FILED
July 18, 2018
INDIANA UTILITY
REGULATORY COMMISSION

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF THE CITY OF FORT WAYNE,)			
INDIANA, FOR AUTHORITY TO ISSUE)			
LONG-TERM DEBT TO FINANCE WATER)			
SYSTEM IMPROVEMENTS AND TO ADJUST)	CAUSE NO.	45125	
ITS RATES AND CHARGES FOR WATER)			
SERVICE)			
	,			
SERVICE)			

<u>VERIFIED DIRECT TESTIMONY AND EXHIBITS OF ERIC J. WALSH, CPA ON</u> <u>BEHALF OF PETITIONER, THE CITY OF FORT WAYNE, INDIANA</u>

Prefiled Direct Testimony of Eric J. Walsh, CPA

Petitioner's Exhibit 10

Eric J. Walsh IURC Testimony Case List

Petitioner's Exhibit 11

City of Fort Wayne Municipal Water Utility Accounting Report on Proposed Improvement Projects and Increase in Rates and Charges

Petitioner's Exhibit 12

Respectfully Submitted,

J. Christopher Janat, Esq. (#18499-49)

Jonathan W. Hughes, Esq. (#28610-29)

Bose McKinney & Evans LLP

111 Monument Circle, Suite 2700

Indianapolis, IN 46204 (317) 684-5000 (Phone)

(317) 684-5173 (Fax)

Counsel for Petitioner, City of Fort Wayne, Indiana

IURC Cause No. _____

City of Fort Wayne, Indiana

> Municipal Water Utility

Testimony of Eric J. Walsh, C.P.A.

On Behalf of Petitioner

July 18, 2018

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF THE CITY OF FORT WAYNE,)
INDIANA, FOR AUTHORITY TO ISSUE)
LONG-TERM DEBT TO FINANCE WATER) CAUSE NO
SYSTEM IMPROVEMENTS AND TO ADJUST)
ITS RATES AND CHARGES FOR WATER)
SERVICE)
)

DIRECT TESTIMONY OF ERIC J. WALSH, CPA

SPONSORING PETITIONERS EXHIBITS 11 to 13 July 18, 2018

ON BEHALF OF FORT WAYNE MUNICIPAL WATER UTILITY

FORT WAYNE MUNICIPAL WATER UTILITY IURC Cause No. Direct Testimony of Eric J. Walsh, CPA

I. Introduction

1	1.	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
2		Α.	My name is Eric J. Walsh and my business address is 112 IronWorks Avenue,
3			Suite C, Mishawaka, Indiana 46544.
4	2.	Q.	WHAT IS YOUR PROFESSION AND BY WHOM ARE YOU EMPLOYED?
5		A.	I am a Certified Public Accountant and a partner in the firm of H. J. Umbaugh &
6			Associates, Certified Public Accountants, LLP ("Umbaugh").
7	3.	Q.	CAN YOU DESCRIBE YOUR FIRM AND ITS AREA OF EXPERTISE?
8		A.	Umbaugh is a firm of Certified Public Accountants practicing exclusively as
9			independent financial advisors and Utility consultants. The firm, in existence for
10			over sixty-five (65) years, is a regional CPA firm with offices in Indianapolis and
11			Mishawaka, Indiana; Okemos, Michigan; and Columbus, Ohio. Our firm has
12			concentrated its practice in providing financial advisory services to various
13			governmental entities and not-for-profit utilities in the Midwest. A large part of our
14			practice involves accounting and cost of service studies in connection with changes
15			in utility rates and financial planning for the issuance of tax-exempt bonds and
16			other evidences of indebtedness.
17	4.	Q.	WHAT IS YOUR EDUCATIONAL EXPERIENCE?
18		A.	I graduated from Goshen College in 2006 with a Bachelor of Arts Degree with a
19			major in Accounting, and joined Umbaugh as a staff accountant in the same year.

Since then I have completed various professional courses sponsored by the American Institute of Certified Public Accountants, the Indiana CPA Society, the American Water Works Association ("AWWA"), the National Rural Electric Cooperative Association, and other professional organizations.

5

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

A.

1

2

3

4

6 5. Q. PLEASE DESCRIBE YOUR RELEVANT PROFESSIONAL EXPERIENCE.

In 2008, I completed the requirements to become licensed as a Certified Public Accountant in the State of Indiana. In July 2010, I became a manager at Umbaugh and on January 1, 2015, I became a principal in the firm. On January 1, 2017, I became a partner in the firm. During the period of my association with Umbaugh, I have been responsible for numerous professional engagements including financial studies for municipally-owned water, electric, and sewage utilities, regional water and sewer districts, and conservancy districts. The engagements have quite often involved the determination of utility revenue requirements, cost of service studies, and the financial planning associated with the issuance of tax-exempt and taxable bonds and loans for utility projects financed through a variety of sources including the open market, the Indiana Bond Bank, the Indiana State Revolving Fund, Rural Development, local banks, and other sources. I have given speeches and participated in workshops concerning utility rates, financing, and project development before the Indiana Rural Water Association, the Alliance of Indiana Rural Water, the Indiana Section of the American Water Works Association, and Accelerate Indiana Municipalities (previously Indiana Association of Cities and Towns).

1	6.	Q.	WHAT PROFESSIONAL ORGANIZATIONS ARE YOU ASSOCIATED
2			WITH?
3		A.	I am a member of the Indiana CPA Society, the American Institute of Certified
4			Public Accountants, and the American Water Works Association. I also serve on
5			the Board of Directors for the Fulton County Rural Electric Membership
6			Cooperative located in Rochester, Indiana. Additionally, Umbaugh is a member of
7			both the Indiana Rural Water Association and the Alliance of Indiana Rural Water.
8			Also, Umbaugh is a financial advisor to Accelerate Indiana Municipalities. In this
9			capacity, we provide guidance on financial matters that affect communities across
0			Indiana.
1	7.	Q.	HAVE YOU COMPLETED THE REQUIREMENTS NECESSARY TO BE
12			DESIGNATED AS A MUNICIPAL ADVISOR BY THE MUNICIPAL
13			SECURITIES RULEMAKING BOARD ("MSRB")?
14	,	A.	Yes. In 2016, I passed the Series 50 exam and am a Series 50-qualified municipal
15			advisor representative. Also, Umbaugh has designated me as one of the Municipal
16			Advisor Principals of our Firm.
17	o	0	HAVE VOU TECTIETED DEFODE AC AN EVDEDT WITNESS?
L /	8.	Q.	HAVE YOU TESTIFIED BEFORE AS AN EXPERT WITNESS?
18		A.	Yes. Directly following this testimony is Petitioner's Exhibit 11, which lists the
19			proceedings in which I have provided testimony before the Indiana Utility
20			Regulatory Commission (the "Commission").

1	9.	Q.	HAVE YOU REVIEWED THE PETITION INITIATING THIS
2			CAUSE?
3		Α.	Yes, I have.
4	10.	Q.	DOES THE PETITION ACCURATELY STATE THE FACTS AND
5			FORT WAYNE'S INTENTIONS?
6		A.	Yes, it does. The Fort Wayne Common Council ("Council") seeks approval to
7			adjust water rates to meet revenue requirements of the Fort Wayne Municipal Water
8			Utility (the "Utility") based on an across-the-board rate analysis. The Council also
9			seeks approval to issue long-term debt to finance improvement projects for the
10			Utility.
11	11.	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CAUSE?
12		A.	The purpose of my testimony is to present the revenue requirements of the Utility
13			and the rate study used as a basis to make recommendations regarding changes in
14			the Utility's present schedule of rates and charges. Our study was based upon
15			information that we obtained from the Utility records that were made available to us
16			by the City of Fort Wayne (the "City").
17 18 19			II. Accounting Report
20	12.	Q.	HAVE THE RESULTS OF YOUR ANALYSIS BEEN SUMMARIZED IN A
21			WRITTEN REPORT?

1		A.	Yes. Our firm prepared an Accounting Report on Proposed Improvement Projects
2			and Increase in Rates and Charges ("Accounting Report") dated June 22, 2018,
3			summarizing the results of our studies. Petitioner's Exhibit 12 is a copy of our
4			Accounting Report.
5	13.	Q.	WAS THE ACCOUNTING REPORT PREPARED BY YOU OR UNDER
6			YOUR SUPERVISION?
7		A.	Yes.
8	14.	Q.	WHAT WERE THE SOURCES OF DATA USED TO PREPARE THE
9			ACCOUNTING REPORT (i.e. PETITIONER'S EXHIBIT 12)?
10		A.	The information within the exhibits and schedules contained within the Accounting
11			Report came from the accounting and business records of the Utility, from officers
12			and employees of the City with knowledge of the facts based on their job
13			responsibilities and activities, and from data that is part of normal business
14			information available to individuals working in the utility rate and financing field.
15	15.	Q.	IS THIS THE TYPE OF DATA NORMALLY RELIED ON AND USED FOR
16			SUCH PURPOSES?
17		A.	Yes.
18	16.	Q.	DOES THE ACCOUNTING REPORT ACCURATELY SUMMARIZE THE
19			RESULTS OF YOUR ANALYSIS USING SUCH DATA?
20		A.	Yes, it does.

17. Q. CAN YOU GENERALLY DESCRIBE THE RATE ADJUSTMENT REQUESTED

BY THE PETITIONER IN THIS CAUSE?

A.

A.

Yes. The Council approved an overall increase in rates to produce approximately \$15,585,000 more revenue. The Utility is proposing that the rate increase be phased in over a five-year period. In conjunction with the increase, the existing outside-City surcharge ("Out-of-Town Differential") will be reduced from 15% to 10% over the course of the same five-year period. The proposed increase is accomplished by first reducing the surcharge and then increasing all rates across-the-board. As a result, the overall increase (all five phases) from current rates for inside-City customers is approximately 33% and the overall increase from current rates for the outside-City customers is approximately 27%.

12 18. Q. CAN YOU DESCRIBE THE FIVE-YEAR PHASE-IN RATE ADJUSTMENT REQUESTED BY PETITIONER IN THIS CAUSE?

Yes. After much consideration and discussion, Fort Wayne is requesting to implement the rate increase in five phases. The first phase ("Phase I") is to be effective upon Commission approval; the second phase ("Phase II") is to be effective twelve months after Phase I; the third phase ("Phase III") is to be effective twelve months after Phase II; the fourth Phase ("Phase IV") is to be effective twelve months after Phase III; and the fifth phase ("Phase V") is to be effective twelve months after Phase IV. Table I below illustrates each phase of increase for both inside-City and outside-City customers. Note that the percentages listed below are the percentage of rate increase over the immediately preceding year's rates.

1		TABLE	I
2		Inside-City	Outside-City
3	Phase I	5.93%	4.79%
4	Phase II	5.92%	4.91%
5	Phase III	5.89%	5.16%
6	Phase IV	5.85%	4.83%
7	Phase V	5.90%	4.90%

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

A.

8 19. Q. MR. WALSH, PLEASE EXPLAIN WHY THE UTILITY IS PROPOSING TO 9 SPREAD OR PHASE IN THE RATE INCREASE OVER FIVE PHASES.

The Utility needs additional funds to cover increased costs, including debt service. and to pay for a number of replacements and improvements to its system as explained by Mr. Schipper in his testimony. The intent in having a five-year phasein is to enable the Utility to generate sufficient funds that will allow the Utility to complete the proposed improvements while minimizing the financial impact on its customers. This approach provides a multi-prong benefit to both the Utility and its customers. Foremost, by phasing in the rate increase, Utility customers have time to plan and budget for the future increases. Second, as Mr. Schipper further describes in his testimony, the rate phase-in matches up well with the Utility's planned pipe replacement program ramp up. Phasing in the increase in pipe replacement work over time allows City engineering time to design the increased main replacement program. It also allows local contractors time to plan for the increased workload (one of the primary contractors used for this work in the past recently closed). Finally, as Mr. Schipper describes, the phase-in accomplishes the Utility's annual pipe rehabilitation and replacement goals in a thought out and sustainable manner.

20. Q. PLEASE EXPLAIN HOW THE ACCOUNTING REPORT IS ORGANIZED.

A.

The Accounting Report is divided into four sections. The first section of the report is the accountants' letter, which describes that the type of accounting service provided was a compilation, and that the resulting Accounting Report is a special purpose report for submission to the Commission and is restricted to that purpose only. This letter is incorporated by reference on all the pages of the Accounting Report.

The second section of the Accounting Report (pages 3 - 9) contains historical financial information regarding the twelve months ended December 31, 2017 (the "Test Year"), and comparative financial information for the two calendar years of 2015 and 2016. In addition, we have compared the Utility's cash and investment account balances at December 31, 2017, with requirements stated in the existing bond documents and capital allowance recommendations.

The third section of the Accounting Report (pages 10 - 23) presents pro forma financial information. Included in this section are pro forma adjustments to Test Year operating expenses, a summary of the Utility's proposed multi-year capital improvement plan, project costs and proposed debt funding for part of the capital plan, future debt amortization schedules, and pro forma annual revenue requirements as compared to annual revenues for all five phases of the rate increase. The resulting proposed rates and charges as compared to present rates and charges are also included in this section.

1			The fourth section of the Accounting Report (pages 24 - 29) contains the individual
2			amortization schedules of the Utility's outstanding bonds and a schedule of
3			combined bond amortization of the Utility.
4	21.	Q.	PLEASE EXPLAIN MORE FULLY THE SECOND SECTION OF THE
5			ACCOUNTING REPORT.
6			Pages 3 and 4 display a Comparative Statement of Net Position as of December 31,
7			2015, 2016, and 2017. Page 5 contains a Comparative Statement of Revenues,
8			Expenses, and Changes in Net Position for calendar years 2015, 2016, and 2017.
9			Page 6 contains a Comparative Statement of Detailed Operating Expenses for the
10			same periods.
11			A Comparative Statement of Cash Flows can be found on pages 7 and 8. This
12			schedule compares the Utility's cash receipts and cash disbursements for calendar
13			years 2015 through 2017.
14			Page 9 compares the account balances of the Utility as of December 31, 2017, with
15			the minimum balances either required to be maintained by the outstanding bond
16			ordinances in effect or balances that are typically maintained by similar utilities.
17	22.	Q.	PLEASE EXPLAIN MORE FULLY THE THIRD SECTION OF THE
18			ACCOUNTING REPORT.
19		A.	The Test Year selected for this Case was calendar year 2017. It is believed that this
20			period is representative and appropriate for rate-making purposes. Pages 10
21			through 13 show Test Year operation and maintenance expenses and adjustments

Direct Testimony of Eric J. Walsh, CPA On Behalf of Fort Wayne Municipal Water Utility IURC Cause No.

Petitioner's Exhibit 10

which have been made based on fixed, known, and measurable changes to arrive at the pro forma annual operation and maintenance expenses. Each of the adjustments is explained in detail on pages 11 through 13 of the report. Adjustments have been made to reflect current price levels for labor, employee benefits, taxes, and insurance. An adjustment has also been made to increase purchased power costs based on the approved Indiana-Michigan Power Co. rate increase in IURC Cause No. 44967. Additional adjustments have been made for rate case expenses, commercial insurance costs, and shared garage and administrative costs with the City. An adjustment has been made to remove non-recurring and/or capital items from operating expenses. Such reductions include expenditures for legal costs and capital items. Finally, an adjustment was made to increase utility costs based on the fourth (January 2018) and fifth (January 2019) phases of the wastewater rate increase approved by the Council in 2014 and the first (July 2017), second (July 2018), and third (July 2019) phases of the stormwater rate increase approved by the Council in 2017. The operation and maintenance expense adjustments result in an overall increase of \$501,673 from Test Year amounts.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

Page 14 of the report shows the proposed capital improvement plan of the Utility for calendar years 2018 through 2023. The plan includes filtration plant improvements, raw water dams and reservoirs, distribution pumping and storage, and distribution system and general water maintenance improvements. The projects are primarily driven by needs established in the Utility's master plans and asset management programs as is more fully described by Mr. Schipper in his testimony.

Direct Testimony of Eric J. Walsh, CPA On Behalf of Fort Wayne Municipal Water Utility IURC Cause No. Petitioner's Exhibit 10

1	The estimated cost of this work for 2018 through 2023 is \$162,490,567. As car
2	also be seen on page 14, the Utility is requesting to defer part of the capital
3	improvement plan for 2019, 2020 and 2021 to later years. Part of the deferred
4	capital improvement plan is to be completed in years 2022 and 2023, while the
5	remaining \$2,405,000 is deferred beyond the five-year rate plan. The difference in
6	the total requested allowance (\$160,085,567) and the capital improvement plan
7	(\$162,490,567) will result in some improvements, namely pipe replacements, being
8	delayed. This deferral, along with moving part of the 2019, 2020 and 2021
9	improvements to 2022 and 2023, was deemed necessary by the Utility and Council
10	to more gradually phase-in the rate increase with the goal of minimizing the
11	financial burden on the Utility's customers. Mr. Schipper has addressed in his
12	testimony the impact of this deferral. Page 14 also shows \$1,975,000 of the
13	proposed capital improvement plan being funded by Tax Increment Financing
14	("TIF"), \$274,671 of proposed 2018 capital improvements being funded by
15	equipment loans, and \$80,785,536 of the proposed capital improvement plan being
16	funded by future debt issues. The remaining \$77,050,360 of capital improvement
17	needs is proposed to be funded on a pay-as-you-go basis. Page 15 details the
18	estimated sources and uses of funds to complete the debt funded portion of the
19	capital improvement plan. This schedule includes a construction contingency
20	allowance of slightly less than five percent and an allowance for issuance costs and
21	IURC fees assuming two bond issues - the first in 2019 totaling \$41,010,000 and
22	the second in 2022 totaling \$44,560,000. Pages 16 through 18 show the resulting
23	estimated amortization schedules for the proposed bond issues.

1	23.	Q.	MR. WALSH, HOW DID THE PETITIONER DECIDE HOW MUCH OF THE
2			CAPITAL IMPROVEMENT PLAN SHOULD BE FUNDED THROUGH THE
3			ISSUANCE OF LONG-TERM DEBT (i.e. BONDS)?
4		A.	As detailed in Mr. Schipper's testimony, the improvements identified on page 14
5			include maintenance and improvements of existing infrastructure, as well as
6			construction of new infrastructure. As such, the Petitioner recognizes a mix of
7			long-term financing, as well as pay-as-you-go funding is appropriate. The
8			Petitioner also considered factors such as current debt levels and structure,
9			upcoming project needs for other City-owned utilities, rate impact, bond coverage
10			levels, and approved borrowing amounts when preparing the funding plan.
11	24.	Q.	CAN YOU FURTHER EXPLAIN THE APPROVED BORROWING AMOUNTS
12			YOU MENTION ABOVE?
12 13		A.	YOU MENTION ABOVE? Yes. On June 26, 2018, the Council adopted Bond Ordinance No. S-60-18
		A.	
13		A.	Yes. On June 26, 2018, the Council adopted Bond Ordinance No. S-60-18
13 14		A.	Yes. On June 26, 2018, the Council adopted Bond Ordinance No. S-60-18 approving the Utility to borrow up to \$85,570,000 in one or more issues. A copy of
131415		A.	Yes. On June 26, 2018, the Council adopted Bond Ordinance No. S-60-18 approving the Utility to borrow up to \$85,570,000 in one or more issues. A copy of Bond Ordinance No. S-60-18 is attached to Petitioner's Exhibit 2 which was
13 14 15 16		Α.	Yes. On June 26, 2018, the Council adopted Bond Ordinance No. S-60-18 approving the Utility to borrow up to \$85,570,000 in one or more issues. A copy of Bond Ordinance No. S-60-18 is attached to <u>Petitioner's Exhibit 2</u> which was sponsored by Mr. Schipper. The capital improvement funding plan contained in the
13 14 15 16 17		Α.	Yes. On June 26, 2018, the Council adopted Bond Ordinance No. S-60-18 approving the Utility to borrow up to \$85,570,000 in one or more issues. A copy of Bond Ordinance No. S-60-18 is attached to Petitioner's Exhibit 2 which was sponsored by Mr. Schipper. The capital improvement funding plan contained in the Accounting Report is based on the \$85,570,000 of debt approved. At this time, the

Direct Testimony of Eric J. Walsh, CPA
On Behalf of Fort Wayne Municipal Water Utility
IURC Cause No.
Petitioner's Exhibit 10

1			IS CALCULATING THE COST OF THE 2019-2023 PROPOSED
2			IMPROVEMENTS BASED ON ENGINEERING ESTIMATES, NOT
3			ACTUAL CONSTRUCTION BIDS RECEIVED?
4	•	A.	Yes, that is correct.
5	26.	Q.	GIVEN THESE UNCERTAINTIES, HOW WILL THE UTILITY BE SURE
6			THE PROPOSED RATES WILL AFFORD COMPLETION OF THE
7			IDENTIFIED IMPROVEMENTS?
8		A.	As I previously explained, page 14 identifies a total need of \$162,490,567 through
9			2023 for capital improvements. The rates requested in this case will only support
10			\$160,085,567 in capital expenditures. In an effort to reduce the impact on
11			ratepayers, Petitioner recognizes some of the identified capital needs will likely be
12			delayed beyond the five-year period.
13	27.	Q.	HOW WILL THE CITY DECIDE WHICH PROJECTS TO COMPLETE AND
14			WHICH TO DEFER?
15		A.	As described more completely in Mr. Schipper's testimony, the City will reduce its
16			annual allowance for pipe replacement. Mr. Schipper explains the methods the
17			Utility uses to prioritize the improvements, and from that prioritization the Utility
18			can determine which pipe it can defer.
19	28.	Q.	WHAT IF COSTS ARE LOWER OR REVENUES ARE HIGHER THAN
20			PROJECTED?

A. The additional savings/revenues would be applied to further projects that would otherwise be unfunded. For instance, if new or additional adjustments are identified that could reduce the revenue requirement or if there is an increase in annual revenues, the Petitioner would propose to fund more of the pipe replacement budget rather than reducing the rates further from the mitigated level already established by the Council.

7 29. Q. DOES THE CITY PROPOSE TO USE ANOTHER REVENUE SOURCE TO 8 FUND PART OF THE PROPOSED CAPITAL PLAN?

9

10

11

12

13

14

15

16

17

18

19

20

A.

Yes. The City recognizes by phasing in the proposed rate increase over five years, the full amount of revenues available for capital improvements will not be available until Phase V rates have been in place. To achieve the gradual phase-in of rates, the City has designed its multi-year capital plan with stair-step increases in pay-as-you-go funding over the period. This delay in revenue increase also resulted in the City proposing to utilize Tax Increment Financing ("TIF") revenues to pay for a portion of the proposed capital plan. The City is proposing to use TIF in the amounts of \$1,650,000 in 2018 and \$325,000 in 2019 to complete part of the capital plan as the water rate increase is implemented in phases.

30. Q. WHAT IS THE SOURCE OF THESE TIF REVENUES THE CITY PLANS TO USE AND FOR WHAT TYPES OF ACTIVITIES CAN SUCH REVENUES BE USED?

A. TIF revenues are generated from the growth in non-residential real property assessed value, also known as "incremental assessed value", in a designated

Direct Testimony of Eric J. Walsh, CPA On Behalf of Fort Wayne Municipal Water Utility IURC Cause No.

Petitioner's Exhibit 10

"allocation area" as determined by the City's Redevelopment Commission. The incremental assessed value represents the growth in value from new construction or other changes in tax status above the "base assessed value" which is the net assessed value of the allocation area at the time of establishment. The TIF revenues are maintained in designated funds of the City, and may only be used for capital expenditures that are located in or directly benefit the designated allocation area.

7

8

9

10

11

12

13

1

2

3

4

5

6

It is important to note the incremental assessed value and resulting property tax revenues proposed to be used to fund the designated water projects all come from properties located within City limits. Mr. Schipper's testimony details the specific projects designated to be funded from TIF revenues.

31. Q. IS THE CITY OBLIGATED TO USE ITS TIF REVENUES TO FUND THESE WATER CAPITAL IMPROVEMENTS?

14 A. No. The City is not obligated to use the TIF revenues to fund the water capital improvements. The City may utilize TIF revenues to fund capital projects that are 15 16 located in or directly benefitting the source allocation area. Accordingly, the City 17 could use the TIF revenues for capital projects not related to the Utility. 18 Nonetheless, the City (and its Redevelopment Commission) has chosen to use the 19 TIF revenues for certain capital water projects. Were the City to not use the 20 \$1,975,000 of TIF revenues for the designated projects these projects would need to 21 be funded by water rates, further increasing the water rate impact.

1	32.	Q.	WHAT ASSUMPTIONS WERE USED IN PREPARATION OF THE
2			AMORTIZATION SCHEDULE FOR THE PROPOSED 2019 BONDS
3			("PROPOSED 2019 BONDS") ON PAGE 16?

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

A.

Page 16 represents a State Revolving Fund ("SRF") bond issue for the Proposed 2019 Bonds. Principal payments are shown being paid annually beginning December 1, 2020, through December 1, 2032, and semiannually June 1 and December 1, beginning June 1, 2033, through December 1, 2048. Interest is shown to be paid semiannually beginning December 1, 2019, at an assumed interest rate of 2.69 percent. The approximate 30-year repayment of the debt is a combination of two underlying amortization schedules. Approximately 36.8% (\$15,090,000) of the Proposed 2019 Bonds is being amortized over 30 years at level annual debt service and the balance, 63.2% or \$25,920,000, is being amortized over 20 years at level annual debt service. The interest assumed for the Proposed 2019 Bonds (2.69%) is based on a blending of the 30-year component being amortized at 2.45 percent and the 20-year component being amortized at interest rates ranging from 2.15 percent to 3.15 percent. The 2.45 percent interest rate is based on current traditional SRF financing rates (2.0%) plus a 20 basis point increase for the extended 30-year financing term, plus another 25 basis points to allow for market fluctuations. The 20 basis point increase for the extended 30-year term is based on SRF's current practice of increasing the traditional 20-year financing rate by 10 basis points for each five years added to the final maturity. The 2.15 percent to 3.15 percent interest rates for the 20-year component are based on current market conditions assuming AAA interest rates, plus a 25 basis point allowance for market fluctuations. Actual interest rates for both components of the bond issue will be determined closer to bond closing.

33. Q. HAS SRF AGREED TO THE BOND ISSUE TERMS DESCRIBED ABOVE?

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

A.

Not yet. Fort Wayne has had, and will continue to have, discussions with SRF in preparation for the issuance of the Proposed 2019 Bonds. Factors such as the amount of traditional funding SRF has available in 2019, fluctuations in open market interest rates, and other SRF borrower needs could impact the final bond terms. Traditionally, SRF has two financing alternatives – a traditional subsidized financing and an SRF pooled funding where SRF borrows funds at open market rates and then loans these funds to pool funding recipients. Historically, traditional subsidized financings are for a term of 20 years. However, SRF has recently allowed amortization of debt for up to 35 years for pipe components of a project. For allowing the longer amortization period, SRF generally requires a 10 basis point increase in interest rates for each five years beyond year 20 added to the final maturity. Based on the pipe components of the projects to be financed via the Proposed 2019 Bonds, as described more fully in the capital improvement plan attached to Mr. Schipper's testimony, we have assumed 36.8% of the Proposed 2019 Bonds will be financed via a 30-year traditional subsidized financing and the remaining non-pipe components of the project equaling 63.2% are funded via a 20year pooled financing.

1	34.	Q.	WHY DID YOU ASSUME A PORTION OF THE PROPOSED 2019
2			BONDS WOULD BE FINANCED VIA A SRF POOLED FINANCING
3			INSTEAD OF A SRF TRADITIONAL SUBSIDIZED FUNDING?
4		A.	SRF has what it calls a Project Priority List due to more demand for its traditional
5			subsidized funds in recent years than funds the SRF program has available.
6			Historically, SRF attempts to spread out traditional subsidized funding to benefit
7			several communities. If there is still demand in the program for funding over and
8			above the traditional subsidized funding available, SRF has the ability to leverage
9			their AAA bond rating to borrow money in the open market and then lend to SRF
10			borrowers via their pooled funding program. Due to the size of the Proposed 2019
11		•	Bonds, we have assumed the entire amount will not be funded through the
12			traditional funding program and the balance will be funded via the pooled program.
13			SRF traditionally blends two issues like this together into one repayment schedule,
14			which is what page 16 represents. The City has completed similar blended
15			borrowings from SRF for its wastewater utility.
16	35.	Q.	WHAT ASSUMPTIONS WERE USED TO PREPARE THE AMORTIZATION
17	<i>55.</i>	٧٠	SCHEDULE FOR THE PROPOSED 2022 BONDS ("PROPOSED 2022 BONDS")
18			ON PAGE 17?
19		A.	Page 17 represents an open market bond issue for the Proposed 2022 Bonds.
20			Principal payments are shown being paid annually beginning December 1, 2023,
21			through December 1, 2032, and semiannually June 1 and December 1 beginning

June 1, 2033, through December 1, 2041. Interest is shown to be paid semiannually

22

beginning December 1, 2022, at assumed interest rates ranging from 2.6 percent to 4.1 percent. Actual interest rates will be determined through competitive bidding. The repayment of the Proposed 2022 Bonds has been wrapped around the Utility's currently outstanding debt and the Proposed 2019 Bonds to allow for level combined annual debt service payments on all debt for years 2023 through 2031. This combined debt service repayment schedule is illustrated on page 18 of the Accounting Report.

36.

Q.

A.

WHY WAS AN OPEN MARKET BOND ISSUE ASSUMED FOR THE PROPOSED 2022 BONDS INSTEAD OF AN SRF FINANCING LIKE THAT ASSUMED FOR THE PROPOSED 2019 BONDS?

Historically, the Utility has issued both SRF and open market debt. This can be seen in the outstanding debt of the Utility as three of the five currently outstanding bonds are open market bonds with the other two being SRF financings. Also, as described earlier, the Utility proposes to wrap, or defer, a portion of principal payments on the Proposed 2022 Bonds to later years in an effort to levelize total combined debt payments. This amortization structure is proposed in an effort to reduce rate impact. While SRF does allow this type of wrap structure, there is typically increased interest rate for using a wrap structure. Also, as explained earlier, SRF has in recent years had more demand for its traditional subsidized funds than funds the SRF program has available. Importantly, the Utility received a

Moody's Investors Service, Inc. bond rating of Aa3 on its 2014 bonds. Obligations
rated as Aa are judged to be of high quality and are subject to low credit risk¹.

A.

37. Q. HOW WILL PETITIONER ACCOUNT FOR ANY CHANGES THAT MAY OCCUR BETWEEN THE PROPOSED AMORTIZATION SCHEDULES SHOWN ON PAGES 16 AND 17 AND ACTUAL RESULTS WHEN THE BONDS ARE SOLD?

Following the bond sale results for the Proposed 2019 Bonds, Petitioner will submit a true-up report to the Commission adjusting water rates for the actual amortization schedule. The same process will be followed after the sale of the Proposed 2022 Bonds. Should interest rates change from our assumptions, the timing of the bond issue change, or SRF provide more or less traditional subsidized funding than assumed, the true-up reports will reflect this. Further, the bond ordinance adopted by the Council authorizing the issuance of the Proposed 2019 and 2022 Bonds specifically allows bonds to be issued via SRF or the open market. To expand on my response to Question 36, should the City decide to utilize SRF funding for the Proposed 2022 Bonds, it would be reflected in the true-up report and final water rates charged to customers.

38. Q. THANK YOU. PLEASE CONTINUE WITH THE EXPLANATION OF THE THIRD SECTION OF THE ACCOUNTING REPORT.

¹ Rating Symbols and Definitions June 2018, *Global Long-Term Rating Scale*, pamphlet, page 6, Moody's Investors Service, New York, New York.

Direct Testimony of Eric J. Walsh, CPA On Behalf of Fort Wayne Municipal Water Utility IURC Cause No. Petitioner's Exhibit 10

A.	Pages 19 and 20 summarize the pro forma annual revenue requirements of the
	Utility. The pro forma revenue requirements incorporate the Utility's adjusted
	operation and maintenance expenses of \$24,842,170 for 2018 that I described
	earlier. Pro forma operation and maintenance expenses are kept at 2018 levels for
	years 2019 through 2023 with the exception of a \$1,724 increase in 2019 for the
	wastewater and stormwater phased in rate increases I described in response to
	Question 22. The pro forma also includes annual utility receipts tax ("URT") based
	on eligible revenues and the proposed revenues by phase. Other components of the
	schedule include annual payments on outstanding debt, annual payments on
	proposed debt, and funding of the debt service reserve for the Proposed 2019 Bonds
	over 12 months and Proposed 2022 Bonds over 60 months. The 12-month debt
	service reserve fund requirement on the Proposed 2019 Bonds is a result of
	requirements contained in the bond ordinances authorizing the outstanding 2005
	and 2006 Bonds. The 2005 and 2006 Bonds are anticipated to be retired prior to the
	Proposed 2022 Bond issue. Also included are annual lease payment obligations of
	the Utility that run through April 6, 2024, and payment in lieu of taxes ("PILT") of
	\$3,169,188 for Phase I, which is annually increased 6% per year for Phases II
	through V. The replacements and improvements allowance as discussed earlier is
	also included in the schedule. The total resulting annual revenue requirements are
	then reduced by other sales, private water charges, interest income, connectivity
	revenue, miscellaneous non-operating revenues, and anticipated increases in non-
	recurring charges revenue. This results in total net annual revenue requirements per
	phase as detailed in Table II below. Other sales, private water charges, connectivity

Year levels. Interest income has been normalized for an increase in interest earnings in the second half of the Test Year. The allowance for increases in non-recurring charges is based on the charges proposed in a 30-day filing Fort Wayne made on July 9, 2018 and anticipated occurrences.

TABLE II					
Rate Phase	Net Revenue Requirements				
Phase I	\$49,903,407				
Phase II	\$52,788,188				
Phase III	\$55,815,827				
Phase IV	\$58,992,071				
Phase V	\$62,369,252				

The net annual revenue requirements are then compared to annual revenues of the Utility. Metered revenues, sales for resale, interdepartmental sales, fire protection revenues, and forfeited discounts have been assumed to equal Test Year levels. The Utility currently has in place an Out-of-Town Differential of 15%. Petitioner is requesting a decrease in the Out-of-Town Differential from 15% to 10% as part of this case. On page 19 of the Accounting Report, we have decreased Test Year water sales annually to recognize the proposed decrease in the Out-of-Town Differential. The Utility's adjusted water sales, fire protection charges, and forfeited discounts are subject to increase and total \$47,108,481 for Phase I. In order to provide sufficient revenues to meet the annual revenue requirements over the five-year period, the adjusted revenues would need to be increased by the amounts in Table III, below.

1	40.0UE-T-UE-	TABLE III	III			
2		Annual Revenue	Cumulative Revenue			
3	Rate Phase	Increase Required	Increase Required			
4	Phase I	\$2,794,926	\$ 2,794,926			
5	Phase II	\$2,950,891	\$ 5,745,817			
6	Phase III	\$3,104,756	\$ 8,850,573			
7	Phase IV	\$3,261,289	\$12,111,862			
8	Phase V	\$3,473,458	\$15,585,320			
9						

A.

11 39. Q. MR. WALSH, IF THE COMMISSION DOES NOT APPROVE THE NON-

RECURRING CHARGES THE UTILITY SUBMITTED IN THE 30-DAY

FILING, WILL THIS IMPACT YOUR REPORT?

A. Yes. The Utility filed its non-recurring rate 30-day filing on July 9, 2018. It is my understanding that the City is expecting to receive the Commission's determination on the 30-day filing by August 8, 2018. In the event the Commission alters any of the rates as presented, then I will need to update the Accounting Report to account for such alterations. If such alterations are needed, I would file an amended Accounting Report together with testimony explaining the revisions.

40. Q. PLEASE EXPLAIN THE PRO FORMA URT USED ON PAGE 19 OF THE ACCOUNTING REPORT IN MORE DETAIL.

The pro forma URT amounts used to calculate proposed rates are based on taxable revenues of the Utility, including metered revenues, private fire protection, penalties, other sales, private water sales, and connectivity revenue. Excluded from the calculation are public fire protection revenues. Historically, the Utility has paid URT on public fire protection revenues, resulting in Test Year URT being

1			overstated. The Utility plans to discontinue the practice of paying URT on public
2			fire protection revenues on a going forward basis.
3	41.	Q.	PLEASE CONTINUE WITH THE EXPLANATION OF THE THIRD
4			SECTION OF THE ACCOUNTING REPORT.
5		A.	Pages 21 through 23 of the Accounting Report summarize the present and proposed
6			water rates and charges. The rates consist of a volumetric rate, a monthly service
7			charge based on the customer's meter size, a monthly public fire protection charge
8			based on the customer's meter size, private fire protection charges, and specific
9			rates for both large industrial customers and the City of New Haven. All recurring
10			monthly rates, including fire protection charges, have been adjusted to reflect the
11			proposed across-the-board rate increase and out-of-town differential reduction
12			previously described.
13	42.	Q.	PLEASE EXPLAIN MORE FULLY THE FOURTH SECTION OF THE
14			ACCOUNTING REPORT.
15		A.	Pages 24 through 28 contain the amortization schedules of the Utility's outstanding
16			bonds. Page 29 of this section displays the Utility's Schedule of Outstanding
17			Combined Bond Amortization.
18	43.	Q.	MR. WALSH, IS THERE ANY OTHER INFORMATION YOU WOULD
19			LIKE TO PROVIDE THE COMMISSION CONCERNING YOUR
20			ACCOUNTING REPORT?

1 A. Yes. Recently the Utility connected a new commercial customer, a Walmart milk 2 processing facility. The facility started having minimal water consumption in 3 December 2017, and on June 13, 2018, had its grand opening. At the time of 4 preparation of the Accounting Report and this testimony, Walmart had not yet 5 received its first bill at full operations. Although I have accounted for matters that 6 were not in the Test Year but which were fixed, known, and measurable, I did not 7 account for Walmart's usage at this point as there is no historical billing data to rely 8 upon.

44. Q. COULD WALMART'S ACTUAL USAGE IMPACT THE ACCOUNTING REPORT?

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

A.

It is difficult to actually ascertain what the particular impact of Walmart's usage will be. Hypothetically, Walmart's usage could have any number of impacts including materially increasing the Utility's revenue, materially increasing the Utility's revenue requirement, and/or not impacting either the revenue or the revenue requirement in a material manner. At this point, the actual impacts are simply too early to anticipate. As can sometimes be the case with a rate case, actual changes can occur during the rate case which warrant an adjustment and normalization. In this case, the Utility will examine whether Walmart's actual usage warrants an adjustment or normalization, and will work with the Office of Utility Consumer Counselor ("OUCC") to attempt to reach an agreement on Walmart's impact, if any, in this case. In the unlikely event an agreement cannot be reached, I can explain the Utility's position on any new or additional data as part of my Rebuttal Testimony.

1	45.	Q.	DOES THIS CONCLUDE THE EXPLANATION OF THE ACCOUNTING
2			REPORT?
3		A.	Yes, it does.
4 5 6			III. Conclusion
7	46.	Q.	IN YOUR OPINION, IS THE ISSUANCE OF THE PROPOSED BONDS A
8			REASONABLE AND NECESSARY METHOD OF FUNDING THE
9			PROPOSED IMPROVEMENTS?
10		A.	Yes, it is. The use of tax-exempt debt is an appropriate means to finance the
11			proposed improvements. The issuance of bonds allows the Utility to spread the
12			recovery of these costs among the benefited users. It also results in lower rates for
13			current customers (as it avoids the financial burden associated with trying to cash
14			fund the entire cost of the proposed improvements on the front end) and provides a
15			mechanism for future customers of the Petitioner to pay for a portion of the
16			facilities that they will use.
17	47.	Q.	DO THE PROPOSED REVENUES PROVIDE ADEQUATE DEBT SERVICE
18			COVERAGE REQUIRED BY IC 8-1.5-2-19(b)?
19		A.	Yes.
20	48.	Q.	IS IT YOUR OPINION THAT THE RATES PROPOSED IN YOUR
21			ACCOUNTING REPORT ARE FAIR, JUST, NON-DISCRIMINATORY
22			AND REASONABLE, AND NECESSARY TO MEET THE PROJECTED

Direct Testimony of Eric J. Walsh, CPA
On Behalf of Fort Wayne Municipal Water Utility
IURC Cause No.

Petitioner's Exhibit 10

1			REVENUE	REQUIREMENTS	OF	THE	UTILITY	AS	THOSE
2			REQUIREM	ENTS HAVE BEEN R	EDUC	ED BY	THE COUNC	CIL?	
3		A.	Yes, it is my o	opinion they are.					
4	49.	Q.	DOES THIS	CONCLUDE YOUR I	OIREC	CT TEST	IMONY IN	THIS (CAUSE?
5		A.	Yes, it does.						

VERIFICATION

I, Eric J. Walsh, partner with H. J. Umbaugh & Associates, Certified Public Accountants, LLP, affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information, and belief.

Signed:

Printed

Eric J. Walsh

Date:

7/18/2018

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing has been served upon the following counsel of record via electronic mail this 4 day of July, 2018:

Office of Utility Consumer Counselor PNC Center, Suite 1500 South 115 W. Washington Street Indianapolis, IN 46204 infomgt@oucc.in.gov

J. Christopher Jan

Bose McKinney & Evans LLP 111 Monument Circle, Suite 2700 Indianapolis, IN 46204 (317) 684-5000 Telephone (317) 684-5173 Facsimile

3454756_7

× .			_

NUKC DETITIONER'S

XHIBIT NO. 15

REPORTE

H.J. UMBAUGH & ASSOCIATES, CERTIFIED PUBLIC ACCOUNTANTS, LLP

Petitioner's Exhibit 11

Eric J. Walsh, CPA

Name	Cause No.
Damon Run Conservancy District	43966
Damon Run Conservancy District	44146
Fort Wayne Municipal Water Utility	44519
South Bend Municipal Water Utility	44892
South Bend Municipal Water Utility	44951
Indiana Michigan Power Company	44967

Petitioner's Exhibit 12

DETITIONER'S

EXHIBIT NO.

ATE

Petitioner's Exhibit No. 12

City of Fort Wayne Municipal Water Utility

Accounting Report On Proposed Improvement Projects and Increase in Rates and Charges

June 22, 2018



Mishawaka, Indiana

TABLE OF CONTENTS

ACCOUNTANTS' RATE STUDY AND COMPILATION REPORT

HISTORICAL	FINANCIAT	INFORMATION
MINIONI AL	PINALIVE JALL	INCIIK WA I IIIN

3 - 4	Comparative Statement of Net Position
5	Comparative Statement of Revenues, Expenses, and Changes in Net Position
6	Comparative Statement of Detailed Operating Expenses
7 - 8	Comparative Statement of Cash Flows

9 Comparison of Account Balances with Minimum Balances Required

PRO FORMA FINANCIAL INFORMATION

10 - 13	Pro Forma Operation and Maintenance Expense
14	Proposed Capital Improvement Plan
15	Schedule of Estimated Sources and Uses of Funds
16	Schedule of Amortization of \$41,010,000 Proposed Principal Amount Waterworks
	Revenue Bonds of 2019
17	Schedule of Amortization of \$44,560,000 Proposed Principal Amount Waterworks
	Revenue Bonds of 2022
18	Schedule of Proposed Combined Bond Amortization
19 - 20	Pro Forma Annual Revenue Requirements and Annual Operating Revenue
21 - 23	Schedule of Present and Proposed Rates and Charges

SUPPLEMENTAL FINANCIAL DATA

24	Schedule of Amortization of \$4,595,000 Outstanding Principal Amount of
	Waterworks Revenue Bonds of 2005
25	Schedule of Amortization of \$10,410,000 Outstanding Principal Amount of
	Waterworks Revenue Bonds of 2006
26	Schedule of Amortization of \$23,260,000 Outstanding Principal Amount of
	Waterworks Revenue Bonds of 2011, Series B
27	Schedule of Amortization of \$35,005,000 Outstanding Principal Amount of
	Waterworks Revenue Bonds of 2012
28	Schedule of Amortization of \$61,340,000 Outstanding Principal Amount of
	Waterworks Revenue Bonds of 2014
29	Schedule of Outstanding Combined Bond Amortization



H. J. Umbaugh & Associates Certified Public Accountants, LLP 112 IronWorks Avenue Suito C Mishawaba, IN 46544 Priona: 574-935-5178 Fax: 574-935-5928 www.umbatign.gom

ACCOUNTANTS' RATE STUDY AND COMPILATION REPORT

June 22, 2018

Mr. Kumar Menon, Director of Utilities Mr. Justin Brugger, Chief Financial Officer Mr. Matthew Wirtz, Deputy Director of Utilities City of Fort Wayne 200 East Berry Street, Room 130 Fort Wayne, Indiana 46802

Re: Fort Wayne (Indiana) Municipal Water Utility (the "Utility")

In connection with the proposed improvement projects and increase in the Utility's schedule of water rates and charges, we have, at your request, compiled this special purpose rate study report for submission to the Indiana Utility Regulatory Commission.

This special purpose rate study report has been prepared for the purpose of requesting approval of the proposed improvement project financing and a new schedule of water rates and charges from the Indiana Utility Regulatory Commission and should not be used for any other purpose.

Further, the pro forma financial information in this report, which has not been compiled, reviewed, or audited by us, is based upon unaudited financial information for the twelve months ended December 31, 2017, which was compiled by us, and assumptions provided by management and their consulting engineers or obtained from other sources. This pro forma financial information is prepared for the purpose of showing the estimated financial effects on the Utility's revenue and revenue requirements of an increase in rates and charges for service and other charges that may be reasonably fixed, known, and measured, excluding provisions for future inflation. The actual results achieved may vary from the pro forma information and the variations may be material. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

We have compiled the accompanying comparative statement of net position of the Utility as of December 31, 2015, 2016, and 2017, and the related comparative statements of revenues, expenses, and changes in net position, and cash flows for the periods then ended and supplementary data. We have not audited or reviewed the accompanying historical financial statements and supplementary data, and accordingly, do not express an opinion or provide any assurance about whether the financial statements are in accordance with accounting principles generally accepted in the United States of America.

(Continued on next page)

Mr. Kumar Menon, Director of Utilities Mr. Justin Brugger, Chief Financial Officer Mr. Matthew Wirtz, Deputy Director of Utilities

Date: June 22, 2018

Page 2

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America and for designing, implementing, and maintaining internal control relevant to the preparation and fair presentation of the financial statements.

Our responsibility is to conduct the compilation in accordance with Statements on Standards for Accounting and Review Services issued by the American Institute of Certified Public Accountants. The objective of a compilation is to assist management in presenting financial information in the form of financial statements without undertaking to obtain or provide any assurance that there are no material modifications that should be made to the financial statements.

Management has elected to omit substantially all of the disclosures required by generally accepted accounting principles. If the omitted disclosures were included in the financial statements, they might influence the user's conclusions about the Utility's financial position, results of operations, and its cash flows. Accordingly, these financial statements are not designed for those who are not informed about such matters.

Unlough

HISTORICAL FINANCIAL INFORMATION

COMPARATIVE STATEMENT OF NET POSITION

	As of December 31,			
ASSETS:	2015	2016	2017	
Current Assets:				
Operating cash and cash equivalents	\$8,811,434	\$10,505,308	\$9,843,878	
Customer accounts receivable (net)	4,863,718	4,717,993	5,963,071	
Interest receivable	21,696	2,322	4,283	
Due from City of Fort Wayne	16,368	11,725	477,715	
Materials and supplies inventory	1,273,373	1,244,784	1,427,535	
Prepaid expenses	80,908	85,918	92,325	
Restricted Assets:			•	
Sinking fund cash and cash equivalents	1,015,901	1,015,486	1,015,294	
Debt service reserve cash and cash equivalents	7,102,658	4,690,817	4,692,561	
Construction fund cash and cash equivalents	2,083,689	91	-	
Customer deposits cash and equivalents	1,541,580	1,524,150	1,734,370	
Total Current Assets	26,811,325	23,798,594	25,251,032	
Noncurrent Assets:				
Restricted Assets:				
Debt service reserve investments	5,088,159	7,500,000	7,600,404	
Regulatory assets	2,956,862	2,666,485	2,389,980	
Capital Assets:				
Depreciable capital assets	443,642,029	453,291,294	460,591,007	
Less accumulated depreciation	(159,021,337)	(166,942,863)	(176,588,808)	
Land	5,666,314	5,865,814	5,878,231	
Construction work in progress	5,434,575	2,844,062	3,593,998	
Total Noncurrent Assets	303,766,602	305,224,792	303,464,812	
Total Assets	330,577,927	329,023,386	328,715,844	
Deferred Outflows of Resources:				
Deferred outflow pension benefit	2,447,511	2,712,683	1,737,012	

(Continued on next page)

COMPARATIVE STATEMENT OF NET POSITION

	As of December 31,		
LIABILITIES:	2015	2016	2017
Current Liabilities:			
Accounts payable	\$3,185,993	\$1,643,178	\$1,001,662
Due to City of Fort Wayne	1,834,527	1,864,088	2,000,795
Interfund payable	70,976	70,956	2,000,750
Compensated absences payable	636,962	620,155	629,252
Accrued payroll	254,054	267,447	228,770
Sales tax payable	193,875	195,161	199,704
Other current liabilities	532,735	366,266	236,836
Payable from restricted assets:	,	000,200	200,000
Accrued interest payable	407,651	387,319	366,209
Customer deposits payable	1,617,275	1,599,845	1,810,065
Bonds payable - current portion	3,815,000	3,920,000	4,030,000
Loans payable - current portion	3,484,000	3,618,000	3,759,000
Lease payable - current portion			58,603
Total Current Liabilities	16,033,048	14,552,415	14,320,896
Noncurrent Liabilities:			
	421 677	244.242	20(702
Compensated absences payable	431,677	344,242	326,783
Bonds payable (net of unamortized premium)	106,649,951	102,581,721	98,406,390
Loans payable	37,288,000	33,670,000	29,911,000
Lease payable	- 5 724 022	- 6 901 042	345,179
Net pension liability	5,734,933	6,821,943	6,115,960
Total Noncurrent Liabilities	150,104,561	143,417,906	135,105,312
Total Liabilities	166,137,609	157,970,321	149,426,208
Deferred Inflows of Resources:			
Deferred inflow pension benefit	554,224	503,953	683,522
NET POSITION:			
Invested in Capital Assets, Net of Related Debt	146,568,319	151,268,677	156,964,256
Restricted	12,723,372	12,743,289	12,866,355
Unrestricted	7,041,914	9,249,829	10,512,515
	-,-,-,-,-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Total Net Position	\$166,333,605	\$173,261,795	\$180,343,126

$\frac{\textbf{COMPARATIVE STATEMENT OF REVENUES, EXPENSES, AND}}{\textbf{CHANGES IN NET POSITION}}$

	Calendar Year Ended December 31,			
	2015	2016	2017	
Operating Revenues:				
Metered Revenues	\$37,940,049	\$38,891,861	\$39,362,224	
Private Fire Protection	1,347,984	1,303,271	1,329,228	
Public Fire Protection	4,420,832	4,434,708	4,605,565	
Other Sales	474,288	2,838,588	571,148	
Sales for Resale	723,987	744,360	1,035,092	
Forfeited Discounts	307,273	664,216	636,098	
Interdepartmental Sales	135,349	365,774	198,317	
Water Charges - Private	61,998	54,355	66,863	
Total Operating Revenues	45,411,760	49,297,133	47,804,535	
Operating Expenses:				
Source of Supply	84,751	124,927	43,273	
Water Treatment	10,814,377	10,528,995	10,270,551	
Transmission and Distribution	6,065,262	5,616,194	5,285,514	
Customer Accounts	2,735,420	2,761,236	2,683,147	
Administrative and General	5,154,788	5,758,279	6,058,012	
Utility Receipts Tax	626,265	661,848	666,421	
Sub-totals	25,480,863	25,451,479	25,006,918	
Depreciation expense	11,192,664	10,580,825	10,958,310	
Total Operating Expenses	36,673,527	36,032,304	35,965,228	
Operating Income	8,738,233	13,264,829	11,839,307	
Nonoperating Revenues:				
Interest Income	63,071	112,793	149,370	
Connectivity Revenue	172,226	192,021	204,854	
Miscellaneous Non-Operating Income	137,780	133,028	105,668	
Gain on Disposal of Assets	24,355	69,399	30,121	
Sub-totals	397,432	507,241	490,013	
Nonoperating Expenses:				
Interest Expense	2,098,498	5,266,491	4,544,058	
Loss on Disposal of Assets	152,040	881,222	320,566	
Sub-totals	2,250,538	6,147,713	4,864,624	
Income Before Contributions and Transfers	6,885,127	7,624,357	7,464,696	
Contributed Capital	1,067,906	2,047,027	2,219,678	
Payment in Lieu of Property Taxes	(2,600,000)	(2,750,000)	(2,603,043)	
Change In Nas Desiries	5 252 022	6.021.284	7.001.221	
Change In Net Position	5,353,033	6,921,384	7,081,331	
Total Net Position - Beginning Total Net Position - Adjustment	164,638,097 (3,657,525) (1)	166,333,605 6,806	173,261,795	
Total Net Position- Ending	\$166,333,605	\$173,261,795	\$180,343,126	

⁽¹⁾ GASB 68 pension adjustment.

COMPARATIVE STATEMENT OF DETAILED OPERATING EXPENSES

	Calendar Year Ended December 31,			
_	2015	2016	2017	
Source of Supply			_	
Salaries and wages	\$58,085	\$72,485	\$17,985	
Employee benefits	26,754	30,303	23,828	
Contractual services	(89)	22,139	1,460	
Total Source of Supply	84,750	124,927	43,273	
Water Treatment				
Salaries and wages	2,591,861	2,604,757	2,590,281	
Employee benefits	1,200,005	1,315,375	1,263,858	
Purchased power	1,407,101	1,450,166	1,477,837	
Chemicals	3,125,230	2,698,763	2,677,399	
Materials and supplies	353,781	458,858	359,144	
Contractual services	1,172,834	1,189,781	1,057,555	
Repairs and maintenance	426,744	304,413	346,806	
Utilities	229,667	223,024	195,344	
Insurance	180,739	185,182	187,704	
Transportation	110,291	81,498	96,769	
Other	16,124	17,177	17,854	
Total Water Treatment	10,814,377	10,528,994	10,270,551	
Transmission and Distribution				
Salaries and wages	3,058,058	2,897,326	2,698,777	
Employee benefits	1,565,151	1,553,209	1,497,126	
Materials and supplies	754,205	451,559	424,911	
Repairs and maintenance	529,628	588,860	557,070	
Other	158,221	125,239	107,630	
Total Transmission and Distribution	6,065,263	5,616,193	5,285,514	
Customer Accounts				
Salaries and wages	665,142	601,452	523,647	
Employee benefits	831,486	935,333	946,442	
Purchased power	24,878	22,494	21,771	
Chemicals	6,525	2,435	374	
Materials and supplies	139,783	388,484	371,618	
Contractual services	430,299	422,219	390,359	
Repairs and maintenance	203,801	37,160	55,137	
Utilities	37,777	36,979	40,537	
Insurance	87,942	91,079	77,955	
Transportation	244,221	167,243	155,513	
Other	63,566	56,358	99,794	
Total Customer Accounts	2,735,420	2,761,236	2,683,147	
Administrative and Control		. –		
Administrative and General	0 707 207	1 775 017	2 234 500	
Salaries and wages	2,727,393	2,725,033	3,332,988	
Employee benefits	286,778	888,390	564,861	
Materials and supplies	(44,594)	(27,714)	(18,953)	
Contractual services	2,115,962	2,136,191	1,732,804	
Repairs and maintenance	6,374	* 000	6,875	
Insurance Other	5,662 57,212	5, 893 30,486	4,482 434,955	
Total Administrative and General	5,154,787	5,758,279	6,058,012	
Utility Receipts Tax	626,265	661,848	666,421	
Depreciation Expense	11,192,664	10,580,825	10,958,310	
Total Operating Expenses	\$36,673,526	\$36,032,302	\$35,965,228	

COMPARATIVE STATEMENT OF CASH FLOWS Increase (Decrease) in Cash

	Calendar Year Ended December 31,		
- -	2015	2016	2017
Cash flows from (to) operating activities:			
Cash received from customers	\$44,368,062	\$49,447,501	\$45,904,309
Cash paid to suppliers, employees and others	(20,575,951)	(26,443,069)	(25,095,132)
Net cash provided (used) by operating activities	23,792,111	23,004,432	20,809,177
Cash flows from (to) noncapital financing activities:			
Contributed capital	1,067,906	2,047,027	2,219,678
Payment in lieu of property taxes	(2,600,000)	(2,750,000)	(2,603,043)
Net cash provided (used) by noncapital financing activities_	(1,532,094)	(702,973)	(383,365)
Cash flows from (to) capital and related			
financing activities:			
Additions to utility plant	(21,699,169)	(9,917,551)	(9,374,431)
Principal paid on bonds	(3,425,000)	(3,710,000)	(3,810,000)
Principal paid on loans	(3,357,000)	(3,484,000)	(3,618,000)
Lease proceeds	~	-	403,782
Interest paid on debt	(5,595,777)	(5,280,017)	(4,565,168)
Other income (expenses)	137,329	(449,627)	41,251
Net cash provided (used) by capital and related			
financing activities	(33,939,617)	(22,841,195)	(20,922,566)
Cash flows from (to) investing activities:			
Interest income	58,775	132,167	147,409
Investments (purchased)	(37,735)	(2,411,841)	(100,404)
Net cash provided (used) by investing activities	21,040	(2,279,674)	47,005
Cash and Cash Equivalents:			•
Increase (decrease)	(11,658,560)	(2,819,410)	(449,749)
Beginning balance	32,213,822	20,555,262	17,735,852
Ending balance	\$20,555,262	\$17,735,852	\$17,286,103

(Continued on next page)

COMPARATIVE STATEMENT OF CASH FLOWS Increase (Decrease) in Cash

	Calendar Year Ended December 31,			
	2015	2016	2017	
Reconciliation of net operating income to cash provided by operating activities:			·	
Operating income	\$8,738,233	\$13,264,829	\$11,839,307	
Adjustments to reconcile operating income to net cash provided by operating activities:				
Depreciation expense	11,192,664	10,580,825	10,958,310	
Change in assets and liabilities: (Increase) decrease in:				
Customer accounts receivable (net)	(1,043,303)	145,725	(1,245,078)	
Due from City of Fort Wayne	(395)	4,643	(465,990)	
Materials and supplies inventory	103,510	28,589	(182,751)	
Prepaid expenses	1,708	(5,010)	(6,407)	
Increase (decrease) in:		•		
Accounts payable	347,819	(1,542,815)	(641,516)	
Due to City of Fort Wayne	1,244,766	29,561	136,707	
Interfund payable	(124,245)	(20)	(70,956)	
Compensated absences payable	(59,490)	(104,242)	(8,362)	
Accrued payroll	(361,009)	13,393	(38,677)	
Sales tax payable	26,259	1,286	4,543	
Other current liabilities	(172,704)	(166,469)	(129,430)	
Customer deposits payable	56,652	(17,430)	210,220	
Net pension liability	3,841,646	771,567	449,257	
Net cash provided by operating activities	\$23,792,111	\$23,004,432	\$20,809,177	

COMPARISON OF ACCOUNT BALANCES WITH MINIMUM BALANCES REQUIRED

Accounts:	Account Balance at 12/31/2017	Minimum Balance Required (1)	Ref.	Variance
Operation and maintenance fund Sinking fund:	\$9,843,878	\$4,141,190	(2)	\$5,702,688
Debt service account	1,015,294	1,015,293	(3)	1
Reserve account	12,292,965	12,190,817	(4)	102,148
Customer deposits fund	1,734,370	1,734,370	(5)	-
Totals	\$24,886,507	\$19,081,670		\$5,804,837

- (1) Minimum balances required by Bond Ordinance No. G-8-14.
- (2) The balance maintained in this fund shall be sufficient to pay the expenses of operation, repair, and maintenance of the then next succeeding two calendar months.

Pro forma 2018 operating expenses	\$24,842,170
Times two month factor	0.1667
Minimum balance required	\$4,141.190

(3) The balance of this account should be equal to the accrued monthly transfers of 1/6 of the interest on all outstanding bonds payable on the then next succeeding interest payment date and 1/12 of the principal on all outstanding bonds payable on the then next succeeding principal payment date.

	Amount	Factor	Total
Principal due December 1, 2018			
2005 Bonds	\$2,250,000	1/12	\$187,500
2006 Bonds	2,455,000	1/12	204,583
2011B Bonds	1,304,000	1/12	108,667
2012 Bonds	1,180,000	1/12	98,333
2014 Bonds	600,000	1/12	50,000
Interest due June 1, 2018			
2005 Bonds	93,366	1/6	15,561
2006 Bonds	205,598	1/6	34,266
2011B Bonds	345,062	1/6	57,510
2012 Bonds	491,725	1/6	81,954
2014 Bonds	1,061,513	1/6	176,919
Minimum balance required			\$1,015,293

(4) Th debt service on the outstanding bonds. The reserve is fully funded.

> Minimum balance required \$12,190,817

(5) Restricted for customer refunds.

PRO FORMA FINANCIAL INFORMATION

PRO FORMA OPERATION AND MAINTENANCE EXPENSE

(See Explanation of Adjustments, Pages 11-13)

	12 Months Ended 12/31/2017	2018 Adj	Ref.	Pro Forma
Source of Supply	(Page 6)			
Salaries and wages	\$17,985	(\$17,985)	(1)	\$ -
Employee benefits	23,828	(23,828)	(2),(3),(4)	
Contractual services	1,460	(23,020)	(~),(~),(~)	1,460
Water Treatment	1,100			1,100
Salaries and wages	2,590,281	226,770	(1)	2,817,051
Employee benefits	1,263,858	115,919	(2),(3),(4)	1,379,777
Purchased power	1,477,837	60,887	(5)	1,538,724
Chemicals	2,677,399	,	(0)	2,677,399
Materials and supplies	359,144	(25,102)	(10)	334,042
Contractual services	1,057,555	3,243	(6)	1,060,798
Repairs and maintenance	346,806	-,	(-)	346,806
Utilities	195,344	659	(11),(12)	196,003
Insurance	187,704	(10,004)	(9)	177,700
Transportation	96,769			96,769
Other	17,854			17,854
Transmission and Distribution				
Salaries and wages	2,698,777	224,841	(1)	2,923,618
Employee benefits	1,497,126	110,373	(2),(3),(4)	1,607,499
Materials and supplies	424,911			424,911
Repairs and maintenance	557,070			557,070
Other	107,630			107,630
Customer Accounts				
Salaries and wages	523,647	42,349	(1)	565,9 96
Employee benefits	946,442	27,500	(2),(3),(4)	973,942
Purchased power	21,771	897	(5)	22,668
Chemicals	374			374
Materials and supplies	371,618			371,618
Contractual services	390,359	(3,209)	(6),(10)	387,150
Repairs and maintenance	55,137	(3,389)	(10)	51,748
Utilities	40,537	428	(11),(12)	40,965
Insurance	77,955	27,407	(9)	105,362
Transportation	155,513			155,513
Other	99,794	(24,000)	(10)	75,794
Administrative and General				
Salaries and wages	3,332,988	(177,409)	(1)	3,155,579
Employee benefits	564,861	(14,282)	(2),(3),(4)	550,579
Materials and supplies	(18,953)	7,808	(7)	(11,145)
Contractual services	1,732,804	219,351	(7),(8),(10)	1,952,155
Repairs and maintenance	6,875	(1.706)	(0)	6,875
Insurance	4,482	(1,706)	(9)	2,776
Other	434,955	(265,845)	(10)	169,110
Totals	\$24,340,497	\$501,673		\$24,842,170
2019 Pro Forma Adjustment - Utilities		\$1,724	(13)	\$24,843,894

(Continued on next page)

(Cont'd)

PRO FORMA OPERATION AND MAINTENANCE EXPENSE Explanation of Adjustments

Adjustment (1) - Salaries and Wages

To adjust test year salaries and wages to reflect pro forma salaries and wages at 2018 rates and planned staffing levels provided by the utility management.

	ı	ro Forma	Administrative Allocation and Labor Transfer	Less: Test Year	Adjustment
Source of Supply	<u>,</u>	-	Encor radiated	(\$17,985)	(\$17,985)
Water Treatment	•	2,817,051		(2,590,281)	226,770
Transmission and Distribution		2,923,618		(2,698,777)	224,841
Customer Accounts		1,593,973	(\$1,027,977)	(523,647)	42,349
Administrative and General		305,588	2,849,991	(3,332,988)	(177,409)
Total Adjustment					\$298,566

Adjustment (2) - FICA

To adjust test year FICA expenses based on current FICA rates and pro forma salaries and wages.

	Less:			
	F	ro Forma	Test Year	Adjustment
		(7.65%)		
Source of Supply	\$	-	(\$1,360)	(\$1,360)
Water Treatment		\$215,504	(200,310)	15,194
Transmission and Distribution		223,657	(206,305)	17,352
Customer Accounts		121,939	(115,000)	6,939
Administrative and General		23,377	(19,127)	4,250
Total Adjustment			=	\$42,375

Adjustment (3) - PERF

To adjust test year PERF expenses based on current PERF contribution rates and pro forma salaries and wages.

					Less:	
	Pi	ro Forma	Pr	o Forma	Test Year	Adjustment
	(Emp	loyer 11.2%)	(Emp	loyee 3.0%)		
Source of Supply	\$		\$	-	(\$2,162)	(\$2,162)
Water Treatment		315,510		84,512	(372,297)	27,725
Transmission and Distribution		327,445		87,709	(398,633)	16,521
Customer Accounts		178,525		47,819	(221,533)	4,811
Administrative and General		34,226		9,168	(65,926)	(22,532)
Total Adjustment						\$24,363

Adjustment (4) - Health Insurance

To adjust test year health insurance expense to provide an allowance for 2018 medical claim allocations and reinsurance premiums.

	Less:			
	P	ro Forma	Test Year	Adjustment
Source of Supply	-3	-	(\$20,306)	(\$20,306)
Water Treatment		667,000	(594,000)	73,000
Transmission and Distribution		913,500	(837,000)	76,500
Customer Accounts		522,000	(506,250)	15,750
Administrative and General		58,000	(54,000)	4,000
Total Adjustment				\$148,944

(Continued on next page)

(Cont'd)

PRO FORMA OPERATION AND MAINTENANCE EXPENSE Explanation of Adjustments

Adjustment (5) - Purchased Power

To adjust test year purchased power expenses based on Indiana Michigan Power Co. rate adjustment in IURC Cause No. 44967.

Pro Forma	IDRC Cause No. 44967.			
Water Treatment		Dro Forms		Adiustment
Water Treatment \$1,538,724 (\$1,477,837) \$60,887 Customer Accounts 22,668 (21,771) 897 Total Adjustment 361,784 Adjustment (6) - Garage Expenses To adjust test year garage expenses to reflect 2018 city garage allocation. Less: Test Year Adjustment Adjustment Adjustment \$3,243 (339,110) \$3,243 (561) (561) \$52,682 (561) (570,212) (561) \$52,682 \$61 <td< td=""><td></td><td></td><td>rest rear</td><td>Aujustment</td></td<>			rest rear	Aujustment
Customer Accounts	Water Treatment	* *	(\$1.477.837)	\$60.887
Total Adjustment				
Adjustment (6) - Garage Expenses Capability		22,000	(=1,(/1)	
Nater Teatment Pro Forma Test Year Adjustment	Total Adjustment			\$61,784
Nater Treatment	Adjı	ustment (6) - Garage Expenses		
Pro Forma S42,353 S39,110 S3,243 Customer Accounts S42,353 S39,110 S3,243 Customer Accounts S2,682 S69,651 C270,212 (561) S2,682 S2,682 S2,682 S3,243 S3,2682	To adjust test year garage expenses to reflect 2018 city g	arage allocation.		
Water Treatment Customer Accounts \$42,353 (39,110) (270,212) \$3,243 (561) Customer Accounts 269,651 (270,212) (561) Total Adjustment \$2,682 Adjustment (7) - Administrative Allocation To adjust test year administrative expense to reflect 2018 allocation of city wide shared costs. Less:				
Customer Accounts		· · · · · · · · · · · · · · · · · · ·		
Total Adjustment (7) - Administrative Allocation		•		
Adjustment (7) - Administrative Allocation	Customer Accounts	269,651	(270,212)	(561)
To adjust test year administrative expense to reflect 2018 allocation of city wide shared costs. Less:	Total Adjustment		2	\$2,682
Pro Forma Pro	Adjustm	ent (7) - Administrative Allocation		
Pro Forma	To adjust test year administrative expense to reflect 2018	l allocation of city wide shared costs.		
Materials and Supplies \$82,927 (\$75,119) \$7,808 Contractual Services 1,983,144 (1,732,804) 250,340			Less:	
Total Adjustment		Pro Forma	Test Year	Adjustment
Total Adjustment		·		
Total Estimated Rate Case expenses to provide annual allowance for rates case costs.	Contractual Services	1,983,144	(1,732,804)	250,340
To adjust the test year rate case expenses to provide annual allowance for rates case costs. Total Estimated Rate Case Costs \$415,000 Divide by Rate Life (Years) 5 Pro Forma Rate Case Expense \$83,000 Less Test Year Amounts (14,863) Total Adjustment (9) - Commercial Insurance Adjustment (9) - Commercial Insurance	Total Adjustment			\$258,148
Total Estimated Rate Case Costs \$415,000 Divide by Rate Life (Years) 5 Pro Forma Rate Case Expense \$83,000 Less Test Year Amounts (14,863) Total Adjustment \$68,137 Adjustment (9) - Commercial Insurance To adjust test year insurance to reflect 2018 commercial insurance allocations. Value Treatment \$177,700 \$187,704 \$10,004 Customer Accounts 105,362 (77,955 27,407 Administrative and General 2,776 (4,482) (1,706) Customer Accounts 105,362 (7,955) 27,407 Customer Accounts 105,362 (7	Adj	ustment (8) - IURC Rate Case		
Divide by Rate Life (Years) 5 783,000 14,863 14	To adjust the test year rate case expenses to provide annual	ual allowance for rates case costs,		
Divide by Rate Life (Years) 5 783,000 14,863 14	Total California de Para Casa Casas	T415 000		
Fro Forma Rate Case Expense Less Test Year Amounts \$83,000 (14,863) Total Adjustment \$68,137 Adjustment (9) - Commercial Insurance Less: Test Year Adjustment Water Treatment \$177,700 (\$187,704) (\$10,004) Customer Accounts 105,362 (77,955) 27,407 Administrative and General 2,776 (4,482) (1,706)				
Customer Accounts Cl4,863 S68,137	· · · ·		\$83,000	
Total Adjustment \$68,137 Adjustment (9) - Commercial Insurance Less: To adjust test year insurance to reflect 2018 commercial insurance allocations. Pro Forma Less: Adjustment Water Treatment \$177,700 (\$187,704) (\$10,004) Customer Accounts 105,362 (77,955) 27,407 Administrative and General 2,776 (4,482) (1,706)				
Adjustment (9) - Commercial Insurance To adjust test year insurance to reflect 2018 commercial insurance allocations. Less:	2003 1001 1000 11110 11110	•••	<u> </u>	
To adjust test year insurance to reflect 2018 commercial insurance allocations. Less: Test Year Adjustment	Total Adjustment			\$68,137
Water Treatment \$177,700 \$187,704 \$187,704 \$10,004 Customer Accounts 105,362 (77,955) 27,407 Administrative and General 2,776 (4,482) (1,706)	Adjust	ment (9) - Commercial Insurance		
Water Treatment \$177,700 \$187,704 \$187,704 \$190,004 Customer Accounts 105,362 (77,955) 27,407 Administrative and General 2,776 (4,482) (1,706)	To adjust test year insurance to reflect 2018 commercial	insurance allocations.		
Water Treatment \$177,700 (\$187,704) (\$10,004) Customer Accounts 105,362 (77,955) 27,407 Administrative and General 2,776 (4,482) (1,706)		Per Forme		Adinatmont
Customer Accounts 105,362 (77,955) 27,407 Administrative and General 2,776 (4,482) (1,706)	Water Treatment			X
Administrative and General 2,776 (4,482) (1,706)			•	
· · · · · · · · · · · · · · · · · · ·	*		, , ,	,
Total Adjustment \$15,697		2,770	(4,404)	
	Total Adjustment			\$15,697

(Continued on next page)

(Cont'd)

PRO FORMA OPERATION AND MAINTENANCE EXPENSE Explanation of Adjustments

Adjustment (10) - Non-Recurring Items

To adjust test year expenses for non-recurring items.

Department	Account Name	Vendor	Description	Amount
Admin and General	Contractual Services	Ice Miller	Bond Services	(\$55,310)
Admin and General	Contractual Services	Bose McKinney & Evans LLP	Aqua Rate Case	(742)
Admin and General	Contractual Services	Bose McKinney & Evans LLP	Other IURC Matters	(22,211)
Admin and General	Contractual Services	Bingham Greenebaum Doll	I&M Rate Case	(20,863)
Admin and General	Other	N/A	Bad Debt Adjustment	(265,845)
Customer Accounts	Contractual Services	Asphalt Care Inc.	Asphalt Resurfacing	(1,567)
Customer Accounts	Contractual Services	TYCO	New Security System	(1,081)
Customer Accounts	Repairs and Maint.	CMS Roofing	Roof Repairs - Garage	(3,389)
Customer Accounts	Other	Indiana Utility Regulatory Commission	Case Penalty Charges	(24,000)
Treatment	Materials and Supplie	s Calgon Carbon	Disinfection System	(25,102)
3	Total Adjustment		3	(\$420,110)

Adjustment (11) - Utilities

To adjust test year utilities expenses based on 2017 partial year rate adjustments in General Ordinance No. G-5-17, first billed in July 2017.

			Less:	
	Utility	Pro Forma	Test Year	Adjustment
Water Treatment	Stormwater (5.5%)	\$7,044	(\$6,855)	\$189
Customer Accounts	Stormwater (5.5%)	3,010	(2,929)	81
Total Adjustment				\$270

Adjustment (12) - Utilities

To adjust test year utilities expenses based on 2018 rate adjustments in General Ordinance No. G-5-17 for stormwater and General Ordinance No. G-19-14 for sewer.

	Utility	Pro Forma	Test Year	Adjustment
Water Treatment	Stormwater (10.4%)	\$7,410	(\$7,044)	\$ 366
Customer Accounts	Stormwater (10.4%)	3,167	(3,010)	157
Water Treatment	Sewer (5.1%)	2,193	(2,089)	104
Customer Accounts	Sewer (5.1%)	3,986	(3,796)	190
Total Adjustme	ent			\$817

Adjustment (13) - Utilities

To adjust test year utilities expenses based on 2019 rate adjustments in General Ordinance No. G-5-17 for stormwater and General Ordinance No. G-19-14 for sewer,

	Utility	Pro Forma	2018 Pro Forma	Adjustment
Water Treatment	Stormwater (11.8%)	\$8,284	(\$7,410)	\$874
Customer Accounts	Stormwater (11.8%)	3,541	(3,167)	374
Water Treatment	Sewer (7.7%)	2,362	(2,193)	169
Customer Accounts	Sewer (7.7%)	4,293	(3,986)	307
Total Adjustm	ent			\$1,724

PROPOSED CAPITAL IMPROVEMENT PLAN (Per Utility Management)

	2018	2019	2020	2021	2022	2023	Total
Filtration Plant Improvements	\$3,270,444	\$11,308,000	\$5,515,000	\$4,290,000	\$9,595,000	\$4,285,000	\$38,263,444
Raw Water Dams and Reservoirs	392,255	3,475,000	2,265,000	325,000	1,600,000	1,805,000	9,862,255
Distribution Pumping and Storage	1,402,465	1,275,000	1,380,000	250,000	480,000	190,000	4,977,465
Distribution System	4,122,982	15,380,000	19,440,000	15,510,000	26,210,000	22,430,000	103,092,982
General Water Maintenance	1,010,421	954,000	1,094,500	1,001,000	1,087,500	1,147,000	6,294,421
Gross Capital Improvements	10,198,567	32,392,000	29,694,500	21,376,000	38,972,500	29,857,000	162,490,567
Reduced/Deferred Main Replacement	-	(280,000)	(2,625,000)	(5,120,000)	5,120,000	500,000	(2,405,000)
Net Capital Improvements	\$10,198,567	\$32,112,000	\$27,069,500	\$16,256,000	\$44,092,500	\$30,357,000	\$160,085,567
Non-Revenue Funding Sources							
TTF	(\$1,650,000)	(\$325,000)	\$ -	\$ -	\$ -	\$ -	(\$1,975,000)
Equipment Loans	(274,671)	-	**	_	₩	_	(274,671)
Future Bond Issues	(570,536)	(22,600,000)	(15,775,000)	(1,490,000)	(27,390,000)	(12,960,000)	(80,785,536)
Cash Funded Capital Improvements	\$7,703,360	\$9,187,000	\$11,294,500	\$14,766,000	\$16,702,500	\$17,397,000	\$77,050,360

SCHEDULE OF ESTIMATED SOURCES AND USES OF FUNDS (Per utility management)

	Proposed	Bonds
ESTIMATED USES OF FUNDS:	2019	2022
	(SRF)	(OM)
Construction and Engineering Costs:		
Filtration Plant Improvements (2018 - 2020)	\$9,908,277 (1))
Raw Water Dams and Reservoirs (2018 - 2020)	5,557,259	
Distribution Pumping and Storage (2018 - 2020)	1,450,000	
Distribution System (2018 - 2020)	22,030,000 (2))
Filtration Plant Improvements (2021 - 2023)		\$9,450,000
Raw Water Dams and Reservoirs (2021 - 2023)		2,660,000
Distribution Pumping and Storage (2021 - 2023)		370,000
Distribution System (2021 - 2023)		29,360,000
Construction Contingency	1,844,651	1,980,600
Total Estimated Construction Costs	40,790,187	43,820,600
Non-Construction Costs:		
Underwriter's discount (1%)		445,600
Allowance for legal counsel, financial advisory,		
bond rating and other costs of issuance	117,288	182,400
IURC Bond fee (\$0.25 per \$100 par)	102,525	111,400
Total Estimated Non-Construction Costs	219,813	739,400
Total Estimated Project Costs	\$41,010,000	\$44,560,000
ESTIMATED SOURCES OF FUNDS:		
Proposed Waterworks Revenue Bonds	\$41,010,000	\$44,560,000

- (1) Includes \$1,305,000 of pipe related project (30 year funding).
- (2) Includes \$13,020,000 of pipe related project (30 year funding).

		2019 Bond	
	Total	Pipe - 30 year	Non-Pipe - 20 year
Construction costs (no contingency) %	\$38,945,536 100%	\$14,325,000 36.8%	\$24,620,536 63.2%

SCHEDULE OF AMORTIZATION OF \$41,010,000 PROPOSED PRINCIPAL AMOUNT OF WATERWORKS REVENUE BONDS OF 2019 Assumed interest rates as indicated. Assumes Bonds are dated June 15, 2019

Payment	Principal		Interest	Debt Ser		Bond Year
Date	Balance	Principal	Rates	Interest	Total	Total
	(In \$1,0	100's)	(%)	(In Dollars)
12/1/2019	\$41,010			\$508,683.48	\$508,683.48	\$508,683.4
6/1/2020	41,010			551,584.50	551,584.50	#200 ₁ 003(4)
12/1/2020	41,010	\$1,410	2.69	551,584.50	1,961,584.50	2,513,169.0
6/1/2021	39,600	\$1,410	2.07	532,620.00	532,620.00	2,313,107,0
12/1/2021	39,600	1,450	2.69	532,620.00	1,982,620.00	2,515,240.0
6/1/2022	38,150	1,430	2.09			7,1,1,2 4 0.01
		1 104	3.60	513,117.50	513,117.50	2.511.275.0
12/1/2022	38,150	1,485	2.69	513,117.50	1,998,117.50	2,511,235.0
6/1/2023	36,665	4 520	2.60	493,144.25	493,144.25	
12/1/2023	36,665	1,530	2.69	493,144.25	2,023,144.25	2,516,288.5
6/1/2024	35,135	* ***	2.00	472,565.75	472,565.75	
12/1/2024	35,135	1,570	2.69	472,565.75	2.042,565.75	2,515,131.5
6/1/2025	33,565			451,449.25	451,449.25	
12/1/2025	33,565	1,610	2.69	451,449.25	2,061,449.25	2,512,898.5
6/1/2026	31,955			429,794.75	429,794.75	
12/1/2026	31,955	1,655	2.69	429,794.75	2,084,794.75	2,514,58 9 .5
6/1/2027	30,300			407,535.00	407,535.00	
12/1/2027	30,300	1,695	2.69	407,535.00	2,102,535.00	2,510,070.0
6/1/2028	28,605			384,737.25	384,737.25	
12/1/2028	28,605	1,750	2.69	384,737.25	2,134,737.25	2,519,474.5
6/1/2029	26,855	.,		361,199.75	361,199.75	
12/1/2029	26,855	1,795	2,69	361,199.75	2,156,199.75	2,517,399.5
6/1/2030	25,060	1,775	2.07	337,057.00	337,057.00	2,011,000
12/1/2030	25,060	1,845	2.69	337,057.00		2,519,114,0
		1,04.)	2.09		2,182,057.00	2,319,114,0
6/1/2031	23,215	1.906	2.00	312,241.75	312,241.75	0.510.102.5
12/1/2031	23,215	1,895	2.69	312,241,75	2,207,241.75	2,519,483.5
6/1/2032	21,320			286,754.00	286,754.00	
12/1/2032	21,320	1,945	2,69	286,754.00	2,231,754.00	2,518,508.0
6/1/2033	19,375	1,000	2.69	260,593.75	1,260,593.75	
12/1/2033	18,375	1,010	2.69	247,143.75	1,257,143.75	2,517,737.5
6/1/2034	17,365	1,030	2.69	233,559.25	1,263.559.25	
12/1/2034	16,335	1,035	2.69	219,705.75	1,254,705.75	2,518,265.0
6/1/2035	15,300	1,055	2.69	205,785.00	1,260,785.00	
12/1/2035	14,245	1,065	2.69	191,595.25	1,256,595.25	2,517,380.2
6/1/2036	13,180	1,065	2.69	177,271.00	1,242,271.00	
12/1/2036	12,115	1,115	2.69	162,946.75	1,277,946.75	2,520,217.7
6/1/2037	11,000	1,130	2.69	147,950.00	1,277,950.00	
12/1/2037	9,870	1,110	2.69	132,751.50	1,242,751.50	2,520,701.5
6/1/2038	8,760	1,150	2.69	117,822.00	1,267,822.00	
12/1/2038	7,610	1,150	2.69	102,354.50	1,252,354.50	2,520,176.5
6/1/2039	6,460	280	2.69	86,887.00	366,887.00	Zip z di i i di
12/1/2039	6,180	290	2.69	83,121.00	373,121.00	740,008.0
6/1/2040	5,890	290	2.69	79,220.50	369,220.50	7-10,000.0
			2.69			739,540.5
12/1/2040	5,600	295		75,320.00	370,320.00	137,340.3
6/1/2041	5,305	300	2.69	71,352.25	371,352.25	717 ((0.5
12/1/2041	5,005	305	2.69	67,317.25	372,317,25	743,669.5
6/1/2042	4,700	310	2.69	63,215.00	373,215.00	
12/1/2042	4,390	310	2.69	59,045.50	369,045.50	742,260.5
6/1/2043	4,080	315	2.69	\$4,876.00	369,876. 0 0	
12/1/2043	3,765	320	2.69	50,639.25	370,639.25	740,515.2
6/1/2044	3,445	325	2.69	46,335.25	371,335.25	
12/1/2044	3,120	330	2.69	41,964.00	371,964.00	743,299.3
6/1/2045	2,790	335	2.69	37,525.50	372,525.50	
12/1/2045	2,455	335	2.69	33,019.75	368,019.75	740,545.
6/1/2046	2,120	345	2.69	28,514.00	373,514.00	
12/1/2046	1,775	345	2.69	23,873.75	368,873.75	742,387.
6/1/2047	1,430	350	2.69	19,233.50	369,233.50	,
12/1/2047	1,080	355	2.69	14,526.00	369,526.00	738,759.:
6/1/2048	725	360	2.69	9,751.25	369,751.25	120,126,
	365				369,909.25	739,660.5
12/1/2048	303	365	2.69	4,909,25	303,303.43	75,000,5

Blended Amortization Assumptions:
63.2% = \$25,920,000 20 year SRF Pooled financing.
36.8% = \$15.090,000 30 year SRF traditional financing + 20bp extended financing (30 years)

SCHEDULE OF AMORTIZATION OF \$44,560,000 PROPOSED PRINCIPAL AMOUNT OF WATERWORKS REVENUE BONDS OF 2022

Assumed interest rates as indicated.
Assumes Bonds are dated June 15, 2022

Payment	Principal		Interest	Debt S	Service	Bond Year
Date	Balance	Principal	Rates	Interest	Total	Total
	(In \$1	,000's)	(%)	(In Dollars)
12/1/2022	\$44,560			\$732,793.17	\$732,793.17	\$732,793.17
6/1/2023	44,560			794,595.00	794,595.00	
12/1/2023	44,560	\$1,270	2.60	794,595.00	2,064,595.00	2,859,190.00
6/1/2024	43,290			778,085.00	778,085.00	
12/1/2024	43,290	1,295	2.80	778,085.00	2,073,085.00	2,851,170.00
6/1/2025	41,995			759,955.00	759,955.00	
12/1/2025	41,995	1,290	2.90	759,955.00	2,049,955.00	2,809,910.00
6/1/2026	40,705			741,250.00	741,250.00	
12/1/2026	40,705	1,310	3.00	741,250.00	2,051,250.00	2,792,500.00
6/1/2027	39,395			721,600.00	721,600.00	
12/1/2027	39,395	1,300	3.15	721,600.00	2,021,600.00	2,743,200.00
6/1/2028	38,095			701,125.00	701,125.00	
12/1/2028	38,095	1,285	3.25	701,125.00	1,986,125.00	2,687,250.00
6/1/2029	36,810			680,243.75	680,243.75	
12/1/2029	36,810	1,275	3.30	680,243.75	1,955,243.75	2,635,487.50
6/1/2030	35,535			659,206.25	659,206.25	
12/1/2030	35,535	1,260	3.40	659,206.25	1,919,206.25	2,578,412.50
6/1/2031	34,275			637,786.25	637,786.25	
12/1/2031	34,275	1,275	3.45	637,786.25	1,912,786.25	2,550,572.50
6/1/2032	33,000			615,792.50	615,792.50	
12/1/2032	33,000	2,815	3.50	615,792.50	3,430,792.50	4,046,585.00
6/1/2033	30,185	1,445	3.55	566,530.00	2,011,530.00	
12/1/2033	28,740	1,450	3.55	540,881.25	1,990,881.25	4,002,411.25
6/1/2034	27,290	1,495	3.60	515,143.75	2,010,143.75	
12/1/2034	25,795	1,500	3.60	488,233.75	1,988,233.75	3,998,377.50
6/1/2035	24,295	1,550	3.60	461,233.75	2,011,233.75	
12/1/2035	22,745	1,550	3.60	433,333.75	1,983,333.75	3,994,567.50
6/1/2036	21,195	1,605	3.65	405,433.75	2,010,433.75	
12/1/2036	19,590	1,610	3,65	376,142.50	1,986,142.50	3,996,576.25
6/1/2037	17,980	1,665	3.70	346,760.00	2,011,760.00	
12/1/2037	16,315	1,665	3.70	315,957.50	1,980,957.50	3,992,717.50
6/1/2038	14,650	1,730	3.75	285,155.00	2,015,155.00	
12/1/2038	12,920	1,730	3.75	252,717.50	1,982,717.50	3,997,872.50
6/1/2039	11,190	1,795	3.80	220,280.00	2,015,280.00	
12/1/2039	9,395	1,795	3.80	186,175.00	1,981,175.00	3,996,455.00
6/1/2040	7,600	1,865	3.90	152,070.00	2,017,070.00	
12/1/2040	5,735	1,865	3.90	115,702.50	1,980,702.50	3,997,772.50
6/1/2041	3,870	1,935	4.10	79,335.00	2,014,335.00	
12/1/2041	1,935	1,935	4.10	39,667.50	1,974,667.50	3,989,002.50
	Totals	\$44,560		\$20,692,823.17	\$65,252,823.17	\$65,252,823.17

SCHEDULE OF PROPOSED COMBINED BOND AMORTIZATION

Bond Year	Outstanding	Proposed	Bond Year	Proposed	Bond Year
Ended Dec. 1	Bonds	2019 Bonds	Total	2022 Bonds	Total
	(page 29)	(page 16)		(page 17)	
2018	\$12,183,525.56		\$12,183,525.56		\$12,183,525.56
2019	12,184,263.38	\$508,683.48	12,692,946.86		12,692,946.86
2020	10,730,622.94	2,513,169.00	13,243,791.94		13,243,791.94
2021	10,747,980.26	2,515,240.00	13,263,220.26		13,263,220.26
2022	10,749,619.08	2,511,235.00	13,260,854.08	\$732,793.17	13,993,647.25
2023	10,775,995.40	2,516,288.50	13,292,283.90	2,859,190.00	16,151,473.90
2024	10,781,039.86	2,515,131.50	13,296,171.36	2,851,170.00	16,147,341.36
2025	10,827,172.80	2,512,898.50	13,340,071.30	2,809,910.00	16,149,981.30
2026	10,841,955.22	2,514,589.50	13,356,544.72	2,792,500.00	16,149,044.72
2027	10,896,077.76	2,510,070.00	13,406,147.76	2,743,200.00	16,149,347.76
2028	10,942,493.60	2,519,474.50	13,461,968.10	2,687,250.00	16,149,218.10
2029	10,997,043.38	2,517,399.50	13,514,442.88	2,635,487.50	16,149,930.38
2030	11,051,625.60	2,519,114.00	13,570,739.60	2,578,412.50	16,149,152.10
2031	11,077,505.92	2,519,483.50	13,596,989.42	2,550,572.50	16,147,561.92
2032	8,915,450.00	2,518,508.00	11,433,958.00	4,046,585.00	15,480,543.00
2033	5,873,700.00	2,517,737.50	8,391,437.50	4,002,411.25	12,393,848.75
2034	5,901,900.00	2,518,265.00	8,420,165.00	3,998,377.50	12,418,542.50
2035		2,517,380.25	2,517,380.25	3,994,567.50	6,511,947.75
2036		2,520,217.75	2,520,217.75	3,996,576.25	6,516,794.00
2037		2,520,701.50	2,520,701.50	3,992,717.50	6,513,419.00
2038		2,520,176.50	2,520,176.50	3,997,872.50	6,518,049.00
2039		740,008.00	740,008.00	3,996,455.00	4,736,463.00
2040		739,540.50	739,540.50	3,997,772.50	4,737,313.00
2041		743,669.50	743,669.50	3,989,002.50	4,732,672.00
2042		742,260.50	742,260.50		742,260.50
2043		740,515.25	740,515.25		740,515.25
2044		743,299.25	743,299.25		743,299.25
2045		740,545.25	740,545.25		740,545.25
2046		742,387.75	742,387.75		742,387.75
2047		738,759.50	738,759.50		738,759.50
2048		739,660.50	739,660.50		739,660.50
Totals	\$175,477,970.76	\$55,736,409.48	\$231,214,380.24	\$65,252,823.17	\$296,467,203.41
Maximum Annual Debt Service	\$12,190,817.00 *	:	\$13,596,989.42		\$16,151,473.90

^{*}Occurred in bond year 2016.

PRO FORMA ANNUAL REVENUE REQUIREMENTS AND ANNUAL OPERATING REVENUE

(See Explanation of References, Page 20)

	2018	Phase I	Phase II	Phase III	Phase IV	Phase V
Annual Revenue Requirements		(2019)	(2020)	(2021)	(2022)	(2023)
Operation and maintenance expenses (page 10)	\$24,842,170	\$24,843,894	\$24,843,894	\$24,843,894	\$24,843,894	\$24,843,894
Utility receipts tax (1)	590,386	628,295	664,579	702,816	743,029	785,960
Debt service						
Outstanding bonds (page 29)	12,183,526	12,184,263	10,730,623	10,747,980	10,749,619	10,775,995
Proposed 2019 bonds (page 16)	-	508,683	2,513,169	2,515,240	2,511,235	2,516,289
Proposed 2022 bonds (page 17)	-	-	-	-	732,793	2,859,190
Debt service reserve (2)	-	703,086	703,086	_	255,450	510,900
Lease payments (3)	66,788	66,788	66,788	66,788	66,788	66,788
Payment in lieu of property taxes (4)	2,989,800	3,169,188	3,359,339	3,560,899	3,774,553	4,001,026
Replacements and improvements (page 14)	7,703,360	9,187,000	11,294,500	14,766,000	16,702,500	17,397,000
Total annual revenue requirements	48,376,030	51,291,197	54,175,978	57,203,617	60,379,861	63,757,042
Less other sales (page 5)	(571,148)	(571,148)	(571,148)	(571,148)	(571,148)	(571,148)
Less water charges private (page 5)	(66,863)	(66,863)	(66,863)	(66,863)	(66,863)	(66,863)
Less interest income (5)	(171,684)	(171,684)	(171,684)	(171,684)	(171,684)	(171,684)
Less connectivity revenue (page 5)	(204,854)	(204,854)	(204,854)	(204,854)	(204,854)	(204,854)
Less miscellaneous non-operating revenue (page 5)	(105,668)	(105,668)	(105,668)	(105,668)	(105,668)	(105,668)
Less additional revenue from non-recurring charges (6)		(267,573)	(267,573)	(267,573)	(267,573)	(267,573)
Net annual revenue requirements	\$47,255,813	\$49,903,407	\$52,788,188	\$55,815,827	\$58,992,071	\$62,369,252
Annual Revenues						
Test year metered revenues, sales for resale						
and interdepartmental sales (page 5)	\$40,595,633	\$40,595,633	\$40,595,633	\$40,59 5 ,633	\$40,595,633	\$40,595,633
1% annual decrease in outside surcharge for 5 years	-	(58,043)	(124,153)	(201,270)	(286,315)	(382,592)
Test year fire protection revenues (page 5)	5,934,793	5,934,793	5,934,793	5,934,793	5,934,793	5,934,793
Test year forfeited discounts (page 5)	636,098	636,098	636,098	636,098	636,098	636,098
Additional revenue from phased increases			2,794,926	5,745,817	8,850,573	12,111,862
Total annual operating revenues	\$47,166,524	\$47,108,481	\$49,837,297	\$52,711,071	\$55,730,782	\$58,895,794
Additional revenues required	\$89,289	\$2,794,926	\$2,950,891	\$3,104,756	\$3,261,289	\$3,473,458
Across-The-Board Rate Adjustment	N/A	5.93%	5.92%	5.89%	5.85%	5.90%
Avg. monthly bill (4,000 gallons/535 cu. ft.)	\$22.78	\$24.12	\$25.55	\$27,08	\$28,65	\$30.32
Bond Coverage With PILOT	163%	178%	191%	212%	222%	211%

(Continued on Next Page)

(Cont'd)

PRO FORMA ANNUAL REVENUE REQUIREMENTS AND ANNUAL OPERATING REVENUE

(Explanation of References)

(1) Annual utility receipts tax ("URT") adjusted based on proposed rate increases.	2018	2019	2020	2021	2022	2023
Test Year Metered Revenues and Private Fire Protection (page 5)	\$40,691,452	\$40,691,452	\$40,691,452	\$40,691,452	\$40,691,452	\$40,691,452
Add: Other Taxable Charges (penalties, other sales, private water and connectivity)	1,478,963	1,736,072	1,736,072	1,736,072	1,736,072	1,736,072
Add: Additional Rate Increase Revenue (taxable portion)	-	2,450,724	5,042,398	7,773,588	10,646,004	13,712,444
Times: Current URT Rate	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%
Pro Forma URT	\$590,386	\$628,295	\$ 664,579	\$702,816	\$ 743,029	\$785,960
(2) Calculated as follows:	2019	2022				
Maximum annual combined debt service (page 18)	\$13,596,989	\$16,151,474				
Less prior debt service reserve	(12,190,817)	(13,596,989)				
Amount to be funded	1,406,172	2,554,485				
Funding period (months)*	12	60				
Monthly funding requirement	\$117,181	\$ 42,575				

^{*} The 2005 and 2006 bond ordinances require DSR to be funded over 12 months. After the 2006 bonds retire in 2021, the DSR may be funded over 5 years.

- (3) Based on 2018 master lease payment schedule provided by the City (\$33,394 due semiannually through April 6, 2024).
- (4) Based on 2018 budgeted PILOT (\$2,989,800) plus 6% annual increase.
- (5) Test year interest income normalized for increased average monthly interest earnings from July through December.
- (6) Based on proposed non-recurring charge rates and estimated annual occurrences.

SCHEDULE OF PRESENT AND PROPOSED RATES AND CHARGES (Inside City)

				:	Proposed Rates		
Metered Rates - Mo	nthly (Per 100 Cubic Feet)	Present (1)	I	II .	III	IV	v
			(5.93%)	(5.92%)	(5.89%)	(5.85%)	(5.90%)
First	2.500 cubic feet	\$2.07	\$2.19	\$2.32	\$2.46	\$2.60	\$2.75
Next	9,500 cubic feet	1.93	2,04	2.16	2.29	2.42	2.56
Over	12,000 cubic feet	1.88	1.99	2.11	2.23	2.36	2.50
		1.50	1.55	<i>4.11</i>	ALT MA. I	2.20	
Service Charge - Mo	onthly						
5/8 inch meter		\$9.18	\$9.72	\$10.30	\$10.91	\$11.55	\$12.23
3/4 inch meter		9.18	9.72	10.30	10.91	11.55	12.23
1 inch meter		23.40	24.79	26.26	27.81	29.44	31.18
1 1/2 inch meter	Γ	52,42	55.53	58.82	62.28	65.92	69.81
2 inch meter		92.99	98.50	104,33	110.48	116.94	123.84
2 1/2 inch meter	r	92.99	98.50	104.33	110.48	116.94	123.84
3 inch meter		209.38	221.80	234,93	248.77	263.32	278.86
4 inch meter		372.21	394.28	417.62	442.22	468.09	495.71
6 inch meter		837.06	886.70	939.19	994.51	1,052.69	1,114.80
8 inch meter		1,488.49	1,576.76	1,670.10	1,768.47	1,871,93	1,982.37
10 inch meter		2,325.55	2,463.46	2,609.30	2,762.99	2,924.62	3,097.17
12 inch meter		2,325.55	2,463.46	2,609.30	2,762.99	2,924.62	3,097.17
Fire Protection Serv	rices						
Public Fire Protection	on Surcharge - Monthly						
5/8 inch meter	-	\$2.53	\$2.68	\$2.84	\$3.01	\$3.19	\$3.38
3/4 inch meter		2.53	2.68	2.84	3.01	3.19	3.38
1 inch meter		6.47	6.85	7.26	7.69	8.14	8.62
I 1/2 inch meter	r	14.55	15.41	16.32	17.28	18.29	19.37
2 inch meter		25.87	27,40	29.02	30.73	32.53	34.45
2 1/2 inch meter	r	40.43	42.83	45.37	48.04	50.85	53.85
3 inch meter		58.22	61.67	65.32	69.17	73.22	77.54
4 inch meter		103.50	109.64	116.13	122.97	130.16	137.84
6 inch meter		232.87	246.68	261,28	276.67	292.86	310.14
8 inch meter		414.00	438.55	464.51	491.87	520.64	551.36
10 inch meter		646.87	685.23	725.80	768.55	813.51	861.51
12 inch meter		931.49	986.73	1,045.14	1,106.70	1,171.44	1,240.55
Private Fire Protect	ion Charge - Monthly						
1 inch connection	on	\$0.29	\$0.31	\$0.33	\$0.35	\$0.37	\$0.39
1 1/2 inch conn	ection	0.84	0,89	0.94	1.00	1.06	1.12
2 inch connection	on	1.79	1.90	2.01	2.13	2.25	2.38
2 1/2 inch conn	ection	3.23	3.42	3.62	3.83	4.05	4,29
3 inch connection	on	5.20	5.51	5.84	6.18	6.54	6.93
4 inch connection	on	11.09	11.75	12.45	13.18	13.95	14.77
6 inch connecti	on	32.23	34.14	36:16	38.29	40.53	42.92
8 inch connection	on	68.67	72.74	77.05	81.59	86.36	91.46
10 inch connect		123.50	130,82	138.56	146.72	155.30	164.46
12 inch connect		199.49	211.32	223.83	237.01	250,88	265.68
16 inch connect		425.12	450.33	476.99	505.08	534.63	566.17
Private Hydrant Re	ntal - Monthly	\$32.23	\$34.14	\$36.16	\$3 8.29	\$ 40.5 3	\$42.92

(Continued on next page)

(Cont'd)

SCHEDULE OF PRESENT AND PROPOSED RATES AND CHARGES (Outside City)

				,	Proposed Rates		
Metered Rates - Mor	nthly (Per 100 Cubic Feet)	Present (1)	I	II II	III	IV	v
		(15%)	(14%)	(13%)	(12%)	(11%)	(10%)
First	2,500 cubic feet	\$2.39	\$2.50	\$2,62	\$2.76	\$2.89	\$ 3,03
Next	9,500 cubic feet	2.23	2.33	2.44	2.56	2,69	2.82
Over	12,000 cubic feet	2.17	2.27	2.38	2.50	2.62	2.75
Service Charge - Mo	onthly						
5/8 inch meter		\$10.56	\$11.08	\$11.64	\$12.22	\$12.82	\$13,45
3/4 inch meter		10.56	11.08	11.64	12.22	12.82	13.45
1 inch meter		26.91	28.26	29.67	31.15	32.68	34.30
1 1/2 inch meter		60.29	63.30	66.47	69.75	73.17	76.79
2 inch meter		106.93	112.29	117.89	123.74	129.80	136.22
2 1/2 inch meter		106.93	112.29	117.89	123,74	129.80	136.22
3 inch meter		240.78	252.85	265.47	278.62	292.29	306.75
4 inch meter		428.04	449.48	471.91	495.29	519.58	545.28
6 inch meter		962.61	1,010.84	1,061.28	1,113.85	1,168.49	1,226.28
8 inch meter		1,711.77	1,797.51	1,887.21	1,980.69	2,077.84	2,180.61
10 inch meter		2,674.37	2,808.34	2,948.51	3,094.55	3,246.33	3,406.89
12 inch meter		2,674.37	2,808.34	2,948.51	3,094.55	3,246.33	3,406.89
Fire Protection Serv	ices						
Public Fire Protection	on Surcharge - Monthly Charge:						
5/8 inch meter		\$2.91	\$3.06	\$3.21	\$3.37	\$3.54	\$3.72
3/4 inch meter		2.91	3.06	3.21	3.37	3.54	3.72
1 inch meter		7,44	7.81	8.20	8.61	9.04	9,48
1 1/2 inch meter	7	16.74	17.57	18.44	19.35	20.30	21.31
2 inch meter		29.76	31.24	32.79	34.42	36.11	37.90
2 1/2 inch meter	7	46.49	48.83	51,27	53.80	56.44	59.24
3 inch meter		66.95	70.30	73.81	77.47	81.27	85.29
4 inch meter		119.02	124.99	131.23	137.73	144.48	151.62
6 inch meter		267.80	281.22	295.25	309.87	325.07	341.15
8 inch meter		476.09	499.95	524.90	550.89	577.91	606.50
10 inch meter 12 inch meter		743.90 1,071.21	781.16 1,124.87	820.15 1,181.01	860.78 1,239.50	903.00 1,300.30	947.66 1,364.61
Private Fire Protecti	ion Charge - Monthly						
1 inch connection	on	\$0.34	\$0.35	\$0.37	\$0.39	\$0.41	\$0.43
1 1/2 inch conne	ection	0.97	1,01	1.06	1.12	1.18	1.23
2 inch connection	on	2.06	2.17	2.27	2.39	2.50	2.62
2 1/2 inch conne	ection	3.71	3.90	4.09	4.29	4.50	4.72
3 inch connection	on	5.99	6.28	6.60	6.92	7. 2 6	7.62
4 inch connection	מכ	12.76	13.40	14.07	14.76	15.48	16.25
6 inch connection	on	37.06	38.92	40.86	42.88	44,99	47.21
8 inch connection	no	78.98	82.92	87.07	91.38	95.86	100.61
10 inch connect	ion	142,03	149.13	156.57	164.33	172.38	180.91
12 inch connect	ion	229.41	240.90	252.93	265.45	278.48	292.25
16 inch connect	ion	488.89	513.38	539.00	565.69	593.44	622.79
Private Hydrant Rei	ntal - Monthly	\$37.06	\$38.92	\$40.86	\$42.88	\$4 4.99	\$47.21

(Continued on next page)

(Cont'd)

SCHEDULE OF PRESENT AND PROPOSED RATES AND CHARGES

					Proposed Rates		
		Present (1)	I	II	III	IV	V
			(5.93%)	(5.92%)	(5.89%)	(5.85%)	(5.90%)
Large Industrial Custo	mers						
Commodity Charg	e (per 100 cubic feet)						
First	2,500 cubic feet	\$2.10	\$2,22	\$2.35	\$2.49	\$2.64	\$2.80
Next	9,500 cubic feet	1.94	2.06	2.18	2.31	2.45	2.59
Over	12,000 cubic feet	1.84	1.95	2.07	2.19	2.32	2.46
-Monthly Service	Charge for each Meter		(Based on Me	eter Size - Same	as Outside-City	Rates)	
-Fire Protection S	Service - 10" line		(Based on Me	eter Size - Same	as Outside-City	Rates)	
City of New Haven:							
Monthly Demand	Charge	\$12,110.10	\$12,828.23	\$13,587.66	\$14,387.97	\$15,229.67	\$16,128.22
Commodity Charg	e:						
- Rate per Hundr	ed Cubic Feet	\$1.6849	\$1.7848	\$1.8905	\$2.0019	\$2,1190	\$2,2440
-Monthly Service	Charge for each Meter		(Based on Meter Size - Same as In-City Rates)				
-Fire Protection S	Services for each Meter		(Based on	Meter Size - Sar	ne as In-City Ra	ites)	

⁽i) Rates effective January 1, 2017 per IURC Order 44162.

SUPPLEMENTAL FINANCIAL DATA

SCHEDULE OF AMORTIZATION OF \$4,595,000 OUTSTANDING PRINCIPAL AMOUNT OF WATERWORKS REVENUE BONDS OF 2005

Principal payable annually on December 1st.

Interest payable semiannually on June 1st and December 1st.

Interest rates as indicated.

Payment	Principal		Interest	Debt Service		Bond Year
Date	Balance	Principal	Rates	Interest	Total	Total
	(In \$1	,000's)	(%)	(In Dollars)
6/1/2018	\$4,595			\$93,365.63	\$93,365.63	
12/1/2018	4,595	\$2,250	4.000	93,365.63	2,343,365.63	\$2,436,731.26
6/1/2019	2,345			48,365.63	48,365.63	
12/1/2019	2,345	2,345	4.125	48,365.63	2,393,365.63	2,441,731.26
	Totals	\$4,595		\$283,462.52	\$4,878,462.52	\$4,878,462.52

SCHEDULE OF AMORTIZATION OF \$10,410,000 OUTSTANDING PRINCIPAL AMOUNT OF WATERWORKS REVENUE BONDS OF 2006

Principal payable annually on December 1st.

Interest payable semiannually on June 1st and December 1st.

Interest rate as indicated.

Payment	Principal		Interest	Debt	Bond Year		
Date	Balance	Principal	Rate	Interest	Total	Total	
	(In \$1,000's)		(%)		In Dollars)	
6/1/2018	\$10,410			\$205,597.50	\$205,597.50		
12/1/2018	10,410	\$2,455	3.95	205,597.50	2,660,597.50	\$2,866,195.00	
6/1/2019	7,955			157,111.25	157,111.25		
12/1/2019	7,955	2,550	3.95	157,111.25	2,707,111.25	2,864,222.50	
6/1/2020	5,405			106,748.75	106,748.75		
12/1/2020	5,405	2,650	3.95	106,748.75	2,756,748.75	2,863,497.50	
6/1/2021	2,755			54,411.25	54,411.25		
12/1/2021	2,755	2,755	3.95	54,411.25	2,809,411.25	2,863,822.50	
	Totals	\$10,410		\$1,047,737.50	\$11,457,737.50	\$11,457,737.50	

SCHEDULE OF AMORTIZATION OF \$23,260,000 OUTSTANDING PRINCIPAL AMOUNT OF WATERWORKS REVENUE BONDS OF 2011, SERIES B

Principal payable annually on December 1st.

Interest payable semiannually on June 1st and December 1st.

Interest rate as indicated.

Payment	Principal		Interest	Debt S	ervice	Bond Year
Date	Balance	Principal	Rate	Interest	Total	Total
	(In \$1,000's)		(%)	(In Dollars)
6/1/2018	\$23,260			\$345,062.15	\$345,062.15	
12/1/2018	23,260	\$1,304	2.967	345,062.15	1,649,062.15	\$1,994,124.30
6/1/2019	21,956			325,717.31	325,717.31	
12/1/2019	21,956	1,351	2.967	325,717.31	1,676,717.31	2,002,434.62
6/1/2020	20,605			305,675.22	305,675.22	
12/1/2020	20,605	1,401	2.967	305,675.22	1,706,675.22	2,012,350.44
6/1/2021	19,204			284,891.38	284,891.38	
12/1/2021	19,204	1,451	2.967	284,891.38	1,735,891.38	2,020,782.76
6/1/2022	17,753			263,365.79	263,365.79	
12/1/2022	17,753	1,504	2.967	263,365.79	1,767,365.79	2,030,731.58
6/1/2023	16,249			241,053.95	241,053.95	
12/1/2023	16,249	1,559	2.967	241,053.95	1,800,053.95	2,041,107.90
6/1/2024	14,690			217,926.18	217,926.18	
12/1/2024	14,690	1,615	2.967	217,926.18	1,832,926.18	2,050,852.36
6/1/2025	13,075			193,967.65	193,967.65	
12/1/2025	13,075	1,674	2.967	193,967.65	1,867,967.65	2,061,935.30
6/1/2026	11,401			169,133.86	169,133.86	
12/1/2026	11,401	1,735	2.967	169,133.86	1,904,133.86	2,073,267.72
6/1/2027	9,666			143,395.13	143,395.13	
12/1/2027	9,666	1,798	2.967	143,395.13	1,941,395.13	2,084,790.26
6/1/2028	7,868			116,721.80	116,721.80	
12/1/2028	7,868	1,863	2.967	116,721.80	1,979,721.80	2,096,443.60
6/1/2029	6,005			89,084.19	89,084.19	
12/1/2029	6,005	1,931	2.967	89,084.19	2,020,084.19	2,109,168.38
6/1/2030	4,074			60,437.80	60,437.80	
12/1/2030	4,074	2,001	2.967	60,437.80	2,061,437.80	2,121,875.60
6/1/2031	2,073			30,752.96	30,752.96	
12/1/2031	2,073	2,073	2.967	30,752.96	2,103,752.96	2,134,505.92
	Totals	\$23,260		\$5,574,370.74	\$28,834,370,74	\$28,834,370.74

SCHEDULE OF AMORTIZATION OF \$35,005,000 OUTSTANDING PRINCIPAL AMOUNT OF WATERWORKS REVENUE BONDS OF 2012

Principal payable annually on December 1st.

Interest payable semiannually on June 1st and December 1st.

Interest rates as indicated.

Payment	Principal		Interest		Debt S	Service	Bond Year
Date	Balance	Principal	Rates		Interest	Total	Total
	(\lambda \\$1,000's)		(%)	-	(In Dollars)
6/1/2018 \$35,005				\$491,725.00	\$491,725.00		
12/1/2018	35,005	\$1,180	2.0		491,725.00	1,671,725.00	\$2,163,450.00
6/1/2019	33,825	41,100	2.0		479,925.00	479,925.00	φ 2,105,100,0
12/1/2019	33,825	1,195	2.0		479,925.00	1,674,925.00	2,154,850.00
6/1/2020	32,630	-,			467,975.00	467,975.00	,,
12/1/2020	32,630	2,125	2.0		467,975.00	2,592,975.00	3,060,950.00
6/1/2021	30,505	,			446,725.00	446,725.00	
12/1/2021	30,505	2,170	2.0		446,725.00	2,616,725.00	3,063,450.00
6/1/2022	28,335				425,025.00	425,025.00	
12/1/2022	28,335	2,210	3.0		425,025.00	2,635,025.00	3,060,050.00
6/1/2023	26,125				391,875.00	391,875.00	
12/1/2023	26,125	2,280	3.0		391,875.00	2,671,875.00	3,063,750.00
6/1/2024	23,845				357,675.00	357,675.00	
12/1/2024	23,845	2,345	3.0		357,675.00	2,702,675.00	3,060,350.00
6/1/2025	21,500				322,500.00	322,500.00	
12/1/2025	21,500	2,420	3.0		322,500.00	2,742,500.00	3,065,000.00
6/1/2026	19,080				286,200.00	286,200.00	
12/1/2026	19,080	2,490	3.0		286,200.00	2,776,200.00	3,062,400.00
6/1/2027	16,590				248,850.00	248,850.00	
12/1/2027	16,590	2,565	3.0		248,850.00	2,813,850.00	3,062,700.00
6/1/2028	14,025				210,375.00	210,375.00	
12/1/2028	14,025	2,640	3.0		210,375.00	2,850,375.00	3,060,750.00
6/1/2029	11,385				170,775.00	170,775.00	
12/1/2029	11,385	2,720	3.0		170,775.00	2,890,775.00	3,061,550.00
6/1/2030	8,665				129,975.00	129,975.00	
12/1/2030	8,665	2,805	3.0		129,975.00	2,934,975.00	3,064,950.00
6/1/2031	5,860				87,900.00	87,900.00	
12/1/2031	5,860	2,885	3.0	(1)	87,900.00	2,972,900.00	3,060,800.00
6/1/2032	2,975				44,625.00	44,625.00	
12/1/2032	2,975	2,975	3.0	(1)_	44,625.00	3,019,625.00	3,064,250.00
	Totals	\$35,005			\$9,124,250.00	\$44,129,250.00	\$44,129,250.00

^{(1) \$5,860,000} of Term Bonds due December 1, 2032.

SCHEDULE OF AMORTIZATION OF \$61,340,000 OUTSTANDING PRINCIPAL AMOUNT OF WATERWORKS REVENUE BONDS OF 2014

Principal payable annually on December 1st through 2032.

Principal payable semiannually on June 1st and December 1st, beginning June 1, 2033.

Interest payable semiannually on June 1st and December 1st.

Interest rates as indicated.

Payment	Principal		Interest	Debt Se	Debt Service	
Date	Balance	Principal	Rates	Interest	Total	Total
	(In \$1,000's)		(%)	(In Dollars)
6/1/2018	\$61,340			\$1,061,512.50	\$1,061,512.50	
12/1/2018	61,340	\$600	2.00	1,061,512.50	1,661,512.50	\$2,723,025.00
6/1/2019	60,740			1,055,512.50	1,055,512.50	
12/1/2019	60,740	610	2.00	1,055,512.50	1,665,512.50	2,721,025.00
6/1/2020	60,130			1,049,412.50	1,049,412.50	
12/1/2020	60,130	695	2.00	1,049,412.50	1,744,412.50	2,793,825.00
6/1/2021	59,435			1,042,462.50	1,042,462.50	
12/1/2021	59,435	715	2.25	1,042,462.50	1,757,462.50	2,799,925.00
6/1/2022	58,720			1,034,418.75	1,034,418.75	
12/1/2022	58,720	3 ,5 90	3.00	1,034,418.75	4,624,418.75	5,658,837.50
6/1/2023	55,130			980,568.75	980,568.75	
12/1/2023	55,130	3,710	3.00	980,568.75	4,690,568.75	5,671,137.50
6/1/2024	51,420			924,918.75	924,918.75	
12/1/2024	51,420	3,820	3.00	924,918.75	4,744,918.75	5,669,837.50
6/1/2025	47,600			867,618.75	867,618.75	
12/1/2025	47,600	3,965	3.00	867,618.75	4,832,618.75	5,700,237.50
6/1/2026	43,635			808,143.75	808,143.75	
12/1/2026	43,635	4,090	3.00	808,143.75	4,898,143.75	5,706,287.50
6/1/2027	39,545	•		746,793.75	746,793.75	
12/1/2027	39,545	4,255	3.25	746,793.75	5,001,793.75	5,748,587.50
6/1/2028	35,290	•		677,650.00	677,650.00	
12/1/2028	35,290	4,430	3.25	677,650.00	5,107,650.00	5,785,300.00
6/1/2029	30,860	•		605,662.50	605,662,50	
12/1/2029	30,860	4,615	3.50	605,662.50	5,220,662.50	5,826,325.00
6/1/2030	26,245	,		524,900.00	524,900.00	, ,
12/1/2030	26,245	4,815	4.00	524,900.00	5,339,900.00	5,864,800.00
6/1/2031	21,430	,,		428,600.00	428,600.00	-,,.
12/1/2031	21,430	5,025	4.00	428,600.00	5,453,600.00	5,882,200.00
6/1/2032	16,405	-,	,,,,,	328,100.00	328,100.00	2,,
12/1/2032	16,405	5,195	4.00	328,100.00	5,523,100.00	5,851,200.00
6/1/2033	11,210	2,735	4.00	224,200.00	2,959,200.00	2,227,23277
12/1/2033	8,475	2,745	4.00	169,500.00	2,914,500.00	5,873,700.00
6/1/2034	5,730	2,865	4.00	114,600.00	2,979,600.00	-,-,-,,
12/1/2034	2,865	2,865	4.00	57,300.00	2,922,300.00	5,901,900.00
12 1/2054	2,003	2,000	1100	27,200,00		2,201,203.00
	Totals	\$61,340		\$24,838,150.00	\$86,178,150.00	\$86,178,150.00

SCHEDULE OF OUTSTANDING COMBINED BOND AMORTIZATION

PaymentDate	2005 Bonds*	2006 Bonds**	2011B Bonds**	2012 Bonds*	2014 Bonds*	Total	Bond Year Total
6/1/2018	\$93,365.63	\$205,597.50	\$345,062.15	\$491,725,00	\$1.061.512.50	\$2,197,262.78	
12/1/2018	2,343,365.63	2,660,597,50	1,649,062.15	1,671,725,00	1,661,512.50	9,986,262.78	\$12,183,525.56
6/1/2019	48,365,63	157.111.25	325,717.31	479,925,00	1,055,512.50	2,066,631.69	.012,103,323.30
12/1/2019	2,393,365.63	2,707,111.25	1,676,717.31	1,674,925.00	1,665,512.50	10,117,631.69	12,184,263.38
6/1/2020	2,1,7,1,10,1,03	106,748.75	305,675.22	467,975.00	1,049,412.50	1,929,811.47	12,104,203,30
12/1/2020		2,756,748.75	1,706,675.22	2,592,975.00	1,744,412.50	8,800,811,47	10,730,622.94
6/1/2021		54,411.25	284,891.38	446,725.00	1,042,462.50	1,828,490.13	10,130,012.34
12/1/2021		2,809,411.25	1,735,891.38	2,616,725.00	1,757,462.50	8.919,490.13	10,747,980.26
6/1/2022		4,009,411.43	263,365.79	425,025.00	1,034,418.75	1,722,809.54	10,747,960,20
12/1/2022			1,767,365.79	2,635,025.00	4,624,418.75	9,026,809.54	10,749,619.08
6/1/2023			241.053.95	391,875.00	980.568.75	1,613,497.70	10,747,017.00
			,	′	4,690,568.75	9,162,497.70	10,775,995.40
12/1/2023			1,800,053.95	2,671,875.00		, ,	10,772,793.40
6/1/2024			217,926.18	357,675.00	924,918.75	1,500,519.93 9,280,519.93	10,781,039.86
12/1/2024			1,832,926.18	2,702,675.00	4,744,918.75		10,781,039.80
6/1/2025			193,967.65	322,500.00	867,618.75	1,384,086,40	10 007 170 00
12/1/2025			1,867,967.65	2,742,500.00	4,832,618.75	9,443,086,40	10,827,172.80
6/1/2026			169,133.86	286,200.00	808,143.75	1,263,477.61	10.041.055.00
12/1/2026			1,904,133.86	2,776,200.00	4,898,143.75	9,578,477.61	10,841,955.22
6/1/2027			143,395.13	248,850.00	746,793.75	1,139,038.88	10 00 6 000 06
12/1/2027			1,941,395.13	2,813,850.00	5,001,793.75	9,757,038.88	10,896,077.76
6/1/2028			116,721.80	210,375.00	677,650.00	1,004,746.80	
12/1/2028			1,979,721.80	2,850,375.00	5,107,650.00	9,937,746.80	10,942,493.60
6/1/2029			89,084.19	170,775.00	605,662.50	865,521.69	
12/1/2029			2,020,084.19	2,890,775.00	5,220,662.50	10,131,521.69	10,997,043.38
6/1/2030			60,437.80	129,975.00	524,900.00	715,312.80	
12/1/2030			2,061,437.80	2,934,975.00	5,339,900.00	10,336,312.80	11,051,625.60
6/1/2031			30,752.96	87,900.00	428,600.00	547,252.96	
12/1/2031			2,103,752.96	2,972,900.00	5,453,600.00	10,530,252,96	11,077,505.92
6/1/2032				44,625.00	328,100.00	372,725.00	
12/1/2032				3,019,625.00	5,523,100.00	8,542,725.00	8,915,450.00
6/1/2033					2,959,200.00	2,959,200.00	
12/1/2033					2,914,500.00	2,914,500.00	5,873,700.00
6/1/2034					2,979,600.00	2,979,600.00	
12/1/2034			-		2,922,300.00	2,922,300.00	5,901,900.00
Totals	\$4,878,462.52	\$11,457,737.50	\$28,834,370.74	\$44,129,250,00	\$86,178,150.00	\$175,477,970.76	\$175,477.970.76

^{*} Open Market Bonds

Note: The maximum annual combined debt service was \$12,190,817.30 for the bond year ended December 1, 2016

^{**} SRF Bonds