

Responsive Testimony

Of

William R. Johnson

Water Department

Financial Analysis Division

Illinois Commerce Commission

Aqua Illinois, Inc.
Application for Certificate of Public
Convenience and Necessity to Operate
A Water Supply and Distribution System
And a Sewer Collection System;
And for a Variance from Main Extension Deposit Rules
To Expand System Development Charges.

Docket No. 06-0655

July 30, 2008

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1 **WITNESS IDENTIFICATION**

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

3 A. My name is William R. Johnson. I am employed by the Illinois Commerce
4 Commission (“ICC” or “Commission”). My business address is 527 East Capitol
5 Avenue, Springfield, Illinois 62701.

6
7 **Q. Are you the same William R. Johnson who submitted direct and rebuttal
8 testimony in this proceeding?**

9 A. Yes, I am.

10

11 **PURPOSE OF TESTIMONY**

12 **Q. What is the purpose of your responsive testimony?**

13 A. I will respond to wastewater treatment capacity issues discussed by V3
14 Monee LLC in their rebuttal testimony (V3 Monee 2.0) and the
15 surrebuttal (Aqua Exhibit 4.0) and supplemental surrebuttal (Aqua
16 Exhibit 5.0) testimony of Aqua Illinois, Inc. (“Aqua” or the “Company”)
17 concerning Aqua’s University Park Division. The terms wastewater and
18 sewer are used interchangeably in my testimony but have identical
19 meanings.

20

21 **WASTEWATER TREATMENT CAPACITY ISSUES**

22 **Q. Please explain what you mean by wastewater treatment capacity**
23 **issues.**

24 A. My direct testimony stated that Aqua's University Park Division
25 wastewater treatment facility had been placed on the Illinois
26 Environmental Protection Agency's ("IEPA") Critical Review List and
27 that it would need to add additional wastewater treatment capacity in
28 the future. (ICC Staff Exhibit 1.00, p. 6.) I recommended in both direct
29 and rebuttal testimony that Aqua be granted a wastewater certificate
30 because it was capable of serving the proposed certificated service
31 area because of both short term and long term plans in place that would
32 address wastewater treatment capacity. (ICC Staff Exhibit 1.00, pp. 11-
33 12 and ICC Staff Exhibit 5.00, p. 4.) However, in rebuttal testimony, V3
34 Monee LLC witness Daniel Flanagan provided a hydraulic loading
35 evaluation for Aqua's University Park Division wastewater treatment
36 plant that calculated a hydraulic load of 104%. (V3 Monee 2.0,
37 Attachment DF 2.1.) A hydraulic load of 104% means that the
38 University Park Division wastewater treatment plant has reached its
39 design capacity. If a wastewater treatment facility reaches its design
40 capacity, the IEPA places the facility on the Restricted Status List and
41 additional wastewater connection permits may no longer be issued
42 without causing a violation of the Environmental Protection Act or
43 Illinois Pollution Control Board Regulations (35 Ill. Adm. Code 306.402).

44 Aqua responded in surrebuttal testimony that V3 Monee LLC's
45 hydraulic load of 104% was incorrect and that it was actually 98.9%.
46 (Aqua Exhibit 4.0, p. 4 and Aqua Exhibit 4.0, Attachment TJR 4.1,
47 Attachment Data Response WD 8.01(1)(d).) Aqua's most recent
48 testimony, supplemental surrebuttal, identifies a current hydraulic load
49 of 86%. (Aqua Exhibit 5.0, p. 4.)

50
51 My direct testimony also stated that I reserved the right to re-examine
52 the wastewater certificate issue after reviewing testimony of intervenors
53 in this case. (ICC Staff Exhibit 1.00, p. 12.)

54

55 **Q. Please discuss further the IEPA's "Critical Review" List and**
56 **"Restricted Status" List.**

57 A. The IEPA's Division of Water Pollution Control "Critical Review" List
58 contains the names of facilities that have been placed on Critical
59 Review. Critical Review is defined as "the Agency determination that a
60 sewer or lift station is approaching hydraulic capacity or that a sewage
61 treatment plant is approaching design capacity such that additional
62 sewer connection permit applications will require close scrutiny to
63 determine whether issuance would result in a violation of the
64 Environmental Protection Act or Illinois Pollution Control Board
65 Regulations". (Illinois Pollution Control Board, Environmental Register,
66 February 2008 – Number 644, p. 10.)

67

68 If a sewer or lift station has reached its hydraulic capacity or a sewage
69 treatment plant has reached design capacity, the facility is placed on
70 the IEPA's Division of Water Pollution Control "Restricted Status" List,
71 which means that additional sewer connection permits may no longer
72 be issued without causing a violation of the Environmental Protection
73 Act or Illinois Pollution Control Board Regulations. (*Id.*, p. 9.)

74

75 The IEPA examines the hydraulic load percentage when determining
76 whether facilities should be placed on the Critical Review List or the
77 Restricted Status List. When a wastewater treatment facility has
78 reached a hydraulic load of 80%, it is placed on the Critical Review List.
79 (35 Ill. Adm. Code 392.302.) When a wastewater treatment facility's
80 hydraulic load percentage has reached its permitted design capacity, it
81 is placed on the Restricted Status List. (35 Ill. Adm. Code 392.202.)

82

83 The calculation of the hydraulic load percentage can be found on the
84 following documents in this docket: Aqua Exhibit 2.1; Aqua Exhibit 4.0,
85 Attachment TJR 4.1, Attachment Data Response WD 8.01(1)(d); Aqua
86 Exhibit 5.1; and V3 Monee 2.0, Attachment DF 2.1.

87

88 **Q. What has transpired since the filing of your rebuttal testimony?**

89 A. As discussed previously, Intervenor V3 Monee LLC witness Daniel
90 Flanagan's rebuttal testimony (V3 Monee 2.0) contained Attachment DF
91 2.1, which identified a hydraulic load percentage of 104% for Aqua's
92 University Park Division wastewater treatment plant. The hydraulic
93 loading evaluation was performed by the IEPA and was calculated on
94 March 20, 2007. The previous hydraulic load for Aqua's University Park
95 Division wastewater treatment plant was 89% and was sent to Aqua on
96 January 25, 2006. (Aqua Exhibit 2.0, Aqua Exhibit 2.1.) Aqua's
97 surrebuttal testimony disagreed with V3 Monee LLC's rebuttal
98 testimony hydraulic load of 104% and provided Attachment TJR 4.1 that
99 calculated a hydraulic load of 98.9%.

100

101 On June 14, 2007, a motion for a continuance was filed by Aqua. The motion
102 was in response to concerns about the availability of capacity at Aqua's
103 University Park Division wastewater treatment plant. Aqua stated that the IEPA
104 re-rating or sale to Thorn Creek Basin Sanitary District ("Thorn Creek") would
105 fully address any capacity concerns raised in this proceeding with respect to the
106 University Park Division wastewater treatment plant. Aqua believed that the sale
107 agreement with Thorn Creek would be completed within 30 days and that the
108 IEPA would rule on the re-rating request in the near future. Aqua therefore
109 requested that the matter be continued to September 7, 2007.

110

111 There were several more status hearings and continuances requested by Aqua
112 that stretched from September 7, 2007 to early June 2008. The wastewater
113 treatment plant re-rating was never ruled on by the IEPA and by November 2007,
114 it appeared that the sale of a portion of Aqua's University Park Division
115 wastewater treatment plant to Thorn Creek was near. (Transcript, November 6,
116 2007.) However, according to Aqua's supplemental surrebuttal testimony, Thorn
117 Creek is no longer interested in a portion of Aqua's University Park Division
118 wastewater treatment plant. (Aqua Exhibit 5.0, p. 3.)

119

120 **Q. Does Aqua's Supplemental Surrebuttal Testimony provide an updated**
121 **hydraulic load percentage for the University Park Division wastewater**
122 **treatment plant?**

123 A. Yes. Aqua has provided an updated hydraulic loading evaluation that calculates
124 a hydraulic load of 86% for the University Park Division wastewater treatment
125 plant. (Aqua Exhibit 5.1.) Aqua witness Mr. Terry J. Rakocy states that the
126 primary change in the available wastewater capacity is the decline in the housing
127 market and sewage flow data for the University Park Division wastewater
128 treatment plant show that annual flow for 2006, the year on which earlier
129 projections of hydraulic load were based, were atypically high (due to wetter
130 weather in those periods). (Aqua Exhibit 5.0, p. 4.)

131

132 **Q. Please explain how housing market changes and sewage flow changes due**
133 **to different weather conditions can affect the hydraulic load percentage.**

134 A. Examining Aqua Exhibit 5.1 “Hydraulic Loading Evaluation”, there are three
135 sections of data (“Current Flow Characteristics” - from the last 12 months,
136 average of the “Lowest 3 Months”, and “Permits Issued in Last 2 Years”)
137 evaluated in calculating the hydraulic load. Wetter weather would typically
138 increase the monthly average flows contained in the “Current Flow
139 Characteristics” section because of infiltration and inflow and housing market
140 changes are reflected in the “Permits Issued in Last 2 Years” section. The
141 hydraulic load is calculated by averaging the “Lowest 3 Months” average flow
142 (the “Lowest 3 Months” are taken from the “Current Flow Characteristics”
143 section), adding the average of the “Lowest 3 Months” with the total Population
144 Equivalentents (“P.E.”) from “Permits Issued in the Last 2 Years”, and then dividing
145 by the Permitted “Design Average Flow.” The lower the number of “Permits
146 Issued in Last 2 Years” (which can be caused by a decline in the housing market)
147 and lower average flows found in the “Lowest 3 Months” section (influenced by
148 lower rainfall) will cause the hydraulic load percentage to decline. Likewise, if the
149 opposite were to occur (more rainfall and an increase in housing development),
150 the hydraulic load could increase. There are also various other combinations
151 that could affect the hydraulic load as well.

152
153 **Q. Does Aqua believe the Commission should be concerned about wastewater**
154 **treatment capacity at the University Park Division wastewater treatment**
155 **plant?**

156 A. No. Aqua believes there is sufficient capacity at the University Park Division
157 wastewater treatment plant and when combined with the re-rating, they believe
158 they can accommodate growth of residential units for the next 17 years. (Aqua
159 Exhibit 5.0, p. 8.) Additionally, Aqua has received the IEPA's approval to expand
160 the Deer Creek Facilities Planning Area ("FPA"), which is the area in which Aqua
161 is the designated sewer management authority. (Aqua Exhibit 5.0, p. 7.) In
162 approving the expansion of the FPA, Aqua stated that the IEPA did not indicate
163 that it had any concerns with the sufficiency of the existing treatment capacity at
164 the University Park Division wastewater treatment plant. (*Id.*, p. 8.)
165

166 **Q. Do you have any concerns with the wastewater treatment capacity at the**
167 **University Park Division wastewater treatment plant?**

168 A. Yes. First, it is apparent from the varying hydraulic loading evaluations provided
169 in this case (Aqua Exhibit 2.1; Aqua Exhibit 4.0, Attachment TJR 4.1, Attachment
170 Data Response WD 8.01(1)(d); Aqua Exhibit 5.1; and V3 Monee 2.0, Attachment
171 DF 2.1) that the hydraulic load can shift periodically. Page 4 of Aqua Exhibit 4.0
172 stated that Aqua had a hydraulic load of 98.9% based upon a May 17, 2007
173 calculation. Aqua Exhibit 5.1 identifies a hydraulic load of 86% based upon a
174 May 6, 2008 calculation. Within approximately one year, the hydraulic load
175 shifted from 98.9% to 86%. My concern is that Aqua could reach its permitted
176 design capacity, because of a swing in hydraulic load, before re-rating is
177 approved by the IEPA or before one of its other long-term plans is implemented.
178

179 Second, Aqua has put a lot of weight on the IEPA re-rating and there is no
180 guarantee the IEPA will even approve the re-rating. Aqua filed for a re-rating on
181 March 19, 2007 and stated that it expects the IEPA to act on the filing within 8
182 weeks. (Company Response to Staff Data Request Staff 1.02(4).) Staff data
183 request WD 9.07 (Response received on June 11, 2008) asked Aqua if it had any
184 contact with the IEPA to discuss the progress of the proposed re-rating of the
185 University Park Division wastewater treatment plant. In response to Staff data
186 request WD 9.07, Aqua replied that their consultant talked with Al Keller of the
187 IEPA. Mr. Keller indicated that the IEPA had not performed a review of the
188 engineering report supporting the re-rating as of June 5, 2008.

189
190 Third, because of my concern that Aqua could reach its permitted design
191 capacity and placed on the IEPA "Restricted Status" List, I asked Aqua if the re-
192 rating were not approved by the IEPA, how long would it take the Company to
193 implement one of its long-term sewer capacity solutions and were there any
194 sewer capacity options available that could be done in a short time frame. (Staff
195 Data Request WD 9.02.) Aqua responded:

196 "The possible alternatives listed in Mr. Rakocy's supplemental surrebuttal
197 testimony would take two to four years from the engineering report review
198 to the in-service date. Potential offloading of sewer treatment capacity to
199 another provider has the shortest design and construction time of two
200 years, not including time for Aqua or Monee to negotiate an agreement
201 with another provider. Construction of a new plant would take a minimum
202 of 3 ½ to 4 years. The expansion of the existing plant is estimated to take
203 2 ½ years. There are no alternatives that are estimated to take less than
204 one year."
205

206 The Company's response does not give me a high level of confidence that
207 it can address any short-term wastewater treatment capacity issues
208 should it reach its permitted design capacity. If Aqua's hydraulic load
209 reaches the point where it is placed on the "Restricted Status" List,
210 (reached its permitted design capacity) additional sewer connection
211 permits would no longer be issued by the IEPA. If additional sewer
212 connection permits are no longer issued by the IEPA, Aqua may not be
213 able to meet its obligations to serve pursuant to the Public Utilities Act.
214 220 ILCS 5/8-101 of the Public Utilities Act states that "A public utility
215 shall, upon reasonable notice, furnish to all persons who may apply
216 therefor and be reasonably entitled thereto, suitable facilities and service,
217 without discrimination and without delay."

218
219 Fourth, paragraph 4 of Aqua's motion for continuance filed on June 14,
220 2007 stated that it was their position that the IEPA re-rating or the sale to
221 Thorn Creek would fully address any capacity concerns raised in the
222 proceeding with respect to the University Park Division wastewater
223 treatment plant. It appears that the Thorn Creek option is no longer viable
224 and the re-rating has not been issued by the IEPA.

225
226 **CERTIFICATED SERVICE AREA**

227 **Q. Your direct and rebuttal testimonies recommended that Aqua's**
228 **proposed University Park Division water and wastewater certificates**

229 **be granted. (ICC Staff Exhibit 1.00, p. 19 and ICC Staff Exhibit 5.00, p.**

230 **4.) Do you still believe Aqua's University Park Division should be**

231 **granted a water and wastewater certificate?**

232 A. My primary recommendation is for the Commission to deny the request for
233 a wastewater certificate for Aqua's University Park Division, because of
234 my concerns discussed previously regarding wastewater treatment
235 capacity. Alternatively, I recommend that if the Commission does grant a
236 wastewater certificate, the area of the wastewater certificate should be
237 limited to areas where there are development proposals.

238

239 I continue to believe that Aqua should be granted a water certificate to
240 serve customers in Aqua's University Park Division. However, I
241 recommend that the certificate for water service also be limited to areas in
242 which there are development proposals.

243

244 **Q. Please explain the basis for limiting the geographical area of the**
245 **certificates.**

246 A. It is clear from the various hydraulic load evaluations that the hydraulic
247 load has come close to reaching the rated design capacity at the
248 University Park Division wastewater treatment plant on at least one
249 occasion. (Aqua Exhibit 4.0, Attachment 4.1, Attachment Data Response
250 WD 8.01(1)(d).) Some of the Company's currently proposed certificated
251 service areas for the University Park Division do not have developments

252 proposed and are just areas where development may occur in the future.
253 In order to minimize the potential of “too many requests for service and not
254 enough wastewater treatment capacity”, I recommend the Commission
255 scale back the Company’s proposed certificated service area. I
256 recommend the following areas be removed from the Company’s
257 proposed certificated service area:

258 Remove from Township 34 North, Range 12 East, Third Principal
259 Meridian, Will County, IL:
260 Section 12, West one-half Section 16, and South East one-quarter Section
261 33.

262 Remove from Township 34 North, Range 13 East, Third Principle
263 Meridian, Will County, IL:
264 West one-half Section 5, Section 6, East one-half Section 7, and West
265 one-half Section 8.
266

267 The areas remaining to be certificated would be:

268 Township 34 North, Range 12 East, Third Principal Meridian, Will County,
269 IL:
270 South East one-quarter Section 9, South West one-quarter Section 10,
271 East one-half Section 16, Section 21, Section 28, Section 27, Section 26,
272 and North East one-quarter of Section 33.
273

274 Township 34 North, Range 13 East, Third Principle Meridian, Will County,
275 IL:
276 West one-half Section 7
277
278

279

280 **Q. Please explain the changes regarding the water certificate from the**
281 **recommendations you made in your direct and rebuttal testimonies.**

282 A. In direct and rebuttal testimony, I recommended that the Commission
283 grant a certificate for both water and wastewater service. After reviewing
284 the rebuttal testimony of V3 Monee LLC, the Aqua surrebuttal testimony,

285 the Aqua supplemental surrebuttal testimony, and data request
286 responses, the concerns outlined above caused me to change my
287 recommendation so that I now recommend that the Commission deny
288 Aqua's request for a wastewater certificate. Alternatively, I recommend
289 that if the Commission grants a wastewater certificate, the area of the
290 wastewater certificate should be limited to areas where there are
291 development proposals. I believe it makes more sense to have identical
292 water and wastewater certificated service areas because of mapping and
293 legal description reasons, as well as to minimize confusion for customers,
294 the Company, and the Commission. Therefore in order to limit the
295 inconsistencies between the water and wastewater certificates, I propose
296 that the proposed water certificated service area be scaled back to match
297 the wastewater certificated service area proposed as my alternative
298 recommendation. This would limit the certificate to areas for which there
299 are currently proposals for development. Granting the certificate on a
300 limited basis would allow Aqua to provide water service for the proposed
301 developments, but would not extend the water certificate to areas where
302 there does not appear to be any development proposed. I recommend
303 that the proposed water certificated service area be scaled back as
304 identified above whether or not the Commission accepts my proposal to
305 eliminate the wastewater certificate.

306

307 In order for the System Development Charge (“SDC”) areas to be
308 consistent with my proposed certificated service area, I recommend the
309 following SDC areas be removed from the Company’s proposed
310 certificated service area:

311
312 Remove from Township 34 North, Range 12 East, Third Principal
313 Meridian, Will County, IL:
314 West one-half Section 16 and South East one-quarter Section 33.

315
316 The areas where the SDC would still be applicable would be the following
317 sections in Township 34 North, Range 12 East, Third Principal Meridian,
318 Will County, IL:
319 East one-half Section 16, Section 21, Section 26, Section 27, Section 28,
320 SE one-quarter Section 9, SW one-quarter Section 10, and North East
321 one-quarter Section 33.

322

323 **Q. Do you have any additional observations?**

324 A. Yes. I recommend that Aqua provide updated maps and legal
325 descriptions similar to Exhibit A, Exhibit B, and Exhibit C provided in Aqua
326 Exhibit 1.0 to reflect the revised certificated service area I have proposed.

327

328 **RECOMMENDATIONS**

329 **Q. What are your recommendations to the Commission with respect to Aqua's**
330 **Petition?**

331 A. I recommend the Commission find that:

332

333 (1) Aqua has demonstrated that the proposed water certificate is necessary to
334 provide adequate, reliable, and efficient service to customers within certain
335 portions of the Expanded Area;

336

337 (2) Aqua has demonstrated that the proposed extension of services is the least-
338 cost method of providing water service to customers in certain portions of the
339 Expanded Area;

340

341 (3) Aqua has demonstrated that it is capable of efficiently managing and
342 supervising the water construction process and has taken sufficient action to
343 ensure adequate and efficient construction and supervision;

344

345 (4) The water depreciation rates currently in effect, or as subsequently revised,
346 for the University Park service area should be applicable to certain portions of
347 the Expanded Area, including 11.23% for personal computers;

348

349 (5) Aqua's requested variance from the water main extension provisions
350 specified in its Rules, Regulations and Conditions of Service tariffs for Water

351 Service (Ill. C.C. No. 47, Rule 28) and the water SDC tariffs applicable to the
352 University Park service area should be approved, the SDCs would apply to
353 Platt Sections 21, 26, 27, 28, East one-half Section 16, SE one-quarter
354 Section 9, SW one-quarter Section 10, and North East one-quarter Section
355 33;

356
357 (6) The Company's University Park water service area Rules, Regulations and
358 Conditions of Service tariffs should be applicable to certain portions of the
359 Expanded Area;

360
361 (7) Certain portions of the Expanded Area, consistent with Staff's
362 recommendation, of the proposed certificated service area, which is
363 legally described as, Township 34 North, Range 12 East, Third
364 Principal Meridian, Will County, IL: South East one-quarter Section 9,
365 South West one-quarter Section 10, East one-half Section 16, Section
366 21, Section 28, Section 27, Section 26, and North East one-quarter of
367 Section 33.

368
369 Township 34 North, Range 13 East, Third Principle Meridian, Will
370 County, IL: West one-half Section 7, should be approved; and

371

372 (8) Aqua should provide updated maps and legal descriptions similar to
373 Exhibit A, Exhibit B, and Exhibit C provided in Aqua Exhibit 1.0, to
374 reflect the revised certificated service area proposed by Staff.

375

376 **CONCLUSION**

377 **Q. Does this conclude your responsive testimony?**

378 **A.** Yes, it does.