

**STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION**

Illinois-American Water Company)	
)	
Application for Approval of its Annual)	
Reconciliation of Purchased Water and)	No. 11-0265
Sewage Treatment Surcharges Pursuant to)	
83 Ill. Adm. Code 655)	

REPLY BRIEF OF ILLINOIS-AMERICAN WATER COMPANY

Illinois-American Water Company (IAWC) and Staff of the Illinois Commerce Commission (Staff) agree on all issues in this reconciliation docket.

The Office of Attorney General (AG) – even though it elected to file no testimony – raises two issues in its Corrected Initial Brief for the first time in this case: (a) a proposal to eliminate the 1.25% factor that IAWC has included in its calculations to reflect the recovery of unbilled authorized consumption (UAC); and (b) a proposal that IAWC “share” with its Country Club District customers excess sewage flow overage charges arising from a 1975 agreement with the City of Elmhurst.

Although raised for the first time at the eleventh hour in this proceeding, these two issues are not new. The AG made, and the Commission rejected, the UAC argument in several prior reconciliation dockets. And the overage charge issue, previously pursued by Staff in earlier reconciliation dockets, has now been dropped by Staff in this case. Since the issue has been resolved, as indicated by its abandonment by Staff, it should not be revived again.

I. 1.25% UAC Factor

A. Introduction

The AG’s prior unsuccessful attempts to eliminate the 1.25% UAC factor came in Docket Nos. 08-0218 and 09-0151. The AG raised the same issue in Docket No. 10-0203;

while a Commission final order is still pending in that case, the AG raised no new facts or arguments therein that would justify a departure from precedent.

There is one change that has occurred since those dockets, however, that provides additional support for the position of IAWC and Staff in this 11-0265 docket: IAWC measured UAC in 2013, and the results show that the 1.25% factor is actually too low – a 1.69% factor would be more accurate. (IAWC Ex. 1.02) The tracking process arose from the Commission’s Order in Docket No. 09-0151, which directed IAWC “to work with the Staff of the Commission’s Water Department to develop appropriate methods of tracking unbilled-authorized water consumption for a one-year period” beginning on January 1, 2013.¹ (Docket No. 09-0151, Final Order, p. 26). The results of the tracking were to be “presented as part of the reconciliation case for that year.” (*Id. See also* IAWC filing in reconciliation Docket No. 14-0218).

As discussed by Kevin Hillen in his testimony in this docket, No. 11-0265, IAWC “recorded a 1.69 % composite UAC for all the purchased water service areas for all the component categories,” which was actually a conservative understatement (IAWC Ex. 1.0, p. 13). Thus, the actual amount of UAC recorded is “higher than the 1.25% amount determined by a reasonable estimate procedure as outlined by AWWA M36.” (*Id.*). As Mr. Hillen testified, because the reconciliation proceeding in this Docket No. 11-0265 preceded the formal tracking of UAC conducted in 2013, “the previously approved Commission methodology using an industry accepted 1.25% for UAC remains in effect and is applicable to this proceeding.” (*Id.*, p. 14). However, the 2013 tracking study “affirms this minimum baseline average UAC is

¹ The AG attempts to denigrate IAWC’s 2013 tracking study (AG Initial Brief, pp. 9-10) with a vague claim that it is “inconsistent.” However, the study’s methodology was submitted to and approved by Staff (Hillen Direct Testimony, IAWC Ex. 1.00, p. 6, and IAWC Ex. 1.01), and Staff has registered no objection to the results. Furthermore, the AG has presented no testimony or other evidence in an attempt refute the study or its methodology, relying on only speculative conjecture by counsel. In addition, the Commission should give no weight or credence to Attachments 1, 2, and 3 to the AG’s Corrected Initial Brief – these are really exhibits that should have been offered as evidence in the docketed case, but were not.

reasonable” for this 11-0265 reconciliation docket (*Id.*).

Accordingly, given the actual measurement of UAC in 2013, there is even less reason for the AG to be raising the issue in this docket and objecting to the 1.25% UAC factor.

With that background, IAWC will discuss herein the UAC matter, recognizing that much of this argument has already been made in prior reconciliation dockets and to the Appellate Court in connection with the AG’s appeal of the 09-0151 Order.²

B. Argument

1. Consistent with Its Prior Rulings, the Commission Should Continue to Allow Recovery for the 1.25% UAC for Known Uses such as Main and Hydrant Flushing and Fire Fighting

Water utilities routinely flush mains and fire hydrants as part of the process to provide safe water for drinking and adequate flow for fire fighting. The AG argues that IAWC should not be allowed to recover the costs of these essential activities in the surcharge reconciliation process. This argument should be rejected again, as it has been rejected in the past by the Commission and Staff.

a. Known Uses

Section 8-306(m) of the Public Utilities Act (Act) requires water utilities to file tariffs that “establish the maximum percentage of unaccounted-for water that would be considered in the determination of any rates or surcharges.” A utility is allowed to recover the cost to produce or purchase unaccounted-for water up to the maximum percentage set forth in its tariffs.

The term “unaccounted-for water” is not defined in the Act, but it is defined in IAWC’s tariffs:

² The AG appealed the Commission’s Final Order in 09-0151; the Appellate Court, First Judicial District, dismissed the appeal in Case No. 1-12-2981. The matter is currently pending before the Illinois Supreme Court, Case No. 116642.

For purposes of this Schedule, the term ‘Unaccounted-for Water’ or ‘UFW’ refers to the amount of water that enters the Company's distribution system and is not used for sales to Customers or for other known purposes as determined by meter measurement or, where no meter reading is available, by reasonable estimation procedures.

(ILL.C.C. No. 24, Section No. 1, First Revised Sheet No. 16 (effective August 1, 2010))

UFW is distinct from UAC, as the Commission stated in its July 31, 2012 Order in 09-0151 reconciliation case (the most recent IAWC reconciliation case in which there is a Commission Final Order):

Having reviewed the record, the Commission first finds it reasonable to draw a distinction between unaccounted-for water and unbilled-authorized water, as urged by Staff and IAWC.

Staff reasonably characterizes UFW “as the difference between water system input volume and authorized consumption: i.e., water that has for practical purposes, been lost.” (Staff Reply Brief at 2) By contrast, unbilled-authorized water is not water that has been “lost” due to leaks, main breaks or other causes. Rather, unbilled-authorized water is actually used – but is not metered and billed – for various known purposes such as hydrant and main flushing, street cleaning and fire fighting.

(Final Order, Docket No. 09-0151, p. 24)

This UAC is the water use to which the Commission properly applied the 1.25% value, because it is not “unaccounted-for water.”

The Commission also came to this conclusion in dockets prior to 09-0151.

In Docket No. 07-0425, the Commission approved IAWC’s tariff that defined “unaccounted-for water” and set the company’s unaccounted-for water percentages. These percentages were arrived at after taking into account the 1.25% value for UAC. The Commission’s final order in that docket recounted the testimony of IAWC’s witness, Mr. Fred Ruckman, who described a study performed by IAWC’s consultant Earth Tech:

Mr. Ruckman stated that Earth Tech evaluated each Purchased Water Surcharge Rider rate area to determine both the current level of UFW and an ultimate target level of UFW. The current level of UFW for each area is equal to the difference between water system input volume and authorized consumption. Because the Company has not historically tracked all forms of authorized consumption, such as unbilled consumption for water used for firefighting, street cleaning and water main flushing, Mr. Ruckman

explained that Earth Tech estimated unbilled authorized consumption in accordance with the American Water Works Association (“AWWA”) M36 Manual. The M36 Manual provides that, based upon the findings of numerous water audits worldwide, a default value of 1.25% is a reasonable estimate of unbilled authorized consumption.

(Docket No. 07-0425, Final Order, p. 3)

The AWWA M36 Manual, entitled “Water Audits and Loss Control Programs,” studied numerous water audits worldwide and concluded that a default value of 1.25% is a reasonable estimate of UAC. (Kerckhove Rebuttal Testimony, Docket No. 09-0151, IAWC Ex. 1.0R, p. 2)³ The M36 Manual describes the most common occurrences of UAC, including “fire fighting and training, flushing water mains, storm inlets, culverts, and sewers, street cleaning, landscaping/irrigation in large public areas, decorative water facilities, swimming pools, construction sites, water quality and other testing, and water consumption at public buildings not included in the customer billing system.” (*Id.*, Attachment A, p. 2)

The Earth Tech report that was admitted into evidence in Commission Docket No. 07-0425 also cited studies of 34 water districts owned by Pennsylvania American Water Company (also privately owned systems) that actually tracked UAC. (Kerckhove Supplemental Direct Testimony, Docket No. 09-0151, IAWC Ex. 1.0Supp, pp. 6-7; Atwood Supplemental Rebuttal Testimony, Docket No. 09-0151, Staff Ex. 5.0, p. 6-7; Staff Initial Brief, Docket No. 09-0151, pp. 16-17) The tracking showed that actual UAC was 1.34%:

In addition to consideration of the AWWA Manual provisions, Illinois American Water Company reviewed data from 34 Pennsylvania water districts where accurate tracking of unbilled authorized consumption is now available. The average percentage of unbilled authorized consumption in these districts was 1.34 percent. After using existing American Water data to verify the AWWA M36 manual estimate, Illinois American Water Company adopted the AWWA default percentage of 1.25 percent for unbilled authorized consumption.

³ Because the AG did not file any testimony in this Docket No. 11-0265, IAWC does not necessarily have testimony on record herein that addresses specific issues raised by the AG for the first time in its Initial Brief, after the close of evidence. Accordingly IAWC will refer from time to time to testimony and exhibits admitted and of record in previous Commission dockets. *See* 83 Ill. Adm. Code 200.640(a)(2).

(Kerckhove Supplemental Direct Testimony, Docket No. 09-0151, IAWC Ex. 1.0Supp, pp. 6-7.) The AG intervened in this case, but did not file any testimony or briefs, and did not object to the use of the 1.25% factor.

The second case in which the Commission addressed and approved the 1.25% default value was IAWC's purchased water and sewer surcharge reconciliation for 2007 costs, Commission Docket No. 08-0218. The Commission, in its final order, "agree[d] with Staff that adoption of the 1.25% adjustment from the AWWA M36 manual is reasonable and that since unbilled authorized consumption in this case was determined to have resulted from firefighting, main flushing and street cleaning, and can be determined by reasonable estimation procedures, it is not a component of UFW." (Docket No. 08-0218, Final Order, pp. 10-11)

The AG intervened in that case. It made the same argument against adoption of the 1.25% value as it makes here – that the 1.25% is really an attempt to increase the unaccounted-for water cap. As in this case, the Commission rejected that argument and found the AG to be “in error.” (Id.)

As William Atwood, an engineer in the Water Department of Staff's Financial Analysis Division, testified, the costs of UAC, including main and fire hydrant flushing, “are prudently and reasonably incurred and the Company should be allowed to recover them. Also, to my knowledge, *water utilities in Illinois have always been allowed to recover these costs in previous purchased water surcharge reconciliations.*” (Atwood Supplemental Rebuttal Testimony, Docket No. 09-0151, Staff Ex. 5.0, p. 2)

Mr. Atwood cited at least 19 dockets in which the Commission permitted the recovery of water used to flush water and sewer mains (*See Kerckhove Revised Surrebuttal Testimony, Docket No. 09-0151, IAWC Ex. 1.01SR, Schedule 1.01SR*): *In re Illinois-American Water*

Co., Docket 03-0179, Ill.C.C. December 03, 2003, 2003 WL 23332971; *In re Del-Mar Water Company*, Docket 03-0180, Ill.C.C. February 04, 2004, 2004 WL 2939048; *In re Illinois-American Water Co.*, Docket 04-0258, Ill.C.C. February 02, 2005; *In re Del-Mar Water Co.*, Docket 04-0373, Ill.C.C. December 15, 2004, 2004 WL 3177920; *In re South Beloit Water, Gas and Elec. Co.*, Docket 05-0155, Ill.C.C. March 23, 2005, 2005 WL 1421317; *In re Del-Mar Water Co.*, Docket 05-0173, Ill.C.C. March 17, 2005, 2005 WL 2296042; *In re Illinois-American Water Co.*, Docket 05-0176, Ill.C.C. March 17, 2005, 2005 WL 1322887; *In re South Beloit Water, Gas and Elec. Co.*, Docket 06-0189, Ill.C.C. October 12, 2006, 2006 WL 4130460; *In re Illinois-American Water Co.*, Docket 06-0196, Ill.C.C. March 06, 2007; *In re Del-Mar Water Co.*, Docket 06-0262, Ill.C.C. February 07, 2007; *In re Illinois-American Water Co.*, Docket 07-0195, Ill.C.C. March 26, 2008; *In re Del Mar Water Co.*, Docket 07-0198, Ill.C.C. March 21, 2007, 2007 WL 909602; *In re Aqua Illinois, Inc.*, Docket 07-0263, Ill.C.C. May 07, 2007, 2007 WL 1341349; *In re Aqua Illinois, Inc.*, Docket No. 07-0264, Ill.C.C. May 07, 2007, 2007 WL 1341350; *In re Del-Mar Water Co.*, Docket 08-0211, Ill.C.C. December 03, 2008; *In re Illinois-American Water Co.*, Docket 08-0218, Ill.C.C. August 10, 2009; *In re Aqua Illinois, Inc.*, Docket 08-0268, Ill.C.C. November 13, 2008; *In re Aqua Illinois, Inc.*, Docket 09-0144, Ill.C.C. March 17, 2010; and *In re Del-Mar Water Co.*, Docket 09-0153, Ill.C.C. October 07, 2009, 2009 WL 3533268.

B. Illinois Department of Natural Resources LMO-2 Reports

In connection with the UAC issue, the AG also cites certain Illinois Department of Natural Resources (IDNR) forms, unrelated to the purchased water surcharge reconciliation, that report hydrant uses. (*See, e.g.*, AG Group Ex. 4, Attachment 2, Part B, pp. 1-4.) On this form, known as an LMO-2, a utility that has an allocation for obtaining Lake Michigan water reports water usage, including hydrant usage. IDNR uses the reports to measure unaccounted

for flow (UFF) in a utility's water system. If UFF is more than 8%, the utility must take steps to increase conservation. (Hillen Rebuttal Testimony, Docket No. 09-0151, IAWC Ex. 2.0R, pp. 5-6)

The AG asserts that IAWC's reporting of water used from hydrants on the LMO-2 forms differs from IAWC's reporting of water used for hydrant flushing and inspections in connection with the purchased water reconciliation docket. (AG Initial Brief, pp. 10-12.) But, IAWC witnesses have explained that IAWC have erred on the side of understating hydrant use on the LMO-2 form, because hydrant use for main and hydrant flushing, fire fighting, and other used had not been metered. (Hillen Rebuttal Testimony, Docket No. 09-0151, IAWC Ex. 2.0R, pp. 5-7.) The AG also implies that IAWC under-reports hydrant usage on LMO-2 forms in order to understate UFF to IDNR. (AG Initial Brief, p. 12.) However, the AG has it backwards – because of the way the LMO-2 form calculates UFF, a utility trying to minimize reported UFF actually would have the incentive to overstate, not understate, hydrant uses on the LMO-2.

The precise formula for calculating UFF is as follows⁴: Total Unaccounted for Flow (line 35 on the LMO-2 form, *id.* at p. 3) is arrived at by subtracting Total Accounted for Flow (line 33, *id.*) from Net Annual Pumpage (line 14, *id.* at p. 2). Total Accounted for Flow is the sum of Total Uses (line 19, *id.*), Total Hydrant Use (line 27, *id.*), and Maximum Unavoidable Leakage (line 31, *id.* at p. 3). Total Uses include metered and unmetered residential, commercial and manufacturing, municipal, and construction uses (lines 15-18, *id.* at p. 2). Total Hydrant Uses – the uses at issue here – include firefighting and training, water main flushing, sewer cleaning, street cleaning, construction, and other (lines 21-26, *id.*). And Maximum Unavoidable Leakage is arrived at by applying a “leakage rate” to the miles of pipe

⁴ For a representative LMO-2 form, *see*, in Docket No. 11-0265, AG Group Ex. 4, Attachment 2, Part B, pp. 1-4.

in the water system based on type of pipe and pipe joints and the age of the pipe. (Section III A and B on the LMO-2, *id.* at p. 3)

Thus, the incentive would be for IAWC to overestimate Hydrant Use on the LMO-2, since Hydrant Use is a component of Accounted for Flow. More Hydrant Use would mean less Unaccounted for Flow. The AG's insinuation that IAWC files inaccurate reports to regulators is therefore baseless. As IAWC's witness testified in Docket No. 09-0151, "If ... the Company had overestimated the hydrant uses on any one report, the result would have been an understated UFF value for that system." (Hillen Rebuttal Testimony, Docket No. 09-0151, IAWC Ex. 2.0R, p. 6) Staff's witness also agreed that "understating the water quantity under hydrant uses in the LMO-2 form results in a more conservative result when calculating UFF." (Atwood Supplemental Rebuttal Testimony, Docket No. 09-0151, Staff Ex. 5.0, p. 5)

As IAWC's witness testified in Docket No. 09-0151, IAWC had not been fully tracking or recording all the various unbilled authorized internal water uses associated with fire hydrants (and was not required to do so, either by statute, regulation, or Commission order). (Hillen Rebuttal Testimony, Docket No. 09-0151, IAWC Ex. 2.0R, p. 6) This was particularly true for hydrant flushing and inspection. It had also not tracked usages by external parties such as fire departments. (*Id.*) As a result, portions of the Hydrant Uses section of the LMO-2 were left incomplete and therefore understated. (*Id.*) The witness said that if a line on the LMO-2 was left blank, such as the line for Firefighting and Training, it was likely that no data was available – IAWC "did not typically estimate these unreported or unrecorded uses, so as not to overstate the total in the Hydrant Uses category." (*Id.*) There was extensive evidence in prior dockets that it is very difficult for IAWC to obtain verifiable consumption information from entities outside of IAWC's control, such as fire districts and departments. (Kerckhove Rebuttal Testimony, Docket No. 09-0151, IAWC Ex. 1.0R, pp. 3-5) As a result, IAWC has

historically elected to under-report rather than over report this consumption. (*Id.* at p. 11) That is, IAWC took a conservative approach, to its detriment, which resulted in the overstatement, not the understatement, of Unaccounted for Flow. However, now that the UAC, per the Commission's Final Order in 09-0151, has been measured starting in 2013, IAWC is using the actual measurements in the LMO-2 reports, to the extent the information is relevant to both forms, and to the extent the dates are in conformity.

In any case, it is inappropriate to insert IDNR's LMO-2 reports into the process of determining a water utility's purchased water and sewer surcharge. The LMO-2 reports are high-level summaries of water usage for a water utility, and IAWC does not complete the reports with the purchased water reconciliation in mind. (Kerckhove Rebuttal Testimony, Docket No. 09-0151, IAWC Ex. 1.0R, pp. 9-10) The LMO-2 report is not designed, nor should it be used, to estimate unaccounted-for water, non-revenue water, and UAC water for IAWC's annual purchased water reconciliation. (*Id.*, p. 10)

C. Company "Facilities"

The AG also makes the illogical argument that the purchased water and sewage surcharge should not include the cost of water used for fire hydrant and main flushing because the water is used "in company facilities." The AG bases its contention on Code §655.30(d), which states: "The determination of costs recoverable from customers through the purchased water/sewer treatment surcharge shall not include water used in, and/or sewage treated for, facilities either owned or leased by the utility." The term "facilities" is not defined in the regulation or in the Act.

According to the AG, the term "facilities" includes IAWC's water mains, sewer mains, and hydrants; and since the water used to flush mains and hydrants comes from IAWC's mains, the cost of such water use is not recoverable.

Taken at face value, this interpretation eviscerates the entire purchased water and purchased sewage surcharge statute. All water sold to customers in the purchased water/sewage districts is used in IAWC mains – that is, in IAWC’s “facilities” – and therefore, according to the AG’s interpretation, there should be no recovery for the cost of the purchased water.

Given this absurd result, the AG’s definition cannot be what the Commission intended by using the word “facilities” in its own regulation. Rather, the proper interpretation is that the cost of water used inside IAWC-owned buildings and the cost of sewage generated inside IAWC-owned buildings is not recoverable, so that a utility cannot recover the costs of water used by company employees, for example, in company kitchens and bathrooms, or for landscaping outside company buildings and production plants. (Kerckhove Rebuttal Testimony, Docket No. 09-0151, IAWC Ex. 1.0R, pp. 11-14; Atwood Supplemental Rebuttal Testimony, Docket No. 09-0151, Staff Ex. 5.0, pp. 3-4.)

The water mains and fire hydrants are assets and infrastructure necessary for the delivery of basic water and wastewater utility service. Hydrant flushing and inspection are necessary to meet regulatory standards, as well as being recommended industry operating practices. In fact, as Staff testified in prior dockets, periodic flushing of water mains is required by Commission regulations, as is the flushing and flow testing of fire hydrants. (Atwood Supplemental Rebuttal Testimony, Docket No. 09-0151, Staff Ex. 5.0, p. 3) These activities “directly contribute to public safety and to the quality of water delivered to customers. They are also recommended by the American Water Works Association.” *Id.*

As Staff further testified in 09-0151, flushing of sewer mains helps maintain hydraulic capacity, thereby preventing sewage backup into homes and overflow into streets and ditches. *Id.* Flushing is also part of the inspection process for discovery of sewer main defects. Surely,

the purchased water and sewage statute would not prevent recovery of costs for required activities directly relevant to the provision of safe, high-quality service to customers.

Regarding the AG's remarks on "goodwill adjustments" – the AG cherry-picks part of IAWC's response to AG DR 1.24 but ignores the most significant part of the answer.⁵ Question 1.24(a) asks, "Does the Company write-off good will adjustments?" IAWC's response is: "No." As clearly stated by IAWC, good will adjustments (which amounted to only \$4,189.25 for the 2010 period, see response to AG DR 1.24(d)) are not write-offs, and therefore are not a "double collection of the uncollectible cost," as asserted by the AG without support. (AG Initial Brief, p. 13). Good will adjustments are given to customers who remain customers and receive adjustments to their bills for certain reasons. Write-offs are made in connection with accounts of former customers who are no longer customers – that is, bad debts. Good will adjustments are not write-offs, and therefore are not recovered in base rates. (Furthermore, as noted above, Staff reviewed IAWC's methodology for tracking and measuring UAC, including good will write-offs, and approved it.)

II. IAWC Should Not Be Required to "Share" Excess Sewage Flow Overage Charges Arising from a 1975 Agreement with the City of Elmhurst.

In its second point, the AG seeks to continue an argument⁶ that Staff has now abandoned – that IAWC should share in the sewage flow overage charges that arise from a 1975 sewage treatment entered into with the City of Elmhurst and IAWC's predecessor in interest. In Docket No. 09-0151, the Commission accepted Staff's argument in part and ordered that IAWC share in those overage charges for its Country Club district:

Thus, the Commission finds it reasonable to exclude one-third of the excess flow charges from the 50/50 sharing. The 50/50 sharing will be applied to the other two-

⁵ And again, the AG filed no testimony regarding this issue, raising it for the first time in a brief, making only lawyer arguments.

⁶ Although, again, the AG did not file any testimony on this issue which it now deems important enough to address in a brief.

thirds of the excess flow charges in the reconciliation year, which results in a disallowance of \$14,800, rather than \$22,200 as proposed by Staff and AG, or zero as recommended by IAWC.

(Order, p. 41)

The order to share was based on the Commission's agreement with Staff that "IAWC should have begun addressing I/I [inflow and infiltration] problems in the 'public' side of the system – such as where ground water enters the sanitary sewers through such places as cracks, holes and defective joints in manholes and sanitary sewer mains – earlier than it did."

(Order, p. 40). The Staff witness had testified that "the Company has been aware that the Country Club sanitary sewer system suffered from significant levels of I/I since at least as early as 2006, and certainly before 2008, and should have taken actions to address the problems prior to 2008." (*Id.*)

But much has changed since 2008, as evidenced by the fact that Staff did not propose in this Docket No. 11-0265 that IAWC should share in any overage charge.

As set forth in the testimony of Michael A. Smyth, IAWC's Senior Manager of Field Services and Production for Chicago Metro, IAWC has taken substantial steps to address the I/I issue in the Country Club district. He testified regarding the efforts of IAWC to improve the sanitary system in its Country Club District since 2009 and to provide educational information to customers regarding unauthorized storm connections. In addition, he discussed IAWC's application to the "2014 IGIG Green Infrastructure Stormwater Retention & Infiltration." And he related how severe weather events significantly impact water and wastewater systems throughout the Western Suburbs of Chicago. (Smyth Direct Testimony, Docket No. 11-0265, IAWC Ex. 2.00, p. 2).

Regarding the steps to address I/I in the Country Club District since the 2008 reconciliation year that the Commission was concerned about in Docket 09-0151, Mr. Smyth

testified that IAWC commissioned a Sanitary Sewer Evaluation Study (“SSES”), completed by its consultant RJN, Inc., in 2009. The SSES examined the Country Club System and provided certain repair recommendations including sanitary sewer rehabilitation, manhole rehabilitation, and sewer lateral rehabilitation. (*Id.*, pp. 4-5).

As a result of the 2009 SSES report, he said IAWC undertook numerous repair and maintenance activities in the Country Club District, as shown in IAWC Exhibit 2.01 in this Docket No. 11-0265. This included the rehabilitation of approximately 19,800 linear feet of sanitary sewer rehabilitation – approximately 99% of the entire sewer system in Country Club. Since 2009, over 13,000 linear feet of sanitary sewer main has been rehabilitated through a cured-in-place pipelining process, which was completed in 2013. (*Id.*, p. 5)

IAWC also completed additional work that was not covered in the SSES, including the replacement of 140 feet of 10-inch sanitary sewer main under Grand Ave. and the replacement of 320 feet of sewer force main at IAWC’s lift station. (*Id.*, p. 6)

Mr. Smyth also testified to the substantial I/I problem that is caused by: illegally-connected area drains on private property; basement sump pumps; cracks, holes, and defective joints in customer service lines; and building or footing drains, among other things. (*Id.*, p. 6)

In an effort to assist customers in remediating their unauthorized connections, IAWC established a grant and loan program, which provides funds up to \$3,000 towards one-half of the cost to remove illegal connections, and provides interest-free loans of up to \$5,000 to help cover the remaining cost. IAWC has also sought to work directly with larger customers to address unauthorized connections. (*Id.*, p. 6)

Mr. Smyth acknowledged that the response of customers has been quite limited. (*Id.*, p. 7) Despite IAWC’s efforts including customer outreach via letters announcing the program and two public educational meetings since July 2010, only one customer take advantage of the

loan and grant program. (*Id.*, p. 7) This is likely due to the substantial cost faced by homeowners in removing illegal connections – anywhere from \$1,000 to \$10,000 (*Id.*, p. 7) As set forth in more detail in his testimony, many neighboring municipal systems have had a similar lack of success. (*Id.*, pp. 7-9) As a result, Smyth testified that “the problem of unauthorized residential connections contributing to I/I is a difficult one to resolve, in part due to circumstances beyond a utility’s control. Absent drastic measures such as threatening disconnection, it will be difficult to eliminate these unauthorized connections.” (*Id.*, p. 9) However, IAWC is continuing its efforts to encourage homeowners to remove illegal connections. (*Id.*, pp. 9-10)

Finally, Smyth noted that there are other factors outside IAWC’s control that contribute to the peak flow and related charges from Elmhurst, primarily severe weather events. (*Id.*, pp. 10-11) The excess charges from Elmhurst arise only during heavy rain events, not during the normal day-to-day operation of the Country Club system. (*Id.*, pp. 10-11) And severe weather effects are not unique to IAWC’s Country Club District. Elmhurst itself sometimes experiences a crippling impact on its water and sewer systems. (*Id.*, p. 11) For example, he stated, in April 2013, Elmhurst experienced a storm that produced 7 inches of rain in 15 hours. (*Id.*, p. 11) Elmhurst’s acting mayor subsequently sent a letter to Elmhurst residents (IAWC Exhibit 2.03) describing the severe impact, and noting “a history of flooding events,” including the 2010 June and July rain events that impacted excess charges for the 2010 reconciliation year. (*Id.*, p. 11)

Mr. Smyth testified that IAWC’s Country Club District is a well-managed system (*Id.*, pp. 11-12), and that IAWC has responsibly addressed I/I issues and remediated the causes of I/I that were within IAWC’s control (*Id.*, pp. 11-12) For these reasons, he said, it was clear that the payments made to the City of Elmhurst for the treatment of Country Club sewage

