

1 ***Introduction and Summary***

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

3 A. My name is Scott J. Rubin. My business address is 333 Oak Lane, Bloomsburg,
4 Pennsylvania 17815.

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

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

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

9 A. I have been asked by the Office of the Illinois Attorney General (“AG”) to review the
10 annual reconciliations filed by Illinois-American Water Company (“IAWC” or
11 “Company”) for its Purchased Water (“PW”) and Purchased Sewage Treatment (“PS”)
12 surcharges.

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

14 A. I have testified as an expert witness before utility commissions or courts in the District of
15 Columbia and in the states of Arizona, Delaware, Kentucky, Illinois, Maine, Maryland,
16 New Jersey, New York, Ohio, Pennsylvania, and West Virginia. I also have testified as
17 an expert witness before two committees of the U.S. House of Representatives and one
18 committee of the Pennsylvania House of Representatives. I have served as a consultant
19 to the staffs of two state utility commissions, several national utility trade associations,
20 and state and local governments throughout the country. Prior to establishing my own
21 consulting and law practice, I was employed by the Pennsylvania Office of Consumer
22 Advocate from 1983 through January 1994 in increasingly responsible positions. From

23 1990 until I left that office, I was one of two senior attorneys in that office. Among my
24 other responsibilities in that position, I had a major role in setting their policy positions
25 on water and electric matters. In addition, I was responsible for supervising the technical
26 staff of that office. I also testified as an expert witness for that office on rate design and
27 cost of service issues.

28 In addition, from 1990 until 1994, I chaired the Water Committee of the National
29 Association of State Utility Consumer Advocates (“NASUCA”). In that position, I
30 served as the liaison between NASUCA members and various industry and government
31 associations, including the National Association of Water Companies, the American
32 Water Works Association, and the U.S. Environmental Protection Agency. I was
33 frequently called upon by those organizations to provide the consumer perspective on
34 various water-industry issues.

35 Throughout my career, I developed substantial expertise in matters relating to the
36 economic regulation of public utilities. I have published articles, contributed to books,
37 written speeches, and delivered numerous presentations, on both the national and state
38 level, relating to regulatory issues. I have attended numerous continuing education
39 courses involving the utility industry. I also periodically participate as a faculty member
40 in utility-related educational programs for the Institute for Public Utilities at Michigan
41 State University, the American Water Works Association (“AWWA”), and the
42 Pennsylvania Bar Institute.

43 **Q, What experience do you have that is directly relevant to the issues you will be**
44 **discussing in this case?**

45 A. During the past ten years or more, I have reviewed numerous PW and PS adjustment
46 filings for the New Jersey Division of Ratepayer Advocate. Those cases usually have
47 been resolved prior to the filing of testimony. I am very familiar with the use of
48 automatic adjustment mechanisms for PW and PS costs and the manner in which those
49 costs are reconciled.

50 I also have testified on behalf of the Pennsylvania Office of Consumer Advocate
51 concerning, among other issues, the reasonableness of a large water utility (Aqua
52 Pennsylvania, Inc.) adopting a PW adjustment clause. There I recommended that the
53 utility should not be permitted to use a PW adjustment clause because of the relatively
54 small magnitude of PW costs and the utility's history of revenues and sales increasing
55 faster than PW expenses.

56 In addition, I testified in IAWC's PW and PS reconciliation cases before this
57 Commission last year (Docket No. 06-0196).

58 **Q. Have you reviewed the Company's filings in this docket?**

59 A. Yes.

60 **Q. Have you reviewed the testimony filed by the Company in this docket?**

61 A. Yes.

62 **Q. What issues specifically will you be addressing in this case?**

63 A. I will be addressing several specific concerns with the data, calculations, and policies
64 reflected in IAWC's PW reconciliations.

65 **Q. Please summarize your major findings and conclusions.**

66 A. I am proposing specific changes in the purchased water rates for three rate districts:
67 Alpine Heights, DuPage, and Moreland. I will briefly summarize my conclusions for
68 each of these rate areas.

69 In **Alpine Heights**, I recommend that the Commission approve IAWC's proposed
70 surcharge rate of \$2.82, but also recommend that the Company should be prohibited from
71 reconciling any differences associated with billing or metering errors. I also recommend
72 that the Commission order the Company to conduct an audit of its bills and meter reads in
73 Alpine Heights and file the results of that audit in its next PW case.

74 In the **DuPage** service area, I recommend that IAWC should return the refund
75 from DuPage Water Commission to IAWC customers over a two-year period. This has
76 the effect of reducing the variable purchased water rate to \$0.75 instead of the rate of
77 \$0.96 proposed by the Company.

78 Finally, in the **Moreland** area, I recommend that, due to missing data, the
79 Company use the average level of UFW for Moreland from 2002 through 2005, which is
80 4.8%. The effect of using this more appropriate level of UFW is to reduce the variable
81 charge for Moreland customers to \$1.29 per 1,000 gallons, instead of IAWC's proposed
82 rate of \$1.41 per 1,000 gallons

83 **Q. Does the purchased water charge vary over the course of the year, or only as a**
84 **result of the reconciliation?**

85 A. Under normal circumstances, the PW rate should change only once per year, as a result of
86 the reconciliation docket. If there is an unusual event, such as a large increase or

87 decrease in the cost of purchased water, then IAWC should request an interim change in
88 the rate to avoid a large over- or under-collection.

89 **Q. In the year under review, were there any interim changes in the purchased water**
90 **charge during the year?**

91 A. As far as I know, there were no interim changes in the PW charges this year.

92 **Q. Some districts have both a fixed purchased water charge and a usage-based charge.**
93 **Have you seen this done by other companies, and if so, can you identify where?**

94 A. The method for recovering PW and PS costs varies from one state to another. Some
95 states permit automatic adjustment surcharges and some do not. Where surcharges are
96 permitted, in my experience, they usually are limited to costs that vary with the amount
97 of water purchased.

98 It is not unusual to have both a fixed and a variable component to PW costs.
99 Whether and how costs are divided between fixed and variable is a function of the
100 contract between the buyer and seller. Typically, the fixed cost component of the contract
101 would recover fixed costs that the PW provider incurs to serve the purchaser, such as the
102 cost of constructing a water main solely to serve the customer, or the costs of metering
103 and billing. While I do not recall specifics, my memory is that the fixed cost component
104 in other jurisdictions is usually recovered through the purchasing utility's base rates. The
105 variable cost (the costs associated with the supplier actually pumping and treating the
106 water) may be eligible for recovery through the PW surcharge.

107 In Illinois, however, the Commission’s regulations specifically permit a utility to
108 have separate surcharge components for fixed and variable charges. 83 Ill. Adm. Code
109 § 655.40.

110 ***Alpine Heights***

111 **Q. Have you reviewed the Company’s reconciliation filing for Alpine Heights?**

112 A. Yes, I have.

113 **Q. Do you have any concerns with the Alpine Heights filing?**

114 A. Yes. I am concerned that the Alpine Heights filing shows that the Company had negative
115 unaccounted-for water (“UFW”) in this service area for April-December 2006, and
116 indeed the entire calendar year of 2006. *IAWC Application for Approval of Annual*
117 *Reconciliation of Purchased Water and Purchased Sewage Treatment Surcharges and*
118 *Approval for Variance (“Application”), Exhibit C, Alpine Heights Service District*
119 (March 14, 2007). That is, the Company claims that it sold more water than it purchased.
120 This is physically impossible because in this and IAWC’s other districts with PW
121 surcharges, purchased water is the only source of water. In particular, Exhibit C of the
122 Alpine Heights filing shows the Company claims it sold 20,759,000 gallons of water, but
123 purchased only 19,818,000 gallons. *Id.*

124 **Q. Did this same issue come up in IAWC’s last purchased water docket?**

125 A. Yes, it did. In that case, I raised the concern that several districts showed that more
126 water was sold than purchased. *Direct Testimony of Scott J. Rubin, ICC Docket No. 06-*
127 *0196, AG/HG Exhibit 1.0, pgs. 11-14.* This is likely to indicate significant errors in
128 billing, meter reading, or record keeping.

129 **Q. How was the issue resolved last year?**

130 A. Last year, IAWC went back to its records and found where it had made errors (such as
131 failing to include the readings from all PW meters, or failing to account for retail billing
132 adjustments).

133 **Q. Has IAWC made such an investigation and correction for Alpine Heights this year?**

134 A. No, it has not. In response to AG Data Request 1.1, the Company states: “We have
135 checked the metering and billing records and have verified the information provided is
136 accurate. The Village of Orland Park, the supplier of lake water for this service area,
137 requires the oversized meter. However, this oversized meter under-registers usage at
138 lower flows. Because this meter under-registers the water purchased, it is possible to
139 have negative unaccounted for water.” IAWC Response to AG Data Request Number
140 1.1.

141 **Q. In your opinion, is this a reasonable explanation for the negative UFW shown in the**
142 **filing?**

143 A. In my opinion, while this may be possible in theory, I do not think it is reasonable to
144 reach this conclusion without auditing the Company’s metering and billing records to its
145 retail customers.

146 I am particularly concerned with the data for Alpine Heights because it shows the
147 greatest discrepancy during periods of high flow, not low flow as the Company suggests
148 in its data request response. Exhibit C in the Alpine Heights filing shows that the biggest
149 discrepancies are in the months of August and September, which are not low-flow
150 periods. *IAWC Application*, Alpine Heights Service District, Exhibit C. Specifically, in

151 August IAWC says it sold 2,584,000 gallons, but purchased only 2,024,000 gallons. Id.
152 Then in September, it claims to have sold 2,003,000 gallons, but purchased only
153 1,469,000 gallons. Id. For those two months combined, then, the Company claims to
154 have sold more than 1 million gallons more than it purchased. Id.

155 **Q. Does the Company store water for later use?**

156 A. Yes, it does, but water storage is relatively short term in nature. Water storage would not
157 explain the magnitude of the discrepancies shown in the Company's data, or the fact that
158 the discrepancies appear month after month.

159 **Q. Has the Company conducted such an audit of its metering and billing records in
160 Alpine Heights?**

161 A. It does not appear that the Company has done such an audit.

162 **Q. Without such an audit, can you reach a conclusion about the reasonableness of the
163 PW surcharge for Alpine Heights?**

164 A. No, I do not have sufficient information to determine if the PW surcharge for Alpine
165 Heights is reasonable or accurate. Although the Company suggests that the meter is
166 under-recording water entering its system, it is also possible that customers are being
167 billed for more than they are actually using, or that the Company has failed to reflect
168 billing adjustments in its reconciliation data. The negative UFW could be explained by
169 any of these reasons (among others), or some combination of them.

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

171 A. I recommend that the Commission approve IAWC's proposed surcharge rate of \$2.82
172 (which is a reduction from the current rate of \$2.94), but that the Company should be

173 prohibited in future reconciliations from increasing the PW rate associated with billing or
174 metering errors. I also recommend that the Commission order the Company to conduct
175 an audit of its bills and meter reads in Alpine Heights and file the results of that audit in
176 its next PW case.

177 **Q. Are there other districts in this Company's filing that show a negative percent of**
178 **unaccounted for water?**

179 A. No, this year Alpine Heights is the only service area that shows negative UFW.

180 ***DuPage***

181 **Q. Have you reviewed the proposed amortization schedule for the one-time refund**
182 **issued by the DuPage Water Commission?**

183 A. Yes, I have reviewed the Company's proposal. As the result of a refund and rate change
184 from its supplier, IAWC shows an over-collection from DuPage customers of \$578,414
185 on its variable charge. IAWC proposes to return this amount to customers over three
186 years, paying interest on the balance at 5% per year.

187 **Q. Is the practice of amortizing a refund over three years standard for the industry?**

188 A. When an automatic adjustment mechanism shows a substantial over- or under-recovery,
189 it is not unusual to amortize the recovery or refund over more than one year. The goal is
190 to mitigate the impact on customers of bill changes associated with the automatic
191 adjustment mechanism. I would emphasize, however, that a utility with an automatic
192 adjustment clause in its tariffs has an obligation to try to avoid substantial over- and
193 under-recoveries. If there is a significant rate change from the supplier, the utility should
194 file for an interim adjustment in the rate. In this case, most of the over-collection is the

195 result of a one-time refund from the supplier, so it probably was not feasible for the
196 Company to request an interim change in the surcharge.

197 **Q. What is the effect of the Company's proposed three-year amortization of the**
198 **variable charge refund?**

199 A. The effect of this change coupled with the DuPage Water Commission's on-going rate
200 reduction is to reduce the variable charge to IAWC DuPage customers from the present
201 rate of \$1.58 to the new rate of \$0.96.

202 **Q. Is the Company also proposing an increase in the fixed charge for DuPage**
203 **customers?**

204 A. Yes. Primarily because of an increase in the fixed-cost component of the charges from its
205 supplier, IAWC is proposing an increase of approximately \$74,000 in its fixed charges.
206 This results in an increase in the fixed charge in DuPage from the present rate of \$5.77 to
207 the new rate of \$6.95.

208 **Q. What will be the impact upon customers of the Company's proposal to decrease the**
209 **per-gallon rate at the same time as increasing the fixed-charged rate?**

210 A. The typical IAWC customer in DuPage uses about 5,000 gallons of water per month. A
211 customer with that level of consumption would have his/her variable charges decrease by
212 \$3.10 per month, and the fixed charge increase by \$1.18. The net effect on a typical
213 customer, therefore, would be to decrease his/her bill by \$1.92 per month. Of course,
214 customers who use substantially more or less water than the typical customer would have
215 different bill impacts.

216 **Q. Given the combination of a substantial over-collection in the variable charge and a**
217 **sizeable increase in the fixed charge, do you support the Company's proposal for a**
218 **three-year amortization of the refund from DuPage Water Commission?**

219 A. No, I do not. I recommend that IAWC should return the refund from DuPage Water
220 Commission to IAWC customers over a two-year period. This has the effect of reducing
221 the amount that customers are effectively lending to IAWC, and it further offsets the
222 impact of the fixed charge increase.

223 **Q. What is the effect of your recommendation on DuPage customers?**

224 A. Using the same methodology as the Company, the refund to customers in the current year
225 would be \$296,437. *IAWC Application*, DuPage County Service District, Exhibit A, page
226 3 revised. Including this larger refund in the PW calculation results in a variable PW rate
227 of \$0.75 instead of the rate of \$0.96 proposed by the Company, as I show on AG Exhibit
228 1.01.

229 ***Moreland***

230 **Q. Have you reviewed the reconciliation filing for the Moreland water rate area?**

231 A. Yes, I have reviewed the Moreland filing, including the revision attached to
232 Mr. Kerckhove's direct testimony.

233 **Q. Is there anything unusual about the filing for this district?**

234 A. Yes, the Moreland data are unusual. The Company states that it does not have accurate
235 data on water purchases during the first six months of 2006. IAWC Exhibit 1.0, pgs. 12-
236 13. The reason, according to Mr. Kerckhove, is that the Company had a credit balance

237 with its supplier (Chicago) and, as a result, accurate records were not kept of water
238 purchases from the supplier. Id.

239 **Q. How does this lack of data affect the reconciliation calculation?**

240 A. Without accurate data on the amount of water purchased, the Company's level of UFW
241 cannot be accurately calculated. Stated differently, it is not known how much water the
242 Company must purchase in order to deliver 1,000 gallons of water to a customer. There
243 is always some water lost in the distribution process, but the precise level cannot be
244 calculated for Moreland because of the lack of data.

245 **Q. How did IAWC address this problem?**

246 A. IAWC did not address this problem. The Company simply used the data that it had,
247 without recognizing the inherent problems with using that inaccurate data.

248 **Q. Can you illustrate the effect of the inaccurate data?**

249 A. Yes, I can. In fact, the Company's filing itself illustrates this problem. The missing data
250 are for January through June. The Company's filing calculates the level of UFW for nine
251 months (April through December) and for 12 months. *IAWC Application*, Moreland
252 Service District, Exhibit C. For 12 months, the Company shows negative UFW (-4.90%),
253 meaning that it sold more water than it purchased. Id. For nine months, however, the
254 Company shows that it had UFW of 18.53%, meaning that IAWC had to purchase
255 approximately 1,227 gallons of water in order to deliver 1,000 gallons to customers.¹
256 Both of these numbers cannot be correct because the system cannot realistically lose
257 18.53% of its input during nine months, but end up selling more than is input into the

¹ $1,227 - (.18.53\% \times 1,227) = 1,000$

258 system for the year. In fact, neither of these numbers is correct. They simply are not
259 accurate representations of the amount of water the Company purchases in order to
260 deliver water to customers.

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

262 A. I recommend that, given the absence of a full year of data for 2006, that the Company use
263 the average level of UFW for Moreland from 2002 through 2005. That average is 4.8%,
264 as I show on AG Exhibit 1.02. I prepared that exhibit using data from the Company's
265 reconciliation filings for 2003 through 2006, which did not have the missing data
266 problem that affects this year's filing.

267 **Q. What is the effect on the PW rate of using a 4.8% level of UFW for Moreland?**

268 A. As I show on AG Exhibit 1.03, the effect of using this more appropriate level of UFW is
269 to reduce the variable charge for Moreland customers to \$1.29 per 1,000 gallons, instead
270 of IAWC's proposed rate of \$1.41 per 1,000 gallons.

271 **Conclusion**

272 **Q. Please summarize your findings and conclusions.**

273 A. In conclusion, I recommend that IAWC conduct a billing and metering audit of the
274 Alpine Heights service area, so that the Commission can have assurance that customer
275 meter and billing errors are not the cause of the negative UFW in that area. I also
276 recommend decreasing the variable purchased water rates in DuPage to return a refund to
277 customers over two years, instead of the three years recommended by IAWC. Finally, I
278 recommend decreasing the variable purchased water rates in Moreland to correct for data
279 errors by using a reasonable level of unaccounted-for water.

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

281 **A. Yes, it does.**