

BEFORE THE STATE OF NEW HAMPSHIRE

PUBLIC UTILITIES COMMISSION

In the matter of:)
Pittsfield Aqueduct Company , Inc)
DW 10-090)
Rate Case)

Direct Prefiled Testimony

Of

Scott J. Rubin

On behalf of the Office of the Consumer Advocate

Dated: **March 4, 2011**

Introduction

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Q. Please state your name and business address.

A. My name is Scott J. Rubin. My business address is 333 Oak Lane, Bloomsburg, 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 New Hampshire Office of the Consumer Advocate (“OCA”) to review the cost of service study and proposed rate design filed by Pittsfield Aqueduct Company (“PAC” 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, California, Connecticut, 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 staffs of the Connecticut Department of Public Utility Control and the Delaware Public Service Commission, as well as to 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 from 1983 through January 1994 in increasingly responsible positions. From 1990 until I left state government, I was

1 one of two senior attorneys in that Office. Among my other responsibilities in that
2 position, I had a major role in setting its policy positions on water and electric matters. In
3 addition, I was responsible for supervising the technical staff of that Office. I also
4 testified as an expert witness for that Office on rate design and cost of service issues.

5 Throughout my career, I developed substantial expertise in matters relating to the
6 economic regulation of public utilities. I have published articles, contributed to books,
7 written speeches, and delivered numerous presentations, on both the national and state
8 level, relating to regulatory issues. I have attended numerous continuing education
9 courses involving the utility industry. I also periodically participate as a faculty member
10 in utility-related educational programs for the Institute for Public Utilities at Michigan
11 State University, the American Water Works Association, and the Pennsylvania Bar
12 Institute. Attachment SJR-1 to this testimony is my curriculum vitae.

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

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

1 utility rate case. From September 2009 through August 2010, I also served as the part-
2 time director of the water research program for the National Regulatory Research
3 Institute.

4 **Summary**

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

6 A. My testimony focuses on two areas: (1) PAC's cost of service study and (2) PAC's
7 proposed rate design.

8 **Q. Did you review the testimony and exhibits of any Company witnesses?**

9 A. Yes. I primarily reviewed the testimony and exhibits of John Palko. Of course, I also
10 reviewed other exhibits that are part of the filing and numerous responses to discovery
11 requests that were provided by Mr. Palko and other witnesses.

12 **Q. Please summarize your conclusions.**

13 A. My conclusions can be summarized as follows:

- 14 • The Company's cost-of-service study ("COSS") should be modified to
15 more accurately allocate water mains among the utility's functions.
- 16 • My revised COSS, without the Company's proposed "adjustments" in the
17 allocation of administrative and general (A&G) expenses and management
18 fees, should be used as a guide to the design of rates, taking into account
19 other important factors such as customer impact, fairness, and revenue
20 stability.

21 **Q. Before you begin your review of the Company's proposals, do you have any
22 preliminary matters to address?**

23 A. Yes. I want to make clear at the outset that my testimony and analysis are based on
24 PAC's proposed revenue requirement. This is a standard practice because it allows

1 different parties' cost-of-service and rate design recommendations to be compared on an
2 "apples-to-apples" basis. This should not be taken, however, as an endorsement of the
3 Company's proposed revenue requirement.

4 **Principles of Rate Design**

5 **Q. Are you familiar with the basic principles and goals of rate design?**

6 A. Yes, I am. I recently wrote a paper on water rate design for the National Regulatory
7 Research Institute, a copy of which is attached as Attachment SJR-2. In that paper, I
8 review the basic principles of properly designed water rates.

9 **Q. Please summarize those basic principles.**

10 A. As I explain in Attachment SJR-2, utility rates should be designed with a goal of meeting
11 the following principles:

- 12 • Practicality, including simplicity, understandability, ability to implement,
13 and public acceptability;
- 14 • Clarity in its interpretation;
- 15 • Effectiveness in yielding the total revenue requirement;
- 16 • Stability in revenues from year to year;
- 17 • Continuity of rates, including the concept of gradualism;
- 18 • Fairness in relation to the cost of serving different types of customers;
- 19 • Avoidance of undue discrimination among similarly situated customers;
20 and
- 21 • Encouragement of efficient consumption practices.

22 It may not be possible in every case to meet all of these principles, but a rate
23 analyst or regulator should evaluate the rate design against these principles. Where a

1 principle cannot be met or where two principles are in conflict, the issue should be
2 recognized and a valid basis should be given for the analyst's or regulator's decision. An
3 accurate cost-of-service study ("COSS") provides important information that should be
4 used to evaluate several of these rate-design principles.

5 **PAC's Cost-of-Service Study ("COSS")**

6 **Q. Did you review PAC's COSS dated April 2010?**

7 A. Yes, I did.

8 ***COSS Methodology***

9 **Q. Do you have any concerns with the methodology used in that study?**

10 A. Yes, the COSS presented by PAC does not use a typical methodology for a water utility.
11 In the water industry, there are two generally accepted methods for preparing a COSS:
12 the commodity-demand method and the base-extra capacity method. Both of those
13 methods separate demand-related costs (that is, costs the utility incurs to meet peak-day
14 or peak-hour demands for water) from costs that are incurred to provide water throughout
15 the year without regard to peaking requirements. In addition, both methods also separate
16 costs that are customer-related or that are directly incurred to provide fire protection.

17 The method used by PAC does not follow either of these accepted approaches.
18 The Company's COSS is basically a variant of the commodity-demand method, but
19 without separating demand-related costs. Instead, the study separates costs into only
20 three functions: volume, customer, and fire.

1 **Q. Is it important to have information about demand-related costs, even for a small**
2 **utility like PAC?**

3 A. Yes, it is important to have information about demand-related costs, even for a small
4 utility. If there are substantial demand-related costs, that could affect the rate design. For
5 example, if there are significant weather-sensitive peak demands that cause the utility to
6 incur additional costs, a seasonal rate or a rate that varies with the amount of
7 consumption might be appropriate. Further, even though PAC is a relatively small utility,
8 it does have commercial, industrial, and municipal customers. Information about
9 demand-related costs, particularly different class demand characteristics, could lead the
10 Company or the Commission to conclude that it should have different rate schedules for
11 different types of customers.

12 With the information contained in PAC's COSS, however, it is not possible to
13 make judgments about any of these issues.

14 **Q. What do you recommend about the COSS methodology?**

15 A. I recommend that PAC should be required to perform a class COSS using either the
16 commodity-demand method or the base-extra capacity method in its next rate case. I
17 recognize that performing such studies can be expensive, but I note that PAC's sister
18 company, Pennichuck Water Works Company, has filed a rate case at the same time, and
19 that filing includes a COSS using the base-extra capacity method. I believe, therefore,
20 that it would not involve a substantial increase in cost for a COSS to be prepared for PAC
21 using the same model that already has been developed for its sister company.

1 Further, given the small size of PAC, I do not believe that it would be necessary
2 to have a class COSS prepared each time it files a rate case. But such a study should be
3 performed periodically, especially if substantial plant investments have occurred, so that
4 the Commission can determine whether the rates bear a reasonable relationship to the
5 cost of serving different types of customers.

6 **Q. Without a class COSS in this case, how will you proceed?**

7 A. Without a class COSS, and without demand-related costs, it is not possible to make
8 recommendations concerning the cost to serve different types of customers or the
9 possibility of adopting a different rate structure. For purposes of this case, therefore, I
10 will use the Company's COSS methodology and I will not propose any changes in the
11 essential structure of PAC's rates.

12 **Q. Do you have any concerns with the way in which costs were allocated in PAC's**
13 **COSS?**

14 A. Yes, I do. I have two major concerns. First, PAC allocated its investment in
15 transmission and distribution water mains using an unusual method that I do not believe I
16 have ever seen used in the water industry. Second, after going through the entire COSS
17 process, PAC then re-allocated A&G expenses and management fees using an arbitrary
18 method that bears no relationship to the cost of providing service.

19 ***Allocation of Transmission and Distribution Mains***

20 **Q. How did PAC allocate its investment in transmission and distribution mains?**

1 A. On Schedule P7 of PAC’s COSS, the Company performs calculations supposedly
2 designed to determine the customer-related portion of water mains. This is a novel
3 concept in the water industry. The cost of transmission and distribution mains is
4 generally recognized as being related to the provision of water, under both average and
5 peak-demand conditions. I have reviewed and prepared dozens of water COSS during
6 the past 20 years or more, and I cannot recall one study where mains were considered to
7 be a customer-related cost. Thus, at the outset, I must reject the very notion of water
8 mains having a customer-related component.

9 It appears that Mr. Palko took this concept of a customer-related component of
10 mains from the electric industry where there is some precedent for including a customer-
11 related portion of distribution poles, wires, and transformers. This is known as the
12 “minimum size” or “minimum system” theory, that assumes there is some very low-
13 capacity electric system that could be built to serve customers with no demand for
14 electricity. This theory has been questioned in the electric industry (as I discuss below),
15 and I am not aware of anyone who has suggested that such a system even would be
16 possible for a water utility. Thus, I must reiterate that this concept has no place in the
17 water industry.

18 Further, even the notion of there being a customer-related portion of distribution
19 facilities in the electric industry has been rejected by a majority of state utility
20 commissions. A study performed for NARUC in 2000 found that at least 30
21 commissions had rejected this approach. Instead, most states use a method known as the
22 “basic customer method.” The NARUC study found: “The most common method used

1 is the basic customer method, which classifies all poles, wires, and transformers as
2 demand-related and meters, meter-reading, and billing as customer-related. This general
3 approach is used in more than thirty states.”¹

4 This basic customer method is the same approach that is used in the commodity-
5 demand method, the base-extra capacity method, and every water COSS that I have seen
6 over the years. Mains and other distribution facilities are related to water consumption
7 and water demand; service lines and meters are customer-related. There is no reason to
8 depart from that industry-standard methodology in this case.

9 **Q. Have you revised PAC’s COSS to change the allocation of transmission and**
10 **distribution mains?**

11 A. Yes, I used PAC’s spreadsheet model and changed the allocation of mains. First, I
12 retained PAC’s assumption that 45% of the cost of mains is related to fire protection.
13 While I would have used a different approach to determining the portion of mains that is
14 related to providing fire demands, I consider the result to be within a reasonable range for
15 a utility the size of PAC. I then allocated the remaining portion of mains investment,
16 55%, to the volume function. Making this change affects not only the allocation of the
17 cost of mains, but also the allocation of other items, such as depreciation expense on
18 those mains, expenses for the maintenance of mains, contributions in aid of construction
19 related to water mains, and other costs that are based on composite allocation factors.

¹ Frederick Weston, *Charging For Distribution Utility Services: Issues In Rate Design* (December 2000), prepared for NARUC under a grant from the Energy Foundation, p. 29.

1 The interactive nature of a computerized COSS reflects all of these related calculations. I
2 have attached the revised COSS as Attachment SJR-3.

3 **Q. What is the effect on the COSS of revising the allocation of transmission and**
4 **distribution mains?**

5 A. Table 1 compares the results of the Company's COSS (from Schedule P11) to my study
6 that changes the allocation of mains.

7

	PAC COSS	Revised COSS	Difference
Volume costs	\$ 340,104	\$ 402,906	\$ 62,802
Customer costs	206,242	143,440	(62,802)
Private fire costs	24,433	24,434	1
Public fire costs	157,682	157,681	(1)
Total cost of service	\$ 728,461	\$ 728,461	\$ 728,461

8 Table 1 shows that removing the customer component of mains increases the allocation
9 of volume-related costs by \$62,802 and decreases the allocation of customer-related costs
10 by the same amount.

11 **Q. How should the Commission use the results of your revised COSS?**

12 A. I recommend that the Commission use the results of my revised COSS as a guide to
13 designing rates in this case.

14 ***Reallocation of A&G Expenses and Management Fees***

15 **Q. Do you have any other concerns about the Company's COSS?**

1 A. Yes. Rather than using the results of its COSS as a guide to designing rates, PAC first
2 makes two unwarranted adjustments to the results of the study. In particular, PAC
3 reallocates a portion of A&G expenses and management fees out of the volume function
4 and into the customer function. Presumably the Company does this so it can justify an
5 increase in the customer charge. PAC, however, does not provide any justification for
6 this radical departure from the COSS, other than to express its desire to have a higher
7 customer charge.

8 **Q. What specifically did the Company do?**

9 A. On Schedule P14, p. 2, the Company begins with the customer costs from its COSS, or
10 \$206,242. This should be the maximum amount the Company recovers from its customer
11 charges, though as I discussed above this amount is overstated because of the improper
12 allocation of mains to the customer function.

13 PAC then adds to that amount 50% of A&G expenses that had been properly
14 allocated to the volume function, plus 50% of management fee expenses that had been
15 properly allocated to the volume function. The Company thereby improperly inflates its
16 so-called customer-related costs by more than \$55,000.

17 **Q. Is the Company's reallocation of A&G expenses reasonable?**

18 A. No. The Company's arbitrary reallocation of A&G expenses from the volume function to
19 the customer function is not reasonable.

20 The Company's total A&G expenses are \$61,371. Of that amount, the COSS
21 allocates \$30,317 to the volume function, \$16,215 to the customer function, and \$14,839

1 to fire protection customers. Importantly, most of this A&G expense is for property
2 insurance (\$48,180 of the \$61,371). The remaining \$13,191 is for miscellaneous A&G
3 expenses.

4 Property insurance costs should be allocated based on the value of the property
5 being insured. In this instance, the Company started by properly allocating property
6 insurance costs based on the value of total plant. Because most of the Company's plant is
7 associated with the production and distribution of water, most of the cost is allocated to
8 the volume and fire protection functions. Specifically, the Company's COSS shows that
9 47.90% of total utility plant in service is allocated to the volume function, 22.58% is
10 allocated to the customer function, and 29.52% is allocated to the fire function. PAC
11 COSS Schedule P1, page 1. Precisely these same percentages are used in the Company's
12 COSS to initially allocate property insurance costs. This initial allocation is consistent
13 with standard practices and assumptions for a COSS; there is no reason to change this
14 allocation after-the-fact as PAC does.

15 Miscellaneous A&G expenses totaling \$13,191 are allocated in proportion to all
16 other operations and maintenance expenses (excluding property insurance and the
17 management fee). This procedure appropriately assigns 54.88% of the cost to the volume
18 function, 40.45% to the customer function, and 4.67% to the fire function. Again, this
19 allocation complies with standard industry practices and there is no need to change it.

20 Despite the appropriateness of the Company's original A&G expense allocations,
21 PAC changes both of these allocations prior to designing rates. Specifically, the
22 Company's reallocation takes the amounts allocated to the volume function for property

1 insurance and miscellaneous A&G expenses and arbitrarily reallocates 50% of the
2 volume-related cost to the customer function. The result is that the customer function
3 would bear 46.5% of property insurance costs ($\$22,418 \div \$48,180$) and 67.9% of
4 miscellaneous A&G expenses ($\$8,956 \div \$13,191$) There is no justification for the
5 customer function to bear 46.5% of the cost of property insurance when the customer
6 function is responsible for only 22.58% of the property that is being insured. Similarly,
7 there is no justification for allocating more than two-thirds of miscellaneous A&G
8 expenses to the customer function, and the Company does not attempt to provide any
9 rationale for doing so.

10 **Q. You testified that the Company also reallocated its management fees. Is the**
11 **Company's reallocation of management fees reasonable?**

12 A. No. PAC's management fee expense is \$160,026, of which \$81,021 is allocated to the
13 volume function, \$47,288 to the customer function, and \$31,717 to fire customers. The
14 allocation is based on an average of the allocation of total plant and total operations and
15 maintenance expenses (excluding the management fee). This allocation is reasonable
16 because it recognizes that the primary functions of management are to manage and
17 maintain the utility's plant assets and to oversee the operations of the utility. Thus, the
18 allocation of management fees in the COSS is reasonably reflective of the role of
19 management, and those costs are spread fairly across all three functions.

20 The arbitrary reallocation of management fees, however, moves \$40,511 from the
21 volume function to the customer function. The result is that the customer function would
22 be allocated \$87,799 for management fees, which is 55% of all management fees. This is

1 not reasonable. While customer-related functions (such as billing, collection, and meter
2 reading) are important, they should not account for 55% of management's time and
3 should not be allocated the majority of management fees. In short, there is no valid basis
4 to reallocate management fees away from the volume function and onto the customer
5 function.

6 **Q. What do you conclude about the Company's proposed reallocation of A&G**
7 **expenses and management fees out of the volume function and into the customer**
8 **function?**

9 A. I conclude that the Company's proposed reallocation of these costs is not consistent with
10 its own COSS. Simply, the reallocation does not reflect the reasons why those costs are
11 incurred. Further, the reallocation is inconsistent with standard industry practice in
12 preparing a water COSS. The purpose of a COSS is to get an accurate depiction of the
13 costs of providing service to different functions or different types of customers; it is not
14 to reflect a utility's judgment about public policy or the importance to the utility of rate
15 stability. I recommend that the Company's proposed reallocation of these expenses
16 should be rejected. Consequently, I have not incorporated this reallocation in my revised
17 COSS.

18 **Rate Design**

19 **Q. How does your calculation of the cost of service compare to the revenues the**
20 **Company receives under existing rates?**

21 A. Table 2 compares the revised cost of service (as shown in Table 1) to the pro forma
22 revenues PAC receives under present rates (from Schedule P13, p. 3 of PAC's COSS).

Table 2: Comparison of Revised Cost of Service with Pro Forma Revenues Under Present Rates			
	Revised COSS	Present Revenues	Difference
Volume costs	\$ 402,906	\$ 285,236	(\$ 117,670)
Customer costs	143,440	168,563	25,123
Private fire costs	24,434	21,188	(3,246)
Public fire costs	157,681	121,294	(36,387)
Total cost of service	\$ 728,461	\$ 596,281	(\$ 132,180)

1 Table 2 shows that PAC's existing customer charges are more than sufficient to recover
2 all of PAC's customer-related costs under PAC's proposed revenue requirement.
3 Specifically, PAC is currently collecting \$168,563 from customer charges, but its
4 customer-related cost under proposed rates is only \$143,440. In other words, if the cost
5 of service were the only consideration, PAC's customer charges should be reduced.
6 Certainly, there is no cost justification for increasing PAC's customer charges in this
7 case. Any rate increase from general service customers (that is, non-fire customers)
8 should be recovered through an increase in the consumption charge. Even if that were
9 done, PAC's revenues from customer charges still would exceed the customer-related
10 cost of service.

11 **Q. Are there other rate design considerations in addition to the cost of service?**

12 A. Yes, there are valid public policy considerations other than the cost of service that should
13 be evaluated when designing utility rates. Among these are the impacts on customers,
14 encouraging the efficient use of the utility service, the stability of the utility's revenues,
15 and the avoidance of dramatic changes in the rate design.

16 **Q. How has the Company proposed to balance these various rate design**
17 **considerations?**

1 A. The Company has placed tremendous weight on the stability of its revenues while
2 ignoring the other factors, including the cost of service. Thus, the Company proposes to
3 recover more than its entire rate increase through increases in fixed charges, and to
4 reduce the consumption charge by \$0.01 per 100 cubic feet (ccf). In my opinion, this is
5 an extreme – and unwarranted – position. The Company has elevated revenue stability
6 above all other considerations and it has crafted a rate design proposal that is neither
7 reasonable nor reflective of the cost of serving different types of customers.

8 **Q. Does the Company’s revenue history exhibit the type of instability that would justify**
9 **such an extreme rate design proposal?**

10 A. No, it does not. According to the Company’s data, its revenues have been relatively
11 constant in recent years. For example, from 2005 through 2007, the Company shows that
12 it received annual revenues of between \$455,500 and \$464,500 each year. PAC
13 Documents Filed Under NHPUC Rule 1604-01, item 19.

14 Similarly, the Company had a rate increase take effect on January 1, 2009. For
15 that year, the Company had quarterly revenues ranging between \$143,000 and \$152,000,
16 and total annual revenues of \$600,600. Id. In the first three quarters of 2010 (the latest
17 data available to me as I prepare this testimony), the Company showed quarterly revenues
18 of between \$145,000 and \$152,000. Total revenues for the first three quarters of 2010
19 totaled \$434,900, which is less than \$5,000 different from its revenues for the same
20 period of 2009. PAC response to OCA 2-1.

21 While it is true that the Company’s sales of water have declined during the past
22 six years, that tells us little about the overall stability of its revenues. Under present rates,

1 more than 50% of the Company's revenues come from fixed charges that are not affected
2 by the amount of water sold. Specifically, Schedule P13, page 3, of PAC's COSS shows
3 total existing revenues of \$596,281. Of that amount, \$311,045 (52.2%) comes from fixed
4 charges. When this is combined with the general stability of PAC's customer base,
5 changes in water sales have only a modest impact on the stability of PAC's revenues.

6 **Q. How does the percentage of revenues PAC receives from fixed charges compare to**
7 **other water utilities with which you are familiar?**

8 A. PAC recovers more of its revenues through fixed charges than almost any other water
9 utility with which I am familiar. Most of the water utility rate cases I have worked on
10 result in the utility recovering less than 30% of its revenue requirement from fixed
11 charges. Indeed, as part of its statewide water conservation policy, the California Urban
12 Water Conservation Council recommends that water utilities recover no more than 30%
13 of their revenues from fixed charges. This is consistent with my experience with water
14 utilities throughout the United States.

15 For example, last year I worked on a rate case involving Illinois-American Water
16 Company which has service areas of different sizes spread throughout that state. In total,
17 that utility's pro forma revenues under present rates for 2009 were \$58.7 million.
18 Approximately \$6.2 million of that amount (10.5%) was recovered through fixed charges.
19 That is, almost 90% of its revenues came from consumption-related charges. Similarly,
20 last year I also reviewed a rate case filed by Kentucky-American Water Company. In
21 that case, the utility proposed a revenue requirement of \$88.1 million, of which \$22.1
22 million (25%) would be recovered from fixed charges.

1 Even in my experience with smaller utilities, I cannot recall a case where the
2 utility received more than half of its revenues from fixed charges. For example, last year
3 I worked on a rate case by Shorelands Water Company in New Jersey. That utility has
4 approximately 11,000 customers, and the utility made similar arguments about the need
5 to improve the stability of its revenues. The settlement in that case provided for the
6 utility to recover approximately \$3.9 million of its total revenue requirement of \$10.5
7 million through fixed charges, or about 37% of its revenues.

8 These cases represent just a few of the many water rate cases on which I have
9 worked. Simply, in my experience it is very unusual to have a water utility recover
10 anywhere near 50% of its revenues from fixed charges. PAC's fixed-charge revenues
11 already are at a level that exceeds the amount recovered by most water utilities with
12 which I am familiar.

13 **Q. What do you conclude about the stability of PAC's revenues?**

14 A. I conclude that the existing rate structure, through which more than 50% of PAC's
15 revenues are from fixed charges, ensures a relatively stable revenue stream for PAC.
16 PAC's experience during 2009 and 2010 is consistent with that conclusion: its revenues
17 have been quite stable during the past two years. In my opinion, there is no need to
18 deviate significantly from the cost of service, or to ignore other important public policy
19 goals, in order to provide PAC with an unusually high level of revenue stability. In fact,
20 in light of my experience with many other water utilities' rate cases, the Commission
21 could even reduce the percentage of revenues PAC recovers through fixed charges and
22 still have rates that promote revenue stability.

1 **Q. What do you recommend?**

2 A. My preferred approach to setting rates for PAC would be to have no increase in PAC's
3 customer charges. Those charges already recover \$168,563 in revenues, even though the
4 customer-related cost of service under PAC's proposed revenue requirement is only
5 \$143,440. Thus, I do not see a justification – either because of the cost of service or for
6 revenue-stability reasons – to increase the customer charges. For example, if PAC's
7 revenue requirement were granted in full, PAC would recover \$350,678 in revenues from
8 fixed charges (customer charges plus fire protection charges), out of a total revenue
9 requirement of \$728,461. This represents 48.1% of revenues recovered through fixed
10 charges which, as I discussed above, is extraordinarily high for a water utility. In my
11 opinion, therefore, keeping customer charges at their existing level would be consistent
12 with the cost of providing service and would not impose an undue burden on the stability
13 of the Company's revenues.

14 **Q. Have you prepared rates that would implement your proposal?**

15 A. Yes. On Attachment SJR-4, I show the rates, and a proof of revenues, that would collect
16 the Company's proposed revenue requirement using my rate design proposal.

17 **Q. If the Commission were to authorize a smaller rate increase than the Company
18 requested, how would you recommend that rates should be designed?**

19 A. If the Commission authorized a lower rate increase than PAC requested, I would continue
20 to hold customer charges at their existing level. The rate increases in fire charges and
21 consumption charges should be scaled back proportionately to produce the authorized
22 level of revenues. On Attachment SJR-5, I illustrate this using a hypothetical revenue

1 requirement of \$656,048 (the same 10% increase authorized by the Commission as
2 temporary rates on October 8, 2010).

3 It should be noted that the rates on Attachment SJR-5 recover more than 48.1% of
4 the total revenue requirement from fixed charges. This will occur under any increase
5 authorized by the Commission that is less than PAC's requested rate increase, because
6 the amount of revenue from fixed charges would decrease at a smaller rate than the
7 decrease in revenues from consumption charges. Thus, under my recommendation, I
8 believe it is likely that the final rates resulting from this case would permit PAC to
9 recover more than 48% of its revenues from fixed charges.

10 **Q. You said that this is your primary recommendation. If the Commission rejects your**
11 **proposal to keep customer charges at their existing level, do you have any other**
12 **recommendations?**

13 A. Yes, if the Commission rejects my proposal to keep customer charges at their current
14 levels, I would urge the Commission to not permit PAC to increase the proportion of total
15 revenues that the Company recovers through fixed charges. As I stated above, that
16 percentage is 52.2%. I consider that percentage to be extraordinarily high for a water
17 utility already, so I would urge the Commission not to authorize any greater recover of
18 revenues through fixed charges. If the Commission were to increase fixed-cost recovery
19 beyond 52.2%, PAC's rates would move even further from the cost of service than they
20 are at present.

1 **Q. Have you calculated what your alternative recommendation, to limit the percentage**
2 **of revenues recovered through fixed charges to 52.2%, would mean for PAC's**
3 **customer charges?**

4 A. Yes. Under PAC's proposed revenue requirement, the maximum customer charge
5 revenue would be \$198,142, which when added to fire revenues would bring the
6 percentage of fixed-charge revenues to 52.2% of the \$728,461 revenue requirement
7 proposed by the Company. Attachment SJR-6 shows the customer charges and
8 consumption charge that would provide PAC with 52.2% of its revenues from fixed
9 charges.

10 I also prepared Attachment SJR-7 to show what this limitation (52.2% of
11 revenues from fixed charges) would mean if the final revenue requirement were set equal
12 to the temporary rate increase previously authorized by the Commission. This
13 attachment shows that the maximum customer-charge revenues under this revenue
14 requirement should be \$178,225.

15 **Conclusion**

16 **Q. Please summarize your rate design recommendations.**

17 A. Table 3 summarizes the rates I recommend, and my alternative recommendation, and the
18 resulting annual bill for a typical residential customer under the hypothetical situation
19 where the Commission authorizes the full revenue requirement requested by PAC.

20

1

Table 3: Typical Residential Bill Under Different Rate Design Options Using PAC's Requested Revenue Requirement				
	Present	PAC Proposed	Recommended: No Customer Charge Increase	Alternative: Retain Same Proportion of Fixed Charges
5/8" meter charge	\$18.67	\$28.98	\$18.67	\$21.95
Rate per ccf	\$4.88	\$4.87	\$6.4632	\$5.9566
Typical bill: 6 ccf	\$47.95	\$58.20	\$57.45	\$57.69
% increase		21.4%	19.8%	20.3%

2 Table 4 shows the same type of summary under the hypothetical situation where the
 3 Commission authorizes a revenue requirement equal to the amount it authorized as a
 4 temporary rate increase on October 8, 2010.

Table 4: Typical Residential Bill Under Different Rate Design Options Using Temporary Rate Revenue Requirement				
	Present	Authorized Temporary Rates	Recommended: No Customer Charge Increase	Alternative: Retain Same Proportion of Fixed Charges
5/8" meter charge	\$18.67	\$20.54	\$18.67	\$19.74
Rate per ccf	\$4.88	\$5.37	\$5.5341	\$5.3688
Monthly bill: 6 ccf	\$47.95	\$52.76	\$51.87	\$51.95
% increase		10.0%	8.2%	8.3%

5 **Q. Does this conclude your direct testimony?**

6 A. Yes, it does.