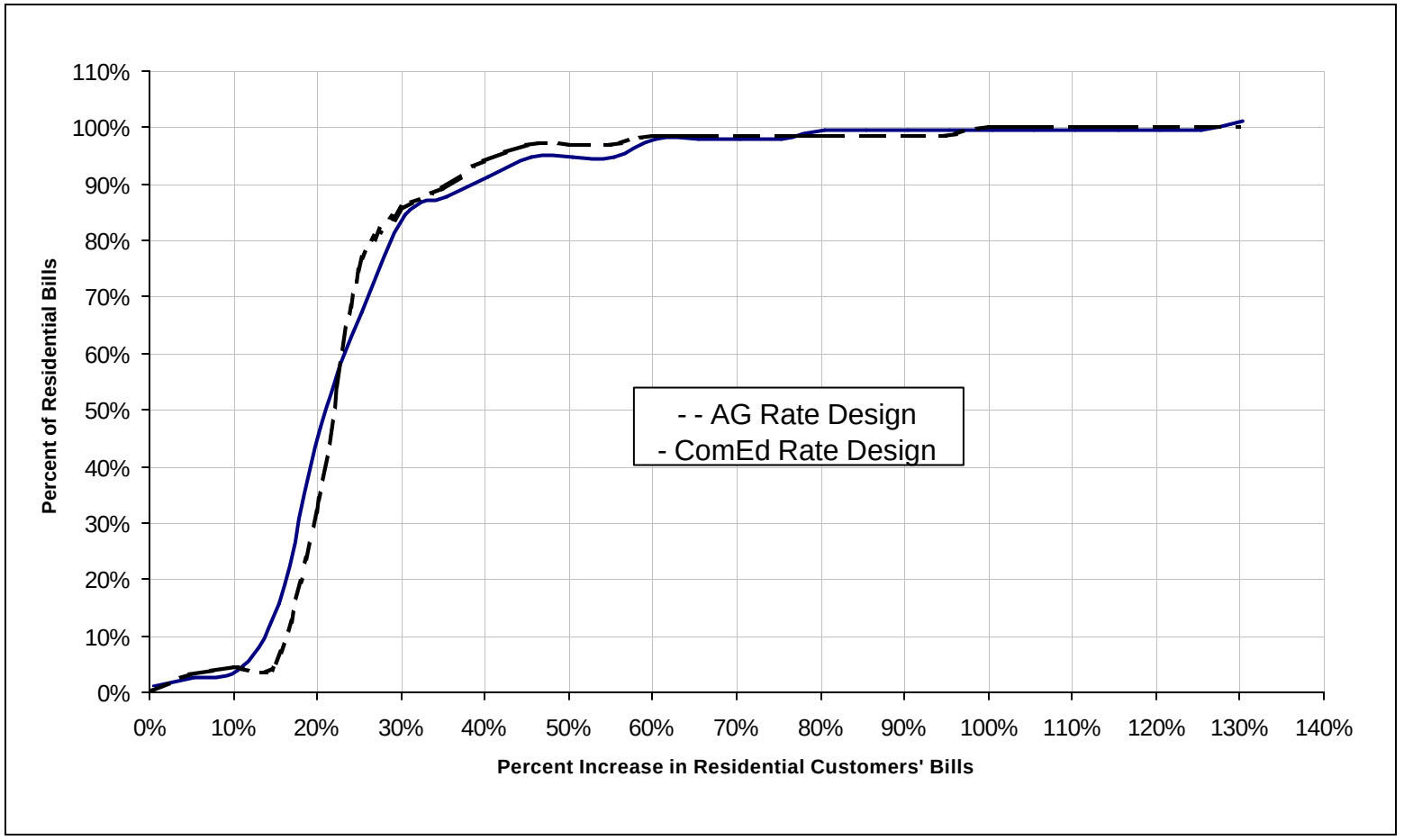
		ComEd Proposed	AG Proposed
		Revenue	Revenue
Customer Charge	39,967,135	$ 284,965,673	$ 285,014,282
Meter Charge	39,967,135	100,717,180	100,769,899
Distribution Charge	27,595,689,571	603,517,731	603,503,409
Total		$ 989,200,584	$ 989,287,590
AG target revenue			$ 989,200,584
Difference			$ 87,006
Percent difference			0.0088%

Sources:
Billing Units and ComEd Proposed Rates from Section 285.5105, Sch. E-5(a)
AG Proposed Rates from AG Exhibits 2.3, 2.6, and 2.7

Impact Analysis on Residential Customers Taking Bundled Service
Using AG's Rate Design Proposal
Assuming Wholesale Electricity Prices of $50 and $60 per MWH, Both with Mitigation

		Wholesale Price of $50/MWH			Wholesale Price of $60/MWH		
	Bill Increase	Bills	Percent of Bills	Cumulative Percent	Bills	Percent of Bills	Cumulative Percent
1	0% to 5%	5,855,106	14.6%	14.6%	1,287,396	3.2%	3.2%
2	5% to 10%	21,061,282	52.7%	67.3%	501,173	1.3%	4.5%
3	10% to 15%	6,497,162	16.3%	83.6%	308,236	0.8%	5.2%
4	15% to 20%	1,900,633	4.8%	88.4%	10,628,522	26.6%	31.8%
5	20% to 25%	1,727,495	4.3%	92.7%	17,032,774	42.6%	74.5%
6	25% to 30%	-	0.0%	92.7%	4,442,322	11.1%	85.6%
7	30% to 35%	1,640,187	4.1%	96.8%	1,419,788	3.6%	89.1%
8	35% to 40%	41,109	0.1%	96.9%	1,938,036	4.8%	94.0%
9	40% to 45%	-	0.0%	96.9%	1,164,727	2.9%	96.9%
10	45% to 50%	678,939	1.7%	98.6%	-	0.0%	96.9%
11	50% to 55%	-	0.0%	98.6%	-	0.0%	96.9%
12	55% to 60%	-	0.0%	98.6%	678,939	1.7%	98.6%
13	60% to 65%	-	0.0%	98.6%	-	0.0%	98.6%
14	65% to 70%	-	0.0%	98.6%	-	0.0%	98.6%
15	70% to 75%	-	0.0%	98.6%	-	0.0%	98.6%
16	75% to 80%	-	0.0%	98.6%	-	0.0%	98.6%
17	80% to 85%	33,151	0.1%	98.7%	33,151	0.1%	98.7%
18	85% to 90%	-	0.0%	98.7%	-	0.0%	98.7%
19	90% to 95%	532,424	1.3%	100.0%	-	0.0%	98.7%
20	95% to 100%	-	0.0%	100.0%	532,424	1.3%	100.0%
21	100% to 105%	-	0.0%	100.0%	-	0.0%	100.0%
22	105% to 110%	-	0.0%	100.0%	-	0.0%	100.0%
23	110% to 115%	-	0.0%	100.0%	-	0.0%	100.0%
24	115% to 120%	-	0.0%	100.0%	-	0.0%	100.0%
25	120% to 125%	-	0.0%	100.0%	-	0.0%	100.0%
26	125% to 130%	-	0.0%	100.0%	-	0.0%	100.0%
27	Total	39,967,488			39,967,488		

Comparison of Impact of ComEd and AG Residential Bill Impacts Under ComEd's Revenue Requirement Assuming Wholesale Electricity Price of $60 per MWH, Both with Mitigation



Commonwealth Edison Company
Ill. C.C. Docket No. 05-0597

AG Exhibit 2.11

Calculation of Residential Portion of Revenue Requirement Discussed by AG Witness Effron

1	Present rates total revenue	$ 1,577,686,072	Section 285.5105, Sch. E-5(a), p. 5
2	ComEd proposed rates total revenue	$ 1,895,546,000	Section 285.5105, Sch. E-5(a), p. 9
3	ComEd proposed rate increase	$ 317,859,928	Line 2 - line 1
4	Present rates residential revenue	$ 853,471,229	Section 285.5105, Sch. E-5(a), p. 1
5	ComEd proposed rates residential revenue	$ 989,200,584	Section 285.5105, Sch. E-5(a), p. 6
6	ComEd proposed residential rate increase	$ 135,729,355	Line 5 - line 4
7	Percent of rate increase from residential class	42.70%	Line 6 / line 3
8	Percent increase in residential revenue	15.90%	Line 6 / line 4
9	Illustrative rate change	$ (116,527,000)	AG Exhibit 1.0
10	Percent of illustrative rate change from residential class	42.70%	Line 7
11	Illustrative change in residential revenue	$ (49,757,029)	Line 9 x line 10
12	Percent increase in residential revenue	-5.83%	Line 11 / line 4
13	Multiplier to develop illustrative proposed rates	0.81251	(1+line 12) / (1+line 8)
14	Target residential revenue	$ 803,714,200	Line 4 + line 11

Residential Proof of Revenues Under Revenue Requirement Discussed by AG Witness Effron

Single Family No Heat

	Billing Units	ComEd Proposed		AG Proposed	
		Rate	Revenue	Rate	Revenue
Customer Charge	26,092,154	$ 7.13	$ 186,037,058	$ 6.30	$ 164,380,570
Meter Charge	26,092,154	$ 2.52	65,752,228	$ 2.23	58,185,503
Distribution Charge	20,717,819,609	$ 0.02187	453,098,715	$ 0.01799	372,713,575
Total			$ 704,888,001		$ 595,279,648

Multi Family No Heat

	Billing Units	ComEd Proposed		AG Proposed	
		Rate	Revenue	Rate	Revenue
Customer Charge	11,604,204	$ 7.13	$ 82,737,975	$ 4.80	$ 55,700,179
Meter Charge	11,604,204	$ 2.52	29,242,594	$ 1.68	19,495,063
Distribution Charge	4,202,185,978	$ 0.02187	91,901,807	$ 0.01799	75,597,326
Total			$ 203,882,376		$ 150,792,568

Single Family With Heat

	Billing Units	ComEd Proposed		AG Proposed	
		Rate	Revenue	Rate	Revenue
Customer Charge	434,212	$ 7.13	$ 3,095,932	$ 6.30	$ 2,735,536
Meter Charge	434,212	$ 2.52	1,094,214	$ 2.23	968,293
Distribution Charge	879,450,693	$ 0.02187	19,233,587	$ 0.01572	13,824,965
Total			$ 23,423,733		$ 17,528,794

Multi Family With Heat

	Billing Units	ComEd Proposed		AG Proposed	
		Rate	Revenue	Rate	Revenue
Customer Charge	1,836,565	$ 7.13	$ 13,094,708	$ 4.80	$ 8,815,512
Meter Charge	1,836,565	$ 2.52	4,628,144	$ 1.68	3,085,429
Distribution Charge	1,796,233,291	$ 0.02187	39,283,622	$ 0.01572	28,236,787
Total			$ 57,006,474		$ 40,137,728

Residential Class Total

		ComEd Proposed	AG Proposed
		Revenue	Revenue
Customer Charge	39,967,135	$ 284,965,673	$ 231,631,797
Meter Charge	39,967,135	100,717,180	81,734,288
Distribution Charge	27,595,689,571	603,517,731	490,372,653
Total		$ 989,200,584	$ 803,738,738
AG target revenue			$ 803,714,200
Difference			$ 24,538
Percent difference			0.0031%

Sources:
Billing Units and ComEd Proposed Rates from Section 285.5105, Sch. E-5(a)
AG Proposed Rates from AG Exhibits 2.3, 2.6, and 2.7 multiplied by multiplier on AG Exhibit 2.11, line 13