## KRJ, INC., d/b/a KRJ UTILITIES DOCKET NO. W-1075, SUB 12

### ON BEHALF OF THE PUBLIC STAFF NORTH CAROLINA UTILITIES COMMISSION

#### **JUNE 8, 2018**

1	Q.	MS. MORGAN, PLEASE STATE FOR THE RECORD YOUR
2		NAME, ADDRESS, AND PRESENT POSITION.
3	A.	My name is Iris Morgan and my business address is 430 North
4		Salisbury Street, Raleigh, North Carolina. I am a Staff Accountant in
5		the Water Section of the Public Staff - Accounting Division and
6		represent the using and consuming public in this proceeding.
7	Q.	HOW LONG HAVE YOU BEEN EMPLOYED BY THE PUBLIC
8		STAFF?
9	A.	I have been employed by the Public Staff since September 2, 2002.
10		I joined the Public Staff Accounting Division on December 1, 2008.
11	Q.	WILL YOU STATE BRIEFLY YOUR EDUCATION AND
12		EXPERIENCE?
13	A.	I am a graduate of North Carolina Wesleyan College with a Bachelor
14		of Science degree in Accounting and Business Administration, a
15		Masters of Accounting and Financial Management, Masters in
16		Business Administration and a Masters in Public Administration.
17		Prior to joining the Public Staff Accounting Division, I was employed

with the Public Staff Consumer Services Division.

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#### 1 Q. WHAT ARE YOUR RESPONSIBILITIES IN YOUR POSITION?

A. I am responsible for analyzing testimony, exhibits, and other data presented by parties before the Commission. I have the further responsibility of performing the examinations of books and records of the utilities involved in rate proceedings and summarizing the results into testimony and exhibits for presentation before the Commission.

## 8 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS

#### 9 **PROCEEDING?**

10 A. The purpose of my testimony is to present the results of my
11 investigation of the levels of revenues, expenses, and investments
12 filed by KRJ, Inc., d/b/a KRJ Utilities (KRJ or Company), in support
13 of its application to increase total operating revenues as follows:

14		Present	Proposed
15		Revenues	<u>Revenues</u>
16	Southern Trace – Water	\$ 74,797	\$ 136,009
17	Rockbridge – Water	\$ 85,093	\$ 201,068
18	Rockbridge - Sewer	\$ 274,950	\$ 418,962

## Q. MS. MORGAN, PLEASE DESCRIBE THE SCOPE OF YOUR INVESTIGATION INTO THE COMPANY'S FILING.

21 A. The Company filed its application for a rate increase on
22 January 10, 2018, based on the test year ended June 30, 2016.
23 My investigation included a review of the application filed by the
24 Company, a review of documentation provided by the Company in

- response to written data requests, and a review of the Company's
- 2 financial records.

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### 3 Q. WOULD YOU BRIEFLY DESCRIBE THE PRESENTATION OF

#### 4 YOUR TESTIMONY AND EXHIBITS?

Yes. For each issue, I will present a discussion of how and why Α. I differ from the Company. I will also present schedules showing the calculation of my adjustments to revenues, expenses, and rate base. Additionally, my schedules will also reflect adjustments recommended by other Public Staff Schedule 1 of my exhibit presents the margin on witnesses. operating revenue deductions requiring a return. Schedules 1(a) and 1(b) of my exhibit present the return on original cost rate base under present rates, Company proposed rates and Public Staff recommended rates. Schedules 2, 2(a) and 2(b) along with their supporting schedules, present the original cost rate base. Schedule 3, 3(a) and 3(b) along with their supporting schedules, present the net operating income for a return. Schedule 4 represents the Public Staff's calculation of operating ratios.

### Q. WHAT MODIFICATION OF THE TEST YEAR HAVE YOU MADE IN

#### THIS PROCEEDING?

A. KRJ filed its application for a rate increase on January 10, 2018, based on a test year ending June 30, 2016. At the time the application was filed, the test year rate base, revenues, and

expenses were 18 months old and did not reflect any known and measurable changes to KRJ's cost of service after the end of the test year. Therefore, the Public Staff witnesses have made adjustments in this proceeding to update the Company's test year to recognize certain events affecting rate base, revenues and expenses as a result of certain known and measurable changes that occurred through March 31, 2018.

Α.

As part of the overall update adjustment, I have made adjustments to recognize changes to plant in service, accumulated depreciation, contributions in aid of construction (CIAC), accumulated amortization of CIAC and depreciation and amortization expense that occurred through March 31, 2018.

# Q. WHAT CONCLUSIONS HAVE YOU REACHED AS TO THE COMPANY'S RATE REQUEST FOR SOUTHERN TRACE WATER OPERATIONS?

Based on my investigation, the Company's original cost rate base at June 30, 2016, updated to March 31, 2018, is \$83,398. The level of operating revenue deductions requiring a return (total operating expenses excluding regulatory fee and income taxes) is \$97,194. I have calculated an increase in the gross revenue requirement using the overall operating margin rate of 7.75%, the rate provided by Public Staff witness John R. Hinton. Use of this operating margin on operating revenue deductions produces an increase of \$32,377

1	in the gross water revenue requirement. The resulting total revenue
2	requirement is \$107,174, of which \$106,983 is water service
3	revenue. Therefore, the Public Staff recommends that water rates
4	be set to reflect a \$32,377 increase, resulting in an annual level
5	of service revenues of \$106,983.

# Q. WHAT CONCLUSIONS HAVE YOU REACHED AS TO THE COMPANY'S RATE REQUEST FOR ROCKBRIDGE WATER

**OPERATIONS?** 

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Based on my investigation, the Company's original cost rate base at June 30, 2016, updated to March 31, 2018, is \$448,926. The level of operating revenue deductions requiring a return (total operating expenses excluding regulatory fee and income taxes) is \$120,515. I have calculated an increase in the gross revenue requirement using the overall rate of return of 7.75%, the rate provided by Public Staff witness Hinton. Use of this return on rate base produces an increase of \$76,944 in the gross water revenue requirement. The resulting total revenue requirement is \$162,037, of which \$159,888 is water service revenue. Therefore, the Public Staff recommends that water rates be set to reflect a \$76,944 increase, resulting in an annual level of service revenues of \$159,888.

Q. WHAT CONCLUSIONS HAVE YOU REACHED AS TO THE
COMPANY'S RATE REQUEST FOR ROCKBRIDGE SEWER
OPERATIONS?

- 1 Α. Based on my investigation, the Company's original cost rate base at June 30, 2016, updated to March 31, 2018 is \$336,054. The level of 2 3 operating revenue deductions requiring a return (total operating expenses excluding regulatory fee and income taxes) \$204,492. 4 I have calculated a decrease in the gross revenue requirement using 5 6 the overall rate of return of 7.75%, the rate provided by Public Staff witness Hinton. Use of this return on rate base produces a decrease 7 of \$39,216 in the gross sewer revenue requirement. The resulting 8 9 total revenue requirement is \$235,734 of which \$226,451 is sewer service revenue. Therefore, the Public Staff recommends that sewer 10 rates be set to reflect a \$39,216 decrease, resulting in an annual 11 level of service revenues of \$226,451. 12
- Q. WHAT ADJUSTMENTS RECOMMENDED BY OTHER PUBLIC

  STAFF WITNESSES HAVE YOU INCORPORATED IN YOUR

  EXHIBIT?

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- A. My exhibit reflects the following adjustments recommended by other
   Public Staff witnesses:
  - The recommendation of Public Staff Financial Analyst
     Hinton regarding the margin on operating revenue
     deductions requiring a return and the return on original
     cost rate base;

1		2.	The recommendations made by Public Staff Engineer
2			Casselberry with regard to the following items pertaining
3			to:
4			a. Service revenues at present rates;
5			b. Service revenues at proposed rates;
6			c. Contract services – operations;
7			d. Contract maintenance and repair;
8			e. Purchased power;
9			f. Chemicals;
10			g. Testing;
11			h. Sludge removal; and
12			i. Depreciation rates.
13	Q.	IN W	HAT AREAS HAVE YOU ADJUSTED THE COMPANY'S
14			CULATION OF ITS RATE BASE, REVENUES, AND
15			NSES?
16	A.	The ad	ccounting and ratemaking adjustments which I am proposing
17			Il discuss relate to the following items:
18		1.	Plant in service;
19		2.	Accumulated depreciation and depreciation expense;
20		3.	Contributions in Aid of Construction (CIAC), accumulated
21			amortization and amortization expense;
22		4.	Cash working capital and average tax accruals;
23		5.	Miscellaneous revenues;

1	6	Uncollectible	accounte:
1	ο.	Uncollectible	accounts.

- 2 7. Insurance expense;
- 3 8. Other expense;
- 4 9. Contract management;
- 5 10. Legal fees;

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- 6 11. Bad debt expense;
- 7 12. Rate case expense;
- 8 13. Regulatory fee; and
- 9 14. State and federal income taxes.

#### PLANT IN SERVICE

- 11 Q. PLEASE EXPLAIN HOW YOU CALCULATED PLANT IN SERVICE
- 12 FOR SOUTHERN TRACE WATER OPERATIONS.
- 13 A. I began my calculation of plant in service with the amount of
- \$265,819 that was approved in the last general rate case proceeding,
- Docket No. W-1075, Sub 4. To this amount, I added \$79,079 of plant
- additions based on my review of the Company's financial records.
- Next, based on the recommendation of Public Staff Engineer
- 18 Casselberry, I included \$44,603 of additional plant items. These
- adjustments resulted in a total amount of \$389,501, for plant in
- service, as shown on Schedule 2-1 of my exhibit.
- 21 Q. PLEASE EXPLAIN HOW YOU CALCULATED PLANT IN SERVICE
- FOR ROCKBRIDGE WATER AND SEWER OPERATIONS.

Public Staff Engineer Casselberry and I examined the Company's financial records and data request responses to determine the level of plant in service for this rate case proceeding. Based on our review of KRJ's financial records and data request responses, we calculated total plant in service for water operations of \$1,463,500 for the test year. To this amount, I added \$9,174 of additional plant items, based on the recommendation of Public Staff Engineer Casselberry. As a result of these plant additions, the total amount of plant in service for Rockbridge water operations is \$1,472,674, as shown on Schedule 2-1(a) of my exhibit.

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Based on review of the Company's financial records, I calculated total plant in service of \$5,289,689 for Rockbridge sewer operations as of June 30, 2016. To this amount, I included \$15,988 of additional plant items based on the recommendation of Public Staff Engineer Casselberry. As a result of these adjustments, total amount of plant in service for sewer operations is \$5,305,677, as shown on Schedule 2-1(b) of my exhibit.

## ACCUMULATED DEPRECIATION AND DEPRECIATION EXPENSE

Q. PLEASE EXPLAIN HOW YOU HAVE CALCULATED

ACCUMULATED DEPRECIATION AND DEPRECIATION

EXPENSE FOR SOUTHERN TRACE WATER OPERATIONS.

- 1 Α. I have calculated amounts for accumulated depreciation and 2 depreciation expense to reflect depreciation related to the adjusted 3 plant assets shown on Schedule 2-1. Accumulated depreciation and depreciation expense reflect the service lives approved in the Sub 4 4 rate case proceeding and the service lives recommended by Public 5 6 Staff Engineer Casselberry. Additionally, I calculated accumulated depreciation based on the year each plant asset was placed in 7 service using the half-year convention through March 31, 2018, as 8 9 shown on Schedule 2-1 of my exhibit.
- **PLEASE EXPLAIN** Q. HOW YOU HAVE CALCULATED 10 11 **ACCUMULATED** DEPRECIATION AND DEPRECIATION 12 **EXPENSE FOR** ROCKBRIDGE WATER AND SEWER 13 OPERATIONS.

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Α.

I have calculated amounts for accumulated depreciation and depreciation expense to reflect depreciation related to the adjusted plant assets shown on Schedules 2-1(a) and 2-1(b). Accumulated depreciation and depreciation expense reflect the service lives recommended by Public Staff Engineer Casselberry. Additionally, I calculated accumulated depreciation based on the year each plant asset was placed in service using the half-year convention through March 31, 2018, as shown on Schedules 2-1(a) and 2-1(b) of my exhibit.

#### 1 CONTRIBUTIONS IN AID OF CONSTRUCTION (CIAC)

2	Q.	PLEASE EXPLAIN YOUR ADJUSTMENTS TO CONTRIBUTIONS

IN AID OF CONSTRUCTION FOR SOUTHERN TRACE WATER

4 **OPERATIONS.** 

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- My calculation of CIAC begins with the \$218,448 amount approved
  by the Commission and used to calculate rates in the Company's last
  rate case proceeding, Sub 4. To this amount, I added \$35,500 of
  tap-on fees collected since the Sub 4 rate case proceeding. My
  adjustment resulted in total CIAC of \$253,948 for Southern Trace
- 11 Q. WHAT ADJUSTMENTS HAVE YOU MADE TO CONTRIBUTIONS

water operations, as shown on Schedule 2-2 of my exhibit.

- 12 IN AID OF CONSTRUCTION FOR ROCKBRIDGE WATER
- 13 **OPERATIONS?**
- 14 A. I examined the Company's financial records and data request
  15 responses to determine the level of tap-on fees and contributed plant
  16 for this rate case proceeding. Based on my review of the Company's
  17 financial records, I calculated \$713,910 of tap-on fees and
  18 contributed plant collected from 2007 through March 31, 2018, as
  19 shown on Schedule 2-2(a) of my exhibit.
- Q. WHAT ADJUSTMENTS HAVE YOU MADE TO CONTRIBUTIONS
  IN AID OF CONSTRUCTION FOR ROCKBRIDGE SEWER
  OPERATIONS?

First, I calculated \$3,297,851 of tap-on fees and contributed plant collected from 2007 to March 31, 2018. Then, as ordered in the previous proceeding, Docket No. W-1075, Sub 5, Order Granting Certificate of Public Convenience and Necessity and Approving Rates, dated November 30, 2006, the Commission established in ordering paragraph No. 6, that in all future rate proceedings, the sewer plant costs to be recovered from future customers through the collection of tap fees will be considered to be excess capacity, and shall not be included in rate base. Therefore, I calculated imputed tap-on fees to reflect future tap-on fees collected as excess capacity, resulting in a total amount of \$664,000 of imputed tap-on fees for a total amount of \$3,961,851 of CIAC for sewer operations, as shown on Schedule 2-2(b) of my exhibit.

## ACCUMULATED AMORTIZATION AND AMORTIZATION EXPENSE

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PLEASE EXPLAIN HOW YOU HAVE CALCULATED ACCUMULATED AMORTIZATION AND AMORTIZATION EXPENSE FOR SOUTHERN TRACE WATER OPERATIONS.

I have calculated amounts for accumulated amortization and amortization expense to reflect amortization related to the adjusted tap-on fees and contributed plant collected shown on Schedule 2-2. Accumulated amortization and amortization expense reflect the 25-year amortization period approved in the Sub 4 rate case proceeding.

Additionally, I calculated accumulated amortization based on the length of time each contribution was collected using the half-year convention through March 31, 2018, as shown on Schedules 2-2 of my exhibit.

#### Q. **PLEASE EXPLAIN** HOW YOU HAVE CALCULATED 5 **ACCUMULATED AMORTIZATION** AND **AMORTIZATION** 6 **EXPENSE** ROCKBRIDGE FOR WATER AND **SEWER** 7 **OPERATIONS.** 8

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I have calculated amounts for accumulated amortization and amortization expense to reflect amortization related to the adjusted tap-on fees and contributed plant shown on Schedules 2-2(a) and 2-2(b). Accumulated amortization and amortization expense for amortization Rockbridge water reflect the 25-year recommended by the Public Staff. The accumulated amortization and amortization expense for Rockbridge sewer reflect a 50-year amortization period recommended by the Public Staff. Additionally, I calculated accumulated amortization based on the length of time each contribution was collected using the half-year convention through March 31, 2018, as shown on Schedules 2-2(a) and 2-2(b) of my exhibit.

#### 1 CASH WORKING CAPITAL AND AVERAGE TAX ACCRUALS

- 2 Q. PLEASE EXPLAIN YOUR ADJUSTMENT FOR CASH WORKING
- 3 CAPITAL NET OF AVERAGE TAX ACCRUALS.
- A. The Company did not provide an amount for this item on its application. In my calculation, I have included 1/8 of total operating expenses as a measure of cash working capital. I have calculated
- 7 average tax accruals as 1/2 property tax.

#### **MISCELLANEOUS REVENUES**

#### 9 Q. WHAT ADJUSTMENTS HAVE YOU MADE TO MISCELLANEOUS

#### 10 REVENUES FOR ROCKBRIDGE WATER OPERATIONS?

- 11 A. On its revised application, the Company included \$321 for 12 miscellaneous revenues water operations. To this amount, I made 13 an adjustment to add \$2,187 of availability revenues. This 14 adjustment results in a total amount of \$2,508 of miscellaneous
- revenues for water operations, as shown on Schedule 3(a) of my
- 16 exhibit.

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### 17 Q. WHAT ADJUSTMENTS HAVE YOU MADE TO MISCELLANEOUS

#### 18 REVENUES FOR ROCKBRIDGE SEWER OPERATIONS?

- 19 A. On its revised application, the Company did not include an amount
- for miscellaneous revenues sewer operations. Therefore, I made an
- adjustment to include \$10,207 of availability revenues. This
- adjustment resulted in a total amount of \$10,207 for miscellaneous

1		revenues for sewer operations, as shown on Schedule 3(b) of my
2		exhibit.
3		UNCOLLECTIBLE ACCOUNTS
4	Q.	WHAT ADJUSTMENTS HAVE YOU MADE TO UNCOLLECTIBLE
5		ACCOUNTS FOR SOUTHERN TRACE WATER OPERATIONS?
6	A.	I made an adjustment to reclassify \$281 of bad debt expense to
7		uncollectible accounts, as shown on Schedule 3 of my exhibit.
8	Q.	WHAT ADJUSTMENTS HAVE YOU MADE TO UNCOLLECTIBLE
9		ACCOUNTS FOR ROCKBRIDGE WATER AND SEWER
10		OPERATIONS?
11	A.	I made an adjustment to reclassify \$359 and \$924 of bad debt
12		expense to uncollectible accounts for water and sewer operations,
13		respectively, as shown on Schedules 3(a) and 3(b) of my exhibit.
14		INSURANCE EXPENSE
15	Q.	WHAT ADJUSTMENT HAVE YOU MADE TO INSURANCE
16		EXPENSE FOR SOUTHERN TRACE WATER OPERATIONS?
17	A.	On its revised application, the Company included \$1,805 for
18		insurance expense. Based on review of the Company's data request
19		responses, I made an adjustment to remove \$302 for a missing
20		invoice. This adjustment result in a total amount of \$1,503 for
21		insurance expense, as shown on Schedule 3-1 of my exhibit.

1	Q.	WHAT	ADJUSTMENTS	HAVE	YOU	MADE	ТО	INSURANCE
2		EXPEN	SE FOR ROCKBR	RIDGE S	EWER	OPERA	OITA	NS?

A. The Company included \$2,350, for insurance expense on its revised application. Based on review of the Company's data request responses, I made an adjustment to remove \$302 for a missing invoice. This adjustment result in a total amount of \$2,048 for insurance expense, as shown on Schedule 3-3 of my exhibit.

#### **OTHER EXPENSE**

## 9 Q. WHAT ADJUSTMENTD HAVE YOU MADE TO OTHER EXPENSE 10 FOR ROCKBRIDGE SEWER OPERATIONS?

A. The Company included \$870 for other expense on its revised application. Based on review of the Company's financial records, I made an adjustment to include an additional \$300 for trash pick-up. This adjustment resulted in a total amount of \$1,170 of other expenses, as shown on Schedule 3-4 of my exhibit.

#### **CONTRACT MANAGEMENT**

- 17 Q. WHAT ADJUSTMENTS HAVE YOU MADE TO CONTRACT
  18 MANAGEMENT FOR ROCKBRIDGE WATER AND SEWER
  19 OPERATIONS?
- A. The Company included \$14,084 for water operations and \$12,058 for sewer operations on its revised application for contract management. Based on review of the Company's financial records,

I made an adjustment to add \$4,687 of contract management expenses. Next, I made an adjustment to add \$3,409 to reflect customer growth. These adjustments resulted in a total amount of \$17,198 for water operations and \$17,040 for sewer operations for contract management, as shown on Schedule 3-1 of my exhibit.

#### <u>LEGAL FEES</u>

shown on Schedule 3-2 of my exhibit.

Α.

## Q. WHAT ADJUSTMENTS HAVE YOU MADE TO LEGAL FEES For SOUTHERN TRACE WATER OPERATIONS?

- 9 A. The Company included \$208 on its revised application for legal fees.

  10 I have made an adjustment to remove \$109 for a missing invoice.

  11 This adjustment result in a total amount of \$99 for legal fees, as
- Q. WHAT ADJUSTMENTS HAVE YOU MADE TO LEGAL FEES FOR
   ROCKBRIDGE WATER AND SEWER OPERATIONS??

The Company included \$3,050 for water operations and \$3,050 for sewer operations on its revised application for legal fees. Based on review of the Company's financial records, I made an adjustment to remove \$2,842 of missing invoices for water operations and remove \$1,050 of missing invoices for sewer operations. These adjustments resulted in a total amount of \$208 of legal fees for water operations and \$2,000 of legal fees for sewer operations, as shown on Schedule 3-2 of my exhibit.

BAD	DEBT	<b>EXP</b>	ENSE
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2	Q.	WHAT ADJUSTMENT HAVE YOU MADE TO BAD DEBTS
3		EXPENSE FOR SOUTHERN TRACE WATER OPERATIONS?
4	A.	The Company included \$281 on its revised application for bad debt
5		expense. I made an adjustment and reclassified \$281 to uncollectible
6		accounts, as shown on Schedule 3 of my exhibit.
7	Q.	WHAT ADJUSTMENTS HAVE YOU MADE TO BAD DEBTS
8		EXPENSE FOR ROCKBRIDGE WATER AND SEWER
9		OPERATIONS?
10	A.	The Company included \$359 and \$924 on its revised application of
11		bad debt expense for water and sewer operations, respectively. I
12		reclassified the \$359 and \$924 of bad debt amounts, to uncollectible
13		accounts, as shown on Schedules 3(a) and 3(b).
14		RATE CASE
15	Q.	WHAT ADJUSTMENTS DID YOU MAKE TO RATE CASE
16		EXPENSE?
17	A.	On its application, the Company did not include an amount for rate
18		case expense. Therefore, I have calculated rate case expense to
19		include the cost of the filing fee of \$250, legal fees of \$26,793,
20		administrative fees of \$37,988 and office supplies and overhead of
21		\$1,728, for a total amount of \$66,759, for rate case expense. Then,
22		I amortized the total cost over three years. These costs resulted in a

1	total amount of 5,027, for rate case expense for Southern Trace
2	water operations and \$8,652 for Rockbridge water operations and
3	\$8,573 for Rockbridge sewer operations, as shown on Schedules 3-
4	3 and 3-5 of my exhibits.

#### **REGULATORY FEE**

- 6 Q. HOW HAVE YOU ADJUSTED THE REGULATORY FEE?
- 7 A. I have calculated the regulatory fee using the statutory rate of 0.14%.

#### 8 STATE AND FEDERAL INCOME TAXES

- 9 Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO STATE AND
- 10 **FEDERAL INCOME TAXES.**
- 11 A. State and federal income taxes are based on the statutory corporate
- rates for the level of income presented after all Public Staff
- 13 adjustments.

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- 14 Q. DOES THIS CONCLUDE YOUR TESTIMONY?
- 15 A. Yes, it does.

Schedule 1

KRJ UTILITIES, INC.

Docket No. W-1075, Sub 12

### MARGIN ON OPERATING REVENUE DEDUCTIONS REQUIRING A RETURN

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

Line No.	<u>ltem</u>	Present Rates (a)	Company Proposed Rates (b)	Public Staff Recommended Rates (c)
1.	Net operating income for a return	(\$22,502) [1]	\$29,598 [4]	\$7,533 [6]
2.	Operating revenue deductions requiring a return	97,194 [2]	97,194 [5]	97,194 [7]
3.	Return	-23.15% [3]	30.45% [3]	7.75% [8]

- [1] Morgan Exhibit I, Schedule 3, Line 30, Column (c).
- [2] Morgan Exhibit I, Schedule 3, Line 20 + Line 21 + Line 22 + Line 23, Column (c).
- [3] Line 1 divided by Line 2.
- [4] Morgan Exhibit I, Schedule 3, Line 30, Column (e).
- [5] Morgan Exhibit I, Schedule 3, Line 20 + Line 21 + Line 22 + Line 23, Column (e).
- [6] Line 2 x Line 3.
- [7] Morgan Exhibit I, Schedule 3, Line 20 + Line 21 + Line 22 + Line 23, Column (g).
- [8] Provided by Public Staff Financial Analyst Hinton.

#### INDEX TO MORGAN EXHIBIT I

LINE		SCHEDULE
NO.	TITLE	NO.
1.	MARGIN ON OPERATING REVENUE DEDUCTIONS	
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2.	ORIGINAL COST RATE BASE	2
3.	CALCULATION OF PLANT IN SERVICE, ACCUMULATED DEPRECIATION AND	
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4.	CALCULATION OF CONTRIBUTIONS IN AID OF CONSTRUCTION,	
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Schedule 2

KRJ UTILITIES, INC.

### Docket No. W-1075, Sub 12

#### ORIGINAL COST RATE BASE

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

Line No.	<u>Item</u>	Per Application (a)	Public Staff Adjustments (b)	After Public Staff Adjustments (c)
1.	Plant in service	\$204,182	\$185,319	\$389,501 [2]
2.	Accumulated depreciation	(105,226)	(152,396)	(257,622) [3]
3.	Contributions in aid of construction	0	(253,948)	(253,948) [4]
4.	Accumulated amortizatioon of CIAC	0	194,621	194,621 [5]
5.	Cash working capital	0	11,011	11,011 [6]
6.	Average tax accruals	0	(165)	(165) [7]
7.	Original cost rate base (Sum of L1 thru L6)	\$98,956	(\$15,558)	\$83,398

- [1] Column (c) minus Column (a).
- [2] Morgan Exhibit I, Schedule 2-1, Column (a), Line 47.
- [3] Morgan Exhibit I, Schedule 2-1, Column (f), Line 47.
- [4] Aorgan Exhibit I, Schedule 2-2, Column (a), Line 20.
- [5] Morgan Exhibit I, Schedule 2-2, Column (f), Line 20.
- [6] Calculated at one-eighth of operating expenses.
- [7] Calculated at one-half property tax.

Morgan Exhibit I Schedule 2-1 Page 1 of 2

Morgan Exhibit I

Schedule 2-1 Page 2 of 2

KRJ UTILITIES, INC.

### Docket No. W-1075, Sub 12 CALCULATION OF PLANT IN SERVICE, ACCUMULATED

DEPRECIATION AND DEPRECIATION EXPENSE

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

#### Southern Trace

Line		Plant		Year				Years		Annual		Accumulated	
No.	<u>Item</u>	In Service	[1]	Acquired	[1]	Life	[1]	In Service	[4]	Depreciation	[5]	Depreciation	[6]
		(a)		(b)		(c)		(d)		(e)		(f)	
	Plant in service per Sub 4 Rate Case:												
1.	Land	\$12,287								\$0		\$0	
2.	Structures	25,538		1996		25		21.75		1,022		(22,229)	
3.	Pumping Equipment	3,565		1996		25		21.75		143		(3,110)	
4.	Treatment Equipment	3,855		1996		25		21.75		154		(3,350)	
5.	Storage Tanks	19,746		1996		25		21.75		790		(17,183)	
6.	Meters	118		1996		25		21.75		5		(109)	
7.	Distribution mains	89,926		1996		25		21.75		3,597		(78,235)	
8.	Service lines	16,724		1996		25		21.75		669		(14,551)	
9.	Meters	1,572		1997		25		20.75		63		(1,307)	
10.	Meters	1,710		1998		25		19.75		68		(1,343)	
11.	Well site	14,213		1999		25		18.75		569		(10,669)	
12.	Structures	3,162		1999		25		18.75		126		(2,363)	
13.	Pumping equipment	5,855		1999		25		18.75		234		(4,388)	
14.	Treatment equipment	4,756		1999		25		18.75		190		(3,563)	
15.	Distribution mains	42,398		1999		25		18.75		1,696		(31,800)	
16.	Service lines	10,400		1999		25		18.75		416		(7,800)	
17.	Telemetry	3,933		1999		25		18.75		157		(2,944)	
18.	Meters	813		1999		25		18.75		33		(619)	
19.	Meters	1,359		2000		25		17.75		54		(959)	
20.	Meters	1,272		2001		25		16.75		51		(854)	
21.	Meters	821		2002		25		15.75		33		(520)	
22.	Meters	705		2003		25		14.75		28		(413)	
23.	Organizational cost	1,091	_	2003		25		14.75		44		(649)	
24.	Total Sub 4 plant in service (Sum of L1 thru L23)	265,819	_							10,142		(208,958)	

KRJ UTILITIES, INC.

## Docket No. V-1075, Sub 12 CALCULATION OF PLANT IN SERVICE, ACCUMULATED DEPRCIATION AND DEPRECIATION EXPENSE For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

Line No.	<u>ltem</u>	Plant In Service (a)		Year Acquired (b)		Life (c)		Years In Service (d)	Annual [4] Depreciation (e)	Accumulated [5] Depreciation [6]
	Plant additions since Sub 4 Rate Case:									
25.	Meters	1,842	[2]	2004	[2]	25	[3]	13.75	74	(1,018)
26.	Replacement equipment W-1	1,154	[2]	2004	[2]	25	[3]	13.75	46	(633)
27.	Replacement equipment W-2	1,198	[2]	2004	[2]	25	[3]	13.75	48	(660)
28.	Land	10,248	[2]	2005	[2]	0	[3]	12.75	0	0
29.	Well house # 3	12,823	[2]	2005	[2]	20	[3]	12.75	641	(8,173)
30.	Well#3	6,285	[2]	2005	[2]	50	[3]	12.75	126	(1,607)
31.	Treatment equipment - W-3	11,000	[2]	2005	[2]	25	[3]	12.75	440	(5,610)
32.	Hydro Pneumatic tank # 2	26,648	[2]	2005	[2]	25	[3]	12.75	1,066	(13,592)
33.	Meters	2,099	[2]	2005	[2]	25	[3]	12.75	84	(1,071)
34.	Meters	3,145	[2]	2006	[2]	25	[3]	11.75	126	(1,481)
35.	Meters	827	[2]	2007	[2]	25	[3]	10.75	33	(355)
36.	Meters	335	[2]	2008	[2]	25	[3]	9.75	13	(127)
37.	Meters	227	[2]	2014	[2]	25	[3]	3.75	9	(34)
38.	Meters	1,003	[2]	2015	[2]	25	[3]	2.75	40	(110)
39.	Meters	246	[2]	2015	[2]	25	[3]	2.75	10	(28)
40.	Meters	1,675	[3]	2016	[2]	25	[3]	1.75	67	(117)
41.	Pump replacement well No. 1	6,073	[3]	2016	[3]	7	[3]	1.75	868	(1,519)
42.	Pump replacement well No. 3	7,859	[3]	2016	[3]	7	[3]	1.75	1,123	(1,965)
43.	Replace pump/repair well No. 2	26,213	[3]	2015	[3]	7	[3]	2.75	3,745	(10,299)
44.	Water meter, well No. 1	1,064	[3]	2016	[3]	20	[3]	1.75	53	(93)
45.	PRV Replacement	1,719	[3]	2018	[3]	10	[3]	1.00	172	(172)
46.	Total Sub 12 plant in service (Sum of L25 thru L45)	123,682	_						8,784	(48,664)
			_							
47.	Total Plant in service (L24 + L46)	\$389,501	_						\$18,926	(\$257,622)

Based on prior rate case, Docket No. W-1075, Sub 4, unless otherwise footnoted. Per examination of Company's financial records. Provided by Public Saff Engineer Caselberry. Calculated based on year placed in service using half year convention through 3/31/2018. Column (a) divided by Column (e), unless fully depreciated. Column (d) multiplied by Column (e), unless fully depreciated.

Schedule 2-2

#### **KRJ UTILITIES**

Docket No. W-1075, Sub 12

### CALCULATION OF CONTRIBUTIONS IN AID OF CONSTRUCTION, ACCUMULATED AMORTIZATION AND AMORTIZATION EXPENSE

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

				Am	nortization	1						
Line		CIAC Per	Year	P	eriod In		Years		Amortization		Accumulated	
No.	<u>ltem</u>	Public Staff [1	.] Contributed	[1]	Years	[1]	In Service	[3]	Expense	[4]	Amortization	[5]
		(a)	(b)		(c)	_	(d)	_	(e)	•	(f)	
	Tap fees per Sub 4											
1.	Tap fees	\$5,000	1996		25		21.75		\$200		\$4,350	
2.	Distribution mains	89,926	1996		25		21.75		3,597		78,235	
3.	Service lines	16,724	1996		25		21.75		669		14,551	
4.	Tap fees	12,500	1997		25		20.75		500		10,375	
5.	Tap fees	14,500	1998		25		19.75		580		11,455	
6.	Tap fees	6,500	1999		25		18.75		260		4,875	
7.	Service lines	10,400	1999		25		18.75		416		7,800	
8.	Distribution mains	42,398	1999		25		18.75		1,696		31,800	
9.	Tap fees	9,000	2000		25		17.75		360		6,390	
10.	Tap fees	5,000	2001		25		16.75		200		3,350	
11.	Tap fees	5,000	2002		25		15.75		200		3,150	
12.	Tap fees	1,500	2003		25		14.75		60		885	
13.	Total (Sum of Line 1 thru Line 12):	218,448							8,738		177,216	
	Tap fees additions since Sub 4											
14.	Tap fees	7,500 [2	2004	[2]	25	[2]	13.75		300		4,125	
15.	Tap fees	9,500 [2	2005	[2]	25	[2]	12.75		380		4,845	
16.	Tap fees	15,500 [2	2006	[2]	25	[2]	11.75		620		7,285	
17.	Tap fees	2,500 [2	2007	[2]	25	[2]	10.75		100		1,075	
18.	Tap fees	500 [2	2014	[2]	25	[2]	3.75		20		75	
19.	Total (Sum of Line 14 thru Line 18):	35,500							1,420		17,405	
20.	Total CIAC (Line 13 + Line 19)	\$253,948							\$10,158	_	\$194,621	

<sup>[1]</sup> Based on prior rate case, Docket No. W-1075, Sub 4, unless otherwise footnoted.

<sup>[2]</sup> Per review of Company's records.

<sup>[3]</sup> Calculated based on year placed in service using half year convention through 3/31/2018.

<sup>[4]</sup> Column (a) divided by Column (c), unless fully depreciated.

<sup>[5]</sup> Column (d) x Column (e), unless fully depreciated.

Docket No. W-1075, Sub 12

#### NET OPERATING INCOME FOR A RETURN

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

#### Southern Trace

Public Staff

Morgan Exhibit I

Schedule 3

Page 1 of 2

			Present Rates		Company Propo	sed Rates	Public St Recommende	
		Amount	Public	Per	Net	Operations	Net Public	Operations
Line		Per Revised	Staff	Public	Company	After Rate	Staff	After Rate
No.	Item	Application	Adjustments [1]	Staff [2]	Increase [13]	Increase [14]	Increase [17]	Increase [18]
	<u>item</u>	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	Operating Revenues:	(4)	(2)	(0)	(4)	(0)	(.,	(6)
1.	Service revenues	\$72,413	\$2,193	\$74,606 [3]	\$61,212	\$135,818 [3]	\$32,377	\$106,983 [19]
2.	Miscellaneous revenues	472	0	472	0	472	0	472
3.	Uncollectible accounts	0	(281)	(281) [4]	0	(281)	0	(281)
4.	Total operating revenues:	72,885	1,912	74,797	61,212	136,009	32,377	107,174
	Operating Expenses:							
5.	Loss from disposal of equipment	13,888	0	13,888	0	13,888	0	13,888
6.	Contract operations	12,744	12,648	25,392 [3]	0	25,392	0	25,392
7.	Contract maintenance and repair	19,141	(8,445)	10,696 [3]	0	10,696	0	10,696
8.	Purchased power	6,955	(81)	6,874 [3]	0	6,874	0	6,874
9.	Chemicals	1,253	(539)	714 [3]	0	714	0	714
10.	Testing	2,397	(87)	2,310 [3]	0	2,310	0	2,310
11.	General & administrative	120	0	120	0	120	0	120
12.	Permit fees	420	0	420	0	420	0	420
13.	Insurance	1,805	(302)	1,503 [5]	0	1,503	0	1,503
14.	Contract management	20,134	0	20,134	0	20,134	0	20,134
15.	Other expenses - bank charges	212	0	212	0	212	0	212
16.	Legal fees	208	(109)	99 [6]	0	99	0	99
17.	Contract accounting	700	0	700	0	700	0	700
18.	Bad debt expense	281	(281)	0 [7]	0	0	0	0
19.	Rate case expense	0	5,027	5,027 [8]	0	5,027	0	5,027
20.	Total operating expenses:	80,258	7,831	88,089	0	88,089	0	88,089
	Depreciation and Taxes:							
21.	Depreciation and amortization expense	18,645	(9,877)	8,768 [9]	0	8,768	0	8,768
22.	Property tax	330	0	330	0	330	0	330
23.	Other taxes	7	0	7	0	7	0	7
24.	Regulatory fee	99	6	105 [10]	85	190 [10]	45	150 [10]
25.	Gross receipts tax	0	0	0	0	0	0	0
26.	State income tax	0	0	0 [11]	1,159	1,159 [15]	295	295 [20]
27.	Federal income tax	0	0	0 [12]	7,868	7,868 [16]	2,002	2,002 [21]
28.	Total depreciation and taxes	19,081	(9,871)	9,210	9,112	18,322	2,342	11,552
29.	Total operating revenue deductions	99,339	(2,040)	97,299	9,112	106,411	2,342	99,641
30.	Net operating income for return:	(\$26,454)	\$3,952	(\$22,502)	\$52,100	\$29,598	\$30,035	\$7,533

#### Docket No. W-1075, Sub 12 **FOOTNOTES TO SCHEDULE 3**

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

**Southern Trace** 

Morgan Exhibit I Schedule 3 Page 2 of 2

[1]	Column (c) minus Column (a), unless otherwise footnoted.
[2]	Column (a) plus Column (b), unless otherwise footnoted.
[3]	Provided by Public Staff Engineer Casselberry
[4]	Amount reclassified from bad debt expense.
[5]	Morgan Exhibit I, Schedule 3-1, Line 3.
[6]	Morgan Exhibit I, Schedule 3-2, Line 3.
[7]	Adjustment to reclassify bad debts expense.
[8]	Morgan Exhibit I, Schedule 3-3, Column (b), Line 7.
[9]	Morgan Exhibit I, Schedule 2-1, Column (e), Line 46,
	minus Morgan Exhibit I, Schedule 2-2, Column (e), Line 21.
[10]	Line 4 multiplied by .14%.
[11]	Morgan Exhibit I, Schedule 3-4, Column (a), Line 12.
[12]	Morgan Exhibit I, Schedule 3-4, Column (a), Line 14.
[13]	Column (e) minus Column (c), unless otherwise footnoted.
[14]	Column (c) plus Column (d), unless otherwise footnoted.
[15]	Morgan Exhibit I, Schedule 3-4, Column (b), Line 12.
[16]	Morgan Exhibit I, Schedule 3-4, Column (b), Line 14.
[17]	Column (g) minus Column (c), unless otherwise footnoted.
[18]	Column (c) plus Column (f), unless otherwise footnoted.
[19]	Revenue requirement as calculated by the Public Staff.
[20]	Morgan Exhibit I, Schedule 3-4, Column (c), Line 12.
[21]	Morgan Exhibit I, Schedule 3-4, Column (c), Line 14.

## Docket No. W-1075, Sub 12 ADJUSTMENT TO INSURANCE

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

Morgan Exhibit I Schedule 3-1

Line No.	<u>ltem</u>	Amount[1]
1.	Insurance per revised application	\$1,805
2.	Adjustment to reflect actual insurance expense	(302)
3.	Insurance per Public Staff (L1 + L2)	1,503
4.	Adjustment to insurance (L3 - L1)	(\$302)

<sup>[1]</sup> Calculated by the Public Staff based on information provided by the Company.

## Docket No. W-1075, Sub 12 ADJUSTMENT TO LEGAL FEES

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

Morgan Exhibit I Schedule 3-2

Line No.	<u>Item</u>	Amount[1]
1.	Legal fees per revised application	\$208
2.	Adjustment to reflect actual legal fees	(109)_
3.	Legal fees per Public Staff (L1 + L2)	99
4.	Adjustment to legal fees (L3 - L1)	(\$109)

<sup>[1]</sup> Calculated by the Public Staff based on information provided by the Company.

Schedule 3-3

KRJ UTILITIES, INC.

Docket No. W-1075, Sub 12

#### CALCULATION OF RATE CASE EXPENSE

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

Line No.	<u>ltem</u>	Amount (a)	Water [3] (b)
1.	Rate case application filing fee	\$250 [1]	
2.	Legal fees	26,793 [2]	
3.	Administrative fees	37,988 [2]	
4.	Office supplies and overhead	1,728 [2]	
5.	Total rate case expense (Sum of L1 thru L4)	66,759	
6.	Amortization period in years	3	
7.	Rate case expense per Public Staff (L5 / L6)	\$22,253	\$5,027

- [1] Statutory filing fee for Class C water companies.
- [2] Negotiated settlement estimate.
- [3] Column (a) multiplied by Southern Trace factor of 22.59%.

Schedule 3-4

#### KRJ UTILITIES, INC.

Docket No. W-1075, Sub 12

#### CALCULATION OF INCOME TAXES

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

Line No.	<u>ltem</u>	Present Rates [1]	Company Proposed Rates [2]	Public Staff Recommended Rates (c) [3]
1.	Operating revenue	\$74,797	\$136,009	\$107,174
2.	Operating revenue deductions:			
3.	Operating expenses	88,089	88,089	88,089
4.	Depreciation expense	8,768	8,768	8,768
5.	Property taxes	330	330	330
6.	Payroll taxes	7	7	7
7.	Regulatory fee	105	190	150
8.	Gross receipts tax	0	0	0
9.	Interest expense	0	0	0
10.	Total deductions (Sum of L3 thru L9)	97,299	97,384	97,344
11.	State taxable income (L1 - L10)	(22,502)	38,625	9,830
12.	State income tax (L11 x 3%)	0	1,159	295
13.	Federal taxable income (L11 - L12)	(22,502)	37,466	9,535
14.	Federal income tax (L13 x 21%)	0	7,868	2,002
15.	Net amount (L13 - L14)	(22,502)	29,598	7,533
16.	Add: Interest expense	0	0	0
17.	Net income for return (L15 + L16)	(\$22,502)	\$29,598	\$7,533

<sup>[1]</sup> Morgan Exhibit I, Schedule 3, Column (c).

<sup>[2]</sup> Morgan Exhibit I, Schedule 3, Column (e).

<sup>[3]</sup> Morgan Exhibit I, Schedule 3, Column (g).

Schedule 4

#### KRJ UTILITIES, INC.

Docket No. W-1075, Sub 12

#### **CALCULATION OF OPERATING RATIOS**

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

Line No.	<u>ltem</u>	Present Rates (a)	Company Proposed Rates (b)	Public Staff Recommended Rates (c)
	Interest expense, regulatory fee, gross receipts, and income taxes included:			
1.	Gross operating revenues	\$74,797 [1]	\$136,009 [5]	\$107,174 [9]
2.	Operating expenses	97,299 [2]	106,411 [6]	99,641 [10]
3.	Operating ratios (L2 / L1)	130.08%	78.24%	92.97%
	Interest expense, regulatory fee, gross receipts, and income taxes excluded:			
4.	Gross operating revenues	\$74,692 [3]	\$126,792 [7]	\$104,727 [11]
5.	Operating expenses	97,194 [4]	97,194 [8]	97,194 [12]
6.	Operating ratios (L5 / L4)	130.13%	76.66%	92.81%

- [1] Morgan Exhibit I, Schedule 3, Line 4, Column (c).
- [2] Morgan Exhibit I, Schedule 3, Line 29, Column (c).
- [3] Morgan Exhibit I, Schedule 3, Line 4 Line 24 Line 25 Line 26 Line 27, Column (c).
- [4] Morgan Exhibit I, Schedule 3, Line 29 Line Line 24 Line 25 Line 26 Line 27, Column (c).
- [5] Morgan Exhibit I, Schedule 3, Line 4, Column (e).
- [6] Morgan Exhibit I, Schedule 3, Line 29, Column (e).
- [7] Morgan Exhibit I, Schedule 3, Line 4 Line Line 24 Line 25 Line 26 Line 27, Column (e).
- [8] Morgan Exhibit I, Schedule 3, Line 29 Line 24 Line 25 Line 26 Line 27, Column (e).
- [9] Morgan Exhibit I, Schedule 3, Line 4, Column (g).
- [10] Morgan Exhibit I, Schedule 3, Line 29, Column (g).
- [11] Morgan Exhibit I, Schedule 3, Line 4 Line 24 Line 25 Line 26 Line 27, Column (g).
- [12] Morgan Exhibit I, Schedule 3, Line 29 Line Line 24 Line 25 Line 26 Line 27, Column(g).

Schedule 1(a)

#### KRJ UTILITIES, INC.

Docket No. W-1075, Sub 12

#### **RETURN ON ORIGINAL COST RATE BASE**

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

#### **Rockbridge - Water Operations**

Line No.	<u>ltem</u>	Capital- ization Ratio (a)	Original Cost Rate Base (b)	Embedded Cost (c)	Overall Cost Rate (d)	Net Operating Income (e)
1.	Present rates:	100.00%	\$448,926 [1]		-7.92%	(\$35,541) [2]
2.	Company proposed rates:	100.00%	\$448,926 [1]		14.41%	\$64,660 [3]
3.	Public Staff recommended rates:	100.00%	\$448,926 [1]		7.75%	\$34,792

<sup>[1]</sup> Morgan Exhibit II, Schedule 2(a), Line 7, Column (c).

<sup>[2]</sup> Morgan Exhibit II, Schedule 3(a), Line 30, Column (c).

<sup>[3]</sup> Morgan Exhibit II, Schedule 3(a), Line 30, Column (e).

#### INDEX TO MORGAN EXHIBIT II

#### Rockbridge

LINE		SCHEDULE
NO.	TITLE	NO.
1.	RETURN ON ORIGINAL COST RATE BASE - WATER OPERATIONS	1(a)
2.	RETURN ON ORIGINAL COST RATE BASE - SEWER OPERATIONS	1(b)
3.	ORIGINAL COST RATE BASE - WATER AND SEWER COMBINED	2
4.	ORIGINAL COST RATE BASE - WATER OPERATIONS	2(a)
5.	ORIGINAL COST RATE BASE - SEWER OPERATIONS	2(b)
6.	CALCULATION OF PLANT IN SERVICE, DEPRECIATION EXPENSE	
	AND ACCUMULATION DEPRECIATION - WATER OPERATIONS	2-1(a)
7.	CALCULATION OF PLANT IN SERVICE, DEPRECIATION EXPENSE	
	AND ACCUMULATION DEPRECIATION - SEWER OPERATIONS	2-1(b)
8.	CALCULATION OF CONTRIBUTIONS IN AID OF CONSTRUCTION,	
	ACCUMULATED AMORTIZATION AND AMORTIZATION EXPENSE- WATER OPERATIONS	2-2(a)
9.	CALCULATION OF CONTRIBUTIONS IN AID OF CONSTRUCTION,	
	ACCUMULATED AMORTIZATION AND AMORTIZATION EXPENSE- SEWER OPERATIONS	2-2(b)
10.	NET OPERATING INCOME FOR A RETURN - WATER AND SEWER COMBINED	3
11.	NET OPERATING INCOME FOR A RETURN - WATER OPERATIONS	3(a) Page 1
12.	FOOTNOTES TO SCHEDULE 3(a) - WATER OPERATIONS	3(a) Page 2
13.	NET OPERATING INCOME FOR A RETURN - SEWER OPERATIONS	3(b) Page 1
14.	FOOTNOTES TO SCHEDULE 3(b) - SEWER OPERATIONS	3(b) Page 2
15.	ADJUSTMENT TO CONTRACT MANAGEMENT	3-1
16.	ADJUSTMENT TO LEGAL FEES	3-2
17.	ADJUSTMENT TO INSURANCE - SEWER OPERATIONS	3-3
18.	ADJUSTMENT TO OTHER EXPENSES - SEWER OPERATIONS	3-4
19.	CALCULATION OF RATE CASE EXPENSE	3-5
20.	CALCULATION OF INCOME TAXES - WATER OPERATIONS	3-6(a)
21.	CALCULATION OF INCOME TAXES - SEWER OPERATIONS	3-6(b)

Schedule 1(b)

#### KRJ UTILITIES, INC.

Docket No. W-1075, Sub 12

#### **RETURN ON ORIGINAL COST RATE BASE**

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

#### **Rockbridge - Sewer Operations**

Line No.	<u>Item</u>	Capital- ization <u>Ratio</u> (a)	Original Cost Rate Base (b)	Embedded Cost (c)	Overall Cost Rate (d)	Net Operating Income (e)
1.	Present rates:	100.00%	\$336,054 [1]		16.68%	\$56,053 [2]
2.	Company proposed rates:	100.00%	\$336,054 [1]		49.48%	\$166,255 [3]
3.	Public Staff recommended rates:	100.00%	\$336,054 [1]		7.75%	\$26,044

<sup>[1]</sup> Morgan Exhibit II, Schedule 2(b), Line 7, Column (c).

<sup>[2]</sup> Morgan Exhibit II, Schedule 3(b), Line 30, Column (c).

<sup>[3]</sup> Morgan Exhibit II, Schedule 3(b), Line 30, Column (e).

## Docket No. W-1075, Sub 12 ORIGINAL COST RATE BASE

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

Morgan Exhibit II Schedule 2

#### **Water and Sewer Combined**

Line No.	<u>ltem</u>	Per Application [1] (a)	Public Staff Adjustments [2]	After Public Staff Adjustments [3]
1.	Plant in service	\$6,487,531	\$290,820	\$6,778,351
2.	Accumulated depreciation	(2,284,181)	371,339	(1,912,842)
3.	Contributions in aid of construction	0	(4,675,761)	(4,675,761)
4.	Accumulated amortizatioon of CIAC	0	560,678	\$560,678
5.	Cash working capital	0	34,554	34,554
6.	Average tax accruals	0_	0	0
7.	Original cost rate base (Sum of L1 thru L6)	\$4,203,350	(\$3,418,370)	\$784,980

<sup>[1]</sup> Morgan Exhibit II, Schedule 2(a) plus 2(b), Column (a).

<sup>[2]</sup> Morgan Exhibit II, Schedule 2(a) plus 2(b), Column (b).

<sup>[3]</sup> Morgan Exhibit II, Schedule 2(a) plus 2(b), Column (c).

## Docket No. W-1075, Sub 12 ORIGINAL COST RATE BASE

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

Morgan Exhibit II Schedule 2(a)

#### **Rockbridge - Water Operations**

				After
Line		Per	Public Staff	Public Staff
No.	<u>ltem</u>	Application	Adjustments [1]	Adjustments
		(a)	(b)	(c)
1.	Plant in service	\$1,075,590	\$397,084	\$1,472,674 [2]
2.	Accumulated depreciation	(303,573)	(158,996)	(462,569) [3]
3.	Contributions in aid of construction	0	(713,910)	(713,910) [4]
4.	Accumulated amortization of CIAC	0	139,839	\$139,839 [5]
5.	Cash working capital	0	12,891	12,891 [6]
6.	Average tax accruals	0	0	0
7.	Original cost rate base (Sum of L1 thru L6)	\$772,017	(\$323,091)	\$448,926

<sup>[1]</sup> Column (c) minus Column (a).

<sup>[2]</sup> Morgan Exhibit II, Schedule 2-1(a), Column (a), Line 32.

<sup>[3]</sup> Morgan Exhibit II, Schedule 2-1(a), Column (f), Line 32.

<sup>[4]</sup> Morgan Exhibit II, Schedule 2-2(a), Column (a), Line 18.

<sup>[5]</sup> Morgan Exhibit II, Schedule 2-2(a), Column (f), Line 18.

<sup>[6]</sup> Calculated at one-eighth of operating expenses.

# Docket No. W-1075, Sub 12 ORIGINAL COST RATE BASE

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

Morgan Exhibit II Schedule 2(b)

Line No.	<u>ltem</u>	Per Application (a)	Public Staff Adjustments [1]	After Public Staff Adjustments (c)
1.	Plant in service	\$5,411,941	(\$106,264)	\$5,305,677 [2]
2.	Accumulated depreciation	(1,980,608)	530,335	(1,450,273) [3]
3.	Contributions in aid of construction	0	(3,961,851)	(3,961,851) [4]
4.	Accumulated amortization of CIAC	0	420,839	420,839 [5]
5.	Cash working capital	0	21,663	21,663 [6]
6.	Average tax accruals	0	0	0
7.	Original cost rate base (Sum of L1 thru L6)	\$3,431,333	(\$3,095,279)	\$336,054

<sup>[1]</sup> Column (c) minus Column (a).

<sup>[2]</sup> Morgan Exhibit II, Schedule 2-1(b), Column (a), Line 22.

<sup>[3]</sup> Morgan Exhibit II, Schedule 2-1(b), Column (f), Line 22.

<sup>[4]</sup> Morgan Exhibit II, Schedule 2-2(b), Column (a), Line 18.

<sup>[5]</sup> Morgan Exhibit II, Schedule 2-2(b), Column (f), Line 18.

<sup>[6]</sup> Calculated at one-eighth of operating expenses.

Schedule 2-1(a)

KRJ UTILITIES, INC.

Docket No. W-1075, Sub 12

# CALCULATION OF PLANT IN SERVICE, ACCUMULATED DEPRECIATION AND DEPRECIATION EXPENSE

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

#### **Rockbridge - Water Operations**

Line		Plant	Year		Years	Annual	Accumulated
No.	<u>ltem</u>	In Service[1]	Acquired [	[1] <u>Life</u>	[2] In Service [3	Depreciation [4]	Depreciation [5]
		(a)	(b)	(c)	(d)	(e)	(f)
	Plant in service per Sub 12 Rate Case:						
1.	Water treatment building	\$23,387	2007	40	10.75	\$585	(\$6,289)
2.	Water site improvements	8,038	2007	40	10.75	201	(2,161)
3.	Operations building	14,775	2007	40	10.75	369	(3,967)
4.	Electrical and generator	132,551	2007	10	10.75	0	(132,551)
5.	Well 1	65,075	2007	50	10.75	1,301	(13,986)
6.	Well 3	42,078	2007	50	10.75	842	(9,052)
7.	Telemetry & control elevation tank	62,217	2007	15	10.75	4,148	(44,591)
8.	Water treatment equipment	78,816	2007	25	10.75	3,153	(33,895)
9.	Water equipment well 1	32,218	2007	25	10.75	1,289	(13,857)
10.	Elevated water tank	310,355	2007	50	10.75	6,207	(66,725)
11.	Meters	4,133	2007	25	10.75	165	(1,774)
12.	Well 1 pump	10,869	2007	7	10.75	0	(10,869)
13.	Service lines	47,700	2007	50	10.75	954	(10,256)
14.	Distribution mains	263,210	2007	50	10.75	5,264	(56,588)
15.	Meters	2,173	2008	25	9.75	87	(848)
16.	Well 3 pump	16,674	2008	7	9.75	0	(16,674)
17.	Meters	617	2009	25	8.75	25	(219)
18.	Lime slurry pump	5,776	2009	7	8.75	0	(5,776)
19.	Meters	2,435	2010	25	7.75	97	(752)
20.	Meters	2,300	2011	25	6.75	92	(621)
21.	Meters	868	2012	25	5.75	35	(201)
22.	Meters	317	2013	25	4.75	13	(62)
23.	Meters	2,098	2014	25	3.75	84	(315)
24.	Distribution mains	62,200	2014	50	3.75	1,244	(4,665)
25.	Service lines	14,800	2014	50	3.75	296	(1,110)
26.	Well 2	58,154	2015	50	2.75	1,163	(3,198)
27.	Well 2 pump	21,489	2015	7	2.75	3,070	(8,443)
28.	Meters	5,744	2015	25	2.75	230	(633)
29.	Meters	1,319	2015	25	2.75	53	(146)
30.	Uranium IX system	171,112	2016	25	1.75	6,844	(11,977)
31.	Meters	9,174	2017	25	1.00	367	(367)
32.	Total Sub 12 plant in service (Sum of L1 thru L31)	\$1,472,674				\$38,178	(\$462,569)

<sup>[1]</sup> Per examination of Company's financial records.

<sup>[2]</sup> Provided by Public Staff Engineer Casselberry.

<sup>[3]</sup> Calculated based on year placed in service using half year convention through 3/31/2018.

<sup>[4]</sup> Column (a) divided by Column (c), unless fully depreciated.

<sup>[5]</sup> Column (d) multiplied by Column (e), unless fully depreciated.

Morgan Exhibit II Schedule 2-1(b)

#### KRJ UTILITIES, INC. Docket No. W-1075, Sub 12 CALCULATION OF PLANT IN SERVICE, ACCUMULATED DEPRECIATION AND DEPRECIATION EXPENSE

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

Line No.	<u>ltem</u>	Plant In Service (a)	[1]	Year Acquired (b)	[1]	Life (c)	[2]	Years In Service (d)	[3]	Annual Depreciation (e)	Accumulated Depreciation [5]
	Plant in service per Sub 12 Rate Case:										
1.	Plant structure	\$1,605,864		2007		50		10.75		\$32,117	(\$345,258)
2.	Chemical feed & instrumentation	62,657		2007		10		10.75		0	(62,657)
3.	Miscellaneous plant cost	17,626		2007		50		10.75		353	(3,795)
4.	WWTP site improvements	263,679		2007		50		10.75		5,274	(56,696)
5.	Operations building	84,539		2007		40		10.75		2,113	(22,715)
6.	Electrical & generator	238,384		2007		10		10.75		0	(238,384)
7.	Gravity mains	531,836		2007		50		10.75		10,637	(114,348)
8.	Service lines	88,015		2007		50		10.75		1,760	(18,920)
9.	Flow monitoring equipment	14,658		2007		25		10.75		586	(6,300)
10.	Plant sewers	337,945		2007		50		10.75		6,759	(72,659)
11.	Influent pump station	161,352		2007		50		10.75		3,227	(34,690)
12.	Irrigation pump station	188,305		2007		50		10.75		3,766	(40,485)
13.	Spray reuse system	625,025		2007		40		10.75		15,626	(167,980)
14.	Long term storage pond	853,779		2007		40		10.75		21,344	(229,448)
15.	Upset pond	33,911		2007		40		10.75		848	(9,116)
16.	DSI tractor	15,693		2007		15		10.75		1,046	(11,245)
17.	Office equipment	420		2011		10		6.75		42	(284)
18.	Gravity mains	147,500		2014		50		3.75		2,950	(11,063)
19.	Service lines	18,500		2014		50		3.75		370	(1,388)
20.	Blower replacement	7,098	[2]	2015		10		2.75		710	(1,953)
21.	Blower replacement	8,890	[2]	2018		10		1.00		889	(889)
22.	Total Sub 12 plant in service (Sum of L1 thru L21):	\$5,305,677								\$110,417	(\$1,450,273)

 $<sup>\</sup>begin{tabular}{ll} \end{tabular} \begin{tabular}{ll} \end{tabular} Per examination of Company's financial records, unless otherwise footnoted. \end{tabular}$ 

<sup>[2]</sup> Provided by Public Staff Engineer Casselberry.

 <sup>[3]</sup> Calculated based on year placed in service using half year convention through 3/31/2018.
 [4] Column (a) divided by Column (c), unless fully depreciated.

<sup>[5]</sup> Column (d) multiplied by Column (e), unless fully depreciated.

Schedule 2-2(a)

#### **KRJ UTILITIES**

Docket No. W-1075, Sub 12

# CALCULATION OF CONTRIBUTIONS IN AID OF CONSTRUCTION, ACCUMULATED AMORTIZATION AND AMORTIZATION EXPENSE

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

#### **Rockbridge - Water Operations**

				Amortization			
Line		CIAC Per	Year	Period In	Years	Amortization	Accumulated
No.	<u>Item</u>	Public Staff [1]	Contributed [1]	Years [2]	In Service [3]	Expense [4]	Amortization [5]
		(a)	(b)	(c)	(d)	(e)	(f)
	Tap fees per Sub 12						
1.	Tap fees	\$46,000	2007	25	10.75	\$1,840	\$19,780
2.	Service lines	47,700	2007	50	10.75	954	10,256
3.	Distribution mains	263,210	2007	50	10.75	5,264	56,588
4.	Tap fees	16,000	2008	25	9.75	640	6,240
5.	Tap fees	6,000	2009	25	8.75	240	2,100
6.	Tap fees	30,000	2010	25	7.75	1,200	9,300
7.	Tap fees	43,000	2011	25	6.75	1,720	11,610
8.	Tap fees	16,000	2012	25	5.75	640	3,680
9.	Tap fees	6,000	2013	25	4.75	240	1,140
10.	Tap fees	25,000	2014	25	3.75	1,000	3,750
11.	Distribution mains	62,200	2014	50	3.75	1,244	4,665
12.	Service lines	14,800	2014	50	3.75	296	1,110
13.	Tap fees	45,000	2015	25	2.75	1,800	4,950
14.	Tap fees	5,000	2015	25	2.75	200	550
15.	Tap fees	20,000	2016	25	1.75	800	1,400
16.	Tap fees	51,000	2017	25	1.00	2,040	2,040
17.	Tap fees	17,000	2018	25	1.00	680	680
18.	Total (Sum of Line 1 thru Line 17):	\$713,910				\$20,798	\$139,839

<sup>[1]</sup> Per review of Company's records.

<sup>[2]</sup> Based on composite life for plant.

<sup>[3]</sup> Calculated based on year placed in service using half year convention through 3/31/2018.

<sup>[4]</sup> Column (a) divided by Column (c).

<sup>[5]</sup> Column (d) x Column (e).

Schedule 2-2(b)

#### **KRJ UTILITIES**

Docket No. W-1075, Sub 12

# CALCULATION OF CONTRIBUTIONS IN AID OF CONSTRUCTION, ACCUMULATED AMORTIZATION AND AMORTIZATION EXPENSE

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

				Amortization			
Line		CIAC Per	Year	Period In	Years	Amortization	Accumulated
No.	<u>Item</u>	Public Staff [1]	Contributed [1]	Years [2]	In Service [3]	Expense [4]	Amortization [5]
		(a)	(b)	(c)	(d)	(e)	(f)
	Tap fees per Sub 12						
1.	Tap fees	\$352,000	2007	50	10.75	\$7,040	\$75,680
2.	Gravity mains	531,836	2007	50	10.75	10,637	114,348
3.	Service lines	88,015	2007	50	10.75	1,760	18,920
4.	Tap fees	128,000	2008	50	9.75	2,560	24,960
5.	Tap fees	48,000	2009	50	8.75	960	8,400
6.	Tap fees	240,000	2010	50	7.75	4,800	37,200
7.	Tap fees	344,000	2011	50	6.75	6,880	46,440
8.	Tap fees	128,000	2012	50	5.75	2,560	14,720
9.	Tap fees	48,000	2013	50	4.75	960	4,560
10.	Tap fees	200,000	2014	50	3.75	4,000	15,000
11.	Gravity mains	147,500	2014	50	3.75	2,950	11,063
12.	Service lines	18,500	2014	50	3.75	370	1,388
13.	Tap fees	360,000	2015	50	2.75	7,200	19,800
14.	Tap fees	120,000	2016	50	1.75	2,400	4,200
15.	Tap fees	408,000	2017	50	1.00	8,160	8,160
16.	Tap fees	136,000	2018	50	1.00	2,720	2,720
17.	Imputed tap fees (83 customers x \$8,000)	664,000	2018	50	1.00	13,280	13,280
18.	Total (Sum of Line 1 thru Line 18):	\$3,961,851				\$79,237	\$420,839

<sup>[1]</sup> Per review of Company's records.

<sup>[2]</sup> Based on composite life for plant.

<sup>[3]</sup> Calculated based on year placed in service using half year convention through 3/31/2018.

<sup>[4]</sup> Column (a) divided by Column (c).

<sup>[5]</sup> Column (d) x Column (e).

Docket No. W-1075, Sub 12

#### NET OPERATING INCOME FOR A RETURN

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

**Water and Sewer Combined** 

Public Staff

Morgan Exhibit II

Schedule 3

			Present Rates		Company Pro	posed Rates	Recommen	ded Rates
		Amount	Public	Per	Net	Operations	Net Public	Operations
Line		Per Revised	Staff	Public	Company	After Rate	Staff	After Rate
No.	<u>ltem</u>	Application	Adjustments	Staff [1]	Increase	Increase [2]	Decrease	Decrease [3]
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
	Operating Revenues:							
1.	Service revenues	\$236,744	\$111,867	\$348,611	\$259,987	\$608,598	\$37,728	\$386,339
2.	Miscellaneous revenues	321	12,394	12,715	0	12,715	0	12,715
3.	Uncollectible accounts	0	(1,283)	(1,283)	0	(1,283)	0	(1,283)
4.	Total operating revenues	237,065	122,978	360,043	259,987	620,030	37,728	397,771
	Operating Expenses:							
5.	Loss from disposal of equipment	10,156	0	10,156	0	10,156	0	10,156
6.	Contract services operations	66,108	11,208	77,316	0	77,316	0	77,316
7.	Contract maintenance & repair	74,163	(15,218)	58,945	0	58,945	0	58,945
8.	Purchased power	43,060	(3,309)	39,751	0	39,751	0	39,751
9.	Chemicals	10,958	6,950	17,908	0	17,908	0	17,908
10.	Testing	6,655	(3,783)	2,872	0	2,872	0	2,872
11.	General & administrative	480	0	480	0	480	0	480
12.	Permit fees	1,695	0	1,695	0	1,695	0	1,695
13.	Insurance expense	4,398	(302)	4,096	0	4,096	0	4,096
14.	Contract management	26,142	8,096	34,238	0	34,238	0	34,238
15.	Other expenses - bank & late charges, trash pick-up	1,046	300	1,346	0	1,346	0	1,346
16.	Legal fees	6,100	(3,892)	2,208	0	2,208	0	2,208
17.	Bad debts expense	1,283	(1,283)	0	0	0	0	0
18.	Sludge removal	6,506	1,691	8,197	0	8,197	0	8,197
19.	Rate case expense	0	17,225	17,225	0	17,225	0	17,225
20.	Total operating expenses	258,750	17,683	276,433	0	276,433	0	276,433
	Depreciation and Taxes:							
21.	Depreciation and amortization expense	206,212	(157,652)	48,560	0	48,560	0	48,560
22.	Property tax	0	0	0	0	0	0	0
23.	Other tax	14	0	14	0	14	0	14
24.	Regulatory fee	360	144	504	364	868	53	557
25.	Gross receipts tax	0	0	0	0	0	0	0
26.	State income tax	0	1,800	1,800	6,318	8,118	(340)	1,460
27.	Federal income tax	0	12,220	12,220	42,902	55,122	(2,309)	9,911
28.	Total depreciation and taxes	206,586	(143,488)	63,098	49,584	112,682	(2,596)	60,502
29.	Total operating revenue deductions	465,336	(125,805)	339,531	49,584	389,115	(2,596)	336,935
30.	Net operating income for return	(\$228,271)	\$248,783	\$20,512	\$210,403	\$230,915	\$40,324	\$60,836

<sup>[1]</sup> Morgan Exhibit II, Schedule 3(a) plus Schedule 3(b), Column (c).

<sup>[2]</sup> Morgan Exhibit II, Schedule 3(a) plus Schedule 3(b), Column (e).

<sup>[3]</sup> Morgan Exhibit II, Schedule 3(a) plus Schedule 3(b), Column (g).

Docket No. W-1075, Sub 12

#### NET OPERATING INCOME FOR A RETURN

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

Morgan Exhibit II Schedule 3(a) Page 1 of 2

#### **Rockbridge - Water Operations**

	Rockbridge - Water Operations		Present Rates		Company Propo	osed Rates	Public St Recommende	
		Amount	Public	Per	Net	Operations	Net Public	Operations
Line		Per Revised	Staff	Public	Company	After Rate	Staff	After Rate
No.	<u>Item</u>	Application	Adjustments [1]	Staff [2]	Increase [13]	Increase [14]	Increase [17]	Increase [18]
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
	Operating Revenues:							
1.	Service revenues	\$58,928	\$24,016	\$82,944 [3]	\$115,975	\$198,919 [3]	\$76,944	\$159,888 [19]
2.	Miscellaneous revenues	321	2,187	2,508 [4]	0	2,508	0	2,508
3.	Uncollectible accounts	0	(359)	(359) [4]	0	(359)	0	(359)
4.	Total operating revenues	59,249	25,844	85,093	115,975	201,068	76,944	162,037
	Operating Expenses:							
5.	Loss from disposal of equipment	10,156	0	10,156	0	10,156	0	10,156
6.	Contract services operations	15,838	1,154	16,992 [3]	0	16,992	0	16,992
7.	Contract maintenance & repair	55,297	(25,307)	29,990 [3]	0	29,990	0	29,990
8.	Purchased power	336	10,167	10,503 [3]	0	10,503	0	10,503
9.	Chemicals	1,764	3,420	5,184 [3]	0	5,184	0	5,184
10.	Testing	4,233	(2,837)	1,396 [3]	0	1,396	0	1,396
11.	General & administrative	240	0	240	0	240	0	240
12.	Permit fees	385	0	385	0	385	0	385
13.	Insurance expense	2,048	0	2,048	0	2,048	0	2,048
14.	Contract management	14,084	3,114	17,198 [5]	0	17,198	0	17,198
15.	Other expenses - bank & late charges	176	0	176	0	176	0	176
16.	Legal fees	3,050	(2,842)	208 [6]	0	208	0	208
17.	Bad debts expense	359	(359)	0 [7]	0	0	0	0
18.	Sludge removal	0	0	0	0	0	0	0
19.	Rate case expense	0	8,652	8,652 [8]	0	8,652	0	8,652
20.	Total operating expenses	107,966	(4,838)	103,128	0	103,128	0	103,128
	Depreciation and Taxes:							
21.	Depreciation and amortization expense	14,657	2,723	17,380 [9]	0	17,380	0	17,380
22.	Property tax	0	0	0	0	0	0	0
23.	Other taxes	7	0	7	0	7	0	7
24.	Regulatory fee	129	(10)	119 [10]	162	281 [10]	108	227 [10]
25.	Gross receipts tax	0	0	0	0	0	0	0
26.	State income tax	0	0	0 [11]	2,004	2,004 [15]	835	835 [20]
27.	Federal income tax	0	0	0 [12]	13,608	13,608 [16]	5,668	5,668 [21]
28.	Total depreciation and taxes	14,793	2,713	17,506	15,774	33,280	6,611	24,117
29.	Total operating revenue deductions	122,759	(2,125)	120,634	15,774	136,408	6,611	127,245
30.	Net operating income for return	(\$63,510)	\$27,969	(\$35,541)	\$100,201	\$64,660	\$70,333	\$34,792

# Docket No. W-1075, Sub 12 FOOTNOTES TO SCHEDULE 3(a)

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

# **Rockbridge - Water Operations**

Morgan Exhibit II Schedule 3(a) Page 2 of 2

[1]	Column (c) minus Column (a), unless otherwise footnoted.
[2]	Column (a) plus Column (b), unless otherwise footnoted.
[3]	Provided by Public Staff Engineer Casselberry.
[4]	Based on review of Company financial records.
[5]	Morgan Exhibit II, Schedule 3-1, Column (b), Line 4.
[6]	Morgan Exhibit II, Schedule 3-2, Column (b), Line 3.
[7]	Adjustment to reclassify bad debts expense.
[8]	Morgan Exhibit II, Schedule 3-5, Column (b), Line 7.
[9]	Morgan Exhibit II, Schedule 2-1(a), Column (e), Line 32.
	minus Morgan Exhibit II, Schedule 2-2(a), Column (e), Line 18.
[10]	Line 4 multiplied by .14%.
[11]	Morgan Exhibit II, Schedule 3-6(a), Column (a), Line 12.
[12]	Morgan Exhibit II, Schedule 3-6(a), Column (a), Line 14.
[13]	Column (e) minus Column (c), unless otherwise footnoted.
[14]	Column (c) plus Column (d), unless otherwise footnoted.
[15]	Morgan Exhibit II, Schedule 3-6(a), Column (b), Line 12.
[16]	Morgan Exhibit II, Schedule 3-6(a), Column (b), Line 14.
[17]	Column (g) minus Column (c), unless otherwise footnoted.
[18]	Column (c) plus Column (f), unless otherwise footnoted.
19]	Revenue requirement as calculated by the Public Staff.
20]	Morgan Exhibit II, Schedule 3-6(a), Column (c), Line 12.
[21]	Morgan Exhibit II, Schedule 3-6(a), Column (c), Line 14.

Docket No. W-1075, Sub 12

#### NET OPERATING INCOME FOR A RETURN

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

#### **Rockbridge - Sewer Operations**

Morgan Exhibit II Schedule 3(b) Page 1 of 2

	Rockbridge - Sewer Operations						Public Sta	aff
			Present Rates		Company Propo	sed Rates	Recommende	d Rates
		Amount	Public	Per	Net	Operations	Net Public	Operations
Line		Per Revised	Staff	Public	Company	After Rate	Staff	After Rate
No.	<u>Item</u>	Application	Adjustments [1]	Staff [2]	Increase [15]	Increase [16]	Decrease [19]	Decrease [20]
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
	Operating Revenues:							
1.	Service revenues	\$177,816	\$87,851	\$265,667 [3]	\$144,012	\$409,679 [3]	(\$39,216)	\$226,451 [21]
2.	Miscellaneous revenues	0	10,207	10,207 [4]	0	10,207	0	10,207
3.	Uncollectible accounts	0	(924)	(924) [4]	0	(924)	0	(924)
4.	Total operating revenues	177,816	97,134	274,950	144,012	418,962	(39,216)	235,734
	Operating Expenses:							
5.	Contract salaries	0	0	0	0	0	0	0
6.	Contract services operations	50,270	10,054	60,324 [3]	0	60,324	0	60,324
7.	Contract maintenance & repair	18,866	10,089	28,955 [3]	0	28,955	0	28,955
8.	Purchased power	42,724	(13,476)	29,248 [3]	0	29,248	0	29,248
9.	Chemicals	9,194	3,530	12,724 [3]	0	12,724	0	12,724
10.	Testing	2,422	(946)	1,476 [3]	0	1,476	0	1,476
11.	General & administrative	240	0	240	0	240	0	240
12.	Permit fees	1,310	0	1,310	0	1,310	0	1,310
13.	Insurance expense	2,350	(302)	2,048 [5]	0	2,048	0	2,048
14.	Contract management	12,058	4,982	17,040 [6]	0	17,040	0	17,040
15.	Other expenses - bank & late charges, trash pick-up	870	300	1,170 [7]	0	1,170	0	1,170
16.	Legal fees	3,050	(1,050)	2,000 [8]	0	2,000	0	2,000
17.	Bad debts expense	924	(924)	0 [9]	0	0	0	0
18.	Sludge removal	6,506	1,691	8,197 [3]	0	8,197	0	8,197
19.	Rate case expense	0	8,573	8,573 [10]	0	8,573	0	8,573
20.	Total operating expenses	150,784	22,521	173,305	0	173,305	0	173,305
	Depreciation and Taxes:							
21.	Depreciation and amortization expense	191,555	(160,375)	31,180 [11]	0	31,180	0	31,180
22.	Property tax	0	0	0	0	0	0	0
23.	Other taxes	7	0	7	0	7	0	7
24.	Regulatory fee	231	154	385 [12]	202	587 [12]	(55)	330 [12]
25.	Gross receipts tax	0	0	0	0	0	0	0
26.	State income tax	0	1,800	1,800 [13]	4,314	6,114 [17]	(1,175)	625 [22]
27.	Federal income tax	0	12,220	12,220 [14]	29,294	41,514 [18]	(7,977)	4,243 [23]
28.	Total depreciation and taxes	191,793	(146,201)	45,592	33,810	79,402	(9,207)	36,385
29.	Total operating revenue deductions	342,577	(123,680)	218,897	33,810	252,707	(9,207)	209,690
30.	Net operating income for return	(\$164,761)	\$220,814	\$56,053	\$110,202	\$166,255	(\$30,009)	\$26,044

# Docket No. W-1075, Sub 12 FOOTNOTES TO SCHEDULE 3(b)

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

**Rockbridge - Sewer Operations** 

Morgan Exhibit II Schedule 3(b) Page 2 of 2

[1]	Column (c) minus Column (a), unless otherwise footnoted.
[2]	Column (a) plus Column (b), unless otherwise footnoted.
[3]	Provided by Public Staff Engineer Casselberry
[4]	Based on review of Company financial records.
[5]	Morgan Exhibit II, Schedule 3-3, Line 3.
[6]	Morgan Exhibit II, Schedule 3-1, Line 4.
[7]	Morgan Exhibit II, Schedule 3-4, Column, Line 3.
[8]	Morgan Exhibit II, Schedule 3-2, Column (c), Line 3.
[9]	Adjustment to reclassify bad debts expense.
[10]	Morgan Exhibit II, Schedule 3-5, Column (c), Line 7.
[11]	Morgan Exhibit II, Schedule 2-1(b), Column (e), Line 22.
	minus Morgan Exhibit II, Schedule 2-2(b), Column (e), Line 18.
[12]	Line 4 multiplied by 0.14%.
[13]	Morgan Exhibit II, Schedule 3-6(b), Column (a), Line 12.
[14]	Morgan Exhibit II, Schedule 3-6(b), Column (a), Line 14.
[15]	Column (e) minus Column (c), unless otherwise footnoted.
[16]	Column (c) plus Column (d), unless otherwise footnoted.
[17]	Morgan Exhibit II, Schedule 3-6(b), Column (b), Line 12.
[18]	Morgan Exhibit II, Schedule 3-6(b), Column (b), Line 14.
[19]	Column (g) minus Column (c), unless otherwise footnoted.
[20]	Column (c) plus Column (f), unless otherwise footnoted.
[21]	Revenue requirement as calculated by the Public Staff.
[22]	Morgan Exhibit II, Schedule 3-6(b), Column (c), Line 12.

Morgan Exhibit II, Schedule 3-6(b), Column (c), Line 14.

[23]

Schedule 3-1

## KRJ UTILITIES, INC.

Docket No. W-1075, Sub 12

#### ADJUSTMENT TO CONTRACT MANAGEMENT

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

#### Rockbridge

Line No.	<u>ltem</u>		Water (b)	· <u>-</u>	Sewer (c)
1.	Contract management per revised application	\$26,142			
2.	Adjustment to update contract management expenses	4,687			
3.	Adjustment to reflect customer growth	3,409			
4.	Contract management expenses per Public Staff (L1 + L2 + L3)	\$34,238	17,198	[2]	17,040 [3]
5.	Contract management per revised application		14,084	_	12,058
6.	Adjustment to contract management (L4 - L5)	:	\$3,114	_	\$4,982

<sup>[1]</sup> Calculated by the Public Staff based on information provided by the Company.

<sup>[2]</sup> Column (a), Line 4 multiplied by water allocation factor of 50.23%.

<sup>[3]</sup> Column (a), Line 4 multiplied by sewer allocation factor of 49.77%.

Schedule 3-2

KRJ UTILITIES, INC.

# Docket No. W-1075, Sub 12

ADJUSTMENT TO LEGAL FEES
For the Test Year Ended June 30, 2016, Updated for Known and
Measurable Changes Through March 31, 2018

#### Rockbridge

Line No.	<u>Item</u>	Amount[1] (a)	Water [1] _	Sewer [1]
1.	Legal fees per revised application	\$6,100		
2.	Adjustment to reflect actual legal expenses	(3,892)		
3.	Legal fees per Public Staff (L1 + L2)	\$2,208	208	2,000
4.	Legal fees per revised application	_	3,050	3,050
5.	Adjustment to legal fees (L3 - L4)	_	(\$2,842)	(\$1,050)

<sup>[1]</sup> Calculated by the Public Staff based on information provided by the Company.

# Docket No. W-1075, Sub 12 ADJUSTMENT TO INSURANCE

Morgan Exhibit II Schedule 3-3

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

Line No.	<u>Item</u>	Amount [1]
1.	Insurance per revised application	\$2,350
2.	Adjustment to reflect actual insurance expense	(302)
3.	Insurance per Public Staff (L1 + L2)	2,048
4.	Adjustment to insurance (L3 - L1)	(\$302)

<sup>[1]</sup> Calculated by the Public Staff based on information provided by the Company.

Schedule 3-4

# KRJ UTILITIES, INC.

Docket No. W-1075, Sub 12

# ADJUSTMENT TO OTHER EXPENSES

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

Line No.	<u>ltem</u>	Amount [1]
1.	Other expenses per revised application	\$870
2.	Adjustment to reflect actual other expenses	300
3.	Other expenses per Public Staff (L1 + L2)	1,170
4.	Adjustment to other expenses (L3 - L2)	\$300

<sup>[1]</sup> Calculated by the Public Staff based on information provided by the Company.

Schedule 3-5

KRJ UTILITIES, INC.

Docket No. W-1075, Sub 12

#### CALCULATION OF RATE CASE EXPENSE

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018

## Rockbridge

Line						
No.	<u>Item</u>	Amount	Water	[3]	Sewer	[4]
		(a)	(b)		(c)	
1.	Rate case application filing fee	\$250 [1]				
2.	Legal fees	26,793 [2]				
3.	Administrative fees	37,988 [2]				
4.	Office supplies and overhead	1,728				
5.	Total rate case expense (Sum of L1 thru L4)	66,759				
6.	Amortization period in years	3_				
7.	Rate case expense per Public Staff (L5 / L6)	\$22,253	\$8,65	2	\$8,573	3

<sup>[1]</sup> Statutory filing fee for Class C water and sewer companies.

<sup>[2]</sup> Negotiated settlement estimate.

<sup>[3]</sup> Column (a), Line 7 multiplied by water allocation factor of 38.88%.

<sup>[4]</sup> Column (a), Line 7 multiplied by sewer allocation factor of 38.53%.

Docket No. W-1075, Sub 12

#### CALCULATION OF INCOME TAXES

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018 Morgan Exhibit II Schedule 3-6(a)

	Rockbridge - Water Operations		Company	Public Staff
Line		Present	Proposed	Recommended
No.	<u>ltem</u>	Rates [1]	Rates [3]	Rates [5]
		(a)	(b)	(c)
1.	Operating revenue	\$85,093	\$201,068	\$162,037
2.	Operating revenue deductions:			
3.	Operating expenses	103,128	103,128	103,128
4.	Depreciation expense	17,380	17,380	17,380
5.	Property taxes	0	0	0
6.	Other taxes	7	7	7
7.	Regulatory fee	119	281	227
8.	Gross receipts tax	0	0	0
9.	Interest expense	13,468 [2]	13,468 [4]	13,468 [6]
10.	Total deductions (Sum of L3 thru L9)	134,102	134,264	134,210
11.	State taxable income (L1 - L10)	(49,009)	66,804	27,827
12.	State income tax (L11 x 3%)	0	2,004	835
13.	Federal taxable income (L11 - L12)	(49,009)	64,800	26,992
14.	Federal income tax (L13 x 21%)	0	13,608	5,668
15.	Net amount (L13 - L14)	(49,009)	51,192	21,324
16.	Add: Interest expense	13,468 [2]	13,468 [4]	13,468 [6]
17.	Net income for return (L15 + L16)	(\$35,541)	\$64,660	\$34,792

<sup>[1]</sup> Morgan Exhibit II, Schedule 3(a), Column (c).

<sup>[2]</sup> Morgan Exhibit II, Schedule 1(a), Column (e), Line 1.

<sup>[3]</sup> Morgan Exhibit II, Schedule 3(a), Column (e).

<sup>[4]</sup> Morgan Exhibit II, Schedule 1(a), Column (e), Line 4.

<sup>[5]</sup> Morgan Exhibit II, Schedule 3(a), Column (g).

<sup>[6]</sup> Morgan Exhibit II, Schedule 1(a), Column (e), Line 7.

Docket No. W-1075, Sub 12

#### **CALCULATION OF INCOME TAXES**

For the Test Year Ended June 30, 2016, Updated for Known and Measurable Changes Through March 31, 2018 Morgan Exhibit II Schedule 3-6(b)

Line	Rockbridge - Sewer Operations	Present	Company Proposed	Public Staff Recommended
No.	Item	Rates [1]	Rates [3]	Rates [5]
	<u>item</u>	(a)	(b)	(c)
		(α)	(6)	(0)
1.	Operating revenue	\$274,950	\$418,962	\$235,734
2.	Operating revenue deductions:			
3.	Operating expenses	173,305	173,305	173,305
4.	Depreciation expense	31,180	31,180	31,180
5.	Property taxes	0	0	0
6.	Other taxes	7	7	7
7.	Regulatory fee	385	587	330
8.	Gross receipts tax	0	0	0
9.	Interest expense	10,082 [2]	10,082 [4]	10,082 [6]
10.	Total deductions (Sum of L3 thru L9)	214,959	215,161	214,904
11.	State taxable income (L1 - L10)	59,991	203,801	20,830
12.	State income tax (L11 x 3%)	1,800	6,114	625
13.	Federal taxable income (L11 - L12)	58,191	197,687	20,205
14.	Federal income tax (L13 x 21%)	12,220	41,514	4,243
15.	Net amount (L13 - L14)	45,971	156,173	15,962
16.	Add: Interest expense	10,082 [2]	10,082 [4]	10,082 [6]
17.	Net income for return (L15 + L16)	\$56,053	\$166,255	\$26,044

<sup>[1]</sup> Morgan Exhibit II, Schedule 3(b), Column (c).

<sup>[2]</sup> Morgan Exhibit II, Schedule 1(b), Column (e), Line 1.

<sup>[3]</sup> Morgan Exhibit II, Schedule 3(b), Column (e).

<sup>[4]</sup> Morgan Exhibit II, Schedule 1(b), Column (e), Line 4.

<sup>[5]</sup> Morgan Exhibit II, Schedule 3(b), Column (g).

<sup>[6]</sup> Morgan Exhibit II, Schedule 1(b), Column (e), Line 7.