

REBUTTAL TESTIMONY

of

Christopher Boggs

Rates Department

Financial Analysis Division

Illinois Commerce Commission

Aqua Illinois, Inc.

Proposed General Increase in Water and Sewer Rates

Docket No. 11-0436

September 29, 2011

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1 **Q. Please state your name and business address.**

2 A. My name is Christopher Boggs, and my business address is 527 E. Capitol
3 Avenue, Springfield, Illinois 62701.

4

5 **Q. Are you the same Mr. Boggs who previously filed testimony in this**
6 **proceeding?**

7 A. Yes, I am.

8

9 **Q. What issues do you address in your rebuttal testimony?**

10 A. I address the Company's water service division consolidation proposal, the
11 Company's updated Cost of Service Study that used Coincident Peak demand
12 factors, the Company's sewer service consolidation proposal, the Company's
13 revenue requirement proposals, Public Fire Protection Charge proposal, Private
14 Fire Protection Charge proposal and my Large Industrial Rate proposal.

15

16 **Q. Are you sponsoring any schedules or attachments with your testimony?**

17 A. Yes, I am. I am sponsoring Staff's water and sewer rate and revenue
18 requirement schedules 9.1-9.6.

19

20 **Water Service Division Consolidation Proposal**

21 **Q. What recommendation did you make in your Direct Testimony regarding**
22 **the Cost of Service ("COS") Study that Aqua used to make rate and rate**
23 **design proposals in this rate case?**

24 A. I recommended that the Company supply an updated COS Study that used
25 Coincident Peak (“CP”) demand factors as the foundation for the study to comply
26 with the Commission’s Final Order from Docket No. 10-0194.

27

28 **Q. Did the Company provide an updated COS Study that used CP demand**
29 **factors as the foundation for the COS Study?**

30 A. Yes. In response to Staff Data Request (“DR”) CB-5.04, the Company provided
31 a complete CP COS Study for each water division that is part of this proceeding
32 (Candlewick Water, “Candlewick”; Fairhaven Water “Fairhaven”; Hawthorn
33 Woods Water “Hawthorn Woods”; Ivanhoe Water, “Ivanhoe”; Oak Run Water,
34 “Oak Run”; Ravenna Water, “Ravenna”; University Park Water, “University Park”;
35 Vermilion Water, “Vermilion” and Willowbrook Water, “Willowbrook”) as well as a
36 COS Study for the Company’s proposed Consolidated Tariff Group.

37

38 **Q. Did the Company provide the updated COS Study for each water division in**
39 **its rebuttal testimony?**

40 A. No, it did not provide the updated COS Study for each water division in its
41 rebuttal testimony. The Company only provided an updated COS Study for the
42 Company’s proposed Consolidated Tariff Group and for the University Park
43 Division. The updated COS Study for the Company’s proposed Consolidated
44 Tariff Group and for University Park can be found in Company Ex. 12.1.

45

46 **Q. Did you review and analyze cost of service and bill impacts of the**
47 **Company's CP COS Study for each water division and the Company's**
48 **proposed Consolidated Tariff Group?**

49 A. Yes, I did. I reviewed the response to Staff DR CB-5.04 that provided the
50 Company's COS studies for each individual water division and the COS study for
51 the proposed Consolidated Tariff Group. I also reviewed the bill impacts that the
52 customers in each water service division would potentially face if the Commission
53 approved the Company's proposed consolidation as well as bill impacts that the
54 customers in each water service division would potentially face if the water
55 divisions remained on a stand alone basis. The results of my analysis appear
56 below.

57

58 **Q. Please describe Table 9.1**

59 A. Table 9.1 illustrates the percentage increase in the monthly bill for a 5,000
60 gallon/month use customer by division, based on the Company's initial rate
61 design proposal. For Fairhaven, all customers have 3/4" meters, so the
62 percentage increase from current rates reflects the increase in a 3/4" meter
63 customer's bill. For Hawthorn Woods, 97% of the customers have 1" meters so
64 the percentage increase provided reflects the increase from current rates in a 1"
65 meter customer's bill. For Ravenna, all customers have 1 1/2" meters, so the

66 percentage increase provided reflects the increase in a 1 1/2" meter customer's
 67 bill. It should be noted that each of these divisions currently have a flat customer
 68 charge for all customers. Under the Company's proposal, all Customer Charges
 69 would be based on a meter size multiplier; thus, the larger meter sizes would
 70 have larger monthly Customer Charges.

71 **Table 9.1¹ Company's Proposed Consolidated Water Service Monthly Customer**
 72 **Bill Increase by Division**

Service Division	Company Proposed Customer Charge	Company Proposed Usage Charge Per 1,000 Gallons Used	Monthly Bill for 5,000 Gallon Customer	% Increase From Current Rates
Fairhaven ²	\$22.15	\$6.8248	\$56.27	97.78%
Hawthorn ³ Woods	\$35.69	\$6.8248	\$69.81	92.85%
Ivanhoe	\$16.00	\$6.8248	\$50.12	137.42%
Oak Run	\$16.00	\$6.8248	\$50.12	-10.74%
Ravenna ⁴	\$67.69	\$6.8248	\$101.84	213.27%
University Park	\$12.50	\$3.2231	\$28.62	90.42%
Vermilion	\$16.00	\$5.1050 ⁵	\$41.53	18.83%
Willowbrook	\$16.00	\$6.8248	\$50.12	58.86%
Candlewick	\$16.00	\$6.8248	\$50.12	35.83%

73

74 **Q. What is the purpose of Table 9.1?**

75 A. I developed Table 9.1 to show what a customer who uses 5,000 gallon/month
 76 would pay monthly in each division if the Commission approved the Company's
 77 consolidated proposal for rate design and revenue requirement. The table
 78 assists in determining the impact that the Company's proposed rate design and

¹ Company Ex. 6.0 Table 12 in each respective division.

² 3/4" Meter Customer (All Fairhaven customers have 3/4" meters).

³ 1" Meter Customer (Smallest meter size for a residential customer is 1").

⁴ 1 1/2" Meter Customer (All Ravenna customers have 1 1/2" meters).

⁵ Rate per 100 cubic feet used.

79 revenue requirements would have on an average use customer's monthly water
80 bill. I will also use this table to make an informed illustrative recommendation of
81 rate design and revenue requirement to the Commission.

82

83 **Q. What do you conclude from Table 9.1?**

84 A. Based on the percentage increases from current rates, I conclude that average
85 use customers in the Fairhaven, Hawthorn Woods, Ivanhoe, Ravenna and
86 University Park water divisions would face sizeable increases in their monthly
87 water bills if the Commission approves the rate design and revenue requirements
88 proposed by the Company.

89

90 **Q. Please describe Table 9.2**

91 A. Table 9.2 illustrates the percentage increase that a 5,000 gallon/month customer
92 in each division would face, if each division would remain as an individual rate
93 area and recovered 100% of the proposed revenue requirement needed to
94 sustain each respective division. As above, the identical meter size rates for
95 Fairhaven, Hawthorn Woods and Ravenna are reflected in Table 9.2.

96 When developing the rates and charges for each division, I used the same
97 percentages of customer charge revenue recovery to usage charge revenue
98 recovery that the Company provided in response to Staff DR CB-5.04. For
99 instance, Table 10 in the Vermilion Division's COS Study from Staff DR CB-5.04
100 indicates the Company would recover 27% of its tariff revenues from the
101 Customer Charge and 73% of its tariff revenues from the Usage Charge. I used

102 the same percentage recoveries provided by the Company in each respective
 103 division that were found on the Company's Table 10 when developing Table 9.2.

104

105 **Table 9.2⁶ Monthly Customer Bill Increase by Division if all Divisions Remained**
 106 **Stand Alone**

Service Division	Customer Charge	Usage Charge Per 1,000 Gallons Used as a Stand Alone Division	Monthly Bill for 5,000 Gallon Customer	% Increase for 5,000 Gallon Customer From Current Rates
Fairhaven ⁷	\$15.00	\$4.5404	\$37.70	32.51%
Hawthorn ⁸ Woods	\$35.46	\$9.1000	\$80.96	123.65%
Ivanhoe	\$14.40	\$5.9070	\$43.94	108.15%
Oak Run	\$10.58	\$8.8400	\$54.78	-2.44%
Ravenna ⁹	\$95.42	\$9.6320	\$143.58	341.78%
University Park	\$10.53	\$3.0550	\$25.81	71.72%
Vermilion	\$10.09	\$8.2600 ¹⁰	\$40.98	17.25%
Willowbrook	\$12.15	\$6.2220	\$43.26	37.12%
Candlewick	\$13.27	\$4.7921	\$37.23	0.894%

107

108 **Q. What is the purpose of Table 9.2?**

109 A. I developed Table 9.2 to show what a 5,000 gallon/month customer would pay
 110 monthly in each division if the Commission approved the Company's rate design
 111 and revenue requirement *and* the respective divisions remained as stand alone
 112 divisions. The table assists in determining the impact that the Company's
 113 proposed rate design and revenue requirements would have on an average use
 114 customer's monthly water bill if each division remained independent. It is also

⁶ Company Schedule A-3 in each respective division.

⁷ All Fairhaven customers have ¾" meters.

⁸ 1" Meter Customer (Smallest meter size for a residential customer is 1").

⁹ All Ravenna customers have 1 1/2" meters.

¹⁰ Rate per 100 cubic feet used.

115 used as a comparison tool with Table 9.1 to explore whether the customers in
116 each division would benefit more from consolidation than remaining independent.
117 I will use this table to make an informed, illustrative recommendation of a rate
118 design and revenue requirement to the Commission.

119

120 **Q. What do you conclude from Table 9.2?**

121 A. Based on the percentage increase in the monthly bill of a 5,000 gallon/month
122 customer, I conclude that customers in the Candlewick, Fairhaven, Ivanhoe and
123 Vermilion Divisions would face larger monthly bill percentage increases under the
124 Company's proposed Consolidated Tariff Group approach than if each of these
125 divisions remained as stand alone divisions.

126

127 **Q. What do you recommend based on the information provided in Tables 9.1
128 and 9.2?**

129 A. I recommend that the Commission reject the Company's proposal to consolidate
130 all water divisions in this proceeding except University Park. Instead, I
131 recommend a Consolidated Tariff Group that includes the divisions of Oak Run,
132 Ravenna, Hawthorn Woods, Willowbrook, Ivanhoe and Vermilion. I also
133 recommend that the Fairhaven and Candlewick divisions form their own division
134 separate from my proposed Consolidated Tariff Group and I recommend
135 approving Aqua's proposal to keep University Park as a stand alone division.
136 Most of these recommendations differ from those I provided in my direct
137 testimony. In my direct testimony, I recommended a consolidated group that

138 included Candlewick, Hawthorn Woods, Oak Run, Ravenna, Vermilion and
139 Willowbrook and stand alone divisions of University Park, Fairhaven Estates and
140 Ivanhoe. I continue to recommend that the University Park Division remain a
141 stand alone division and I will explain the other proposed modifications to my
142 direct testimony recommendations below. My updated recommendations are
143 based upon my analysis of information provided by the Company after I
144 submitted my direct testimony.

145

146 **Q. Why do you recommend that Oak Run, Ravenna, Hawthorn Woods,**
147 **Willowbrook, Ivanhoe and Vermilion comprise your proposed Consolidated**
148 **Tariff Group?**

149 A. The customers of Ivanhoe, Ravenna and Hawthorn Woods would have larger
150 monthly bill increases if they remained as stand alone divisions than if they were
151 included in the Consolidated Tariff Group. Vermilion customers would have a
152 slightly larger monthly bill increase if it was included in the Consolidated Tariff
153 Group than if it remained a standalone. However, its increase in either scenario
154 would be less than the overall increase that the Company proposes to revenues
155 in this proceeding and it is by far the largest division; thus, the benefits of adding
156 its large customer base to the Consolidated Tariff Group provides an economies
157 of scale benefit that allows the Company to spread out the recovery of costs of
158 service to a larger group. Oak Run customers are going to experience a rate and
159 revenue reduction whether it stands alone or whether it is consolidated with other
160 divisions so this is a good time to include them in the Consolidated Tariff Group.

161 Finally, Willowbrook customers would face only a slightly larger increase in their
162 monthly bills in the Consolidated Tariff Group than if they stood alone, but its
163 small customer base would benefit more from its costs being spread out over a
164 larger group in the event it needs a major water system improvement in the
165 future.

166

167 **Q. Why do you recommend that Fairhaven and Candlewick be joined together**
168 **as their own division rather than being included in your proposed**
169 **Consolidated Tariff Group?**

170 A. Fairhaven and Candlewick customers would have significantly larger monthly bill
171 increases if they were made part of the Consolidated Tariff Group than if they
172 remained as stand alone divisions. Based on my analysis, Candlewick
173 customers would realize a reduction in their current monthly customer charges if
174 they stood alone; likewise, Candlewick customers would realize a lower
175 Customer Charge than they currently pay if they consolidated with the Fairhaven
176 customer base. It is not typical for Staff to propose a reduction in Customer
177 Charges in a rate case where the cost to serve the customer base has increased.
178 In this rate case, however, a lower Candlewick Customer Charge was necessary
179 to mitigate rate shock to Fairhaven customers under my proposed consolidation
180 of Fairhaven and Candlewick. Consolidating Candlewick with Fairhaven provides
181 each with the benefit of having a larger customer base to spread out costs while
182 avoiding the larger rate shock that would occur if these divisions were included in
183 the Consolidated Tariff Group.

184

185 **Q. Please describe Table 9.3.**

186 A. Table 9.3 illustrates the percentage increase (or decrease in the case of Oak
 187 Run) in a 5,000 gallon/month water bill in each respective water division when
 188 45% of the tariff revenues are recovered through the Customer Charge and 55%
 189 of the tariff revenues are recovered through the Usage Charge.

190 As with Table 9.1 and Table 9.2, it is important to remember that Table 9.3
 191 reflects the increase in a ¾” meter customer’s bill in Fairhaven, the increase in a
 192 1” meter customer’s bill in Hawthorn Woods, and the increase in a 1 1/2” meter
 193 customer’s bill in Ravenna.

194 **Table 9.3 Monthly Customer Bill Impacts reflecting 45% Tariff Revenue Recovery**
 195 **from Customer Charges and 55% Tariff Revenue Recovery from Usage**
 196 **Charges**

Service Division	Proposed Customer Charge ¹¹	Proposed Usage Charge Per 1,000 gallons used	Monthly Bill for 5,000 gallon User	% increase for 5,000 gallon user from current rates
Fairhaven ¹²	\$17.09	\$5.7896	\$46.04	61.83%
Hawthorn Woods ¹³	\$64.58	\$4.6812	\$87.99	143.07%
Ivanhoe	\$25.83	\$4.6812	\$49.24	133.25%
Oak Run	\$25.83	\$4.6812	\$49.24	-12.39%
Ravenna ¹⁴	\$129.15	\$4.6812	\$152.56	369.42%
University Park	\$15.06	\$2.5648	\$27.88	85.50%
Vermilion	\$25.83	\$4.6812	\$49.24	40.89%
Willowbrook	\$25.83	\$4.6812	\$49.24	56.07%
Candlewick	\$12.35	\$5.7896	\$41.30	11.92%

¹¹ Tariff revenues calculated at 45% coming from the Customer Charge and 55% coming from Usage Charges.

¹² All Fairhaven customers have ¾” meters.

¹³ 1” Meter Customer (Smallest meter size for a residential customer is 1”).

¹⁴ All Ravenna customers have 1 1/2” meters.

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Q. What is the significance of 45% tariff revenue recovery from the Customer Charge and 55% tariff recovery from the Usage Charge?

A. The Company states that it proposes to move rates toward equalizing the Customer Charge to the calculated COS (Company Ex. 6.0, Schedule 6.1, p. 2) due to a significant portion of Aqua’s expenses being fixed. The Company expresses concerns that water conservation is likely due to increases in the overall monthly bills of most customers in this proceeding. The Company asserts that increasing fixed charges becomes essential to ensure that it is able to collect its full revenue requirement that is approved in this rate case. (*Id.*)

According to Table 9.4 below, the average percentage of the revenues recovered from the Customer Charge among the nine water divisions in this rate case is 45%. The average percentage of the revenues recovered through the Usage Charge for the same divisions is 55%.

Therefore, as a starting point, I analyzed the impacts of the 45% tariff revenue recovery from the Customer Charge and 55% tariff revenue recovery from the Usage Charge for my proposed tariff groups, which include the Consolidated Tariff Group of the Oak Run, Ravenna, Hawthorn Woods, Willowbrook, Ivanhoe and Vermilion divisions, a Fairhaven-Candlewick Division and University Park as a stand alone division. This analysis was completed to determine the impact on a 5,000 gallon/month user’s monthly water bill.

219 **Q. Please describe Table 9.4.**

220 A. Table 9.4 below represents, by division, the various contrasts in the tariff revenue
 221 percentages recovered through the Customer Charges and Usage Charges as
 222 illustrated in the Company’s CP COS Study.

223 **Table 9.4¹⁵ Tariff Revenue Recovery Percentage Comparisons**

Service Division	% of revenues recovered through Customer Charges	% of revenues recovered through Usage Charges
Fairhaven	68%	32%
Hawthorn Woods	32%	68%
Ivanhoe	39%	61%
Oak Run	77%	23%
Ravenna	55%	45%
University Park	35%	65%
Vermilion	27%	73%
Willowbrook	26%	74%
Candlewick	45%	55%
Avg.	45%	55%

224
 225 Table 9.4 shows, as described above, that the average division would recover
 226 45% of its tariff revenues through the Customer Charge and 55% of its tariff
 227 revenues through the Usage Charge. From here forward I will refer to this as the
 228 “45/55 split”. The 45/55 split approach resulted in a \$25.83 Customer Charge for
 229 a 5/8” meter customer to recover the Company’s proposed revenue requirement

¹⁵ Company response to Staff DR CB-5.04. COS Study Table 10 in each respective water division.

230 from my proposed Consolidated Tariff Group of Hawthorn Woods, Ivanhoe, Oak
231 Run, Ravenna, Vermilion and Willowbrook. I could not justify recommending a
232 rate design that increased the Customer Charge to \$25.83 for a 5/8" meter
233 customer because of the possible rate shock that some of the customers in the
234 various divisions would face in the 45/55 split approach. For example, Ivanhoe
235 customers currently do not have a Customer Charge so increasing the Customer
236 Charge from zero to \$25.83 would be contrary to the rate design principle of
237 gradualism. Willowbrook customers likewise would have an increase to their
238 current Customer Charge from \$10 to \$25.83 under the 45/55 split approach.
239 Therefore, I formulated an alternative approach for my proposed Consolidated
240 Tariff Group that better conforms to the principle of gradualism and still would
241 recover the Company's proposed revenue requirement.

242

243 **Q. What is your alternative revenue split approach?**

244 A. Because the Vermilion Division represents nearly 73% of the customer base of
245 the Consolidated Division, and because the Vermilion Division CP COS Study
246 reflects 28% of its revenue recovery from the Customer Charge, I analyzed an
247 approach in which the Company would recover 28% of its tariff revenues through
248 the Customer Charge and 72% of its tariff revenues through the Usage Charge.
249 This approach, that I will call the "28/72 split," is illustrated in Table 9.5 below and
250 applies gradualism to the increases in the Customer Charge.

251

252 **Table 9.5 Monthly Customer Bill Impacts reflecting 28% Tariff Revenue**
 253 **Recovery from Customer Charges and 72% Tariff Revenue Recovery**
 254 **from Usage Charges**

Service Division	Proposed Customer Charge ¹⁶	Proposed Usage Charge Per 1,000 gallons used	Monthly Bill for 5,000 gallon User	% increase for 5,000 gallon user from current rates
Fairhaven ¹⁷	\$17.09	\$5.7896	\$46.04	61.83%
Hawthorn Woods ¹⁸	\$35.69	\$6.5349	\$68.36	88.84%
Ivanhoe	\$16.00	\$6.5349	\$48.67	130.55%
Oak Run	\$16.00	\$6.5349	\$48.67	-13.32%
Ravenna ¹⁹	\$67.69	\$6.5349	\$100.36	208.80%
University Park	n/a	n/a	n/a	n/a
Vermilion	\$16.00	\$6.5349	\$48.67	39.26%
Willowbrook	\$16.00	\$6.5349	\$48.67	54.26%
Candlewick	\$12.35	\$5.7896	\$41.30	11.92%

255

256 **Q. What did the comparison of these two revenue recovery approaches**
 257 **indicate?**

258 A. Comparing Table 9.3 to Table 9.5 shows that lowering the percentage of tariff
 259 revenues recovered through the Customer Charge yields a lower percentage
 260 increase in a bill for a 5,000 gallon/month water customer. Rate shock
 261 consideration was given to the customers of Fairhaven, Hawthorn Woods,
 262 Ivanhoe and Ravenna; because these customers would likely experience the
 263 largest monthly bill impacts at the conclusion of this rate case.

264

¹⁶ Revenues calculated at 28.5% coming from the Customer Charge and 71.5% coming from usage charges.

¹⁷ All Fairhaven customers have ¾" meters.

¹⁸ 1" Meter Customer (Smallest meter size for a residential customer is 1").

¹⁹ All Ravenna customers have 1 1/2" meters.

265 **Q. What are the specific reasons that the 45/55 split approach yielded a higher**
266 **monthly bill increase percentage than the 28/72 split approach for some**
267 **divisions?**

268 A. The reasons for these larger bill impacts are, in the case of Fairhaven, having a
269 very modest current monthly customer charge of \$6; and Ivanhoe customers
270 currently having no monthly customer charge. Any increase in Customer
271 Charges will result in a significant percentage increase in the monthly bill for the
272 customers in these two divisions. For Hawthorn Woods, the smallest meter size
273 used by residential customers is 1" and for Ravenna, the smallest residential
274 meter size used is 1 1/2". When applying the meter size multiplier as presented
275 in the American Water Works ("AWWA") M 1 manual, and adopted by Aqua in
276 this rate case, the meter sizes that are used for the Ravenna and Hawthorn
277 Woods customers dictate the Customer Charge to which these customers will be
278 subjected. The 1" and 1 1/2" meter sizes are typically installed for larger volume
279 use customers so unfortunately for the residential customers that have larger
280 sized meters, larger Customer Charges are obligatory.

281

282 **Q. What revenue split approach are you recommending in this proceeding?**

283 A. I take no issue with the Company's desire to recover more of its fixed costs
284 through its monthly Customer Charge. However, my above analysis indicates
285 that a 28/72 split approach would best achieve the goal of rate gradualism for my
286 proposed Consolidated Tariff Group and the University Park Division. Thus, it is

287 my recommendation that the 28/72 split approach be approved for my proposed
288 Consolidated Tariff Group and the University Park Division to recover tariff
289 revenues.

290

291 **Q. What approach do you recommend for the Fairhaven-Candlewick?**

292 A. I recommend the 45/55 split approach for this proposed division. The Company's
293 goal is to eventually set the Customer Charge to the calculated cost of service.
294 (Company Ex. 6.0, Schedule 6.1, p. 2) If a 28/72 split approach was
295 implemented for this proposed division, however, recovery of fixed costs through
296 the Customer Charge would actually decrease. Moreover, the 45/55 split
297 approach for Fairhaven-Candlewick division would not cause significant rate
298 shock to its customers in this rate case. In the event the Commission grants
299 Aqua the ability to recover more of its fixed costs through the Customer Charge
300 in future rate cases, this approach allows for a more gradual increase in this
301 charge over time.

302

303 **Water Rate Design**

304 **Q. Please describe the Company's present rate structure.**

305 A. The Company's present rate structure consists of a flat customer charge and a
306 declining block usage charge, which are billed monthly and can be found on
307 Aqua Exhibit 12.0, Schedule 12.1. Specifically, these charges are: the

308 Customer Charge, which is a flat per month charge and a Usage Charge, which
309 is a charge per 1,000 gallons of water.

310

311 The Customer Charge recovers a portion of the fixed costs to serve customers,
312 which are the costs that do not vary with the amount of water consumed. The
313 fixed costs typically include costs for meter reading, billing, customer accounts,
314 collection expenses, and maintenance and capital costs related to meters.
315 (American Water Works Association (“AWWA”) Manual, M54, First Edition, p.
316 35.)

317

318 The Usage Charge recovers the costs that are variable based on usage and not
319 recovered through the fixed charge. The Usage Charge varies in proportion to
320 the level of a customer’s consumption. (*Id.*)

321

322 **Q. Does the Company propose to change the water rate structure?**

323 A. No. The Company does not propose to change the current rate structure.

324

325 **Q. What level of revenue increase does the Company propose?**

326 A. The Company proposes that Aqua receive a revenue increase of approximately
327 22.94% (i.e., \$4,151,098) from current water revenues to recover its proposed
328 revenue requirement. (Aqua Ex. 12.0, Schedule 12.1, p. 47 of 47.)

329

330 **Q. Has the Company proposed new rates to recover these increased revenues**
331 **from customers?**

332 A. Yes. The Company proposes new rates for all customers.

333

334 **Q. What is your opinion of how the Company developed the specific Customer**
335 **Charges and Usage Charges it proposes in this proceeding?**

336 A. I agree with the proposal to recover a greater percent of the revenue requirement
337 from the fixed Customer Charge since a significant portion of Aqua's water
338 expenses are fixed.

339

340 **Q. Please describe your proposed method for the development of water rates.**

341 A. I increased the Customer Charges in each of my proposed divisions based on
342 AWWA meter factors, where the allocation of costs among customer types was
343 done through the application of meter factors, and using the revenue split
344 approaches I recommend above. The application of meter factors relates the
345 flow for meters larger than 5/8" to that of the volume of flow for 5/8" meter. In
346 other words, I used equivalent meter ratios expressed in terms of the ratio of
347 related meter capacity for each meter size relative to a 5/8" meter size.²⁰ The
348 remaining revenue requirement increase is recovered through the Usage
349 Charge, which I recommend to be \$7.412 per 1,000 gallons for my proposed
350 Consolidated Tariff Group, \$5.5074 per 1,000 gallons for my proposed

²⁰ American Water Works Association, AWWA Manual M1, 2000, p. 202.

351 Fairhaven-Candlewick Division, and \$4.147 per 1,000 gallons for the University
352 Park Division.

353

354 **Q. Do you recommend the Company's proposal for water rates be approved?**

355 A. No. I recommend the Commission set rates based on my methodology which
356 follows AWWA meter factors, uses my recommended revenue split approaches,
357 and recovers the proposed revenue requirements presented in Staff witness
358 Burma Jones' rebuttal testimony. (Staff Ex. 6.0, Schedules 6.01 CW, column (i),
359 line 1; 6.01 FE&C, column (k), line 1 and 6.01 UPW, column (i), line 1.)

360

361 **Q. Has Staff recommended updated revenue requirements for your proposed**
362 **Consolidated Tariff Group, Fairhaven-Candlewick Division and the**
363 **University Park Division since filing direct testimony?**

364 A. Yes, it has. Staff witness Burma Jones has recommended updated Staff
365 revenue requirements in her rebuttal testimony, Staff Ex. 6.0.

366

367 **Q. Have you developed a set of proposed rates to recover Staff's proposed**
368 **revenue requirement?**

369 A. Yes, I have. I have adjusted the Customer Charges and Usage Charges as
370 further discussed below.

371

372 **Q. Please describe Staff Exhibit 9.0, Schedules 9.1, 9.2 and 9.3.**

373 A. Staff Exhibit 9.0, Schedules 9.1-9.3 show the computation of factored bills for my
374 proposed water divisions. The computations are derived from the number of bills
375 from each of the Company's meter sizes multiplied by the corresponding AWWA
376 Meter Factor. The result is the number of factored bills. Factored bills are then
377 used to determine the monthly Customer Charges for 5/8" meter customers in
378 Schedules 9.1-9.3. As discussed above, I determined the increase for the
379 monthly Customer Charges and the Usage Charges based on approximately a
380 28/72 split for my proposed Consolidated Tariff Group and the University Park
381 Division. I determined the increase for the monthly Customer Charges and the
382 Usage Charges based on approximately a 45/55 revenue split for my proposed
383 Fairhaven-Candlewick Division. Once the 5/8" meter Customer Charge is
384 established, my proposed Customer Charges for each of the other meter sizes in
385 each proposed division is calculated using the AWWA Meter Factor multipliers.

386

387 **Q. What are the Customer Charges and Usage Charges that you are**
388 **recommending in this case?**

389 A. My proposed Customer Charges and Usage Charges are shown on ICC Staff
390 Exhibit 9.0, Schedules 9.1-9.3.

391

392 **Q. How should your proposed rates be revised if the Commission adopts a**
393 **revenue requirement that differs from Staff's proposal?**

394 A. If the Commission decides to adopt a revenue requirement other than that
395 proposed by Staff, the water charges proposed by Staff as shown on Schedules
396 9.1 through 9.3 should be adjusted on an equal percentage basis to recover the
397 revenue requirement adopted in the Final Order.

398

399 **Sewer Service Division Consolidation Proposal**

400 **Q. Have you reviewed the Company's Sewer Division consolidation proposal?**

401 A. Yes, I have.

402

403 **Q. Can you provide an analysis of the Company's proposal to consolidate all**
404 **six of the sewer divisions in this proceeding?**

405 A. Yes. Please see Table 9.6 below which was taken from my Direct Testimony
406 (Staff Ex. 4.0, p.15):

407

408

409

410

411

412 **Table 9.6 Company's Proposed Sewer Service Division Revenue Increases:**
 413 **Consolidated vs. Stand Alone**

Service Division	Consolidated Tariff Group ²¹	Stand Alone ²²
Candlewick	-17.86%	-9.75%
Ellwood Greens	167.55%	81.08%
Hawthorn Woods	45.03%	112.61%
Ivanhoe	354.17%	591.63%
University Park	38.21%	19.92%
Willowbrook	19.43%	30.91%
Consolidated	21.58%	N/A

414

415 As Table 9.6 illustrates, all sewer divisions would require a higher revenue
 416 increase at the Company's proposed revenue requirement as a stand alone
 417 division than if they were all consolidated, except the Ellwood Greens and the
 418 University Park divisions.

419

420 **Q. Please discuss your analysis that relates to Ellwood Greens' inclusion in**
 421 **the Consolidated Sewer Division.**

422 A. Currently, these customers have a modest, flat monthly Customer Charge
 423 (\$23.76) and are not subject to a monthly Usage Charge. Under the Company's
 424 consolidation proposal, however, these customers would be subject to both a
 425 monthly Customer Charge and a Usage Charge. The Customer Charge increase
 426 for Ellwood Greens customers would be 51% (\$23.76 to \$36) based on the
 427 Company's proposed rates.

428

²¹ Company Ex. 6.4.

²² Company Schedule A-3 for each individual division.

429 **Q. What would the monthly residential Ellwood Greens bill look like for a 5,000**
430 **gallon/month water customer if Ellwood Greens was approved to be**
431 **included in the Consolidated Sewer Division?**

432 A. Under the Company's consolidation proposal, an Ellwood Greens residential
433 customer that uses 5,000 gallons of water/ month would have a monthly bill of
434 \$62.53. This would represent a 163% increase from the current monthly bill of
435 \$23.76. The Company's response to Staff DR CB-5.02 indicates that the same
436 customer will experience an 83% increase in his/her monthly bill (\$43.49 stand
437 alone vs. \$23.76 current) if Ellwood Greens remained a stand alone division.

438

439 **Q. What is your recommendation regarding the inclusion of Ellwood Greens in**
440 **the Consolidated Sewer Division?**

441 A. I recommend that the Commission reject the Company's proposal to include
442 Ellwood Greens in the Consolidated Sewer Division. A 5,000 gallon/month water
443 customer would see the percentage increase in his/her monthly bill nearly double
444 if Ellwood Greens was included in the consolidation. Likewise, the revenues that
445 have been proposed to be recovered from the Ellwood Greens customers would
446 also double if Ellwood Greens was included in the consolidation. Furthermore,
447 according to the Company's response to Staff DR CB-5.03, if Ellwood Greens
448 was not in the Consolidated Sewer Division, the monthly Customer Charge for
449 the remainder of the customers in the proposed Consolidated Sewer Division
450 would need to be increased from the Company's proposed \$36 to \$36.35 and the

451 Usage Charge would need to be increased from the Company's proposed \$5.306
452 per 1,000 gallons used to \$5.35 per 1,000 gallons used. These slight increases
453 to the tariff charges would not have a significant impact on the monthly bills of the
454 remaining customers of the Consolidated Sewer Division.

455

456 **Q. Please discuss your analysis that relates to University Park's inclusion in**
457 **the Consolidated Sewer Division.**

458 A. A review of Table 9.6 above and the Company's Schedule A-3 for University
459 Park shows that University Park sewer customers would experience a lower
460 revenue recovery (19.92%) if the division remained a stand alone rather than the
461 revenue increase they would experience if they were being included in the
462 Consolidated Sewer Division (38.21%). Currently, University Park customers
463 have a flat monthly Customer Charge (\$45.55) and are not subject to a monthly
464 Usage Charge. Under the proposed consolidation, University Park customers
465 would be subject to both a monthly Customer Charge and a Usage Charge. The
466 Customer Charge for these customers would actually decrease by 26.5%
467 (\$45.55 to \$36) based on the Company's proposed rates although the inclusion
468 of a uniform Usage Charge would cause the overall bill of any customer using
469 more than 2,000 gallons of waste water to exceed the current stand alone flat
470 monthly Customer Charge.

471

472 **Q. What would the residential monthly University Park bill look like for a 5,000**
473 **gallon/month water customer if University Park was approved to be**
474 **included in the Consolidated Sewer Division?**

475 A. Under the consolidation proposal, a University Park residential customer that
476 uses 5,000 gallons of water/month would have a monthly bill of \$62.53. This
477 would represent a 37% increase from the current monthly bill of \$45.55. If
478 University Park remained a stand alone division, the same customer will
479 experience a 20% increase in his/her monthly bill (\$54.68 flat stand alone rate vs.
480 \$45.55 current flat stand alone rate).

481

482 **Q. What is your recommendation regarding including University Park in the**
483 **Consolidated Sewer Division?**

484 A. I recommend that the Commission reject the Company's proposal to include
485 University Park in the Consolidated Sewer Division. A 5,000 gallon/month water
486 customer would see the percentage increase in his/her monthly bill nearly double
487 if University Park was included in the consolidation. Likewise, the revenues that
488 have been proposed to be recovered from the University Park customers would
489 also double if University Park was included in the consolidation. Therefore, I
490 recommend leaving University Park Sewer as a stand alone division.

491

492 **Q. Is there a Consolidated Sewer Division that you would recommend the**
493 **Commission approve over the one that Aqua has recommended?**

494 A. Yes. I recommend that the Commission approve a Consolidated Sewer Division
495 that includes Candlewick, Hawthorn Woods, Ivanhoe and Willowbrook. Each of
496 these divisions would experience smaller revenue recovery and smaller monthly
497 sewer bills upon being consolidated than they would if each of these divisions
498 remained on a stand alone basis.

499

500 **Q. What is your recommendation for the University Park and Ellwood Greens**
501 **sewer divisions?**

502 A. I recommend that both of these divisions remain on a stand alone basis because
503 including them in the Company's proposed Consolidated Water Division would
504 require larger revenue increases and monthly sewer bills for customers than if
505 these two divisions remained independent. In my opinion, in this rate case the
506 customers of University Park and Ellwood Greens would experience no
507 additional advantages by being consolidated with my proposed Consolidated
508 Sewer Division.

509

510 **Sewer Rate Design**

511 **Q. Please describe the Company's present sewer rate structure.**

512 A. The Company's present rate structure consists of a flat customer charge for
513 customers in the Ellwood Greens, Hawthorn Woods Candlewick, Willowbrook
514 divisions and for Candlewick residential customers. The Ivanhoe district
515 currently bills on a flat usage basis with no monthly customer charge. The
516 Candlewick division also has an Availability Charge and University Park
517 Commercial customers are subject to both monthly Customer Charges and
518 Usage Charges. Candlewick's Availability Charge is a charge for water
519 availability service to customers who are not full time residents of Candlewick.

520
521 As discussed above, the Customer Charge recovers some of the fixed costs to
522 serve customers, which are the costs that do not vary with the amount of water
523 consumed. The fixed costs typically include costs for meter reading, billing,
524 customer accounts, collection expenses, and maintenance and capital costs
525 related to meters. (American Water Works Association ("AWWA") Manual, M54,
526 First Edition, p. 35.)

527
528 The Usage Charge recovers the costs that are variable based on usage and
529 other fixed costs not recovered through the Customer Charge. The Usage
530 Charge varies in proportion to the level of a customer's consumption. (*Id.*)

531
532 **Q. Does the Company propose to change the sewer rate structure?**
533 A. Yes. The Company proposes to change the current rate structure for the
534 Candlewick, Ellwood Greens, Hawthorn Woods, Ivanhoe, University Park and

535 Willowbrook Divisions to recover approximately 43% of their revenues through a
536 Customer Charge and 57% of their revenues through a Usage Charge.

537

538 **Q. What level of revenue increase does the Company propose?**

539 A. My review of the filing indicates that the Company proposes that it receive a
540 revenue increase of approximately 21.21% (i.e., \$1,247,828) from current sewer
541 revenues to recover its proposed revenue requirement. (Aqua Schedule 12.3.)

542

543 **Q. Has the Company proposed new rates to recover these increased revenues**
544 **from customers?**

545 A. Yes. The Company proposes new rates for all customers in the Candlewick,
546 Ellwood Greens, Hawthorn Woods, Ivanhoe, University Park and Willowbrook
547 Divisions.

548

549 **Q. How did the Company determine its proposal for the Customer Charge and**
550 **the Usage Charge?**

551 A. In Schedule E-3.11, the Company states that since the current rate designs for
552 each of the divisions in its proposal are all different, it was necessary to have
553 significant changes in its proposed rate design. Aqua did not specifically mention
554 why it proposed the revenue recovery split that it did; however, the Company did
555 note that its proposed rate design would recover a significant portion of its sewer
556 revenues through the Usage Charge to encourage conservation and to allow for
557 a fairer distribution of revenues for all customers.

558

559 **Q. What is your opinion of how the Company developed the specific Customer**
560 **Charges and Usage Charge it proposes in this proceeding?**

561 A. I take no issue with the Company's proposal to recover a greater percent of the
562 revenue requirement from the Usage Charge as customers are more able to
563 control their monthly bill by adjusting their usage to match their budget.
564 However, the Company did not develop a sewer COSS for this case as
565 previously discussed; consequently, there is no cost foundation for the
566 Company's proposed Customer Charges or Usage Charges.

567

568 **Q. Has Staff recommended updated revenue requirements for the**
569 **Consolidated Sewer Division, Ellwood Greens Division and the University**
570 **Park Division since filing direct testimony?**

571 A. Yes, it has. Staff witness Burma Jones has recommended updated Staff
572 revenue requirements in her rebuttal testimony, Staff Ex. 6.0.

573

574 **Q. Have you developed a set of proposed rates to recover Staff's proposed**
575 **revenue requirements for your proposed Consolidated Sewer Division,**
576 **Ellwood Greens Division and the University Park Division?**

577 A. Yes, I have. I have presented my proposed sewer rates in Schedules 9.4
578 through 9.6 as further discussed below.

579

580 **Q. Please describe Staff Exhibit 9.0, Schedules 9.4, 9.5 and 9.6.**

581 A. Staff Exhibit 9.0, Schedule 9.4 shows the computation of revenues for my
582 proposed Consolidated Sewer Division. The computation is derived from the
583 number of billing units from each of the Company's divisions in my Consolidated
584 Sewer Division proposal while recovering 45% of its revenues through the
585 Customer Charge and 55% of its revenues from the Usage Charge. This is the
586 same revenue split approach that I used in my proposed Fairhaven-Candlewick
587 water division and very similar to the Company's proposed 43/57 revenue split
588 approach used in its sewer rate design. This same rate design is also used in
589 my proposed University Park Division as shown in Staff Exhibit 9.0, Schedule
590 9.6. Because Ellwood Greens currently has a monthly flat rate structure, I am
591 proposing a similar sewer rate design to what is currently being used in Elwood
592 Greens Sewer in Staff Exhibit 9.0, Schedule 9.5 because I see no clear value to
593 changing its rate design in this case if it is not to be consolidated with any other
594 sewer division.

595

596 **Q. How should your proposed rates be revised if the Commission adopts a**
597 **revenue requirement that differs from Staff's proposal?**

598 A. If the Commission decides to adopt a revenue requirement other than that
599 proposed by Staff, the sewer charges proposed by Staff as shown on Schedules
600 9.4 through 9.6 should be adjusted on an equal percentage basis to recover the
601 revenue requirement adopted in the Final Order.

602

603 **Q. Is the Company in compliance with 220 ILCS 5/8-306(h) of the Public**
604 **Utilities Act (“Act”)?**

605 A. No, it is not. Sec. 8-306(h) of the Act states:

606 Water and sewer utilities; low usage. Each public utility that provides
607 water and sewer service must establish a unit sewer rate, subject to
608 review by the Commission, which applies only to those customers who
609 use less than 1,000 gallons of water in any billing period. (220 ILCS 5/8-
610 306(h))
611

612 The Company did not provide a separate sewer rate that applies only to those
613 customers who use less than 1,000 gallons of water in any billing period.

614

615 **Q. What is your recommendation?**

616 A. Although I am not a lawyer, Staff counsel advises me that Section 8-306(h) of the
617 Act mandates that the Company establish “a unit sewer rate...that applies *only* to
618 those customers who use less than 1,000 gallons of water in any billing period.”
619 (Emphasis added.) If the Company has not already done so, I recommend that
620 the Company design such a rate that would comply with Section 8-306(h) of the
621 Act and provide it in its surrebuttal testimony.

622

623 **Q. Is the Company in compliance with 220 ILCS 5/8-306(i) of the Act?**

624 A. No, it is not. Sec. 8-306(i) of the Act states:

625 Water and sewer utilities; separate meters. Each public utility that
626 provides water and sewer service must offer separate rates for water and
627 sewer service to any commercial or residential customer who uses
628 separate meters to measure each of those services. In order for the

629 separate rate to apply, a combination of meters must be used to measure
630 the amount of water that reaches the sewer system and the amount of
631 water that does not reach the sewer system. (220 ILCS 5/8-306(i))
632

633 The Company did not provide separate rates for a residential customer who uses
634 separate meters to measure the amount of water that reaches the sewer system
635 and the amount of water that does not reach the sewer system.

636

637 **Q. What is your recommendation?**

638 A. Although I am not a lawyer, Staff counsel advises me that Section 8-306(i) of the
639 Act mandates that the Company “must offer separate rates for water and sewer
640 service to any commercial or residential customer who uses separate meters to
641 measure each of those services.” If the Company has not already done so, I
642 recommend that the Company design a rate that would comply with Section 8-
643 306(i) of the Act and provide it in its surrebuttal testimony.

644

645 **Public Fire Protection Charges**

646 **Q. Has the Company made any revisions to its Public Fire Protection rate**
647 **design since its original filing?**

648 A. Yes. Mr. Monie explains in his rebuttal testimony that he changed the total
649 number of fire hydrants due to a revised hydrant count by Aqua while breaking
650 down customer counts into separate fire districts serving the water divisions that
651 had been proposed to have uniform public fire rates (Aqua Ex. 12.0, pgs. 3-4).
652 Mr. Monie also indicates that the Countryside Fire District provides fire protection
653 service to portions of the Hawthorn Woods and Ivanhoe Divisions and all of the

654 Ravenna Division. Thus, he has combined the customers and fire hydrants in
655 the divisions served by the Countryside Fire District to allocate public fire charges
656 using the two tier method based on fire district rather than water operating
657 division (*Id.*). This approach yields a Company proposed uniform Public Fire
658 Protection rate for the customers of Hawthorn Woods, Ivanhoe and Ravenna.

659

660 **Q. Do you take issue with the revisions that the Company has proposed for**
661 **Public Fire Protection charges?**

662 A. No, I do not. The Company correctly recalculated the Public Fire Protection
663 charges to match the updated customer and hydrant counts that had originally
664 been provided in the Company's initial COS Study. In addition, the Company
665 changed the allocation of overall costs to the public and private fire protection
666 classes to conform to the cost of service changes as the result of CP COS Study.
667 Finally, the Company's proposal is designed to fully recover the Public Fire
668 Protection cost of service.

669

670 **Q. What is your recommendation regarding the Company's proposed Public**
671 **Fire Protection charges?**

672 A. I recommend that the Commission approve the Company's method and resulting
673 rate design for recovering the Public Fire Protection cost of service. The two tier
674 method for setting Public Fire Protection costs that the Company employed has
675 been approved in previous rate cases. (Docket Nos. 00-0337, 00-0338, 00-0339,
676 Cons. (p. 9); Docket No. 06-0285 (p. 18) and in Docket No. 10-0194.)

677 Additionally, the Company's proposed rate design recovers the full cost of Public
678 Fire Protection service which is consistent with the Commission's expressed
679 position in the most recent Illinois American Water Corp. rate case "that the
680 Public Utilities Act requires public fire protection charges to be set no higher than
681 the cost of service." (Docket No. 09-0319, Final Order, p. 184.)

682

683 **Private Fire Protection Charges**

684 **Q. Has the Company proposed any changes to its original rate design**
685 **proposal for Private Fire Protection charges?**

686 A. No, it has not. The Company is proposing a 100% increase in revenue recovery
687 from this class which will move the recovery of cost to serve this class to 55.12%.
688 Therefore, I will not be making any recommendations to modify the Company's
689 proposed Private Fire Protection rate design that I concurred with in my Direct
690 Testimony (Staff Ex. 4.0 p. 43). The Company's proposed rates will move the
691 revenue recovery a reasonable step closer to full cost recovery which should be
692 the eventual goal for this service.

693

694 **Viscofan Charges**

695 **Q. Has the Company provided any details about its claim that any revenue**
696 **increase greater than 8.37% from Viscofan (Large Industrial rate class)**
697 **would result in Viscofan building its own water plant?**

698 A. No, it has not. The Company states that it "takes seriously" the possibility of
699 Viscofan leaving the water system if a large rate increase is approved by the

700 Commission. (Aqua Ex. 12.0, p. 8.) Viscofan is Aqua's largest customer and
701 Aqua is devoted to keeping them on the water system due to the large amount of
702 revenue Viscofan contributes to the system. In the past, Aqua has proposed
703 moderate rate increases that were intentionally kept low to encourage Viscofan
704 to remain on the water system because Viscofan has indicated that it has
705 explored the possibility of building and managing its own water plant to try to
706 control costs of its own water usage. (Viscofan Ex. 1.0, pp. 4-5.)

707

708 **Q. According to the Company's COS Study, what is the subsidy to Viscofan**
709 **that other water customers would provide under your proposed rates?**

710 A. The Company's COS Study shows that Viscofan has a cost of service totaling
711 \$1,430,892 (Aqua Ex. 12.0, Schedule 12.1, Table 12). My proposed rates would
712 recover only \$758,613 (53.02%) from Viscofan (Staff Ex. 9.0, Schedule 9.1).
713 Other customers are, therefore, providing a subsidy to Viscofan of approximately
714 \$672,279 according to Aqua Schedule Ex. 12.0, Schedule 12.1, Table 12.
715 Viscofan would continue to receive a subsidy under my proposed rates that is
716 considerably more than the \$126,943 amount of increase that my proposed rates
717 would require from Viscofan. Under most any reasonable measure, my
718 proposed rates provide Viscofan with a sizeable subsidy and would continue to
719 represent a significant effort to work with an important customer in Aqua's water
720 system while gradually moving closer toward full recovery of the cost to serve
721 Viscofan.

722

723 **Q. Is it possible that Viscofan would disconnect from the water system if the**
724 **Commission approves your proposed Large Industrial Rates?**

725 A. The possibility remains that Viscofan will disconnect from Aqua's water service
726 after reviewing its options for water service and whether the cost to build and
727 manage its own water system outweighs the option of remaining a customer of
728 Aqua's water service.

729

730 **Q. What impact would Viscofan's decision to leave Aqua's water system have**
731 **on the rates of the other customers?**

732 A. According to Aqua's response to Viscofan's DR 1.02, it appears the rates for
733 customers using less than 74,800 gallons in Aqua's proposed Consolidated Tariff
734 Group would increase by approximately \$0.32 per 1,000 gallons used. Table 9.7
735 below is taken from Aqua's response to Viscofan's DR 1.02. In that response,
736 Aqua indicated that the only modification to its rate design was to increase Usage
737 Charges for its proposed Consolidated Tariff Group for General Metered
738 Customers in the event Viscofan disconnects from Aqua's water system.

739

740

741 **Table 9.7 Usage Charge Comparison for the Company’s proposed Consolidated**
 742 **Tariff Group with and without Viscofan as a Large Industrial Use**
 743 **customer**

Block	Rebuttal Rate Per 1,000 Gal.	Rate Without Viscofan Per 1,000 Gal.
0 - 74,800 Gals.	\$6.6887	\$7.0071
Next 673,200 Gals.	\$4.8518	\$5.0827
Over 748,000 Gals.	\$3.4655	\$3.6305

744

745 **Q. How has the Commission ruled on the Viscofan subsidy in past rate cases?**

746 A. In Docket No. 04-0442, the Commission agreed with Staff that Teepak (now
 747 known as Viscofan), at a minimum, should continue to pay at least 48.7% of its
 748 cost of service. The Commission also concurred with Staff; however, that
 749 Viscofan should begin to pay a greater portion of its cost of service to address
 750 Viscofan’s declining contribution toward its cost of service, while not being so
 751 large as to induce rate shock. In the Final Order of Docket No. 04-0442, the
 752 Commission concluded “that Teepak (Viscofan) should assume responsibility for
 753 an additional 1.0%, or a total of 49.7%, of its cost of service.” (Final Order,
 754 Docket No. 04-0442, pg. 54.)

755

756 **Q. How is your Large Industrial Rate proposal consistent with the**
757 **Commission's findings in Docket No. 04-0442?**

758 A. My rate proposal for Aqua's Large Industrial class (Viscofan) increases the
759 revenue percentage that Aqua would recover from Viscofan to 53.02% (up from
760 49.7% approved in Docket No. 04-0442). This proposed increase would
761 represent a gradual increase in the percentage of the cost to serve this customer
762 while slightly reducing the subsidy that other rate classes provide to Viscofan.
763 My proposal also seeks to minimize any potential rate shock that could induce
764 Viscofan to consider building its own water plant.

765

766 **Q. Are there any other contested rate issues with Aqua's rate case filing that**
767 **need to be addressed?**

768 A. No, there are not.

769

770 **Q. Does this conclude your rebuttal testimony?**

771 A. Yes, it does.

Aqua Illinois, Inc.
Consolidated Tariff Group -Water
Staff Proposed Rates and Revenue Requirement

(includes billing determinants for the year 2012)

Description (A)	Rate (B)	Residential		Sales for Resale		Commercial		Industrial		Total					
		Billing Determinant (E)	Revenue (C)	Billing Determinant (E)	Revenue (C)	Billing Determinant (E)	Revenue (C)	Billing Determinant (E)	Revenue (C)	Billing Determinant (E)	Revenue (C)				
Meter Size															
5/8"	\$ 16.39	204,086	\$ 3,344,203	-	\$ -	9,234	\$ 151,311	96	\$ 1,573	213,416	\$ 3,497,087				
3/4"	\$ 22.68	3,588	81,393	-	-	121	2,745	-	-	3,709	84,138				
1"	\$ 36.55	11,491	420,015	12	439	2,419	88,418	144	5,263	14,066	514,135				
1-1/2"	\$ 69.32	1,055	73,137	-	-	1,086	75,286	84	5,823	2,225	154,246				
2"	\$ 108.41	186	20,163	42	4,553	1,154	125,100	207	22,440	1,589	172,256				
3"	\$ 200.41	12	2,405	-	-	297	59,523	12	2,405	321	64,333				
4"	\$ 332.76	24	7,986	-	-	-	-	-	-	24	7,986				
6"	\$ 661.75	-	-	1	662	84	55,587	-	-	85	56,249				
8"	\$ 1,056.28	-	-	12	12,675	-	-	-	-	12	12,675				
10"	\$ 1,517.62	-	-	-	-	12	18,211	-	-	12	18,211				
12"	\$ 2,214.66	-	-	-	-	-	-	-	-	-	-				
6" Tur. LG Ind.	\$ 825.61	-	-	-	-	-	-	Lg Ind.	12	9,907	12	9,907			
3" Tur.	\$ 233.19	-	-	-	-	48	11,193	36	8,395	84	19,588				
4" Tur.	\$ 398.31	-	-	-	-	12	4,780	108	43,017	120	47,797				
6" Tur.	\$ 825.61	-	-	12	9,907	-	-	48	39,629	60	49,537				
8" Tur.	\$ 1,187.37	-	-	-	-	-	-	-	-	-	-				
Oak Run Availability	\$ 14.70	22,155	325,604	-	-	-	-	-	-	22,155	325,604				
Total Cust	0	0	296734.1458	0	0	0	17139.1669	0	0	783.2000845	0	0	309306.4802	\$	5,033,749.03
Usage Charges: (per 1,000 Gallons)															
0 - 74.8 K Gal.	\$ 7.4068	969,523	\$ 7,181,063	-	\$ -	198,936	\$ 1,473,479	23,856	\$ 176,695	1,192,315	\$ 8,831,237				
Next 673.2 K Gal.	\$ 5.3752	39,144	210,404	-	-	126,468	679,787	69,394	373,006	235,006	1,263,197				
Over 748 K Gal.	\$ 3.8394	17,014	65,324	-	-	122,190	469,138	171,403	658,088	310,607	1,192,550				
All usage Sales/Resale	\$ 3.8732	-	-	237,929	921,543	-	-	-	-	237,929	921,543				
All usage Lg. Ind.	\$ 1.8260	-	-	-	-	-	-	Lg Ind.	410,024	748,703	410,024	748,703			
Total Usage Charges		1,025,681	\$ 7,456,791	237,929	\$ 921,543	447,594	\$ 2,622,404	674,677	\$ 1,956,493	2,385,880	\$ 12,957,230				
Other Revenues														\$	201,802.00
Total Tariff Revenues			\$ 7,456,791		\$ 921,543		\$ 2,622,404		\$ 1,956,493		\$ 18,192,781				

0
0

Aqua Illinois, Inc.
Consolidated Tariff Group -Water
Staff Proposed Rates and Revenue Requirement

Fire Service Revenue:						
Public Fire	5/8"	3/4"	1"	1 1/2" & Larger		
Danville Fire District						
Units	134,468	25	3,914	3,320	141,727	
Rate	\$ 6.17	\$ 9.26	\$ 15.43	\$ 30.85		
Revenue	\$ 829,668	\$ 232	\$ 60,393	\$ 102,422	\$	992,714
Lynch Fire District						
Units	12,932	-	511	130	13,573	
Rate	\$ 5.52	\$ 8.28	\$ 13.80	\$ 27.60		
Revenue	\$ 71,385	\$ -	\$ 7,052	\$ 3,588	\$	82,024
Kickapoo Fire District						
Units	11,655	11	198	106	11,970	
Rate	\$ 6.52	\$ 9.78	\$ 16.30	\$ 32.60		
Revenue	\$ 75,991	\$ 108	\$ 3,227	\$ 3,456	\$	82,781
Tilton Fire District						
Units	12,342	-	177	95	12,614	
Rate	\$ 7.10	\$ 10.65	\$ 17.75	\$ 35.50		
Revenue	\$ 87,628	\$ -	\$ 3,142	\$ 3,373	\$	94,142
Westville Fire District						
Units	10,682	-	200	95	10,977	
Rate	\$ 5.73	\$ 8.60	\$ 14.33	\$ 28.65		
Revenue	\$ 61,208	\$ -	\$ 2,866	\$ 2,722	\$	66,796
Bismarck Fire District						
Units	5,184	-	259	24	5,467	
Rate	\$ 6.16	\$ 9.24	\$ 15.40	\$ 30.80		
Revenue	\$ 31,933	\$ -	\$ 3,989	\$ 739	\$	36,661
Philo Fire District						
Units	6,411	-	59	12	6,482	
Rate	\$ 6.91	\$ 10.37	\$ 17.28	\$ 34.55		
Revenue	\$ 44,300	\$ -	\$ 1,020	\$ 415	\$	45,734
Indianola Fire District						
Units	1,372	-	-	-	1,372	
Rate	\$ 7.68	\$ 11.52	\$ 19.20	\$ 38.40		
Revenue	\$ 10,537	\$ -	\$ -	\$ -	\$	10,537
Candlewick						
Units	5,965	16,589	144	12	22,710	
Rate	\$ 4.71	\$ 7.07	\$ 11.78	\$ 23.55		
Revenue	\$ 28,094	\$ 117,287	\$ 1,700	\$ 283		
Hawthorn Woods						
Units	10	36	5,458	116	5,620	
Rate	\$ 6.13	\$ 9.20	\$ 15.33	\$ 30.65		
Revenue	\$ 61	\$ 331	\$ 83,675	\$ 3,558		
Ivanhoe						
Units	32	837	1,910	24	2,804	
Rate	\$ 6.13	\$ 9.20	\$ 15.33	\$ 30.65		
Revenue	\$ 197	\$ 7,705	\$ 29,277	\$ 740		
Oak Run						
Units	6,485	2,411	36	36	8,969	
Rate	\$ 9.96	\$ 14.94	\$ 24.90	\$ 49.80		
Revenue	\$ 64,594	\$ 36,024	\$ 896	\$ 1,793		
Ravenna						
Units	-	-	-	602	602	
Rate	\$ 6.13	\$ 9.20	\$ 15.33	\$ 30.65		
Revenue	\$ -	\$ -	\$ -	\$ 18,463		
University Park						
Units	19,593	1,655	4,582	1,644	27,474	
Rate	\$ 7.47	\$ 11.21	\$ 18.68	\$ 37.35		
Revenue	\$ 146,359	\$ 18,550	\$ 85,597	\$ 61,397		
Willowbrook						
Units	11,556	388	1,322	36	13,302	
Rate	\$ 7.48	\$ 11.22	\$ 18.70	\$ 37.40		
Revenue	\$ 86,437	\$ 4,354	\$ 24,721	\$ 1,346		
Total Public Fire					285,663	\$ 1,411,390

Aqua Illinois, Inc.
 Consolidated Tariff Group -Water
 Staff Proposed Rates and Revenue Requirement

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	Hydrants	Prv.Serv.Line Less than 3"	Prv.Serv.Line 3"	Prv.Serv.Line 4"	Prv.Serv.Line 6"	Prv.Serv.Line 8"	Prv.Serv.Line 10"	Prv.Serv.Line 12"	Prv.Serv.Line 16"	
Private Fire Service										
Units	-	72	-	372	1,163	649	193	58	-	2,508
Rate	\$0.00	\$ 20.00	\$ 36.00	\$ 64.80	\$ 169.20	\$ 349.60	\$ 620.00	\$ 996.00	\$ 2,112.00	
Revenue	\$ -	\$ 1,440	\$ -	\$ 24,114	\$ 196,842	\$ 226,960	\$ 119,743	\$ 58,067	\$ -	
Total Private Fire										\$ 627,166
Total Sales of Water 12 months ended 12/31/10										\$ 20,231,337
Miscellaneous Revenues										\$ 177,300
Total Revenues										\$ 20,408,638
										\$120,270 0.535%
										\$16,196,147 (\$4,212,490)

Aqua Illinois, Inc.
Fairhaven-Candlewick Water Division
Staff Proposed Rates and Revenue Requirement

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Staff Exhibit 9.0
Schedule 9.2
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(includes billing determinants for the year 2012)

Description (A)	Rate (B)	Residential		Sales for Resale		Commercial		Industrial		Total	
		Billing Determinant (E)	Revenue (C)	Billing Determinant (E)	Revenue (C)	Billing Determinant (E)	Revenue (C)	Billing Determinant (E)	Revenue (C)	Billing Determinant (E)	Revenue (C)
Meter Size		2 area									
5/8"	\$ 12.25	5941	\$ 72,800.89	#	\$ -	24	\$ 294		\$ -	5,965	\$ 73,095
3/4"	\$ 16.96	20,188	342,471		-	60	1,018	-	-	20,248	343,489
1"	\$ 27.33	120	3,280		-	24	656		-	144	3,936
1-1/2"	\$ 51.84		-		-		-		-		-
2"	\$ 81.07		-		-		-		-		-
3"	\$ 149.87		-		-	12	1,798		-	12	1,798
4"	\$ 248.85		-		-		-		-		-
6"	\$ 494.87		-		-		-		-		-
8"	\$ 789.91		-		-		-		-		-
10"	\$ 1,134.91		-		-		-		-		-
12"	\$ 1,656.17		-		-		-		-		-
Candlewick Availability	\$ 12.88	5,429	69,946		-		-		-	5,429	69,946
3" Tur.	\$ 245.31		-		-		-		-		-
4" Tur.	\$ 419.01		-		-		-		-		-
6" Tur.	\$ 868.52		-		-		-		-		-
8" Tur.	\$ 1,249.08		-		-		-		-		-
Total Customer Charges		31,678	\$ 488,498		\$ -	120	\$ 3,766		\$ -	31,798	\$ 492,265
Usage Charges: (per 1,000 Gallons)											
0 - 74.8 K Gal.	\$ 5.7923	102,408	\$ 593,180		\$ -	1,464	\$ 8,480		\$ -	103,872	\$ 601,660
Next 673.2 K Gal.	\$ 4.2016		-		-		-		-		-
Over 748 K Gal.	\$ 3.0011		-		-		-		-		-
All usage Sales/Resale	\$ 3.8732		-		-		-		-		-
All usage Lg. Ind.	\$ 1.8260		-		-		-		-		-
Total Usage Charges		102,408	\$ 593,180		\$ -	1,464	\$ 8,480		\$ -	103,872	601,660
Other Revenues										\$	10,766.00
Total Tariff Revenues			\$ 1,081,679		\$ -		\$ 12,246		\$ -	\$	1,104,691

Aqua Illinois, Inc.
University Park Water Division
Staff Proposed Rates and Revenue Requirement

Docket No. 11-0436
Staff Exhibit 9.0
Schedule 9.3
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(includes billing determinants for the year 2012)

Description (A)	Rate (B)	Residential		Sales for Resale		Commercial		Industrial		Total	
		Billing Determinant (E)	Revenue (C)	Billing Determinant (E)	Revenue (C)	Billing Determinant (E)	Revenue (C)	Billing Determinant (E)	Revenue (C)	Billing Determinant (E)	Revenue (C)
Meter Size											
5/8"	\$ 11.51	19,081	\$ 219,629	-	\$ -	511	\$ 5,887	-	\$ -	19,593	\$ 225,516
3/4"	\$ 15.94	1,619	25,804	-	-	36	574	-	-	1,655	26,378
1"	\$ 25.68	3,928	100,880	-	-	654	16,794	-	-	4,582	117,673
1-1/2"	\$ 48.70	144	7,027	-	-	307	14,964	-	-	452	21,991
2"	\$ 76.14	73	5,558	-	-	783	59,640	-	-	856	65,199
3"	\$ 140.78	12	1,689	-	-	152	21,349	-	-	164	23,038
4"	\$ 233.74	24	5,610	-	-	89	20,703	12	2,805	125	29,117
6"	\$ 464.83	-	-	-	-	36	16,734	-	-	36	16,734
8"	\$ 741.96	-	-	-	-	-	-	-	-	-	-
10"	\$ 1,066.01	-	-	-	-	-	-	-	-	-	-
12"	\$ 1,555.63	-	-	-	-	-	-	-	-	-	-
6" Tur. LG Ind.	\$ 825.80	-	-	-	-	-	-	-	-	-	-
3" Tur.	\$ 233.24	-	-	-	-	-	-	-	-	-	-
4" Tur.	\$ 398.40	-	-	-	-	-	-	-	-	-	-
6" Tur.	\$ 825.80	-	-	-	-	-	-	-	-	-	-
8" Tur.	\$ 1,187.64	-	-	-	-	-	-	12	13,935	12	13,935
Oak Run Availability	\$ 9.45	-	-	-	-	-	-	-	-	-	-
Total Customer Charges		24,882	\$ 366,197	-	\$ -	2,568	\$ 156,645	24	\$ 16,740	27,474	\$ 539,581
Usage Charges: (per 1,000 Gallons)											
0 - 74.8 K Gal.	\$ 4.1451	170,962	\$ 708,646	-	\$ -	100,694	\$ 417,380	1,805	7,480	273,460	\$ 1,133,506
Next 673.2 K Gal.	\$ 3.0067	-	-	-	-	45,556	136,973	11,148	33,519	56,704	170,492
Over 748 K Gal.	\$ 2.1476	-	-	-	-	19,524	41,930	17,230	37,002	36,754	78,933
All usage Sales/Resale	\$ 3.8732	-	-	-	-	-	-	-	-	-	-
All usage Lg. Ind.	\$ 1.8260	-	-	-	-	-	-	-	-	-	-
Total Usage Charges		170,962	\$ 708,646	-	\$ -	165,773	\$ 596,283	30,182	\$ 78,001	366,918	1,382,931
Total Tariff Revenues											1,922,512
Other Revenues											\$ 66,083.00
Total Revenues			\$ 1,074,843		\$ -		\$ 752,927		\$ 94,741		\$ 1,988,595

(includes billing determinants for the year 2012)

Line No.	Description (A)	Residential		Bulk Service		Commercial		Industrial		Total		
		Rate (B)	Billing Determinant (C)	Revenue (D)	Billing Determinant (E)	Revenue (F)	Billing Determinant (G)	Revenue (H)	Billing Determinant (I)	Revenue (J)	Billing Determinant (K)	Revenue (L)
1	Customer Charges:											
2	All Single-Unit Customers w/ Meas. Water	\$33.09	40,994	\$ 1,356,406		\$ -		\$ -		\$ -	40,994	1,356,406
3	All Multi-Unit Customers w/ Meas. Water	\$23.16		-		-		-		-	-	-
4	Flat Rate Service:											
5	All Non-Measured Customers	\$59.03	1,619	95,544		-	12	728		-	1,631	96,272
6	All Non-Measured Multi-Unit Customers	\$44.98		-		-		-		-	-	-
7	Candlewick Availability	\$25.02	5,782	144,660		-		-		-	5,782	144,660
8	Balmoral Woods Country Club	\$268.05		-		-	12	3,217		-	12	3,217
9	Total Customer Charges		48,394	\$ 1,596,610		\$ -	24	\$ 3,945		\$ -	48,418	\$ 1,600,554
10	Usage Charges: (per 1000 gallons)											
	All Usage except Bulk Service	\$7.3137	223,250	\$ 1,632,779		\$ -	44,226	\$ 323,455		\$ -	267,476	\$ 1,956,233
11	Total Usage Charges		223,250	\$ 1,632,779		\$ -	44,226	\$ 323,455		\$ -	267,476	\$ 1,956,233
12	Miscellaneous Charges											37,217
13	Total Revenue			\$ 3,229,388		\$ -		\$ 327,399		\$ -		\$ 3,594,005

(includes billing determinants for the year 2012)

Line No.	Description (A)	Rate (B)	Residential		Multi-Family Dwellings		Commercial		Industrial		Total	
			Billing Determinant (C)	Revenue (D)	Billing Determinant (E)	Revenue (F)	Billing Determinant (G)	Revenue (H)	Billing Determinant (I)	Revenue (J)	Billing Determinant (K)	Revenue (L)
1	Flat Rate:											
2	Single Family Residence	\$41.52	2,868	\$ 119,080	-	\$ -	-	\$ -	-	\$ -	2,868	\$ 119,080
3	Golf Club	\$330.32	-	-	-	-	12	3,964	-	-	12	3,964
			-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-
4	Total Customer Charges		2,868	\$ 119,080	-	\$ -	12	\$ 3,964	-	\$ -	2,880	\$ 123,044
5	Usage Charges: (per 1000 gallons)											
6	Commercial w/ Usage Charge		-	-	-	-	-	-	-	-	-	-
7	Total Usage Charges		-	\$ -	-	-	-	-	-	-	-	-
8	Miscellaneous Charges											-
9	Total Revenue			\$ 119,080		\$ -		\$ 3,964		\$ -		\$ 123,044

(includes billing determinants for the year 2012)

Line No.	Description	Staff RTTY Rate	Residential		Bulk Service		Commercial		Industrial		Total	
			Billing Determinant	Revenue	Billing Determinant	Revenue	Billing Determinant	Revenue	Billing Determinant	Revenue	Billing Determinant	Revenue
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)
1	Customer Charges:											
2	Non-Residential <250,000 GPD	\$22.61	-	\$ -	-	\$ -	1,882	\$ 42,568	24	\$ 537	1,906	\$ 43,105
3	Non-Residential >250,000 GPD	\$11.80	-	-	-	-	-	-	-	-	-	-
4	Bulk Service Customers	\$7.37	-	-	24	177	-	-	-	-	24	177
5	Flat Rate Service:											
6	W/ Water Service Single Family	\$44.78	22,683	1,015,756	-	-	-	-	-	-	22,683	1,015,756
7	W/Water Service Multi-Unit per unit	\$29.00	-	-	-	-	-	-	-	-	-	-
8	Mobile Homes	\$18.33	-	-	-	-	-	-	-	-	-	-
9	WO/Water Service Multi-Unit per unit	\$29.00	-	-	-	-	10,992	318,788	-	-	10,992	318,788
10	Meadow Creek Surcharge	\$2.45	732	1,793	-	-	-	-	-	-	732	1,793
11	Total Customer Charges		23,415	\$ 1,017,549	24	\$ 177	12,874	\$ 361,356	24	\$ 537	36,337	\$ 1,379,619
12	Usage Charges: (per 1000 gallons)											
13	All Water Usage < 250,000 GPD	\$6.2347	-	\$ -	-	\$ -	94,688	\$ 590,348	41,160	\$ 256,623	135,848	\$ 846,971
14	>250,000 GPD Users	\$5.1487	-	-	-	-	-	-	-	-	-	-
15	Bulk Service Customers All Usage	\$4.6402	-	-	180,901	839,416	-	-	-	-	180,901	839,416
16	Total Usage Charges		-	\$ -	180,901	839,416	94,688	\$ 590,348	41,160	\$ 256,623	316,748	\$ 1,686,386
17	Miscellaneous Charges											11,283
18	Total Revenue			\$ 1,017,549		\$ 839,592		\$ 951,705		\$ 257,159		\$ 3,077,288