

STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

Aqua Illinois, Inc.)	
)	Docket No. 04-0442
Proposed general increase in water rates.)	

Rebuttal Testimony of

DAVID R. MONIE

President
G.P.M. Associates Inc.

On Behalf of
Aqua Illinois, Inc.

October 6, 2004

1 **I. INTRODUCTION**

2 **Q. Please state your name, occupation and business address.**

3 A. My name is David R. Monie. I am President of G.P.M. Associates Inc., a water engineering and
4 management consulting firm located at 1920 Frontage Road, Suite 110, Cherry Hill, NJ 08034.

5 **Q. Are you the same David R. Monie that submitted Direct Testimony in this matter?**

6 A. Yes.

7 **II. PURPOSE OF TESTIMONY**

8 **Q. What is the purpose of your rebuttal testimony in this proceeding?**

9 A. The purpose of my rebuttal testimony is to comment on and rebut certain portions of the Illinois
10 Commerce Commission (“Commission”) Staff witness Mr. Michael Luth’s Direct Testimony
11 (Staff Ex. 4.0) and Staff Exhibit 4.1 that Mr. Luth sponsored. Specifically, I will address the
12 following:

- 13 1. Cost of Service Study Methodology
- 14 2. Pro Forma Current Rate Revenues
- 15 3. Public Fire Protection Charges
- 16 4. Charges to TeePak
- 17 5. Elimination of the Fourth Consumption Rate Block
- 18 6. Customer Charge

19 **III. COST OF SERVICE STUDY METHODOLOGY**

20 **Q. Please comment on the Cost of Service Study Methodology used by Mr. Luth.**

21 A. Both Mr. Luth and I used the base-extra capacity method as recommended by the American
22 Water Works Association to allocate costs. While the details of the calculations vary in the two
23 studies, it is interesting, but not surprising, that the results are quite similar. Before the Small

24 Main Adjustment made by Mr. Luth, each class of service cost, expressed as a percentage of total
25 costs, is within one percent on both studies. While I disagree with using a Small Main
26 Adjustment because a distribution grid of smaller pipes can provide an equivalent piping system
27 to single pipes of larger diameter, I do not dispute the results of the Staff's Cost of Service Study
28 ("COSS") as it affects the overall Customer Class Cost of Service.

29 IV. PRO FORMA CURRENT RATE REVENUES

30 **Q. What are your comments on Staff's calculation of revenues based on current rates?**

31 A. There are two apparent mistakes made in Staff Exhibit 4.1. First, in calculating the number of
32 bills by customer class and meter size on Staff Exhibit 4.1 page 1 and on Staff Exhibit 4.2 page 1,
33 Mr. Luth did not use the actual number of pro forma bills as set forth on Table 9 of Schedule 1
34 attached to Aqua Illinois Exhibit 4.0 (Direct Testimony and COSS of David Monie). Instead,
35 Staff used 12 times the number of equivalent units set forth on WP 5b of Schedule 1 of Aqua
36 Illinois Exhibit 4.0. For purposes of clarity, I rounded up the number of units on WP 5b to the
37 next highest integer. The equivalent units are used to allocate customer costs, but not to calculate
38 revenues from current or proposed rates. The actual number of bills should be used as set forth
39 on Table 9. Second, Mr. Luth proposes to eliminate the fourth declining consumption block. I
40 will discuss the appropriateness of this recommendation later in my rebuttal testimony, but page 1
41 of Staff Exhibit 4.1 and page 1 of Staff Exhibit 4.2 combine the third and fourth declining
42 consumption blocks for the calculation of present rates revenue as well as Staff proposed
43 revenues. This has the effect of increasing present rates' revenues. Accordingly, given these two
44 errors, the pro forma billing analysis set forth on Table 9, the present rates metered revenues of
45 \$9,423,704 calculated on Table 9 of Schedule 1 attached to Aqua Illinois Exhibit 4.0 should be
46 utilized in place of the \$9,431,171 calculated by Mr. Luth.

47 **V. PUBLIC FIRE PROTECTION CHARGES**

48 **Q. Do you agree with Mr. Luth’s position on Public Fire Protection Charges?**

49 A. No. While I accept Mr. Luth’s position that 100% of the Cost of Service for Public Fire
50 Protection Charges should be utilized, I disagree with his calculation of the charges for the
51 various communities as set forth on page 14 of Staff Exhibit 4.1.

52 **Q. What is the basis of your disagreement with Mr. Luth on Public Fire Protection Charges?**

53 A. In systems that receive most or all of their fire protection charges directly from the various
54 municipalities or fire districts, it is not unusual to allocate the charges based on the number of fire
55 hydrants or inch feet or a combination of both. It is also appropriate in such cases to allocate
56 public fire protection charges based on the number of customers in the various communities. For
57 instance, in the state of Ohio, customers pay directly for public fire protection and a uniform
58 charge is included in the customers’ other rates that is not dependant on the municipality or fire
59 district in which they are located.

60 On the other hand, in systems, such as Vermilion, that receive the vast majority (in this case
61 100%) of public fire protection charges from individual customers, it is my opinion that the
62 charges should be uniform throughout the service territory. In Vermilion’s case, all customers
63 except those in the Indianola area are part of an interconnected system. The Company provides
64 fire protection throughout its territory. It is not easy to explain to one customer living close to
65 another similar customer, but across a municipal boundary, why his/her water bill is significantly
66 higher than his/her neighbor’s water bill. If a Cost of Service Study were to break down all of the
67 costs of serving each separate municipality, it is likely that different cost of service based tariff
68 designs would be called for. It has been the position of the Commission and the Company that
69 uniform rates throughout the service territory are appropriate. Uniform rates for fire protection

70 charges would, therefore, be consistent with the overall philosophy of uniform rates within the
71 service territory previously adopted by the Commission.

72 **Q. How does Mr. Luth propose to allocate Public Fire Protection Charges?**

73 A. Mr. Luth proposes to allocate Public Fire Protection Charges using what the Commission calls a
74 “Single-Tier Method” as set forth on pages 13 and 14 of Staff Exhibit 4.1. This Single-Tier
75 Method calculates the cost per fire hydrant of the total Public Fire Protection costs. It then
76 calculates the total cost per municipality based on the number of fire hydrants in that
77 municipality. The Single-Tier Method then allocates within each municipality to customers
78 based on equivalent units.

79 **Q. Has the Commission previously used Staff’s proposed methodology to allocate Public Fire
80 Protection charges for Vermilion?**

81 A. No. The Commission has used previously what is called a “Two-Tier Method” for allocating
82 Public Fire Protection charges. In the last rate case for Vermilion (Docket Nos. 00-0337, 00-0338
83 and 00-0339 Consolidated) this same issue was in dispute. It was ultimately resolved by adopting
84 the Two-Tier Method.

85 **Q. Have you performed a comparison of Public Fire Protection Rates using both Methods?**

86 A. I have prepared the attached schedule (Schedule R4-1) which calculates Public Fire Protection
87 Rates by both the Single-Tier and Two-Tier Methods. Initially, it needs to be noted that to clarify
88 the comparison, I used the total cost of Public Fire Charges proposed by Mr. Luth in Staff
89 Exhibit 4.1. It should be emphasized, however, that the total amount of Public Fire Charges will
90 be dependent on the ultimate revenue requirement and corresponding expenses the Commission
91 adopts in this proceeding and that appropriate adjustments will need to be made. Turning to the
92 substance, the Single-Tier Method calculation is identical to that used by Mr. Luth on page 14 of
93 Staff Exhibit 4.1 and as described above. In calculating the Two-Tier Method, hydrant costs are

94 allocated based on the number of fire hydrants (similar to the Single-Tier Method), but non-
95 hydrant costs are allocated based on the number of equivalent service units. To calculate the
96 appropriate allocation of Public Fire Protection charges using the Two-Tier Method, I used the
97 breakdown of hydrant and non-hydrant charges as set forth on page 13 of Staff Exhibit 4.1

98 **Q. Do you have a recommendation to resolve the dispute over Public Fire Protection Charges?**

99 A. Yes, I recommend that the Public Fire Protection Charges as calculated using the Two-Tier
100 Method be utilized in this matter. This would be consistent with the fact that the Commission's
101 previously authorized Public Fire Protection Charges for Vermilion were set based on the Two-
102 Tier Method.

103 VI. CHARGES TO TEEPAK

104 **Q. Please comment on Mr. Luth's Testimony concerning water rates for the Large Industrial**
105 **customer class (pages 11-15 of Staff Exhibit 4.0).**

106 A. The only customer that qualifies for the Large Industrial Customer Class is TeePak. As set forth
107 in my Direct Testimony in this matter (Aqua Illinois Ex. 4.0), TeePak is a very important
108 business for the City of Danville and the surrounding communities. The Company informed Staff
109 in response to ML-7 that there is very real concern that TeePak may leave the area if water rates
110 are increased more than the 6% (including the 5% QIPS Surcharge) proposed by the Company.
111 Mr. Luth is recommending a \$175,417 increase to TeePak above present rates revenues of
112 \$456,503 (exclusive of the QIPS Surcharge) or 38.4% compared with the Company's proposed
113 increase to TeePak of \$27,451 or 6.0%. Mr. Luth has stated his opinion that "[a]n increase of
114 \$175,417 in water costs represents slightly more than 1/10th of one percent of [TeePak's total]
115 revenues" and that "[a]n increase of 1/10th of one percent in operating costs compared to
116 revenues, while receiving 40% subsidy from surrounding water customers, does not appear to be

117 a powerful reason for TeePak to leave an established location with experienced employees
118 producing its products.” (Staff Ex. 4.0, pages 14-15, lines 278-283).

119 **Q. Do you believe Mr. Luth’s recommendation is based on a policy judgment he made?**

120 A. Yes. Mr. Luth states in his testimony that the benefit of a larger increase to TeePak would be to
121 reduce the “subsidy” provided to the fully allocated cost of service by the other customers of the
122 system. (Staff Ex. 4.0, page 15, lines 284-299).

123 **Q. Please comment on Mr. Luth’s use of the term “subsidy.”**

124 A. It should be noted that the use of the term “subsidy” is misleading. While it is true that the
125 proposed rates of both the Company and Staff would result in TeePak paying revenues less than
126 the fully allocated cost of serving TeePak, there is no dispute that TeePak contributes to the fixed
127 capital of the Company and, therefore, is a net benefit to the other customer classes. As a result,
128 if TeePak were to leave the system entirely, there would be the necessity of higher rates to some
129 or all of the other customer classes.

130 **Q. What information are you relying upon for your opinion that TeePak’s threat to leave the
131 system is real?**

132 A. First and foremost, I am relying on the Rebuttal Testimony of TeePak’s Danville Plant Manager
133 Mr. Douglas Cunningham that is being presented in this case. I am also relying on a letter from
134 TeePak’s President and Chief Executive Officer Mr. Paul Murphy, which was provided to Staff in
135 response to ML-7 and is attached hereto as part of Attachment R4-2, wherein Mr. Murphy
136 expresses TeePak’s position on the issue. In addition, I am relying on the opinion of the elected
137 officials of the City of Danville and other concerned establishments in the area that make up
138 Vermilion Advantage. Letters from the Mayor of Danville and Vermilion Advantage were also
139 provided to Staff in response to ML-7 and are also attached hereto as part 3 of Attachment R4-2.

140 **Q. Do you have any comments on the position taken by the City of Danville?**

141 A. Yes. The Mayor of Danville has the responsibility of protecting the interests of all members of
142 the Danville community. Nonetheless, the Mayor of Danville has strongly requested that water
143 rates to TeePak not be increased more than 1% above existing rates, including the QIPS
144 Surcharge (see the letter from Mayor Scott Eisenhauer that was attached to the Company’s
145 response to ML-7). In addition, Vermilion Advantage, an organization that includes many
146 community leaders and businesses in the region, has made a similar request that the increase to
147 TeePak be no more than 1%. The Mayor and Vermilion Advantage both feel strongly that it is
148 appropriate to provide this water rate incentive to TeePak as one of the ways to help TeePak stay
149 competitive. In my opinion, the Mayor and Vermilion Advantage are close to the situation and
150 are reliable sources.

151 **Q. Overall, what is your opinion on whether the Commission should adopt the Company’s**
152 **position in reliance on the information from TeePak, the City of Danville and Vermilion**
153 **Advantage?**

154 A. It is my opinion that the Commission should adopt the Company’s position on this issue. As I
155 explained to Staff in response to ML-7, a copy of which is attached hereto as Attachment R4-3,
156 the American Water Works Association M1 Manual “Principles of Water Rates, Fees, and
157 Charges” (Fifth Edition) (“M-1 Manual”) allows for factors other than Cost of Service to be
158 utilized in setting tariffs. Chapter 9 of the M-1 Manual, which is entitled “Selecting Rate
159 Structures,” discusses how a utility should proceed in determining a rate structure. While there is
160 a large volume of information in the M-1 Manual that would support Aqua Illinois’ proposed
161 Large Industrial Customer tariff that includes a 6% increase versus the 21.5% increase for other
162 customers, the opening paragraph to Chapter 9 on page 79 states:

163 A utility is presented with a major challenge when it sets out to select a
164 rate structure that is responsive to the philosophy and objectives of both
165 the utility and its community. It is important to the utility and its
166 customers to select the appropriate rate structure because the majority of
167 the utility’s revenues are collected through water rates and because

168 pricing policies may support a community's social, economic, political,
169 and environmental concerns.

170 Also, on page 79 of the M-1 Manual, it states:

171 The [tariff] design, however, is a function of many diverse and
172 sometimes competing objectives. When diverse and competing
173 objectives are well understood and evaluated, a utility has the
174 opportunity to design a rate structure that does more than simply recover
175 its costs. A properly selected rate structure should support and optimize
176 a blend of various utility objectives and should work as a public
177 information tool in communicating these objectives to customers.

178 **Q. How significantly will the Company's proposed lower percentage increase to TeePak impact**
179 **the percentage of other customers' rate increases?**

180 A. The effect of the Company's proposal to increase the rates to TeePak by 1% (not including the
181 QIPS Surcharge) rather than the overall proposed Metered Service increase of 14.95% (see
182 Table 12 of my COSS in Schedule 1 of Aqua Illinois Ex. 4.0) is to have additional increases in
183 the other metered customer classes of less than 1%. The average increase over Company
184 proposed rates for the other metered classes would be 0.71% (15.66% vs. 14.95%) if TeePak
185 were to receive an increase of 14.95%.

186 **Q. Has the Commission previously made a finding that it is appropriate for TeePak to bear a**
187 **lower percentage increase than customers generally?**

188 A. Yes. The Commission has approved a lower percentage increase for TeePak's rates than
189 customers generally in Docket Nos. 00-0337, 00-0338 and 00-0339 consolidated; Docket No. 97-
190 0351 and Docket No. 94-0270.

191 **Q. What rationale has the Commission previously relied upon?**

192 A. In addition to the possible relocation of TeePak's Danville plant to another area, the Commission
193 has relied on the probability that TeePak will construct its own source of supply if its water rates
194 are significantly increased. In the last rate proceeding for Vermilion, Docket Nos. 00-0337, 00-

195 0338 and 00-0339 consolidated, at pages 18 and 19 of Staff Ex. 5.0, Staff witness Mr. Raymond

196 E. Pilapil testified on this issue as follows:

197 Q. Has Teepak [sic] provided evidence that they are capable of
198 constructing an alternative water supply source at a cost that would
199 require a lower rate to avoid Teepak from discontinuing water purchases
200 from [Aqua Illinois, Inc.]?

201 A. Teepak has submitted testimony and updated Exhibit 1A and 3A
202 previously presented in Docket No. 97-0351, based on current cost and
203 inflation estimates which reasonably demonstrates that they have
204 investigated the feasibility of constructing an alternative water supply
205 (DR Response REP 1.12). Furthermore, Teepak has stated that 'if the
206 Large Service Rate approved by the Commission, increases by more than
207 2.5%, Devro-Teepak would begin detailed engineering to proceed with
208 construction of its own water system. If Devro-Teepak is given a 0% to
209 2.5% increase in the Large General Service Rate filed, Devro-Teepak
210 would stay on the system.' (DR Response REP 1.12, Ex. 2, pages 5-6).

211 Q. What are you proposing for Large General Service?

212 A. Teepak purchases approximately 15% of the water sold in the
213 Vermilion service area, consuming 420 million gallons (DR Response
214 REP 1.12, Exhibit 2, pages 5-6). In addition, they have already
215 demonstrated in the last two rate cases (Docket Nos. 97-0351 and 94-
216 0270), as well as this rate case, for Vermilion that they are ready and able
217 to construct an alternative water supply and cease purchasing water from
218 [Aqua Illinois]. Therefore, since the proposed rate will exceed out of
219 pocket cost by a very considerable margin, I agree with [Aqua Illinois']
220 proposed increased rate of 2.5% for Large General Service, to relieve the
221 remaining ratepayers from seeing a significant rate increase if Teepak
222 were to cease purchasing water from [Aqua Illinois]. Simply stated, the
223 remaining rate payers benefit from Teepak remaining on the system at a
224 less than full cost of service rate since Teepak will still make a
225 significant contribution to fixed cost.

226 **Q. How does the Company's proposed percentage increase for TeePak compare to the one**
227 **approved by the Commission in Docket Nos. 00-0337, 00-0338 and 00-0339 consolidated?**

228 A. The proposed increase of 6% (including the rolling in of the QIPS Surcharge) is significantly
229 higher than the Commission approved increase of 2.5% in the last rate case.

230 **Q. Would you please summarize your recommendation on this issue?**

231 A. Yes. For all of the reasons discussed herein as well as in my Direct Testimony, it is my opinion
232 that the risk of TeePak no longer being a customer of the Company or a contributor to the region
233 in many other ways far outweighs the lower than fully allocated cost of service for Teepak's
234 water rate.

235 VII. ELIMINATION OF THE FOURTH CONSUMPTION RATE BLOCK

236 **Q. Please describe Mr. Luth's proposal to eliminate the Company's fourth consumption rate**
237 **block (Staff Ex. 4.0, page 13, lines 249-55)?**

238 A. Mr. Luth proposes to eliminate the fourth trailing and declining block. Mr. Luth states he
239 recommends to do so "because the usage in that block represents less than four percent of total
240 industrial usage, and only 1/2 of one percent of total usage" and "[t]he industrial customer class is
241 the only customer class that would have any usage billing through the fourth usage block, so it is
242 not necessary to have a fourth usage block to accommodate only four percent of the usage by the
243 only customer class to which the rate would apply."

244 **Q. Do you agree with Mr. Luth's proposal?**

245 A. No.

246 **Q. Please comment on his stated rationale.**

247 A. Mr. Luth's reasoning does not make sense to me. In most systems that have declining block
248 rates, the precise tariff design purpose for having a trailing rate block is so it applies only for
249 water service to the largest industrial users. There are at least two reasons for having such a rate
250 block. First, on a cost of service basis it is simply cheaper to provide large quantities of water to
251 one customer. Second, it is clearly the intent of the community leaders of the service area to
252 attract and maintain industry. This is true not only in the Danville area but in most regions of the
253 country. While this rate block does not have a large number of applicable users, it is precisely
254 for this reason that this rate block exists. That is, to provide fair pricing targeted to the few large

255 users in the service territory. In my opinion, therefore, it is not appropriate to eliminate this rate
256 block and possibly alienate present and potential industrial users in the Vermilion service area of
257 the Company.

258 VIII. CUSTOMER CHARGE

259 **Q. Please comment on Mr. Luth's proposal for the Customer Charge.**

260 A. Mr. Luth proposes to leave the Customer Charge at the current level of \$12.00 per month for a
261 customer with a 5/8" meter. Only the Customer Charge for TeePak is proposed by Mr. Luth to be
262 increased (Staff Ex. 4.0, page 2, lines 31-36).

263 **Q. What is the Company's position?**

264 A. The Company proposes to increase the Customer Charge at the same increase percentage as the
265 overall increase in metered revenues.

266 **Q. Do you have any concerns with Mr. Luth's proposal?**

267 A. Yes. The effect of Mr. Luth's proposal to not increase the Customer Charge is that the increase
268 for the average and larger users will be substantially greater on a percentage basis than if the
269 Customer Charge is increased at the same rate as the other metered charges. Staff Exhibit 4.3
270 shows the Staff recommended increase for a 100 cf per month user to be 6.5% versus the increase
271 for an average residential customer using 800 cf per month to be 11.2%. Mr. Luth gives no
272 justification for such a radical tariff change. The fact is that the Residential Customer Class
273 necessarily has a higher class percentage than its fully allocated cost of service due to the less
274 than fully allocated rates charged to TeePak. It is appropriate, therefore, that the Residential
275 Customer Class Customer Cost is higher than the fully allocated cost of service for the Customer
276 Cost. Absent further study, therefore, it is my opinion that there should be an increase in the
277 Customer Cost.

278 **Q. Do you have any recommendation for a compromise position on the Customer Cost?**

279 A. Yes. Since it is true that the Customer Cost is slightly higher than the amount indicated in the
280 Cost of Service Study, it is my suggestion, for purposes of compromise, that the Customer
281 Charge be increased by 50% of the overall percent increase in metered revenues other than for the
282 Large Industrial Class.

283 **Q. Mr. Monie, does this complete your testimony at this time?**

284 A. Yes.