

GAINESVILLE REGIONAL UTILITIES

UTILITY RATE STUDY

For the Electric, Water, Wastewater and Natural Gas Systems

FEBRUARY 27, 2018 | COUNCIL WORKSHOP



Agenda

- Introductions
- Objectives of 2017 Study
- Cost of Service Study Overview
- Natural Gas System Study
- Water System Study
- Wastewater System Study
- Electric System Study
- Connection Charge Study
- Comments/Questions

UTILITY RATE STUDY

**For the
Electric,
Water,
Wastewater
and
Natural Gas
Systems**

About Willdan

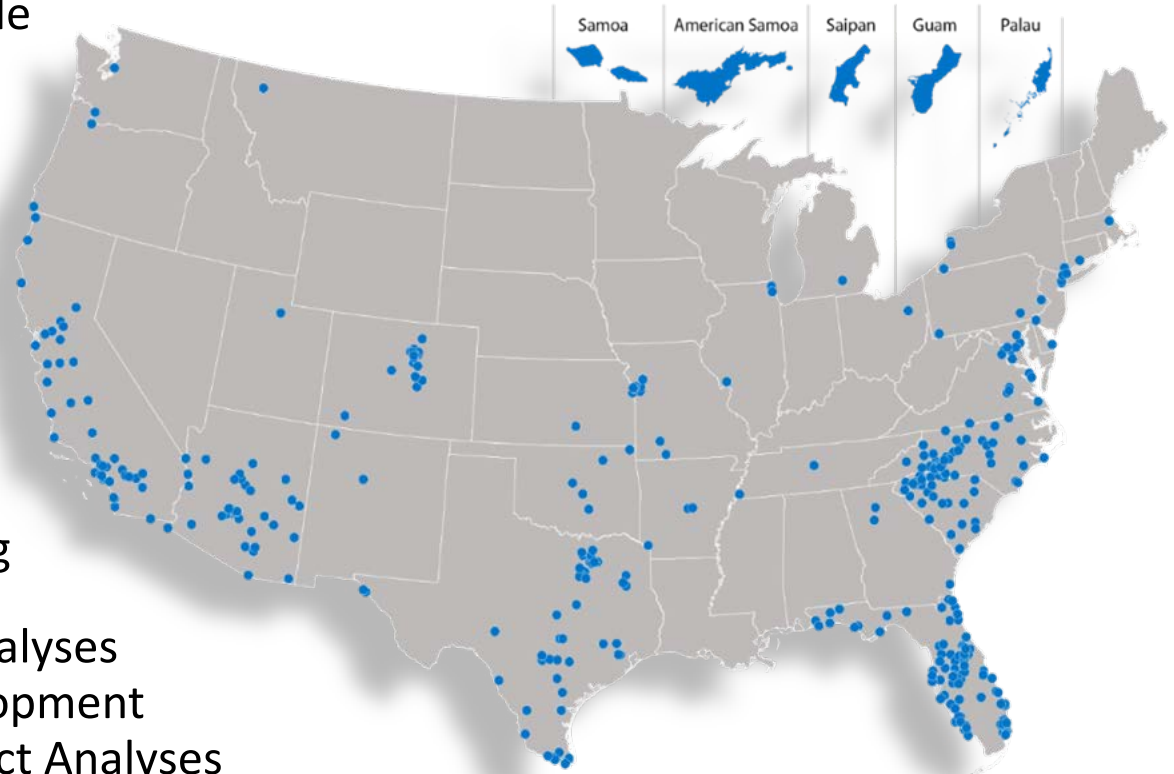


Willdan Financial Services is one of four operating units of Willdan Group Inc.



Willdan Financial Services

- One of the largest public sector financial consulting service companies in the US
- Financial & Management Consulting Services
 - Retail/Wholesale Rates
 - Cost-of-Service Studies
 - Financial Feasibility Analyses
 - Valuation Analyses
 - Regionalization Studies
 - Capital Planning Studies
 - Alternatives Analyses
 - Contract Development
 - Economic Impact Analyses



Your Presenters

Lisa M. Vedder

- Project Manager
- Harvard University
Master Public Administration
- University of Wisconsin-Madison
BS Industrial Engineering
Tau Beta Pi & Alpha Pi Mu
- Certified Internal Auditor
- Certification in Control Self Assessment
- 30 years experience in public utility industry-rate, financial, regulatory, power supply

Daryll B. Parker

- Water/Wastewater Lead
- University of Florida
Master of Business Administration
- University of Florida
BS/BA Marketing
- 25 years experience in public utility industry-rate, financial, capital planning and debt funding

Your Presenters

Jennifer A. White

- Electric Lead
- Texas Christian University, B.S. in Economics
- 19 years experience in management consulting to electric utilities
- Expertise includes cost-of-service and rate design studies, integrated resource planning, and utility organizational strategic planning and performance assessment

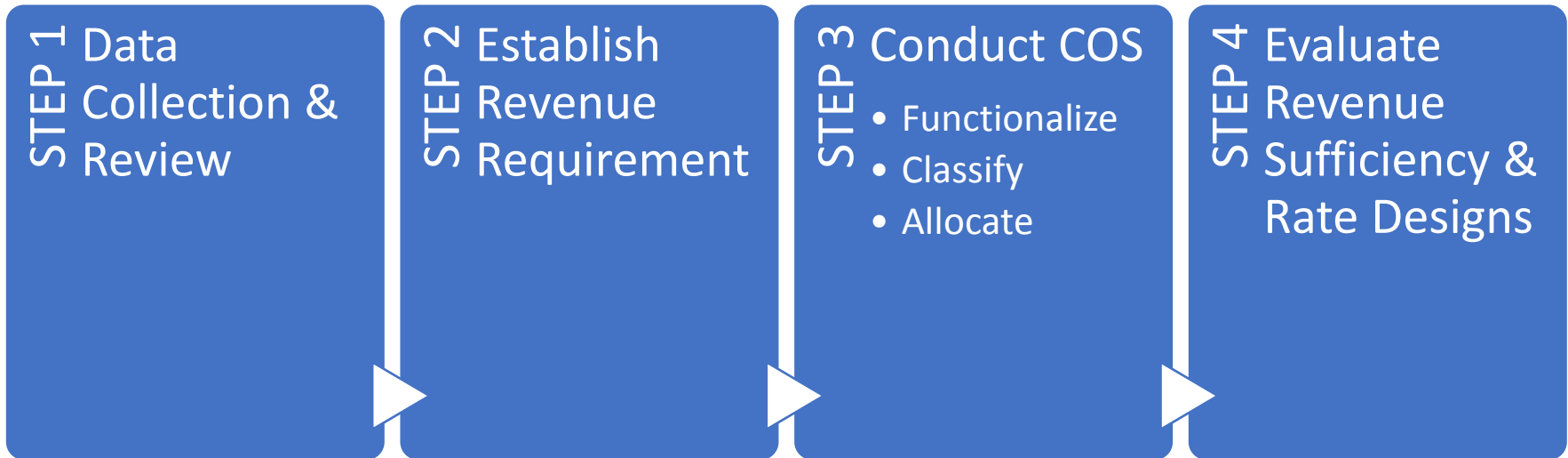
Objectives of 2017 Study

- Assess adequacy and appropriateness of current utility rate structures.
- Determine revenue requirements for Test Year 2019 and the cost to serve each customer class.
- Identify inter- and intra-class subsidization and other issues and areas of concern.
- Provide recommendations:
 - For rate changes that align with COS principles and industry standards.
 - Regarding delineation of customer rate classes and incentives.

Cost of Service Study Overview

- Rules for Price Setting
 - Cost of Service (COS) plus
 - *A reasonable* return
- James C. Bonbright's 1960 *Principles of Public Utility Rates*
 - Practical
 - Uncontroversial as to interpretation
 - Effective in meeting revenue requirements
 - Stable from a revenue perspective
 - Stable from a rate perspective
 - Fairness among customer classes
 - Avoidance of undue discrimination
 - Efficient economically, discouraging wasteful use of services and promoting optimal offerings of services

Study Approach



Test Year



- 12-month period that reflects financial and operating conditions that are expected to occur into the future
- Sources
 - Historical Fiscal Year Accounting and Operating Information
 - Audited Financial Statements
- Reflects anticipated conditions
- Basis for generating rates

Cost of Service and Rate Design Process

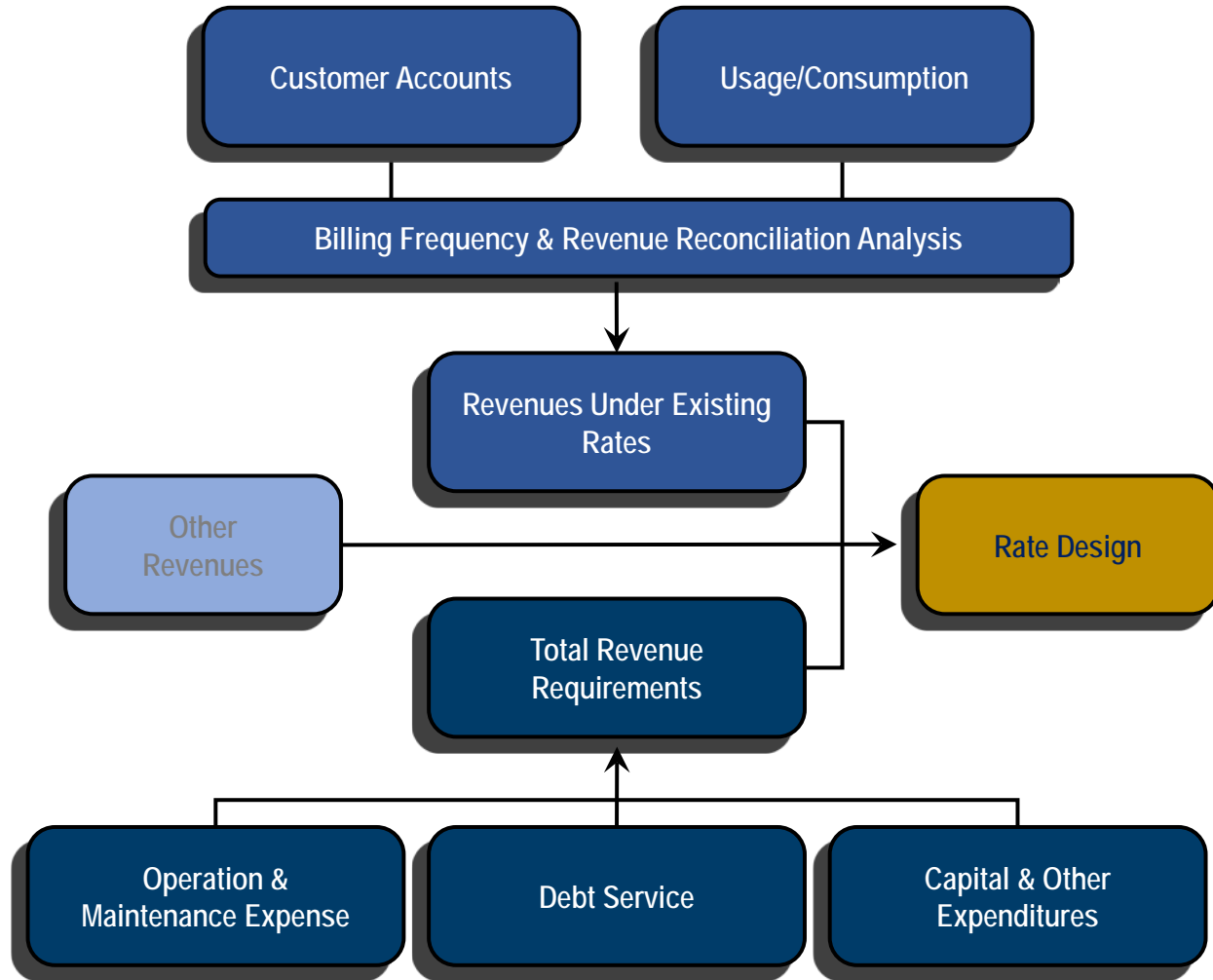
Step 1
Establish Revenue Requirement

Step 2
Allocate Costs

- **Functionally Unbundle**
Production, Collection, Treatment, Transmission, Distribution, Customer
- **Classify**
Fixed, Variable, Customer
- **Allocate to Customer Classes**

Step 3
Design Rates

Cost of Service/Rate Design Methodology



Properly designed rates will generate sufficient revenues to equal the revenue requirement



NATURAL GAS

Natural Gas System Results

- Factors Driving Proposed Rates
- Current Rates
- FY 2019 Revenue Requirement
- Cost of Service vs. Current and Proposed Rates
- Revenues at Current, COS, and Proposed Rates
- Bill Comparisons
- Neighboring Utility Comparisons
- Recommendations
- Comments/Questions

Factors Driving Proposed Rates

- No changes proposed

Current Natural Gas Rates (\$/Therm)

Residential

Customer Charge (\$/Month)	\$	9.75
Usage Charge		0.63
Manufactured Gas Plant Cost Recovery Factor	\$	0.06

Residential - Liquid Propane

Customer Charge (\$/Month)	\$	9.75
Usage Charge (Basic No Recovery) (\$/Gallon)		0.72
Purchased Gas Adjustment (\$/Gallon)		0.98

General Service Small Commercial

Customer Charge (\$/Month)	\$	20.00
Usage Charge		0.62
Manufactured Gas Plant Cost Recovery Factor		0.06

General Service Firm

Usage Charge	\$	45.00
General Service Regular - Firm	\$	0.44
Manufactured Gas Plant Cost Recovery Factor	\$	0.06

Large Volume Service Interruptible

Customer Charge (\$/Month)	\$	400.00
Usage Charge		0.27
Manufactured Gas Plant Cost Recovery Factor		0.06

Regular Service Interruptible

Customer Charge (\$/Month)	\$	400.00
Usage Charge		0.39
Manufactured Gas Plant Cost Recovery Factor		0.06

UF Cogen

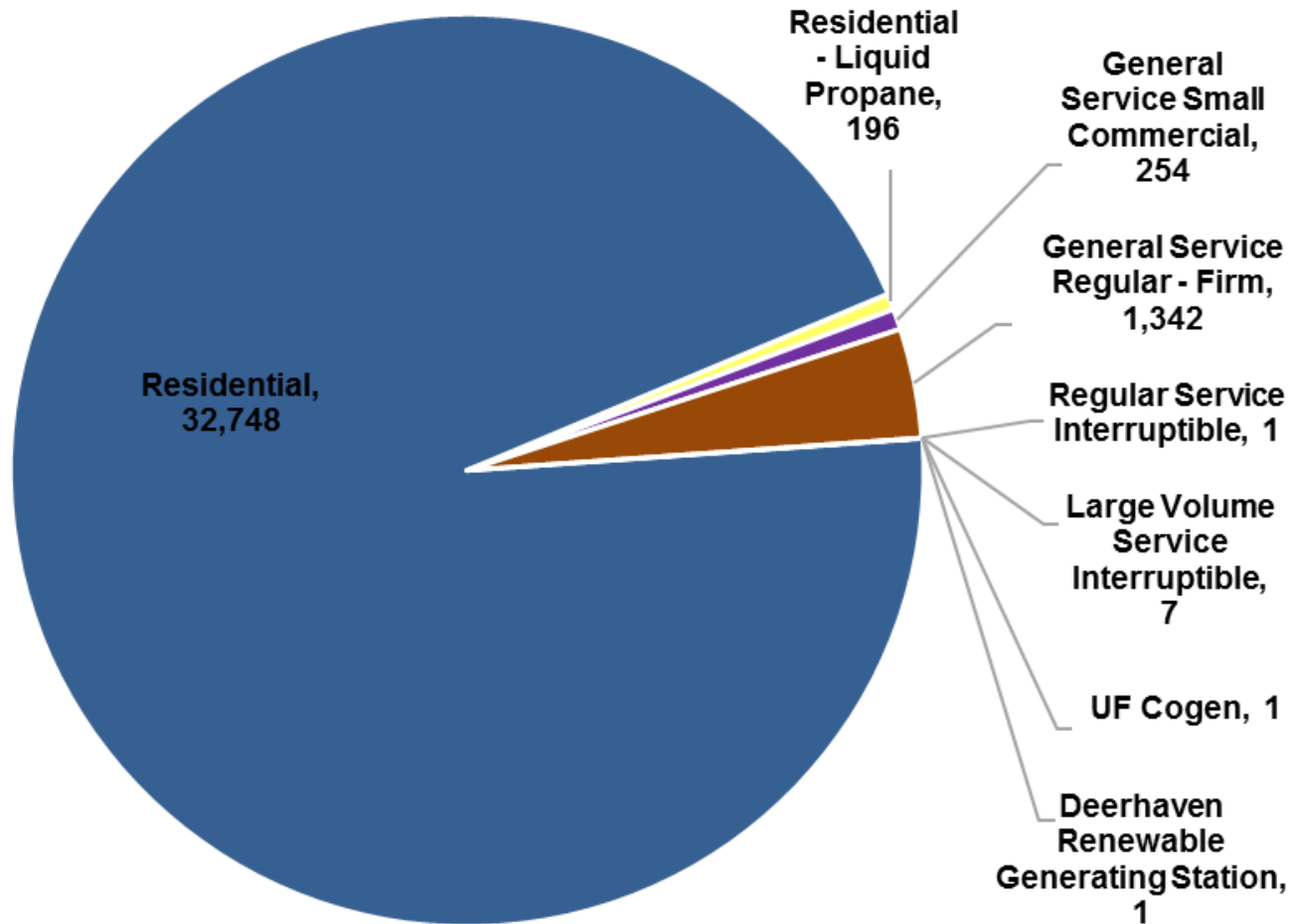
Customer Charge (\$/Month)	\$	300.00
Transportation Charge		0.01

Deerhaven Renewable Generating Station

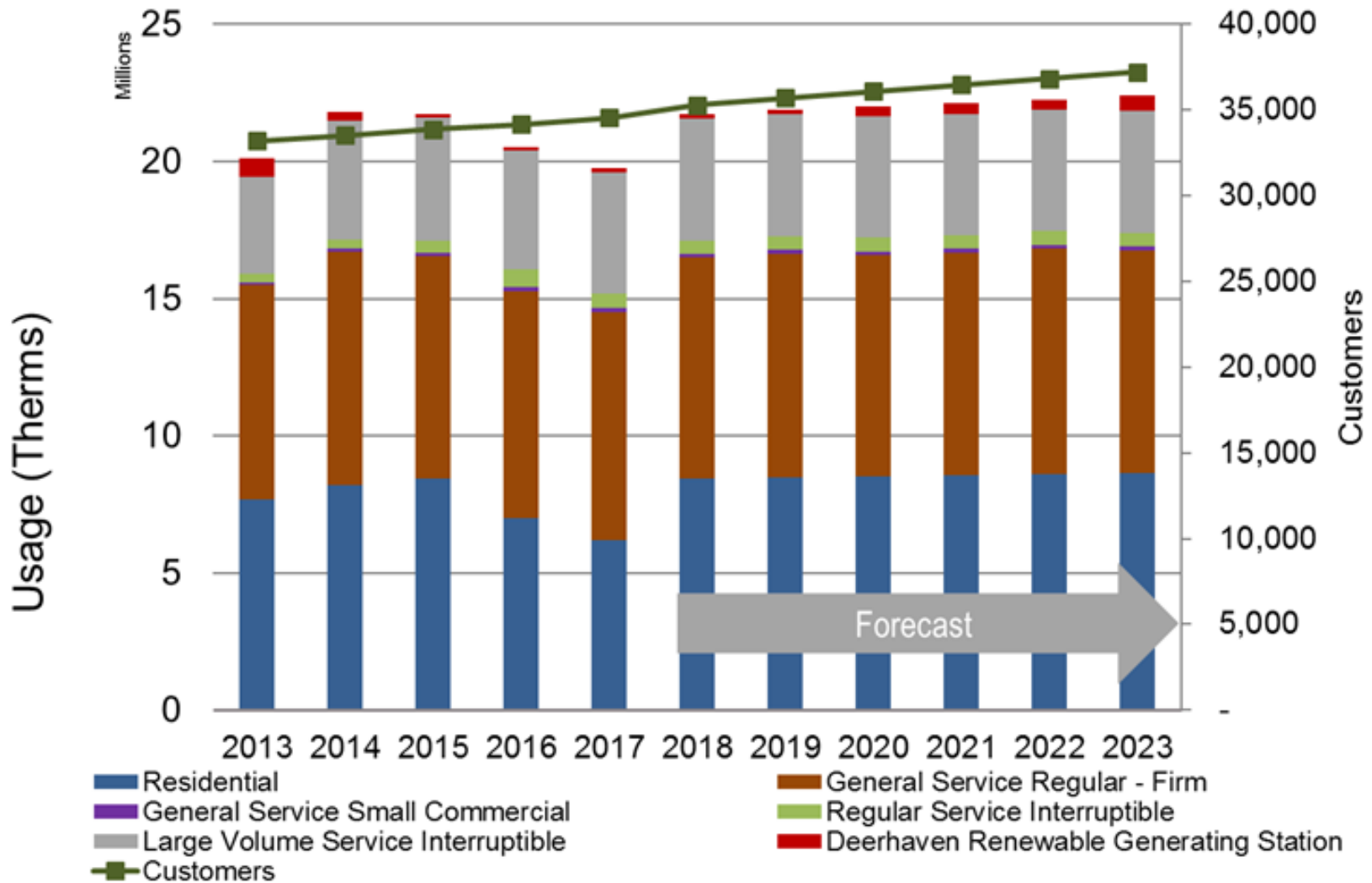
Purchased Gas Adjustment	\$	0.23
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- Purchased Gas Adjustment
 - \$0.23/Therm (varies monthly)
 - Applies to all commodity sales

Natural Gas Customer Accounts (FY 2017)



Projected Customers & Usage – Natural Gas



Natural Gas Billing Determinants (Test Year FY 2019)

NATURAL GAS CUSTOMER CLASS	CUSTOMER ACCOUNTS	USAGE (THERMS)
Residential	33,846	8,470,217
General Service Small Commercial	260	149,019
General Service Regular - Firm	1,377	8,168,396
Regular Service Interruptible	1	501,408
Large Volume Service Interruptible	7	4,430,000
Deerhaven Renewable Generating Station	1	157,037
Total All Rate Classes	35,492	21,876,078
		TRANSPORT (THERMS)
University of Florida Cogeneration Plant	1	32,000,000
		USAGE (GALLONS)
Residential Liquid Propane	202	58,074

Functionally Unbundled Revenue Requirement

NATURAL GAS BUDGET COMPONENT	TEST YEAR FY 2019 (\$000)
Supply	\$5,845
Transportation	1,801
Distribution	6,552
Customer	7,149
Direct Assign	110
Total Revenue Requirement	\$21,458

Classified, Functionally Unbundled Revenue Requirement

NATURAL GAS BUDGET COMPONENT	FIXED (\$000)	VARIABLE (\$000)	TOTAL (\$000)
Supply	\$0	\$5,845	\$5,845
Transportation	0	1,801	1,801
Distribution	6,552	0	6,552
Customer	7,149	0	7,149
Direct Assign	25	86	110
Total Revenue Requirement	\$13,726	\$7,732	\$21,458

Revenue Requirement Allocated to Customer Class

NATURAL GAS CUTOMER CLASS	FIXED	VARIABLE	TOTAL
Residential			
Supply	\$-	\$2,263,214	\$2,263,214
Transportation	-	283,136	283,136
Distribution	2,537,038	-	2,537,038
Customer	4,167,308	-	4,167,308
Total Residential	\$6,704,346	\$2,546,350	\$9,250,696
Residential Liquid Propane			
Supply	\$-	\$85,608	\$85,608
Distribution	24,771	-	24,771
Customer	24,899	-	24,899
Total Residential Liquid Propane	\$49,671	\$85,608	\$135,278
General Service Small Commercial			
Supply	\$-	\$39,817	\$39,817
Transportation	-	4,981	4,981
Distribution	44,635	-	44,635
Customer	32,049	-	32,049
Total General Service Small Commercial	\$76,684	\$44,799	\$121,483

Revenue Requirement Allocated to Customer Class

NATURAL GAS CUTOMER CLASS	FIXED	VARIABLE	TOTAL
General Service Regular - Firm			
Supply	\$-	\$2,182,568	\$2,182,568
Transportation	-	273,047	273,047
Distribution	2,446,635	-	2,446,635
Customer	2,034,795	-	2,034,795
Total General Service Regular - Firm	\$4,481,430	\$2,455,615	\$6,937,045
Regular Service Interruptible			
Supply	\$-	\$133,975	\$133,975
Transportation	-	16,761	16,761
Distribution	150,184	-	150,184
Customer	1,231	-	1,231
Total Regular Service Interruptible	\$151,415	\$150,735	\$302,151

Revenue Requirement Allocated to Customer Class

NATURAL GAS CUTOMER CLASS	FIXED	VARIABLE	TOTAL
Large Volume Service Interruptible			
Supply	\$-	\$1,183,681	\$1,183,681
Transportation	-	148,083	148,083
Distribution	1,326,894	-	1,326,894
Customer	851,630	-	851,630
Total Large Volume Service Interruptible	\$2,178,523	\$1,331,764	\$3,510,287
Deerhaven Renewable Generating Station			
Supply	\$-	\$41,960	\$41,960
Transportation	-	5,249	5,249
Distribution	47,036	-	47,036
Customer	18,469	-	18,469
Total DHRGS	\$65,505	\$47,209	\$112,715
University Of Florida Cogeneration Plant			
Supply	\$-	\$-	\$-
Transportation	-	1,069,673	1,069,673
Distribution	-	-	-
Customer	18,469	-	18,469
Total UF Cogeneration Plant	\$18,469	\$1,069,673	\$1,088,142
TOTAL ALL RATE CLASSES	\$13,726,043	\$7,731,754	\$21,457,797

Current v. COS v. Proposed Rates

GAS Rates (\$/Therm Unless Noted)	RATES FY		Difference Rates v. COS	Change from COS	Proposed Rates	Difference Proposed v. Current	
	2018	COS Rates					
Oct-17							
Residential							
Customer Charge (\$/Month)	\$ 9.75	\$ 10.69	\$ (0.94)	-9%	\$ 9.75	\$ -	
Usage Charge	Per Therm Net Embedded Fuel	\$ 0.56094	\$ 0.27958	\$ 0.28	101%	\$ 0.56094	\$ -
Embedded Fuel Cost (Natural Gas)	Per Therm	\$ 0.06906	\$ 0.06906	\$ -	0%	\$ 0.06906	\$ -
Purchased Gas Adjustment	Per Therm	\$ 0.23000	\$ 0.18479	\$ 0.05	24%	\$ 0.23000	\$ -
Manufactured Gas Plant Cost Recovery	Per Therm	\$ 0.05560	\$ 0.05560	\$ -	0%	\$ 0.05560	\$ -
Residential - Liquid Propane							
Customer Charge (\$/Month)		\$ 9.75	\$ 10.69	\$ (0.94)	-9%	\$ 9.75	\$ -
Usage Charge (Basic No Recovery)	Per Gallon Net Embedded Fuel	\$ 0.56094	\$ 0.40524	\$ 0.16	38%	\$ 0.56094	\$ -
Embedded Fuel Cost (Liquid Propane)		\$ 0.15882	\$ 0.15882	\$ -	0%	\$ 0.15882	\$ -
Purchased Gas Adjustment	(\$/Gallon)	\$ 0.97500	\$ 1.24166	\$ (0.27)	-21%	\$ 0.97500	\$ -
General Service Small Commercial							
Customer Charge (\$/Month)		\$ 20.00	\$ 10.69	\$ 9.31	87%	\$ 20.00	\$ -
Usage Charge	Per Therm Net Embedded Fuel	\$ 0.55094	\$ 0.27958	\$ 0.27	97%	\$ 0.55094	\$ -
Embedded Fuel Cost (Natural Gas)	Per Therm	\$ 0.06906	\$ 0.06906	\$ -	0%	\$ 0.06906	\$ -
Purchased Gas Adjustment	Per Therm	\$ 0.23000	\$ 0.18479	\$ 0.05	24%	\$ 0.23000	\$ -
Manufactured Gas Plant Cost Recovery	Per Therm	\$ 0.05560	\$ 0.05560	\$ -	0%	\$ 0.05560	\$ -
General Service Regular - Firm							
Customer Charge (\$/Month)		\$ 45.00	\$ 128.33	\$ (83.33)	-65%	\$ 45.00	\$ -
Usage Charge	Per Therm Net Embedded Fuel	\$ 0.37094	\$ 0.27958	\$ 0.09	33%	\$ 0.37094	\$ -
Embedded Fuel Cost (Natural Gas)	Per Therm	\$ 0.06906	\$ 0.06906	\$ -	0%	\$ 0.06906	\$ -
Purchased Gas Adjustment	Per Therm	\$ 0.23000	\$ 0.18479	\$ 0.05	24%	\$ 0.23000	\$ -
Manufactured Gas Plant Cost Recovery	Per Therm	\$ 0.05560	\$ 0.05560	\$ -	0%	\$ 0.05560	\$ -
Large Volume Service Interruptible							
Customer Charge (\$/Month)		\$ 400.00	\$ 10,694.43	\$ (10,294.43)	-96%	\$ 400.00	\$ -
Usage Charge	Per Therm Net Embedded Fuel	\$ 0.20094	\$ 0.27958	\$ (0.08)	-28%	\$ 0.20094	\$ -
Embedded Fuel Cost (Natural Gas)	Per Therm	\$ 0.06906	\$ 0.06906	\$ -	0%	\$ 0.06906	\$ -
Purchased Gas Adjustment	Per Therm	\$ 0.23000	\$ 0.18479	\$ 0.05	24%	\$ 0.23000	\$ -
Manufactured Gas Plant Cost Recovery	Per Therm	\$ 0.05560	\$ 0.05560	\$ -	0%	\$ 0.05560	\$ -

Current v. COS v. Proposed Rates

GAS Rates (\$/Therm Unless Noted)		RATES FY		Difference Rates v. COS	Change from COS	Proposed Rates	Difference Proposed v. Current
		2018	COS Rates				
<u>Regular Service Interruptible</u>							
Customer Charge (\$/Month)		\$ 400.00	\$ 106.94	\$ 293.06	274%	\$ 400.00	\$ -
Usage Charge	Per Therm Net Embedded Fuel	\$ 0.32484	\$ 0.27958	\$ 0.05	16%	\$ 0.32484	\$ -
Embedded Fuel Cost (Natural Gas)	Per Therm	\$ 0.06906	\$ 0.06906	\$ -	0%	\$ 0.06906	\$ -
Purchased Gas Adjustment	Per Therm	\$ 0.23000	\$ 0.18479	\$ 0.05	24%	\$ 0.23000	\$ -
Manufactured Gas Plant Cost Recovery	Per Therm	\$ 0.05560	\$ 0.05560	\$ -	0%	\$ 0.05560	\$ -
<u>UF Cogen</u>							
Customer Charge (\$/Month)		\$ 300.00	\$ 1,604.16	\$ (1,304.16)	-81%	\$ 300.00	\$ -
Purchased Gas Adjustment	Per Therm	-	-				
Transportation Charge	Per Therm	\$ 0.01000	\$ 0.03176	\$ (0.02)	-69%	0.01	\$ -
<u>Deerhaven Renewable Generating Station</u>							
Customer Charge (\$/Month)		\$ -	\$ 1,604.16	\$ (1,604.16)	-100%	\$ -	\$ -
Purchased Gas Adjustment	Per Therm	\$ 0.23000	\$ 0.25385	\$ (0.02)	-9%	\$ 0.23000	\$ -
Usage Charge	Per Therm	\$ -	\$ 0.03176	\$ (0.03)	-100%	\$ -	\$ -
Embedded Fuel Cost (Natural Gas)	Per Therm	\$ -	\$ -	\$ -	100%	\$ -	\$ -

Current v. COS v. Proposed Revenues

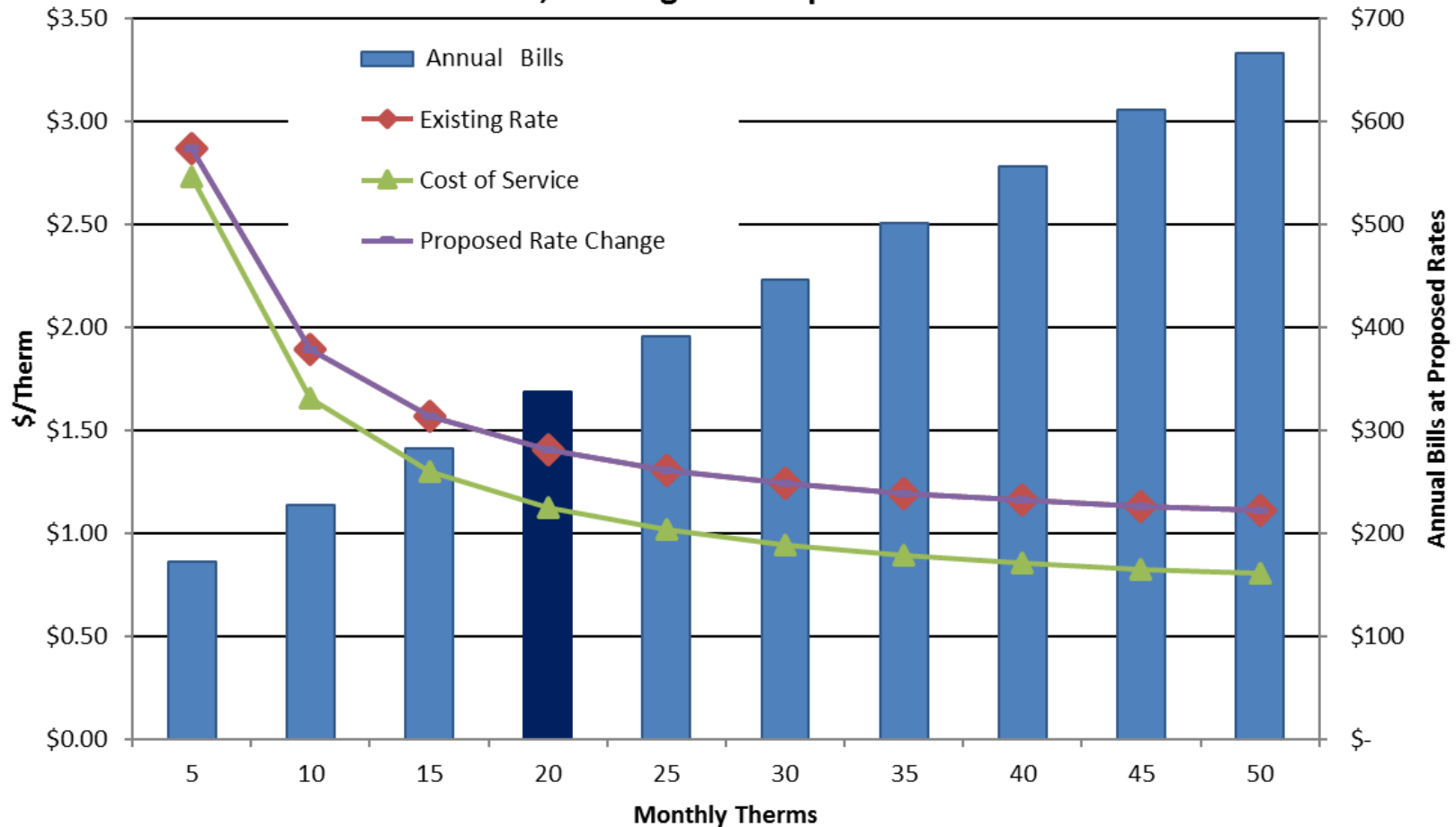
GAS Rate Revenues	Revenue at Current Rates	COS Rate Revenue	Change from COS		Proposed Rates	Difference Proposed v. Current
	At FY2018 Rates					
<u>Residential</u>						
Non-Gas	\$ 9,182,158	\$ 7,182,535	\$ 1,999,622	28%	\$ 9,182,158	\$ -
Embedded Gas	\$ 584,953	\$ 584,953	\$ -	0%	\$ 584,953	\$ -
PGA	\$ 1,948,150	\$ 1,565,198	\$ 382,952	24%	\$ 1,948,150	\$ -
TOTAL	\$ 11,715,261	\$ 9,332,687	\$ 2,382,574	26%	\$ 11,715,261	\$ -
<u>Residential - Liquid Propane</u>						
Non-Propane	\$ 56,236	\$ 25,952	\$ 30,284	117%	\$ 56,236	\$ -
Embedded Propane	\$ 9,223	\$ 9,223	\$ -	0%	\$ 9,223	\$ -
PGA	\$ 56,622	\$ 95,642	\$ (39,020)	-41%	\$ 56,622	\$ -
TOTAL	\$ 122,081	\$ 130,817	\$ (8,736)	-7%	\$ 122,081	\$ -
<u>General Service Small Commercial</u>						
Non-Gas	\$ 152,856	\$ 83,352	\$ 69,504	83%	\$ 152,856	\$ -
Embedded Gas	\$ 10,291	\$ 10,291	\$ -	0%	\$ 10,291	\$ -
PGA	\$ 34,274	\$ 27,537	\$ 6,737	24%	\$ 34,274	\$ -
TOTAL	\$ 197,422	\$ 121,180	\$ 76,242	63%	\$ 197,422	\$ -
<u>General Service Regular - Firm</u>						
Non-Gas	\$ 4,227,816	\$ 4,858,693	\$ (630,877)	-13%	\$ 4,227,816	\$ -
Embedded Gas	\$ 564,109	\$ 564,109	\$ -	0%	\$ 564,109	\$ -
PGA	\$ 1,878,731	\$ 1,509,425	\$ 369,306	24%	\$ 1,878,731	\$ -
TOTAL	\$ 6,670,656	\$ 6,932,228	\$ (261,571)	-4%	\$ 6,670,656	\$ -
<u>Large Volume Service Interruptible</u>						
Non-Gas	\$ 1,169,672	\$ 2,372,475	\$ (1,202,803)	-51%	\$ 1,169,672	\$ -
Embedded Gas	\$ 305,936	\$ 305,936	\$ -	0%	\$ 305,936	\$ -
PGA	\$ 1,018,900	\$ 818,613	\$ 200,287	24%	\$ 1,018,900	\$ -
TOTAL	\$ 2,494,508	\$ 3,497,024	\$ (1,002,516)	-29%	\$ 2,494,508	\$ -

Current v. COS v. Proposed Revenues

GAS Rate Revenues	Revenue at Current Rates	COS Rate Revenue	Change from COS		Proposed Rates	Difference Proposed v. Current
<u>Regular Service Interruptible</u>						
Non-Gas	\$ 195,556	\$ 169,344	\$ 26,212	15%	\$ 195,556	\$ -
Embedded Gas	\$ 34,627	\$ 34,627	\$ -	0%	\$ 34,627	\$ -
PGA	\$ 115,324	\$ 92,655	\$ 22,669	24%	\$ 115,324	\$ -
TOTAL	\$ 345,507	\$ 296,626	\$ 48,881	16%	\$ 345,507	\$ -
<u>UF Cogen</u>						
Non-Gas	\$ 323,600	\$ 1,035,486	\$ (711,886)	-69%	\$ 323,600	\$ -
Embedded Gas	\$ -	\$ -	\$ -	100%	\$ -	\$ -
PGA	\$ -	\$ -	\$ -	100%	\$ -	\$ -
TOTAL	\$ 323,600	\$ 1,035,486	\$ (711,886)	-69%	\$ 323,600	\$ -
<u>Deerhaven Renewable Generating Station</u>						
Non-Gas	\$ -	\$ 71,885	\$ (71,885)	-100%	\$ -	\$ -
Embedded Gas	\$ -	\$ -	\$ -	100%	\$ -	\$ -
PGA	\$ 36,118	\$ 39,864	\$ (3,745)	-9%	\$ 36,118	\$ -
TOTAL	\$ 36,118	\$ 111,749	\$ (75,630)	-68%	\$ 36,118	\$ -
<u>TOTAL NATURAL GAS</u>						
Non-Gas	\$ 15,251,658	\$ 15,773,771	\$ (522,113)	-3%	\$ 15,251,658	\$ -
Embedded Gas	\$ 1,499,917	\$ 1,499,917	\$ -	0%	\$ 1,499,917	\$ -
PGA	\$ 5,031,498	\$ 4,053,292	\$ 978,206	24%	\$ 5,031,498	\$ -
TOTAL	\$ 21,783,073	\$ 21,326,980	\$ 456,093	2%	\$ 21,783,073	\$ -
<u>TOTAL LIQUID PROPANE</u>						
Non-Propane	\$ 56,236	\$ 25,952	\$ 30,284	117%	\$ 56,236	\$ -
Embedded Propane	\$ 9,223	\$ 9,223	\$ -	0%	\$ 9,223	\$ -
PGA	\$ 56,622	\$ 95,642	\$ (39,020)	-41%	\$ 56,622	\$ -
TOTAL	\$ 122,081	\$ 130,817	\$ (8,736)	-7%	\$ 122,081	\$ -
TOTAL REVENUE	\$ 21,905,154	\$ 21,457,797	\$ 447,357	2%	\$ 21,905,154	\$ -

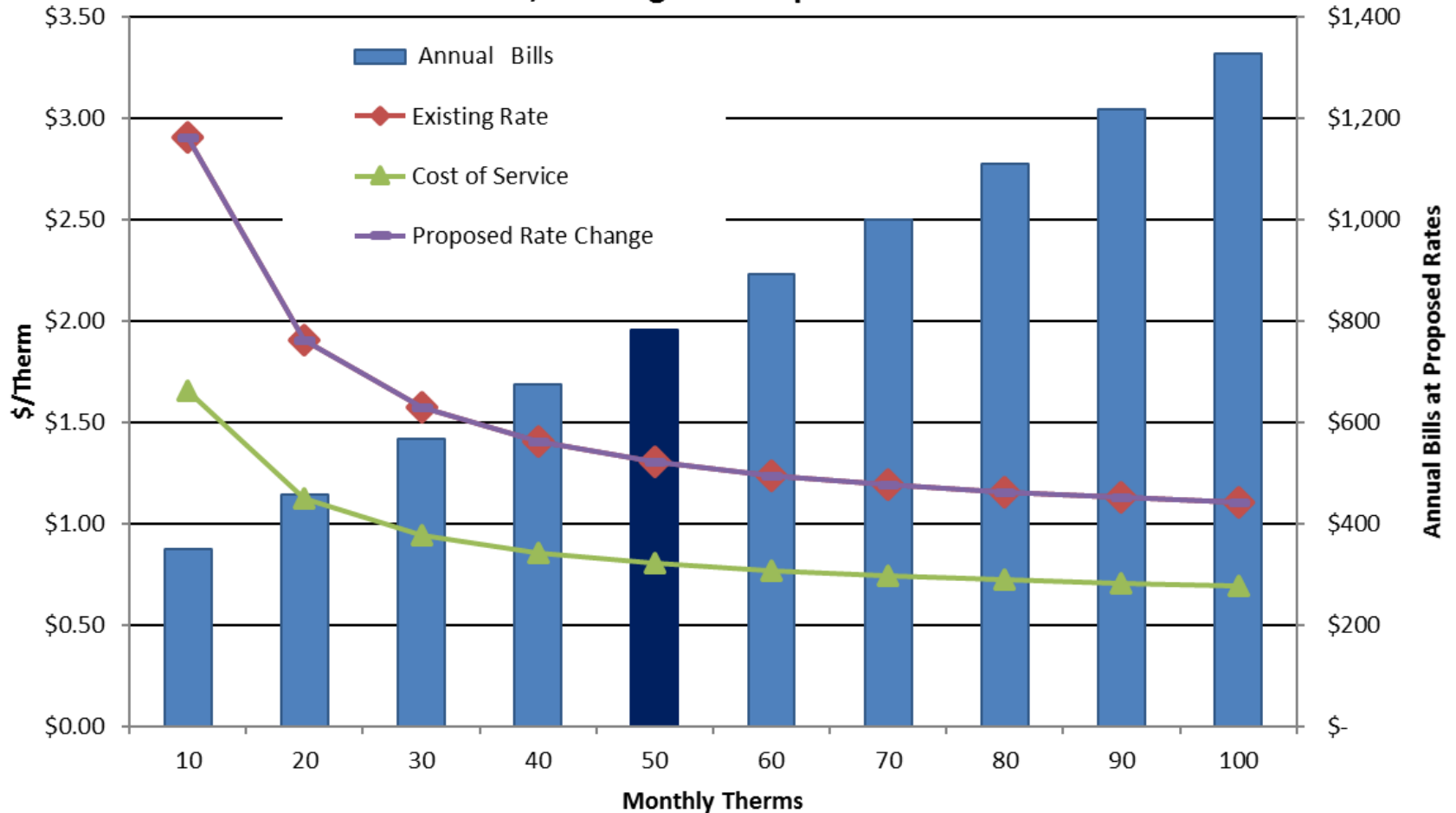
Natural Gas Bill Comparison

Gainesville Regional Utilities Residential COS, Existing and Proposed Rates



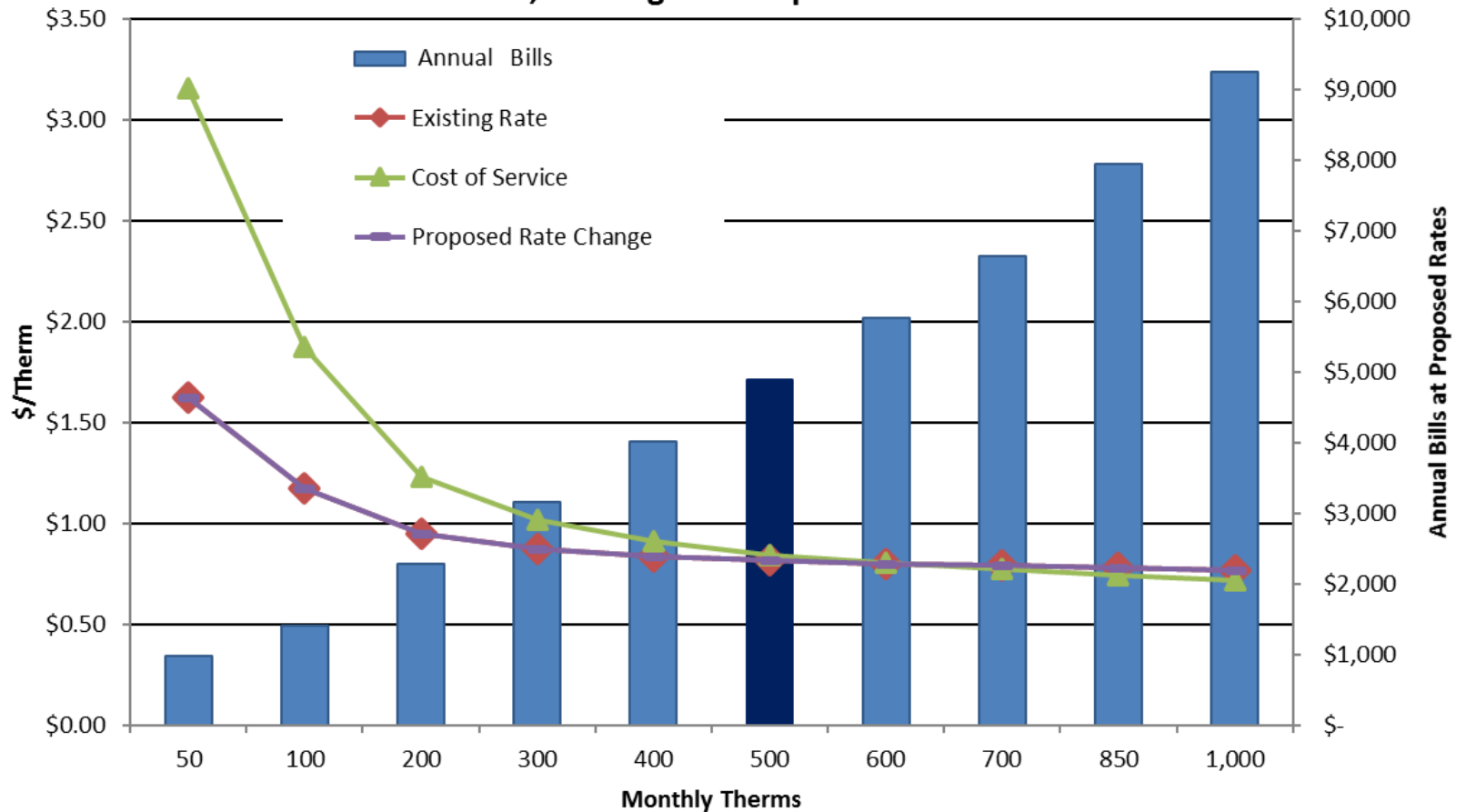
Natural Gas Bill Comparison

Gainesville Regional Utilities Small Commercial COS, Existing and Proposed Rates



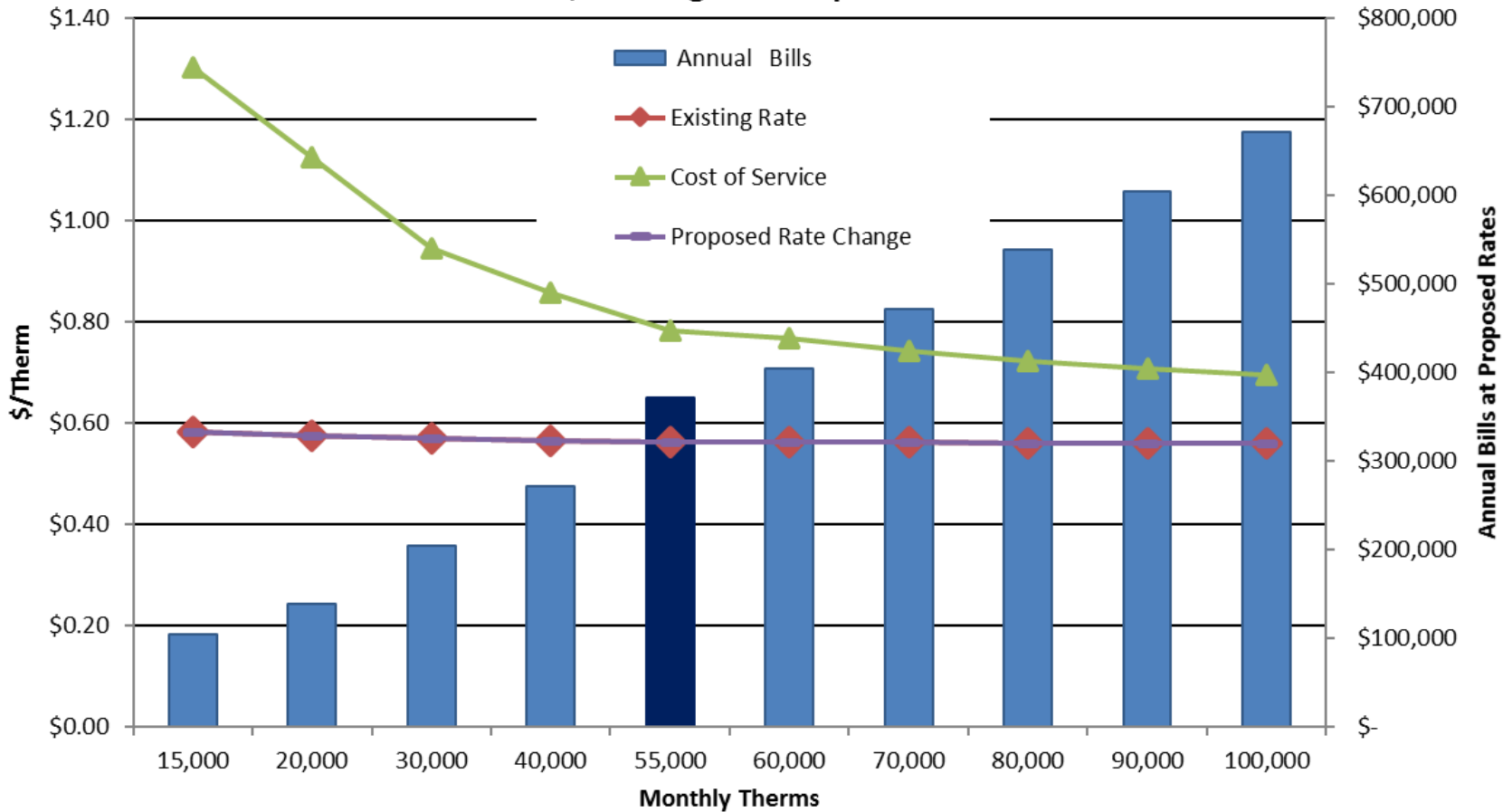
Natural Gas Bill Comparison

Gainesville Regional Utilities Commercial COS, Existing and Proposed Rates



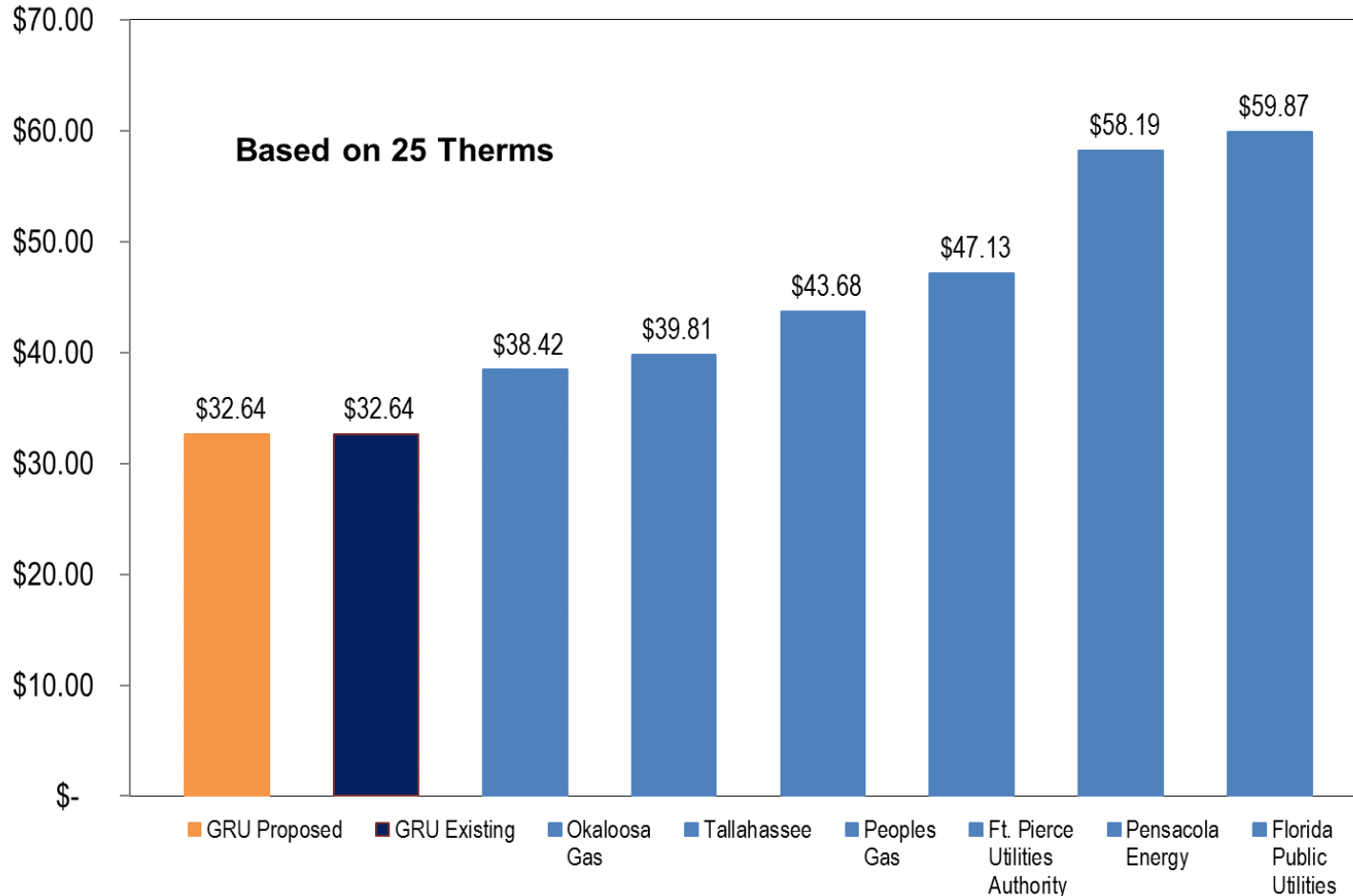
Natural Gas Bill Comparison

Gainesville Regional Utilities Large Volume Industrial COS, Existing and Proposed Rates



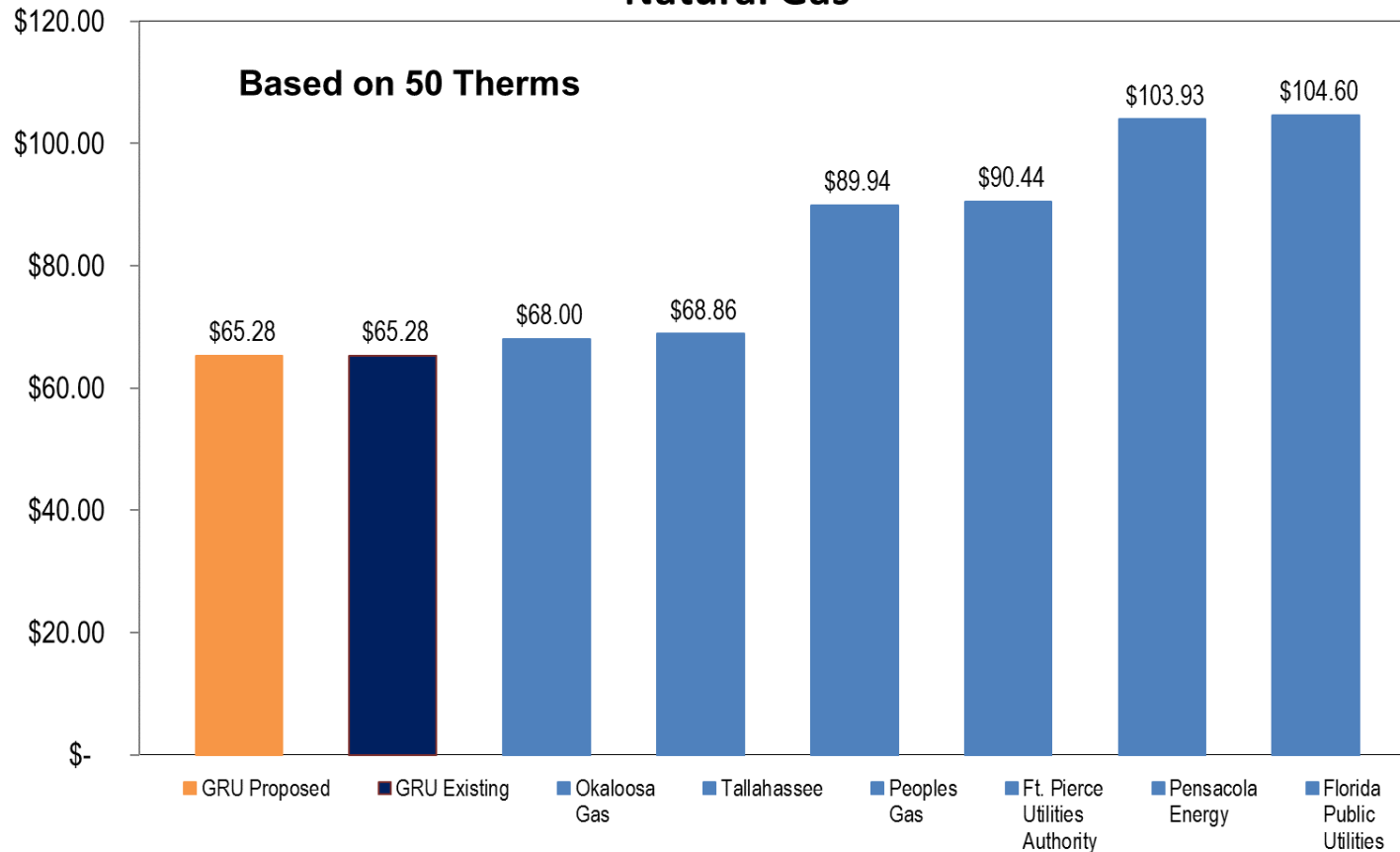
Natural Gas Neighboring Utility Comparison

Gainesville Regional Utilities Residential Monthly Bill Comparison Natural Gas



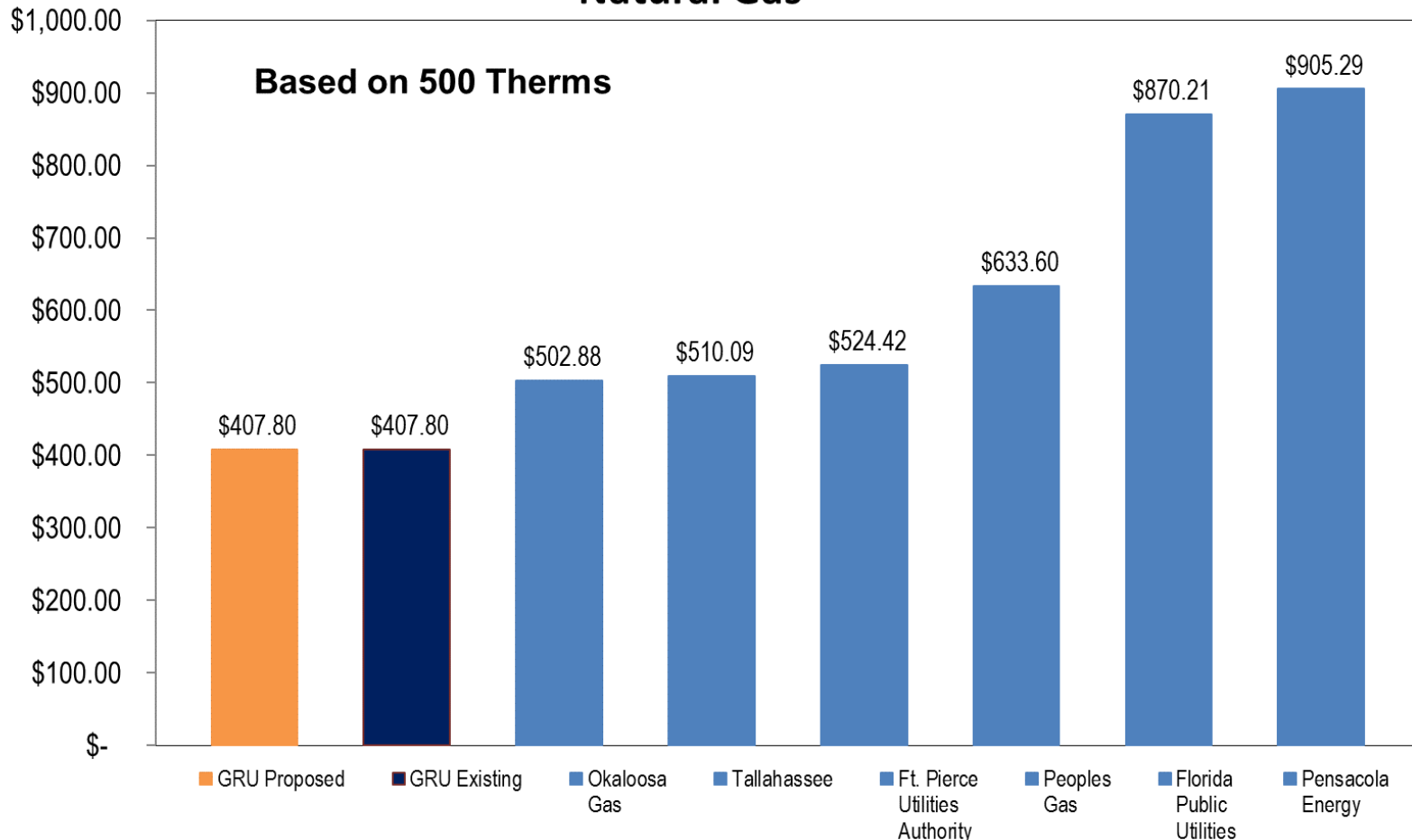
Natural Gas Neighboring Utility Comparison

Gainesville Regional Utilities Small Commerical Monthly Bill Comparison Natural Gas



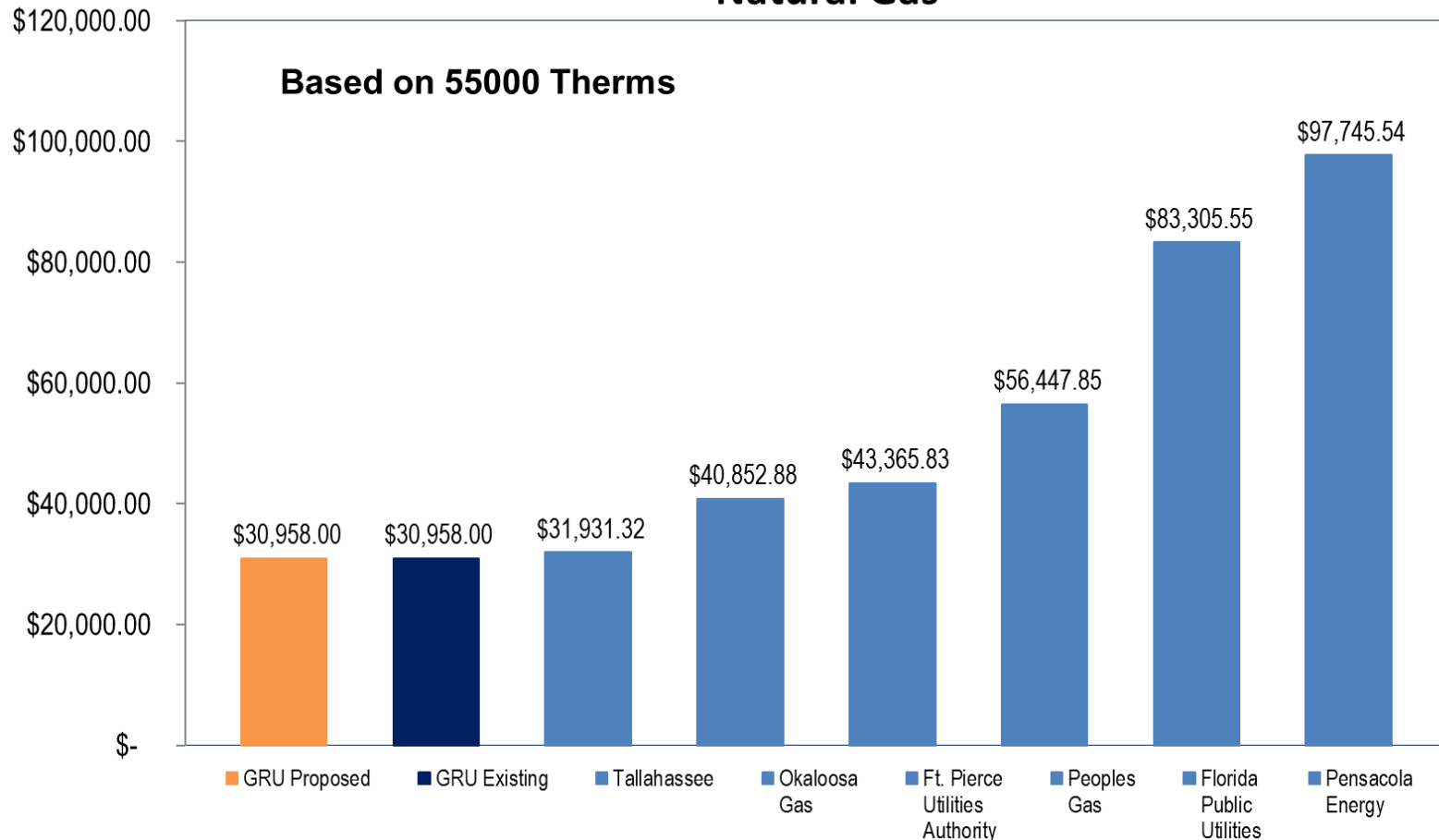
Natural Gas Neighboring Utility Comparison

Gainesville Regional Utilities Commercial Monthly Bill Comparison Natural Gas



Natural Gas Neighboring Utility Comparison

Gainesville Regional Utilities Large Volume Industrial Monthly Bill Comparison Natural Gas



Natural Gas Recommendations

- Move retail rate classes towards cost-based rates over time to the extent possible.
- Maintain competitive rates to provide systemwide benefits.



NATURAL GAS

Comments & Questions



WATER

Water System

- Existing Rates
- Factors Driving Proposed Rates
- FY 2019 Cost of Service Analysis
- Cost of Service vs. Current and Proposed Rates
- Revenues at Current, COS, and Proposed Rates
- Bill Comparisons
- Neighboring Utility Comparisons
- Recommendations
- Comments/Questions

Existing Rates - Water

Monthly Base Charges:

5/8 & 3/4 Inch	\$	9.45
1.0 Inch	\$	9.65
1.5 Inch	\$	12.50
2.0 Inch	\$	20.00
3.0 Inch	\$	74.00
4.0 Inch	\$	100.00
6.0 Inch	\$	140.00
8.0 Inch	\$	200.00
10.0 Inch	\$	275.00

Volumetric Per 1,000 Gal - Residential:

0 to 4,000 Gallons / Month	\$	2.45
4,001 to 16,000 Gallons / Month	\$	3.75
All Over 16,000 Gallons / Month	\$	6.00

Volumetric Per 1,000 Gal - Res Irrigation:

0 to 12,000 Gallons / Month	\$	3.75
All Over 12,000 Gallons / Month	\$	6.00

Volumetric Per 1,000 Gal - General Service:

Multi-Family	\$	3.75
Nonresidential	\$	3.85
Nonresidential Irrigation	\$	4.60

Proposed Rate Structure Changes - Water

- Monthly Base Charges
 - Increment by meter size in accordance with AWWA meter equivalency factors
 - Apply a 5-year phasing approach to avoid rate shock to larger customers
- Volumetric Rates
 - Maintain current volumetric rate structure
 - Apply minor adjustments as proposed for rate structure consistency

Factors Driving Proposed Rates - Water

Meter Equivalency Factors

Meter Size	Base Charges	Existing Factors	AWWA Factors ⁽¹⁾
5/8 & 3/4 Inch	\$ 9.45	1.00	1.00
1.0 Inch	\$ 9.65	1.02	2.50
1.5 Inch	\$ 12.50	1.32	5.00
2.0 Inch	\$ 20.00	2.12	8.00
3.0 Inch	\$ 74.00	7.83	16.00
4.0 Inch	\$ 100.00	10.58	25.00
6.0 Inch	\$ 140.00	14.81	50.00
8.0 Inch	\$ 200.00	21.16	80.00
10.0 Inch	\$ 275.00	29.10	125.00

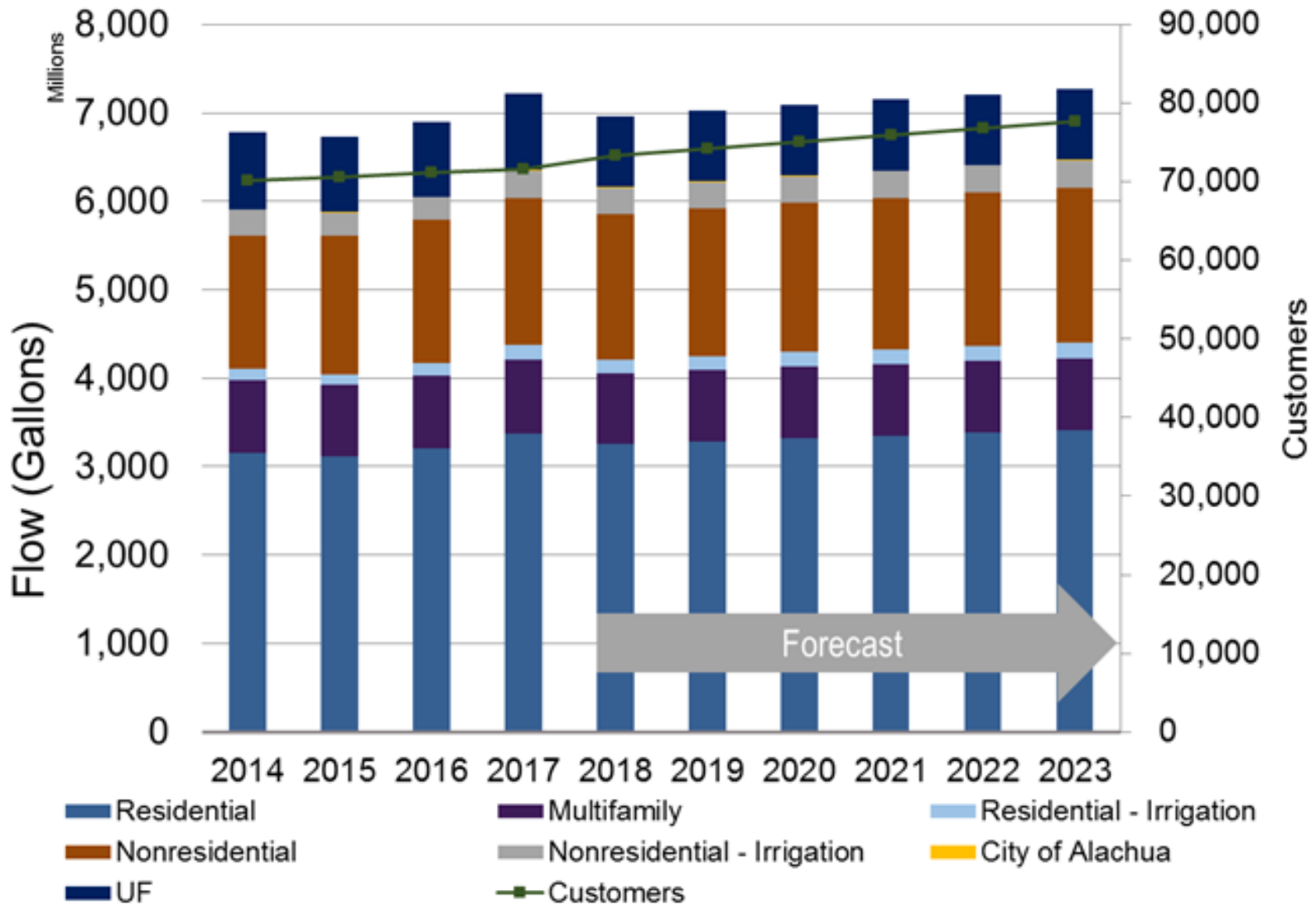
(1) Meter-size equivalency factors established by the AWWA and identified in AWWA Standards C700, M1 and M22.

Factors Driving Proposed Rates - Water

Equivalency Factor Phasing

Meter Size	AWWA Factors	Existing Factors	Proposed Phasing Implementation				
			Test Year	Year 2	Year 3	Year 4	Year 5
5/8 & 3/4 Inch	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1.0 Inch	2.50	1.02	1.30	1.60	1.90	2.20	2.50
1.5 Inch	5.00	1.32	2.10	2.90	3.70	4.50	5.00
2.0 Inch	8.00	2.12	3.30	4.50	5.70	6.90	8.00
3.0 Inch	16.00	7.83	9.50	11.20	12.90	14.60	16.00
4.0 Inch	25.00	10.58	13.50	16.40	19.30	22.20	25.00
6.0 Inch	50.00	14.81	21.90	29.00	36.10	43.20	50.00
8.0 Inch	80.00	21.16	32.90	44.70	56.50	68.30	80.00
10.0 Inch	125.00	29.10	48.30	67.50	86.70	105.90	125.00

Projected Customers & Usage - Water



COS Determinants - Water

Customer-Related Determinants

Customer Accounts	
Amount	Percent

Equivalent Residential Units	
Amount	Percent

Customer Class:

Residential	64,673	87.09%	70,858	83.83%
Multifamily	1,350	1.82%	2,181	2.58%
Residential - Irrigation	1,727	2.33%	2,025	2.40%
Nonresidential	5,103	6.87%	7,368	8.72%
Nonresidential - Irrigation	1,328	1.79%	1,530	1.81%
City of Alachua	4	0.01%	25	0.03%
UF On Campus	36	0.05%	421	0.50%
UF Off Campus	40	0.05%	113	0.13%
Total System	74,261	100.00%	84,521	100.00%

COS Determinants - Water

Flow-Related Determinants

Avg Day Usage - Base		Max Day Factor	Max Day Capacity	Extra Capacity - System		Extra Capacity - Dist.	
Amount	Percent			Amount	Percent	Amount	Percent

Customer Class:

Residential	8,229,853	43.18%	1.19	9,800,136	1,570,283	49.34%	1,570,283	49.45%
Multifamily	2,301,949	12.08%	1.18	2,727,441	425,492	13.37%	425,492	13.40%
Residential - Irrigation	594,154	3.12%	1.62	964,506	370,352	11.64%	370,352	11.66%
Nonresidential	4,857,420	25.48%	1.11	5,393,226	535,807	16.84%	535,807	16.87%
Nonresidential - Irrigation	870,021	4.56%	1.31	1,138,691	268,670	8.44%	268,670	8.46%
City of Alachua	15,030	0.08%	1.45	21,797	6,767	0.21%	0	0.00%
UF On Campus	2,165,479	11.36%	1.00	2,165,479	0	0.00%	0	0.00%
UF Off Campus	26,301	0.14%	1.19	31,266	4,965	0.16%	4,965	0.16%
Total System	19,060,207	100.00%		22,242,544	3,182,337	100.00%	3,175,570	100.00%

COS Functionalization - Water

	Supply/ Treatment	Transmission	Distribution	Administration	Customer Billing
Revenue Requirements:					
Customer Expenses	\$ 0	\$ 0	\$ 0	\$ 0	\$1,474,155
Admin & General	1,616,443	608,515	2,037,203	187,533	499,518
Operating Expenses	7,677,310	839,972	2,812,080	0	0
Debt Service	1,951,191	1,060,459	3,550,231	618,419	0
General Fund Transfer	3,056,699	476,405	1,594,921	61,679	649,138
UPIF	2,922,072	507,497	1,655,596	754,267	1,318,682
Total Expenditures	\$17,223,716	\$ 3,492,848	\$11,650,030	\$ 1,621,900	\$3,941,493
Non-Rate Revenues	(2,314,239)	(469,311)	(1,565,339)	(217,924)	(529,593)
Net Requirement	\$14,909,477	\$ 3,023,537	\$10,084,692	\$ 1,403,975	\$3,411,900

Total Net Revenue Requirement \$32,833,580

COS Classification - Water

	Test Year Budget	Base	Max Day System	Max Day Distribution	Cust Billing
Revenue Requirements:					
Customer Expenses	\$ 1,474,155	\$ 0	\$ 0	\$ 0	\$1,474,155
Admin & General	4,949,212	2,861,328	629,229	938,778	519,876
Operating Expenses	11,329,363	7,318,710	2,752,003	1,258,650	0
Debt Service	7,180,300	4,595,069	840,178	1,677,920	67,134
General Fund Transfer	5,838,842	3,348,197	1,112,082	722,730	655,833
UPIF	7,158,115	3,719,349	1,184,709	853,494	1,400,563
Total Expenditures	\$ 37,929,986	\$21,842,652	\$ 6,518,201	\$ 5,451,572	\$4,117,561
Non-Rate Revenues	(5,096,406)	(2,934,855)	(875,808)	(732,492)	(553,250)
Net Requirement	\$ 32,833,580	\$18,907,797	\$ 5,642,392	\$ 4,719,080	\$3,564,311

Existing, COS & Proposed Rates - Water

Monthly Base Charges

Description	Test Year Water Rates - Inside			Difference vs. Existing	
	Existing	COS	Proposed	COS	Proposed
Monthly Base Charges:					
5/8 & 3/4 Inch	\$ 9.45	\$ 3.51	\$ 9.45	\$ (5.94)	\$ -
1.0 Inch	\$ 9.65	\$ 3.58	\$ 12.29	\$ (6.07)	\$ 2.64
1.5 Inch	\$ 12.50	\$ 4.64	\$ 19.85	\$ (7.86)	\$ 7.35
2.0 Inch	\$ 20.00	\$ 7.45	\$ 31.19	\$ (12.55)	\$ 11.19
3.0 Inch	\$ 74.00	\$ 27.52	\$ 89.78	\$ (46.48)	\$ 15.78
4.0 Inch	\$ 100.00	\$ 37.18	\$ 127.58	\$ (62.82)	\$ 27.58
6.0 Inch	\$ 140.00	\$ 52.05	\$ 206.96	\$ (87.95)	\$ 66.96
8.0 Inch	\$ 200.00	\$ 74.36	\$ 310.91	\$ (125.64)	\$ 110.91
10.0 Inch	\$ 275.00	\$ 102.26	\$ 456.44	\$ (172.74)	\$ 181.44

Existing, COS & Proposed Rates - Water

Volumetric Rates

Description	Test Year Water Rates - Inside			Difference vs. Existing	
	Existing	COS	Proposed	COS	Proposed
Volumetric Per 1,000 Gal - Residential:					
0 to 4,000 Gallons / Month	\$ 2.45	\$ 2.89	\$ 2.45	\$ 0.44	\$ -
4,001 to 16,000 Gallons / Month	\$ 3.75	\$ 4.42	\$ 3.75	\$ 0.67	\$ -
All Over 16,000 Gallons / Month	\$ 6.00	\$ 7.07	\$ 6.13	\$ 1.07	\$ 0.13
Volumetric Per 1,000 Gal - Res Irrigation:					
0 to 12,000 Gallons / Month	\$ 3.75	\$ 8.28	\$ 3.75	\$ 4.53	\$ -
All Over 12,000 Gallons / Month	\$ 6.00	\$ 13.25	\$ 6.13	\$ 7.25	\$ 0.13
Volumetric Per 1,000 Gal - General Service:					
Multi-Family	\$ 3.75	\$ 4.37	\$ 3.75	\$ 0.62	\$ -
Nonresidential	\$ 3.85	\$ 3.70	\$ 3.86	\$ (0.15)	\$ 0.01
Nonresidential Irrigation	\$ 4.60	\$ 5.48	\$ 4.61	\$ 0.88	\$ 0.01

Existing, COS & Proposed Revenues - Water

Test Year 2019 Projected Revenues

Description	Test Year Water Revenues			Difference vs. Existing	
	Existing	COS	Proposed	COS	Proposed
Combined Revenues:					
Residential	\$ 19,298,359	\$ 16,269,848	\$ 19,345,679	\$(3,028,511)	\$ 47,320
Multifamily	3,398,541	3,762,242	3,479,959	363,701	81,418
Residential - Irrigation	1,043,097	1,881,821	1,049,135	838,724	6,038
Nonresidential	7,660,394	6,875,500	7,864,454	(784,894)	204,060
Nonresidential - Irrigation	1,634,343	1,803,212	1,658,144	168,869	23,801
City of Alachua	11,759	27,976	13,287	16,217	1,528
UF On Campus	2,292,490	2,165,921	2,318,301	(126,569)	25,811
UF Off Campus	48,080	47,051	53,695	(1,029)	5,615
Total	\$ 35,387,063	\$ 32,833,571	\$ 35,782,654	\$(2,553,492)	\$ 395,591
TY Revenue Requirement	\$ 32,833,580	\$ 32,833,580	\$ 32,833,580		
Difference	\$ 2,553,483	\$ (9)	\$ 2,949,074	\$(2,553,492)	\$ 395,591

Typical Bill Comparisons - Water

Residential

Meter Size	Monthly Flow (Gal)	Monthly Charges			Difference From Existing	
		Existing	COS	Proposed	COS	Proposed
3/4 Inch	0	\$ 9.45	\$ 3.51	\$ 9.45	\$ (5.94)	\$ 0.00
3/4 Inch	2,000	\$ 14.35	\$ 9.29	\$ 14.35	\$ (5.06)	\$ 0.00
3/4 Inch	4,000	\$ 19.25	\$ 15.07	\$ 19.25	\$ (4.18)	\$ 0.00
3/4 Inch	6,000	\$ 26.75	\$ 23.91	\$ 26.75	\$ (2.84)	\$ 0.00
3/4 Inch	8,000	\$ 34.25	\$ 32.76	\$ 34.25	\$ (1.49)	\$ 0.00
3/4 Inch	12,000	\$ 49.25	\$ 50.44	\$ 49.25	\$ 1.19	\$ 0.00
3/4 Inch	16,000	\$ 64.25	\$ 68.13	\$ 64.25	\$ 3.88	\$ 0.00
3/4 Inch	20,000	\$ 88.25	\$ 96.42	\$ 88.77	\$ 8.17	\$ 0.52

Typical Bill Comparisons - Water

Small Commercial

Meter Size	Monthly Flow (Gal)	Monthly Charges			Difference From Existing	
		Existing	COS	Proposed	COS	Proposed
3/4 Inch	10,000	\$ 47.95	\$ 40.54	\$ 48.05	\$ (7.41)	\$ 0.10
3/4 Inch	20,000	\$ 86.45	\$ 77.57	\$ 86.65	\$ (8.88)	\$ 0.20
1.0 Inch	40,000	\$ 163.65	\$ 151.69	\$ 166.69	\$ (11.96)	\$ 3.04
1.0 Inch	60,000	\$ 240.65	\$ 225.75	\$ 243.89	\$ (14.90)	\$ 3.24
1.5 Inch	80,000	\$ 320.50	\$ 300.86	\$ 328.65	\$ (19.64)	\$ 8.15
1.5 Inch	100,000	\$ 397.50	\$ 374.92	\$ 405.85	\$ (22.58)	\$ 8.35
2.0 Inch	150,000	\$ 597.50	\$ 562.86	\$ 610.19	\$ (34.64)	\$ 12.69
2.0 Inch	200,000	\$ 790.00	\$ 748.00	\$ 803.19	\$ (42.00)	\$ 13.19

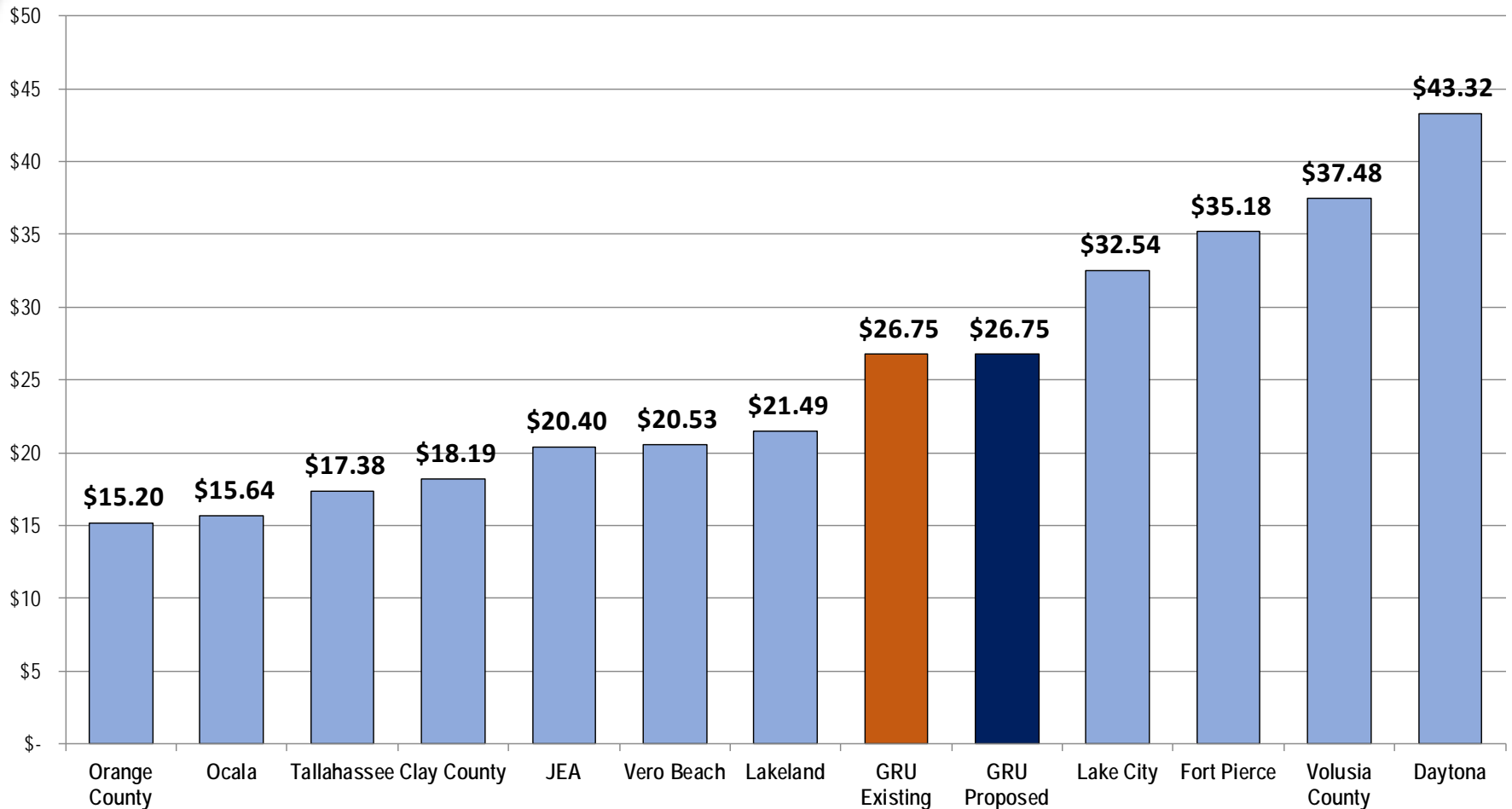
Typical Bill Comparisons - Water

Large Commercial

Meter Size	Monthly Flow (Gal)	Monthly Charges			Difference From Existing	
		Existing	COS	Proposed	COS	Proposed
3.0 Inch	150,000	\$ 651.50	\$ 582.93	\$ 668.78	\$ (68.57)	\$ 17.28
3.0 Inch	200,000	\$ 844.00	\$ 768.07	\$ 861.78	\$ (75.93)	\$ 17.78
4.0 Inch	300,000	\$ 1,255.00	\$ 1,148.01	\$ 1,285.58	\$ (106.99)	\$ 30.58
4.0 Inch	400,000	\$ 1,640.00	\$ 1,518.28	\$ 1,671.58	\$ (121.72)	\$ 31.58
6.0 Inch	600,000	\$ 2,450.00	\$ 2,273.70	\$ 2,522.96	\$ (176.30)	\$ 72.96
6.0 Inch	1,000,000	\$ 3,990.00	\$ 3,754.80	\$ 4,066.96	\$ (235.20)	\$ 76.96
8.0 Inch	2,000,000	\$ 7,900.00	\$ 7,479.86	\$ 8,030.91	\$ (420.14)	\$ 130.91
8.0 Inch	6,000,000	\$23,300.00	\$22,290.86	\$23,470.91	\$ (1,009.14)	\$ 170.91

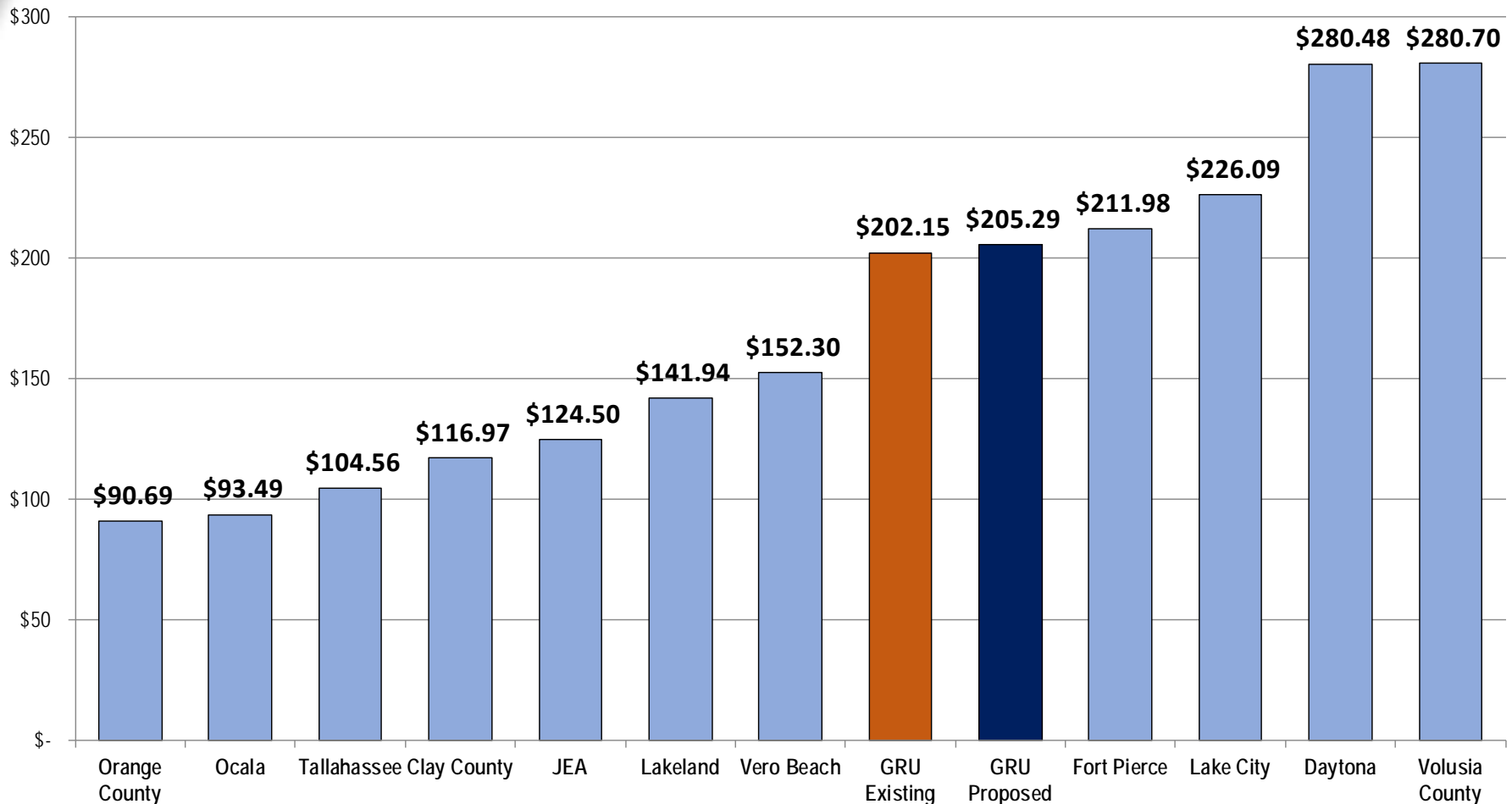
Neighboring Utility Comparisons - Water

Residential – 6,000 Gallons Per Month



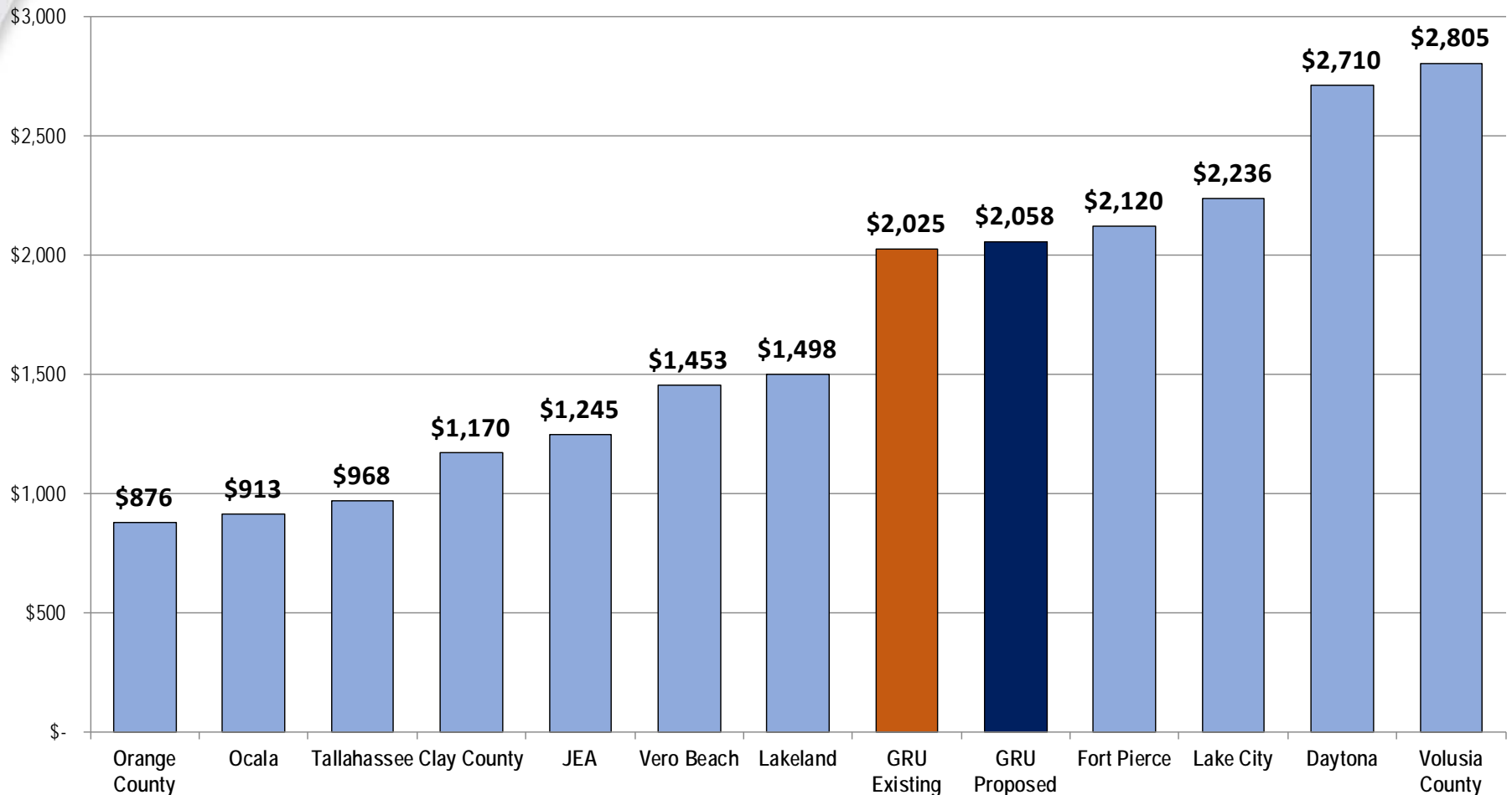
Neighboring Utility Comparisons - Water

Small Commercial – 50,000 Gallons Per Month



Neighboring Utility Comparisons - Water

Large Commercial – 500,000 Gallons Per Month



Recommendations - Water

- Adopt the proposed water rates to become effective as of October 1, 2018 (or other such date as deemed appropriate by the City Commission)
- Apply a phase-in approach to adjust the base monthly charges to be consistent with AWWA meter equivalency factors
- Review the rates as needed to ensure the financial sufficiency of the utility system



WATER

Comments & Questions



WASTEWATER

Wastewater System

- Existing Rates
- Factors Driving Proposed Rates
- FY 2019 Cost of Service Analysis
- Cost of Service vs. Current and Proposed Rates
- Revenues at Current, COS, and Proposed Rates
- Bill Comparisons
- Neighboring Utility Comparisons
- Recommendations
- Comments/Questions

Existing Rates - Wastewater

Monthly Base Charges:

All Connection Sizes	\$	9.10
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Volumetric Rates Per 1,000 Gal:

All Billable Flow - General Service	\$	6.30
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All Billable Flow - Reclaimed	\$	0.95
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Residential Flat Fee:

Per Month	\$	40.60
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Proposed Rate Structure Changes - Wastewater

- Monthly Base Charges
 - Increment by connection size in accordance with the proposed water meter equivalency factors
 - Apply a 5-year phasing approach to avoid rate shock to larger customers
- Volumetric Rates
 - Maintain current volumetric rate structure

Factors Driving Proposed Rates - Wastewater

Meter Equivalency Factors

Meter Size	Base Charges	Existing Factors	AWWA Factors ⁽¹⁾
5/8 & 3/4 Inch	\$ 9.10	1.00	1.00
1.0 Inch	\$ 9.10	1.00	2.50
1.5 Inch	\$ 9.10	1.00	5.00
2.0 Inch	\$ 9.10	1.00	8.00
3.0 Inch	\$ 9.10	1.00	16.00
4.0 Inch	\$ 9.10	1.00	25.00
6.0 Inch	\$ 9.10	1.00	50.00
8.0 Inch	\$ 9.10	1.00	80.00
10.0 Inch	\$ 9.10	1.00	125.00

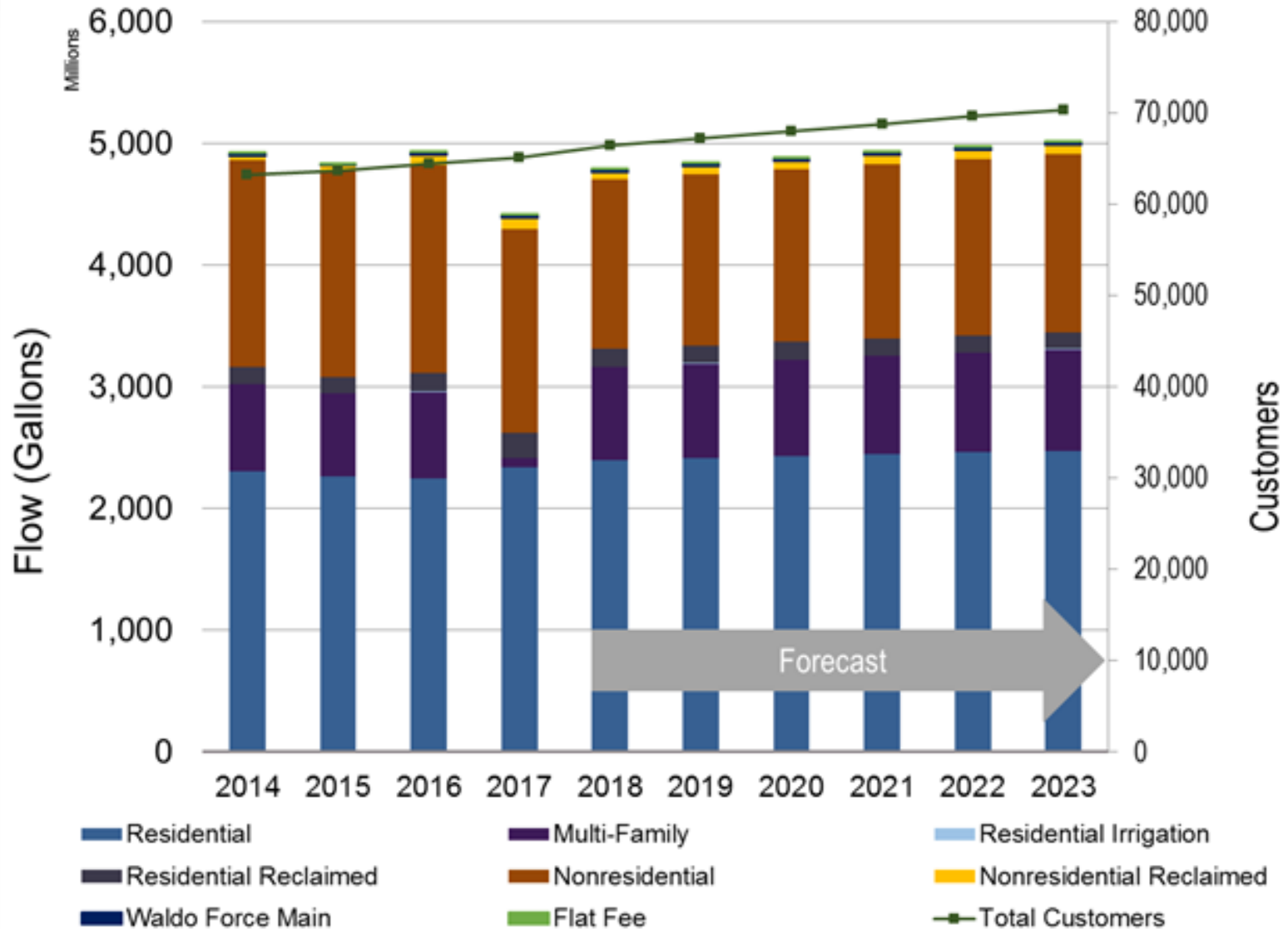
(1) Meter-size equivalency factors established by the AWWA and identified in AWWA Standards C700, M1 and M22.

Factors Driving Proposed Rates - Wastewater

Equivalency Factor Phasing

Meter Size	AWWA Factors	Existing Factors	Proposed Phasing Implementation				
			Test Year	Year 2	Year 3	Year 4	Year 5
5/8 & 3/4 Inch	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1.0 Inch	2.50	1.00	1.30	1.60	1.90	2.20	2.50
1.5 Inch	5.00	1.00	2.10	2.90	3.70	4.50	5.00
2.0 Inch	8.00	1.00	3.30	4.50	5.70	6.90	8.00
3.0 Inch	16.00	1.00	9.50	11.20	12.90	14.60	16.00
4.0 Inch	25.00	1.00	13.50	16.40	19.30	22.20	25.00
6.0 Inch	50.00	1.00	21.90	29.00	36.10	43.20	50.00
8.0 Inch	80.00	1.00	32.90	44.70	56.50	68.30	80.00
10.0 Inch	125.00	1.00	48.30	67.50	86.70	105.90	125.00

Projected Customers & Flows - Wastewater



COS Determinants - Wastewater

Customer-Related Determinants

	Customer Accounts		Equivalent Residential Units	
	Amount	Percent	Amount	Percent
Customer Class:				
Residential	57,392	85.33%	62,185	84.97%
Multi-Family	1,367	2.03%	1,406	1.92%
Res Irrigation	2,929	4.35%	3,513	4.80%
Flat Fee	59	0.09%	62	0.08%
Residential Reclaimed	919	1.37%	1,141	1.56%
Nonresidential	4,452	6.62%	4,703	6.43%
Nonresidential Reclaimed	140	0.21%	173	0.24%
Waldo Force Main	2	0.00%	2	0.00%
Total System	67,260	100.00%	73,185	100.00%

COS Determinants - Wastewater

Flow-Related Determinants

	Annual Flow - Treatment		Annual Flow - Collection	
	Amount	Percent	Amount	Percent
Customer Class:				
Residential	2,640,381,545	50.45%	2,640,381,545	50.67%
Multi-Family	809,194,191	15.46%	809,194,191	15.53%
Res Irrigation	1,157,117	0.02%	1,157,117	0.02%
Flat Fee	3,720,000	0.07%	3,720,000	0.07%
Residential Reclaimed	181,598,904	3.47%	181,598,904	3.49%
Nonresidential	1,494,971,469	28.57%	1,494,971,469	28.69%
Nonresidential Reclaimed	79,659,041	1.52%	79,659,041	1.53%
Waldo Force Main	22,882,966	0.44%	0	0.00%
Total System	5,233,565,233	100.00%	5,210,682,267	100.00%

COS Functionalization - Wastewater

	Treatment	Collection	Administration	Customer Billing
Revenue Requirements:				
Customer Expenses	\$ 0	\$ 0	\$ 0	\$ 1,554,519
Admin & General	2,681,653	2,207,694	214,217	383,202
Operating Expenses	11,307,912	2,741,891	0	0
Debt Service	3,297,337	4,689,900	721,841	0
General Fund Transfer	4,874,256	1,724,538	74,638	675,142
UPIF	3,683,795	4,214,055	652,076	640,107
Total Expenditures	\$25,844,953	\$15,578,079	\$ 1,662,771	\$ 3,252,971
Non-Rate Revenues	(3,076,445)	(1,854,331)	(197,927)	(387,216)
Net Requirement	\$22,768,508	\$13,723,748	\$ 1,464,843	\$ 2,865,755

Total Net Revenue Requirement \$40,822,854

Existing, COS & Proposed Rates - Wastewater

Monthly Base Charges

Description	Test Year Wastewater Rates			Difference vs. Existing	
	Existing	COS	Proposed	COS	Proposed
Monthly Base Charges:					
5/8 & 3/4 Inch	\$ 9.10	\$ 3.38	\$ 9.40	\$ (5.72)	\$ 0.30
1.0 Inch	\$ 9.10	\$ 3.38	\$ 12.22	\$ (5.72)	\$ 3.12
1.5 Inch	\$ 9.10	\$ 3.38	\$ 19.74	\$ (5.72)	\$ 10.64
2.0 Inch	\$ 9.10	\$ 3.38	\$ 31.02	\$ (5.72)	\$ 21.92
3.0 Inch	\$ 9.10	\$ 3.38	\$ 89.30	\$ (5.72)	\$ 80.20
4.0 Inch	\$ 9.10	\$ 3.38	\$ 126.90	\$ (5.72)	\$ 117.80
6.0 Inch	\$ 9.10	\$ 3.38	\$ 205.86	\$ (5.72)	\$ 196.76
8.0 Inch	\$ 9.10	\$ 3.38	\$ 309.26	\$ (5.72)	\$ 300.16
10.0 Inch	\$ 9.10	\$ 3.38	\$ 454.02	\$ (5.72)	\$ 444.92

Existing, COS & Proposed Rates - Wastewater

Volumetric Rates

Description	Test Year Wastewater Rates			Difference vs. Existing	
	Existing	COS	Proposed	COS	Proposed
Volumetric Rates Per 1,000 Gal:					
All Billable Flow - General Service	\$ 6.30	\$ 7.24	\$ 6.49	\$ 0.94	\$ 0.19
All Billable Flow - Reclaimed	\$ 0.95	\$ 7.24	\$ 0.98	\$ 6.29	\$ 0.03
Residential Flat Fee:					
Per Month	\$ 40.60	\$ 39.61	\$ 41.85	\$ (0.99)	\$ 1.25

Existing, COS & Proposed Revenues - Wastewater

Test Year 2019 Projected Revenues

Description	Test Year Wastewater Revenues			Difference vs. Existing	
	Existing	COS	Proposed	COS	Proposed
Combined Revenues:					
Residential	\$23,430,596	\$21,653,079	\$24,163,733	\$(1,777,517)	\$ 733,137
Multi-Family	5,252,105	5,919,043	5,578,639	666,937	326,534
Res Irrigation	391,079	151,073	405,199	(240,006)	14,120
Flat Fee	30,206	29,467	31,136	(740)	930
Residential Reclaimed	297,462	1,361,859	307,764	1,064,397	10,302
Nonresidential	9,933,703	11,020,873	10,604,514	1,087,170	670,811
Nonresidential Reclaimed	94,751	584,102	111,770	489,351	17,019
Waldo Force Main	144,163	103,338	148,510	(40,824)	4,348
Total	\$39,574,065	\$40,822,834	\$41,351,266	\$ 1,248,768	\$ 1,777,201
TY Revenue Requirement	\$40,822,854	\$40,822,854	\$40,822,854		
Difference	\$ (1,248,788)	\$ (20)	\$ 528,412	\$ 1,248,768	\$ 1,777,201

Typical Bill Comparisons - Wastewater

Residential

Meter Size	Monthly Flow (Gal)	Monthly Charges			Difference From Existing	
		Existing	COS	Proposed	COS	Proposed
3/4 Inch	0	\$ 9.10	\$ 3.38	\$ 9.40	\$ (5.72)	\$ 0.30
3/4 Inch	2,000	\$ 21.70	\$ 17.87	\$ 22.38	\$ (3.83)	\$ 0.68
3/4 Inch	4,000	\$ 34.30	\$ 32.36	\$ 35.36	\$ (1.94)	\$ 1.06
3/4 Inch	6,000	\$ 46.90	\$ 46.85	\$ 48.34	\$ (0.05)	\$ 1.44
3/4 Inch	8,000	\$ 59.50	\$ 61.34	\$ 61.32	\$ 1.84	\$ 1.82
3/4 Inch	12,000	\$ 84.70	\$ 90.31	\$ 87.28	\$ 5.61	\$ 2.58
3/4 Inch	16,000	\$ 109.90	\$ 119.29	\$ 113.24	\$ 9.39	\$ 3.34
3/4 Inch	20,000	\$ 135.10	\$ 148.27	\$ 139.20	\$ 13.17	\$ 4.10

Typical Bill Comparisons - Wastewater

Small Commercial

Meter Size	Monthly Flow (Gal)	Monthly Charges			Difference From Existing	
		Existing	COS	Proposed	COS	Proposed
3/4 Inch	10,000	\$ 72.10	\$ 75.83	\$ 74.30	\$ 3.73	\$ 2.20
3/4 Inch	20,000	\$ 135.10	\$ 148.27	\$ 139.20	\$ 13.17	\$ 4.10
1.0 Inch	40,000	\$ 261.10	\$ 293.15	\$ 271.82	\$ 32.05	\$ 10.72
1.0 Inch	60,000	\$ 387.10	\$ 438.04	\$ 401.62	\$ 50.94	\$ 14.52
1.5 Inch	80,000	\$ 513.10	\$ 582.92	\$ 538.94	\$ 69.82	\$ 25.84
1.5 Inch	100,000	\$ 639.10	\$ 727.80	\$ 668.74	\$ 88.70	\$ 29.64
2.0 Inch	150,000	\$ 954.10	\$ 1,090.01	\$ 1,004.52	\$ 135.91	\$ 50.42
2.0 Inch	200,000	\$ 1,269.10	\$ 1,452.22	\$ 1,329.02	\$ 183.12	\$ 59.92

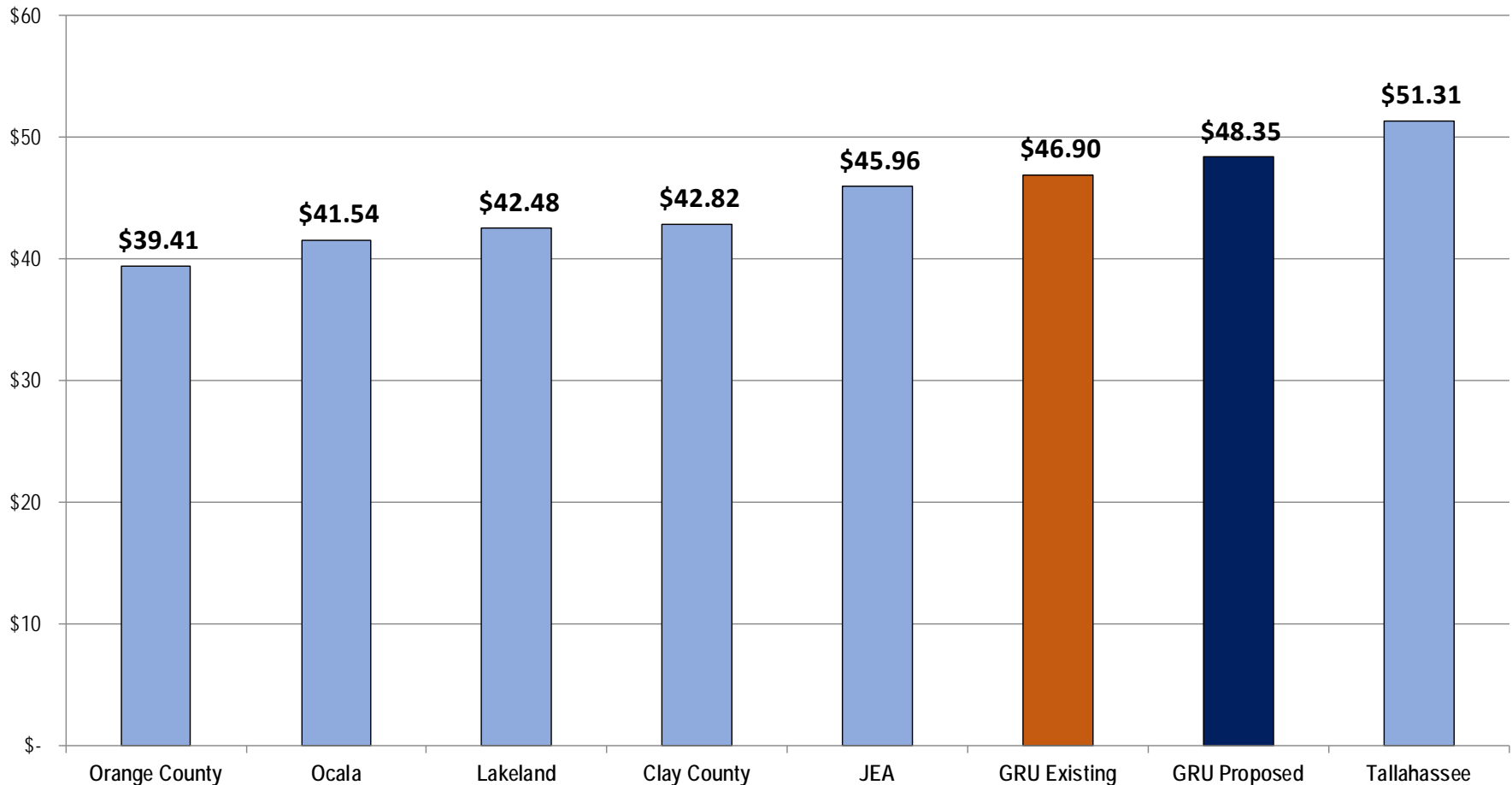
Typical Bill Comparisons - Wastewater

Large Commercial

Meter Size	Monthly Flow (Gal)	Monthly Charges			Difference From Existing	
		Existing	COS	Proposed	COS	Proposed
3.0 Inch	150,000	\$ 954.10	\$ 1,090.01	\$ 1,062.80	\$ 135.91	\$ 108.70
3.0 Inch	200,000	\$ 1,269.10	\$ 1,452.22	\$ 1,387.30	\$ 183.12	\$ 118.20
4.0 Inch	300,000	\$ 1,899.10	\$ 2,176.64	\$ 2,073.90	\$ 277.54	\$ 174.80
4.0 Inch	400,000	\$ 2,529.10	\$ 2,901.06	\$ 2,722.90	\$ 371.96	\$ 193.80
6.0 Inch	600,000	\$ 3,789.10	\$ 4,349.90	\$ 4,099.86	\$ 560.80	\$ 310.76
6.0 Inch	1,000,000	\$ 6,309.10	\$ 7,247.58	\$ 6,695.86	\$ 938.48	\$ 386.76
8.0 Inch	2,000,000	\$ 12,609.10	\$ 14,491.77	\$ 13,289.26	\$ 1,882.67	\$ 680.16
8.0 Inch	6,000,000	\$ 37,809.10	\$ 43,468.54	\$ 39,249.26	\$ 5,659.44	\$ 1,440.16

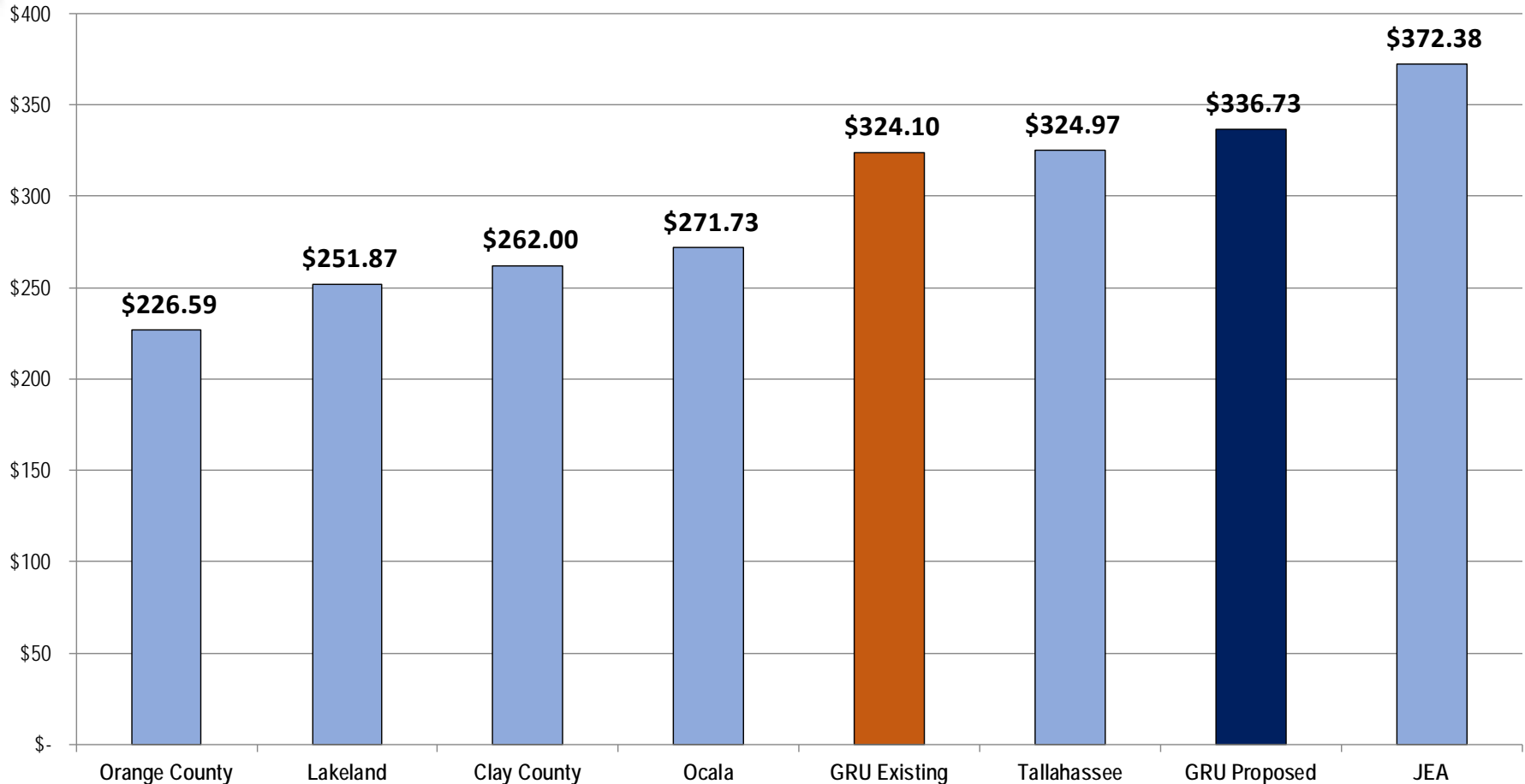
Neighboring Utility Comparisons - Wastewater

Residential – 6,000 Gallons Per Month



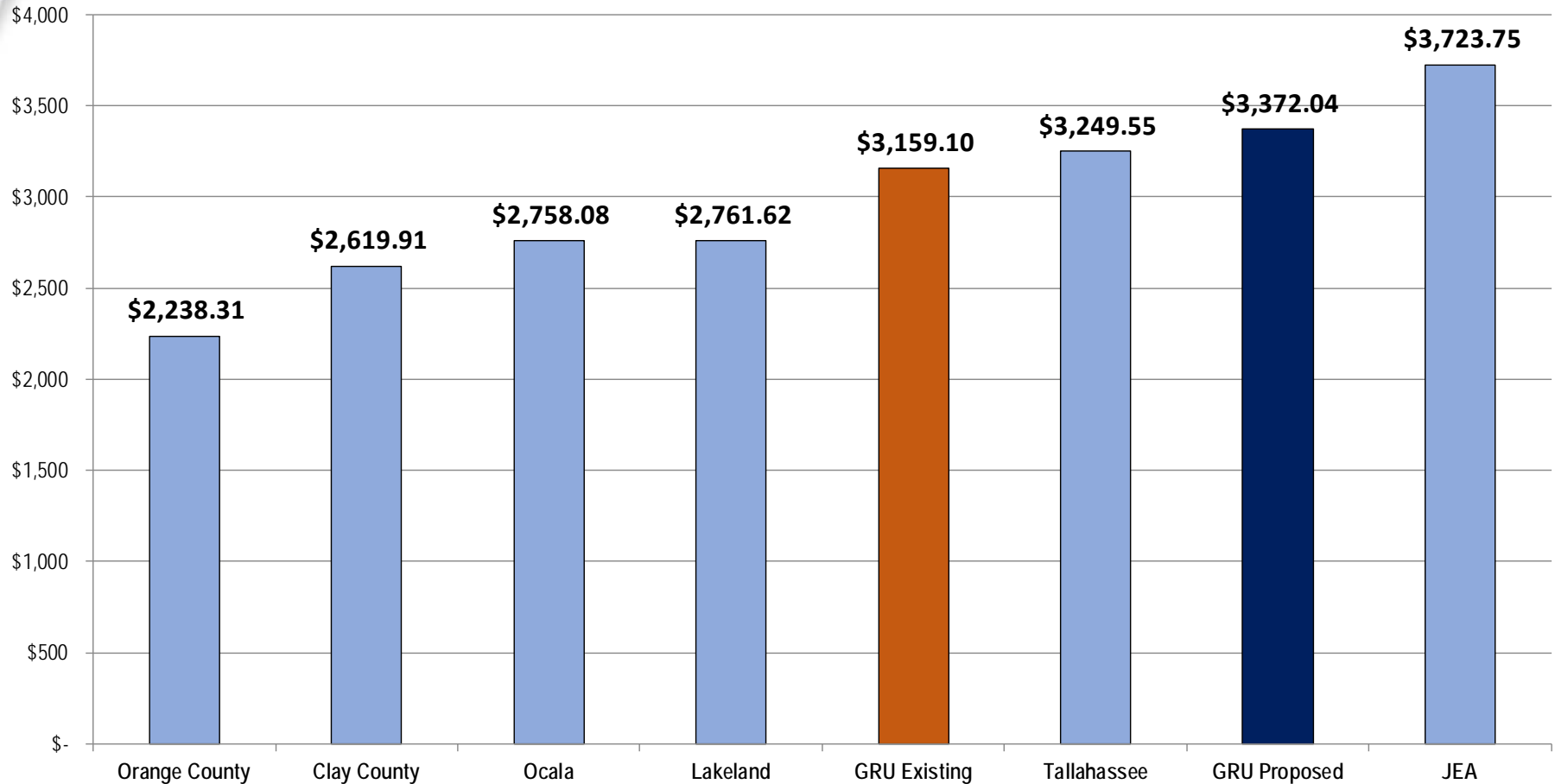
Neighboring Utility Comparisons - Wastewater

Small Commercial – 50,000 Gallons Per Month



Neighboring Utility Comparisons - Wastewater

Large Commercial – 500,000 Gallons Per Month



Recommendations - Wastewater

- Adopt the proposed wastewater rates to become effective as of October 1, 2018 (or other such date as deemed appropriate by the City Commission)
- Apply a phase-in approach to adjust the base monthly charges to be consistent with AWWA meter equivalency factors
- Review the rates as needed to ensure the financial sufficiency of the utility system



WASTEWATER

Comments & Questions



ELECTRIC

GAINESVILLE REGIONAL UTILITIES



Electric System Results

- Factors Driving Proposed Rates
- Existing Rates
- FY 2019 Revenue Requirement
- Cost of Service vs. Current and Proposed Rates
- Revenues at Current, COS, and Proposed Rates
- Bill Comparisons
- Neighboring Utility Comparisons
- Recommendations
- Comments/Questions

Factors Driving Proposed Rates - Electric

- Deerhaven Renewable Generating Station Purchase
 - Power purchase costs decrease from \$81 million in FY 2018 to \$1.6 million for the Test Year FY 2019.
 - Annual Debt Service increases from \$40 million to \$71 million.
- Cross subsidization of Residential and Rental Lighting Classes
 - All other retail classes pay more than cost to serve for the Test Year under current rates.
 - Residential subsidy \$3.2 million.
 - Rental lighting subsidy \$372,481.
- Wholesale customers can select other suppliers and contribute to fixed cost recovery, therefore, at current rates these transactions are beneficial to retail classes.

Existing Rates - Electric

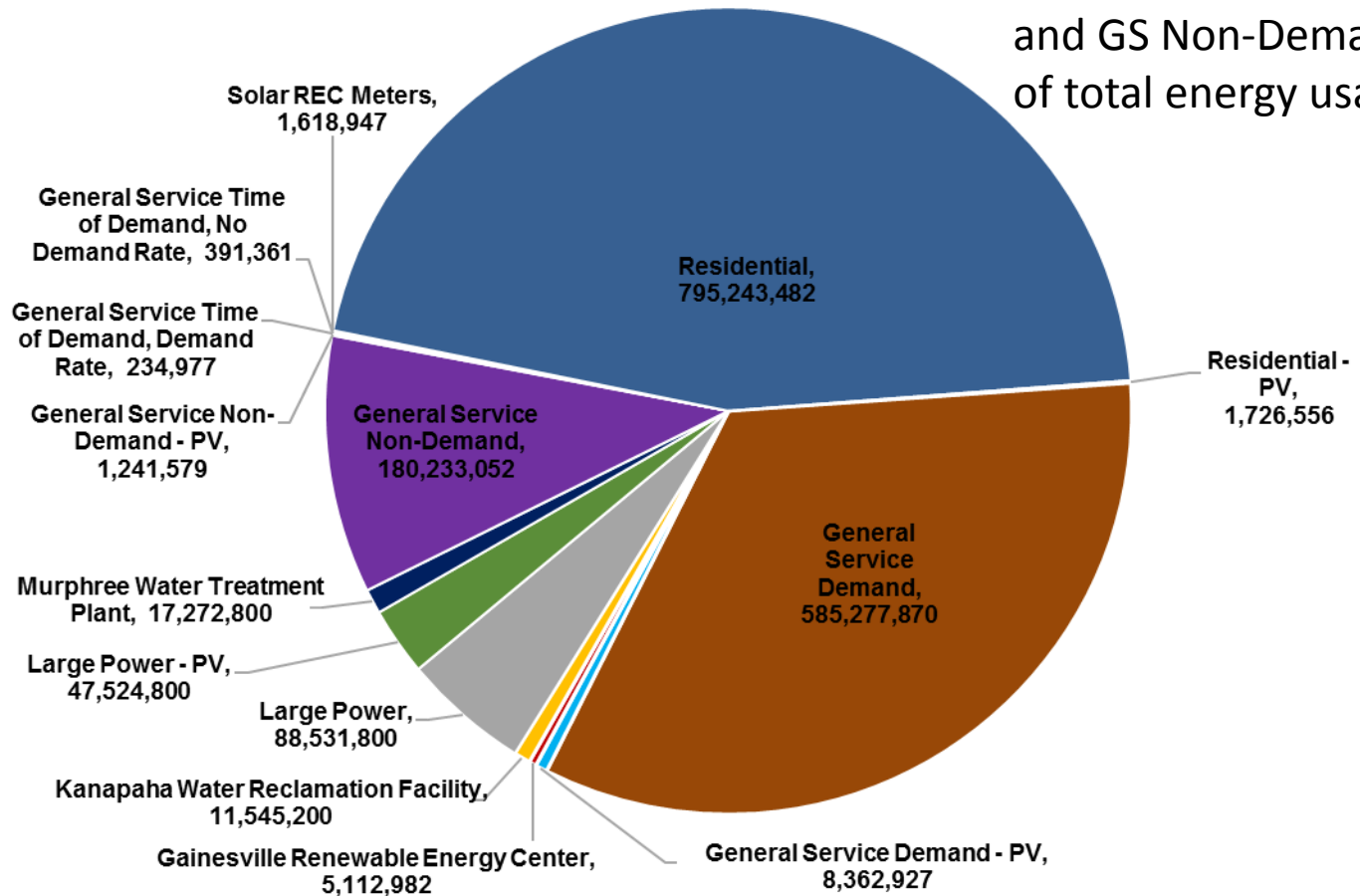
Customer Class	Rate Component	Rates Effective October 1, 2017	Rates Effective February 1, 2018
<u>Residential</u>			
	Tier 1 kWh (0-850), Less Embedded Fuel (\$ per kWh)	0.0375	0.0615
	Tier 2 kWh (>850), Less Embedded Fuel (\$ per kWh)	0.0595	0.0865
	Customer Charge (\$ per Month)	14.25	14.25
	Embedded Fuel (\$ per kWh)	0.0065	0.0065
	Fuel and Purchased Power Adjustment (\$ per kWh)	0.0700	0.0350
<u>General Service Non-Demand</u>			
	Tier 1 kWh (0-1500), Less Embedded Fuel (\$ per kWh)	0.0635	0.0825
	Tier 2 kWh (>1500), Less Embedded Fuel (\$ per kWh)	0.0965	0.1155
	Customer Charge (\$ per Month)	29.50	29.50
	Embedded Fuel (\$ per kWh)	0.0065	0.0065
	Fuel and Purchased Power Adjustment (\$ per kWh)	0.0700	0.0350
<u>General Service Demand</u>			
	Energy Charge, Less Embedded Fuel (\$ per kWh)	0.0347	0.0536
	Demand Charge (\$ per kW)	8.50	9.50
	Customer Charge (\$ per Month)	100.00	100.00
	Embedded Fuel (\$ per kWh)	0.0065	0.0065
	Fuel and Purchased Power Adjustment (\$ per kWh)	0.0700	0.0350
	Primary Service Discount	(0.1500)	(0.1500)
	Primary Metering Discount*	2.00%	2.00%
<u>Large Power Service</u>			
	Energy Charge, Less Embedded Fuel (\$ per kWh)	0.0305	0.0498
	Demand Charge (\$ per kW)	8.50	9.75
	Customer Charge (\$ per Month)	350.00	350.00
	Embedded Fuel (\$ per kWh)	0.0065	0.0065
	Fuel and Purchased Power Adjustment (\$ per kWh)	0.0700	0.0350
	Primary Service Discount	(0.1500)	(0.1500)
	Primary Metering Discount*	2.0%	2.0%

Existing Rates - Electric

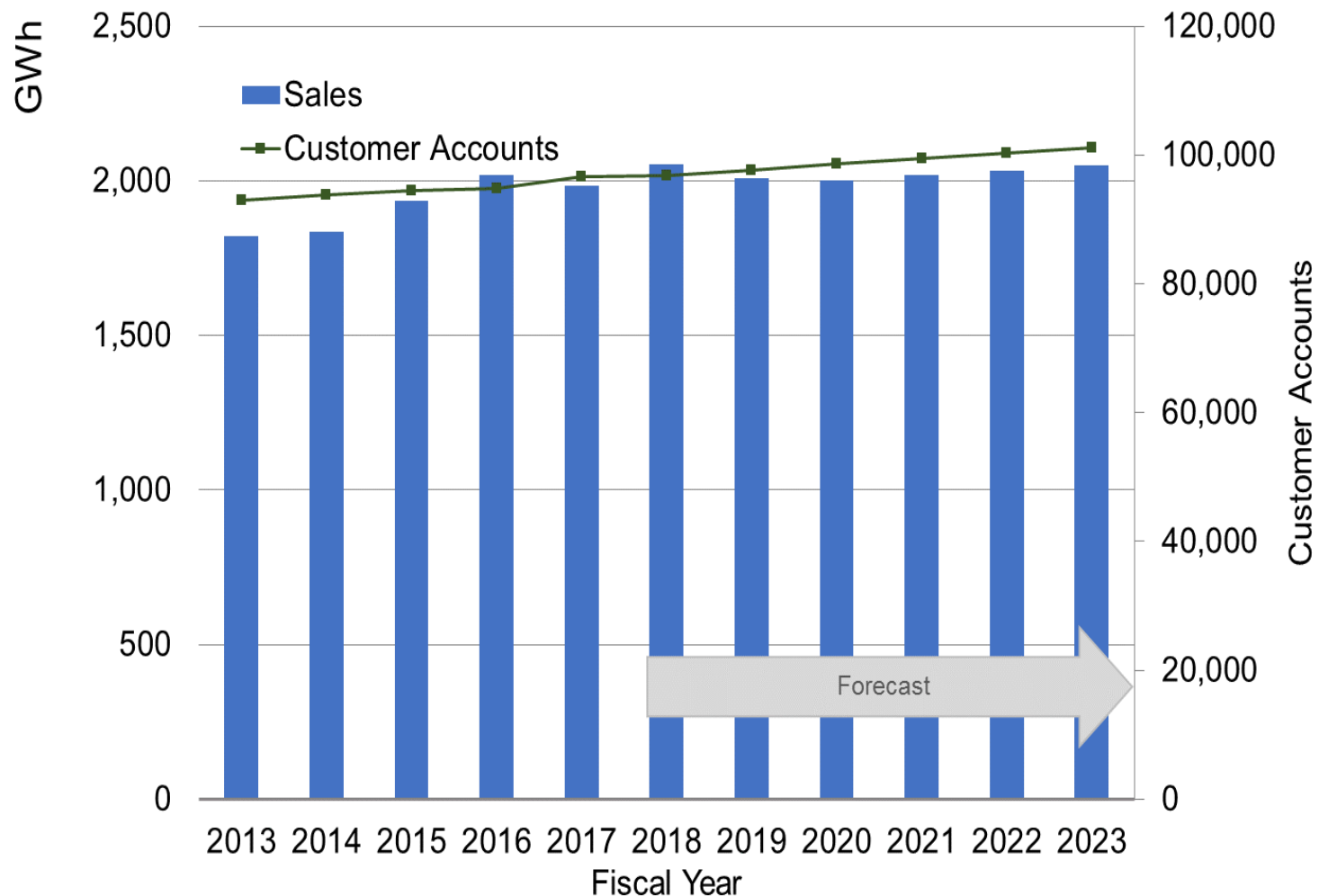
Customer Class	Rate Component	Current FY 2018 Rates
<u>Alachua</u>		
	Base Energy Charge (\$ per kWh)	0.0185
	Demand Charge (\$ per kW)	-
	Customer Charge (\$ per Month)	1,750.00
	Fuel and Purchased Power Adjustment (\$ per kWh)	0.0395
<u>Winter Park</u>		
	Energy Charge (\$ per kWh)	-
	Demand Charge, Base Rate (\$ per kW)	8.00
	Customer Charge (\$ per Month)	-
	Fuel and Purchased Power Adjustment (\$ per kWh)	0.0440
<u>Wheeling - Seminole Electric Power Cooperative</u>		
	Wheeling Charge (\$ per kW)	1.3600

FY 2017 Energy Usage by Customer Class

Residential is 47%,
 GS Demand is 37%,
 and GS Non-Demand is 11%
 of total energy usage.



Customer Sales and Accounts - Electric



Test Year Billing Determinants - Electric

CUSTOMER CLASS	ANNUAL LOAD (MWH)	COINCIDENT PEAK DEMAND (MW)	NON- COINCIDENT PEAK DEMAND (MW)	AVERAGE CUSTOMER ACCOUNTS
General Service Demand	607,288	109.8	148.6	1,176
General Service Demand - PV	8,677	1.5	2.2	18
Gainesville Renewable Energy Center	6,136	4.2	9.9	1
Kanapaha Water Reclamation Facility	11,545	1.1	1.7	1
Large Power	96,192	14.1	17.9	9
Large Power - PV	51,637	6.6	10.0	2
Murphree Water Treatment Plant	17,273	1.4	2.5	1
General Service Non-Demand	184,335	49.3	57.7	9,417
General Service Non-Demand - PV	1,270	0.2	0.4	61
General Service Time of Demand, Demand	235	0.0	0.1	3
General Service Time of Demand, Non-Demand	391	0.1	0.3	11
Residential	834,475	218.3	239.8	81,871
Residential - PV	1,812	0.4	0.5	214
Rental Lighting	11,995	2.0	3.2	1,295
Streetlighting	12,895	2.1	3.4	15
Traffic Lights	54	0.0	0.0	2
Sales for Resale - Alachua	142,029	26.7	29.5	1
Sales for Resale - Winter Park	22,090	-	10.0	1
TOTAL	2,010,328	437.7	537.8	94,099

COS Functionalization - Electric

	Production	Transmission	Distribution	Customer
Production O&M	\$98,561,430	\$0	\$0	\$0
Purchased Power and Other Production	20,128,895	-	-	-
Transmission and Distribution O&M	-	1,547,134	13,406,324	-
Customer Expenses	-	-	-	5,683,341
Administrative & General Expense	14,272,821	1,833,382	6,948,515	7,411,894
Debt Service	56,350,705	1,620,454	13,328,135	3,798
Fund Transfers	17,206,453	494,799	4,069,690	1,160
Capital Improvement Projects, Paid with Cash	9,346,426	380,019	12,491,686	597,279
Subtotal	\$215,866,730	\$5,875,787	\$50,244,350	\$13,697,472
Less Other Income	32,583,923	455,702	3,872,860	891,743
Total Revenue Requirement	\$183,282,807	\$5,420,085	\$46,371,490	\$12,805,729

Total Revenue Requirement is \$247,880,111

COS Classification - Electric

Production

Demand Related	\$	59,291,883
Energy Related		123,990,924
Total Production	\$	183,282,807

Transmission

138 kV System (All Customers)	\$	4,978,764
Direct Assignment (Alachua)		441,320
Total Transmission	\$	5,420,085

Distribution

Demand Related	\$	28,249,194
Customer Related		12,030,563
Direct Assignment (Lighting)		6,091,733
Total Distribution	\$	46,371,490

Customer \$ 12,805,729

**Total Revenue Requirements to be Met from Base, Fuel Adjustment,
and Wholesale Revenues** \$ **247,880,111**

Existing, COS, & Proposed Rates - Electric

Customer Class	Rate Component	Current FY 2018 Rates	COS Rates, Test Year 2019	Difference Current from COS (%)	GRU Proposed Rate (Rates Effective February 1)	Difference Proposed from Current (%)
<u>Residential</u>						
	Tier 1 kWh (0-850), Less Embedded Fuel (\$ per kWh)	0.0375	0.0658	-43.0%	0.0615	64.0%
	Tier 2 kWh (>850), Less Embedded Fuel (\$ per kWh)	0.0595	0.1004	-40.7%	0.0865	45.4%
	Customer Charge (\$ per Month)	14.25	20.66	-31.0%	14.25	0.0%
	Embedded Fuel (\$ per kWh)	0.0065	0.0065	0.0%	0.0065	0.0%
	Fuel and Purchased Power Adjustment (\$ per kWh)	0.0700	0.0351	99.6%	0.0350	-50.0%
<u>General Service Non-Demand</u>						
	Tier 1 kWh (0-1500), Less Embedded Fuel (\$ per kWh)	0.0635	0.0629	0.9%	0.0825	29.9%
	Tier 2 kWh (>1500), Less Embedded Fuel (\$ per kWh)	0.0965	0.0959	0.6%	0.1155	19.7%
	Customer Charge (\$ per Month)	29.50	21.69	36.0%	29.50	0.0%
	Embedded Fuel (\$ per kWh)	0.0065	0.0065	0.0%	0.0065	0.0%
	Fuel and Purchased Power Adjustment (\$ per kWh)	0.0700	0.0351	99.6%	0.0350	-50.0%
<u>General Service Demand</u>						
	Energy Charge, Less Embedded Fuel (\$ per kWh)	0.0347	0.0214	61.8%	0.0536	54.5%
	Demand Charge (\$ per kW)	8.50	16.12	-47.3%	9.50	11.8%
	Customer Charge (\$ per Month)	100.00	79.55	25.7%	100.00	0.0%
	Embedded Fuel (\$ per kWh)	0.0065	0.0065	0.0%	0.0065	0.0%
	Fuel and Purchased Power Adjustment (\$ per kWh)	0.0700	0.0351	99.6%	0.0350	-50.0%
	Primary Service Discount	(0.1500)	(0.3321)	-54.8%	(0.1500)	0.0%
	Primary Metering Discount*	2.00%	0.70%	183.9%	2.00%	0.0%
<u>Large Power Service</u>						
	Energy Charge, Less Embedded Fuel (\$ per kWh)	0.0305	0.0216	41.0%	0.0498	63.3%
	Demand Charge (\$ per kW)	8.50	16.33	-48.0%	9.75	14.7%
	Customer Charge (\$ per Month)	350.00	1,335.90	-73.8%	350.00	0.0%
	Embedded Fuel (\$ per kWh)	0.0065	0.0065	0.0%	0.0065	0.0%
	Fuel and Purchased Power Adjustment (\$ per kWh)	0.0700	0.0351	99.6%	0.0350	-50.0%
	Primary Service Discount	(0.1500)	(0.3321)	-54.8%	(0.1500)	0.0%
	Primary Metering Discount*	2.0%	0.7%	183.9%	2.0%	0.0%

*Note: The Primary Metering Discount currently applies a 2% reduction to energy and demand charges; COS results changes this discount to 0.7% and applies it to the energy portion only.

Existing, COS, & Proposed Rates - Electric

Customer Class	Rate Component	Current FY 2018 Rates	COS Rates, Test Year 2019	Difference Current from COS (%)	GRU Proposed Rate (Rates Effective February 1)	Difference Proposed from Current (%)
<u>Alachua</u>						
	Base Energy Charge (\$ per kWh)	0.0185	0.0278	-33.5%	0.0185	0.0%
	Demand Charge (\$ per kW)	-	14.52	-100.0%	-	
	Customer Charge (\$ per Month)	1,750.00	17,386.21	-89.9%	1,750.00	0.0%
	Fuel and Purchased Power Adjustment (\$ per kWh)	0.0395	0.0351	12.6%	0.0395	0.0%
<u>Winter Park</u>						
	Energy Charge (\$ per kWh)	-	0.0278	-100.0%	-	
	Demand Charge, Base Rate (\$ per kW)	8.00	13.70	-41.6%	8.00	0.0%
	Customer Charge (\$ per Month)	-	2,711.59	-100.0%	-	
	Fuel and Purchased Power Adjustment (\$ per kWh)	0.0440	0.0351	25.4%	0.0440	0.0%
<u>Wheeling - Seminole Electric Power Cooperative</u>						
	Wheeling Charge (\$ per kW)	1.3600	1.099	23.7%	1.3600	0.0%

Existing, COS, & Proposed Revenue – Electric (\$000)

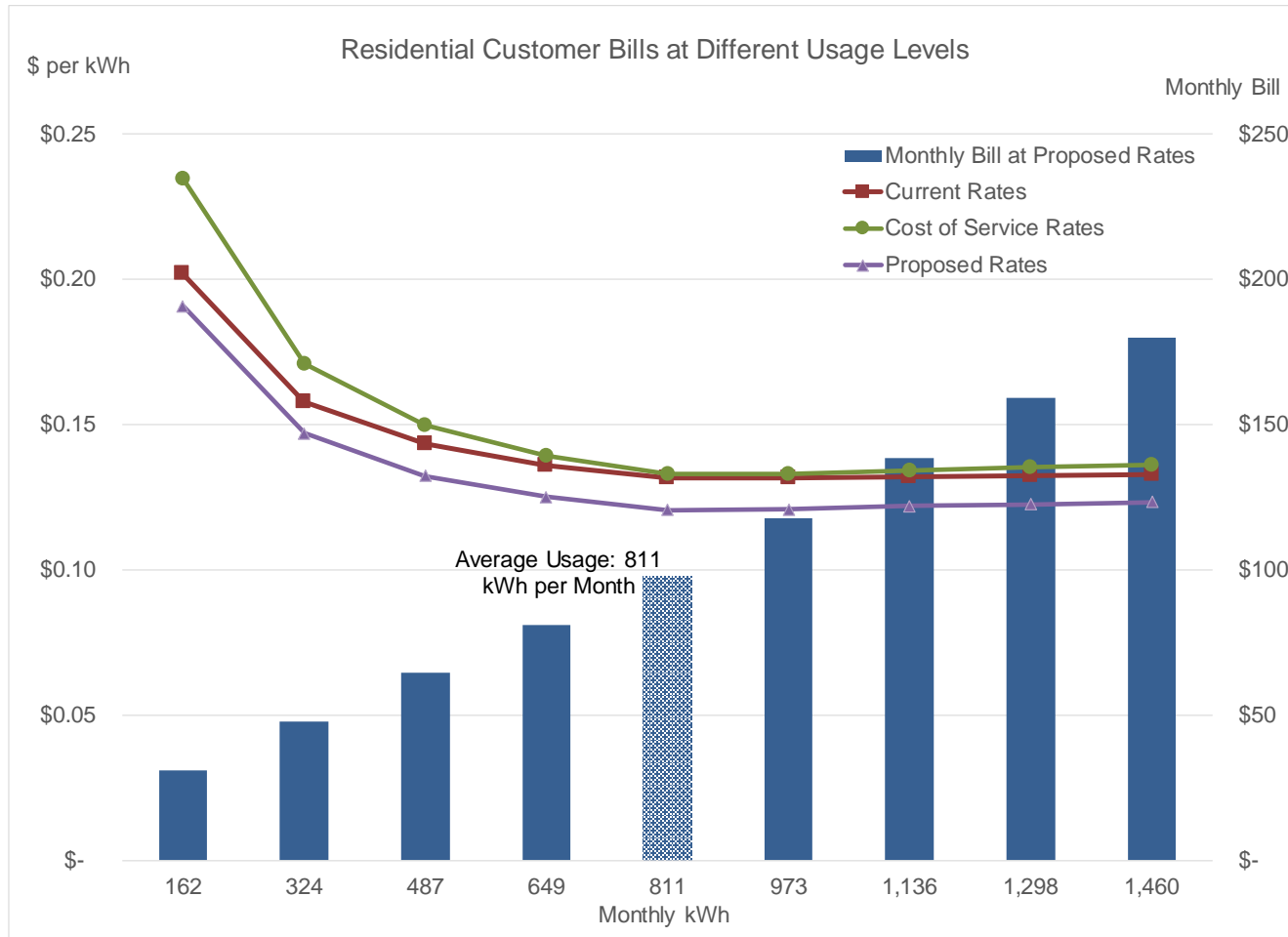
Customer Class	Rate Component	FY 2019 Revenues Under GRU Proposed Rates (Rates Effective February 1)	FY 2019 Revenues Under COS Rates	Difference Feb. 1 from COS (Value)	Difference Feb. 1 from COS (%)
<u>Residential</u>					
	Tier 1 kWh (0-850), Less Embedded Fuel	\$ 39,725	\$ 42,508	\$ (2,783)	-6.5%
	Tier 2 kWh (>850), Less Embedded Fuel	16,309	18,921	(2,612)	-13.8%
	Customer Charge	14,165	20,535	(6,370)	-31.0%
	Embedded Fuel	5,424	5,424	-	0.0%
	Fuel and Purchased Power Adjustment	29,207	29,270	(63)	-0.2%
	Total	\$ 104,830	\$ 116,657	\$ (11,828)	-10.1%
<u>General Service Non-Demand</u>					
	Tier 1 kWh (0-1500), Less Embedded Fuel	\$ 7,325	\$ 5,588	\$ 1,737	31.1%
	Tier 2 kWh (>1500), Less Embedded Fuel	11,036	9,165	1,871	20.4%
	Customer Charge	3,394	2,495	899	36.0%
	Embedded Fuel	1,198	1,198	-	0.0%
	Fuel and Purchased Power Adjustment	6,452	6,466	(14)	-0.2%
	Total	\$ 29,405	\$ 24,912	\$ 4,493	18.0%
<u>General Service Demand</u>					
	Energy Charge, Less Embedded Fuel	\$ 32,551	\$ 13,023	\$ 19,527	149.9%
	Demand Charge	14,998	25,444	(10,445)	-41.1%
	Customer Charge	1,471	1,171	301	25.7%
	Embedded Fuel	3,947	3,947	-	0.0%
	Fuel and Purchased Power Adjustment	21,255	21,301	(46)	-0.2%
	Primary Service Discount	(72)	(159)	87	-54.8%
	Primary Metering Discount*	(258)	(42)	(216)	512.0%
	Total	\$ 73,893	\$ 64,684	\$ 9,209	14.2%

Existing, COS, & Proposed Revenue – Electric (\$000)

Customer Class	Rate Component	FY 2019 Revenues Under GRU Proposed Rates (Rates Effective February 1)	FY 2019 Revenues Under COS Rates	Difference Feb. 1 from COS (Value)	Difference Feb. 1 from COS (%)
Large Power Service					
	Energy Charge, Less Embedded Fuel	\$ 4,790	\$ 2,080	\$ 2,710	130.3%
	Demand Charge	1,776	2,975	(1,199)	-40.3%
	Customer Charge	40	154	(114)	-73.8%
	Embedded Fuel	625	625	-	0.0%
	Fuel and Purchased Power Adjustment	3,367	3,374	(7)	-0.2%
	Primary Service Discount	(27)	(60)	33	-54.8%
	Primary Metering Discount*	(102)	(19)	(83)	436.0%
	Total	\$ 10,469	\$ 9,129	\$ 1,341	14.7%
Total Rate Revenues (w/o Rental/Street Lighting)					
	Rental and Street Lighting (no change)	7,805	7,805	-	0.0%
	Total Rate Revenue	247,181	247,605	(423)	-0.2%
	Less Total Cost to Serve	247,880	247,880	-	0.0%
	Surplus/(Deficiency)	(699)	(275)	(423)	153.7%
	Surcharge Revenues	4,832	4,695	138	2.9%
	Other Revenues	34,347	34,347	-	0.0%
	Total Other Revenues	\$ 39,180	\$ 39,042	\$ 138	0.4%
Total Rate Plus Other Revenues					
	Less Total Revenue Requirement	\$ 285,684	\$ 285,684	-	0.0%
	Total Surplus/(Deficiency)	\$ 677	\$ 962	(286)	-29.7%

Typical Bill Comparisons - Electric

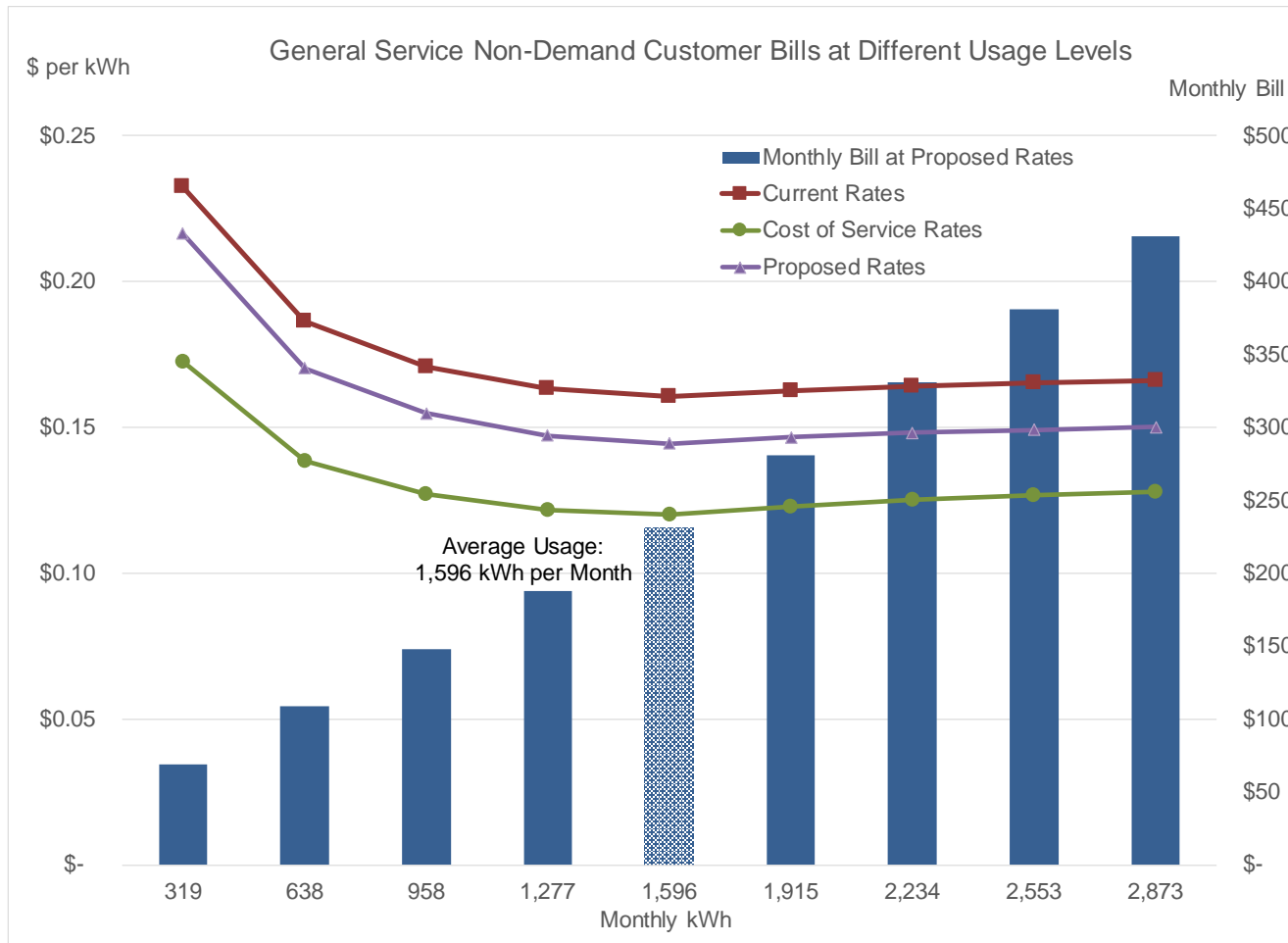
Residential



Average Residential customer would see 10.2% increase at COS rates (against Feb. 1 current rates).

Typical Bill Comparisons - Electric

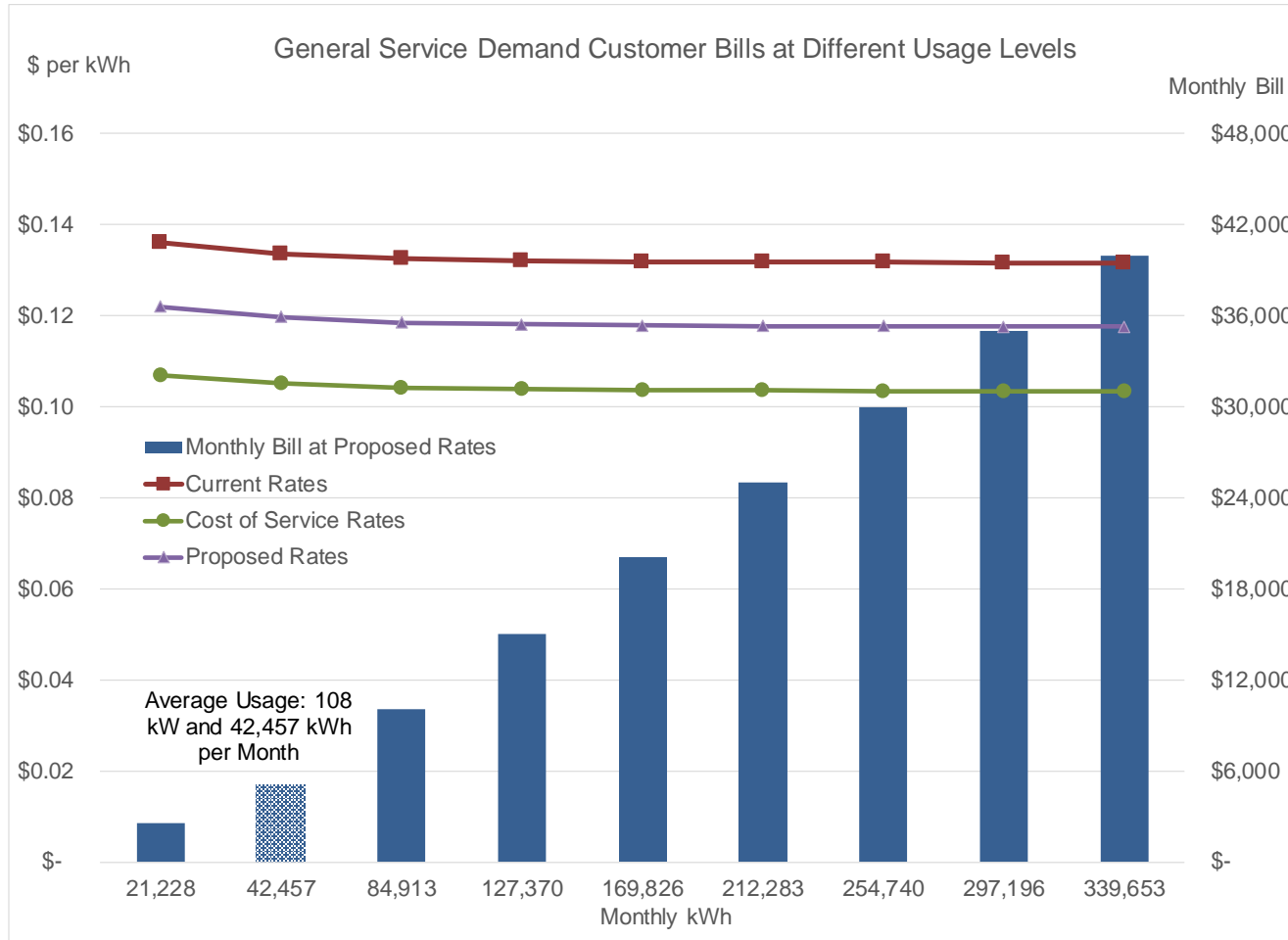
General Service Non-Demand



Average GS Non-Demand customer would see 16.9% decrease at COS rates (against Feb. 1 current rates).

Typical Bill Comparisons - Electric

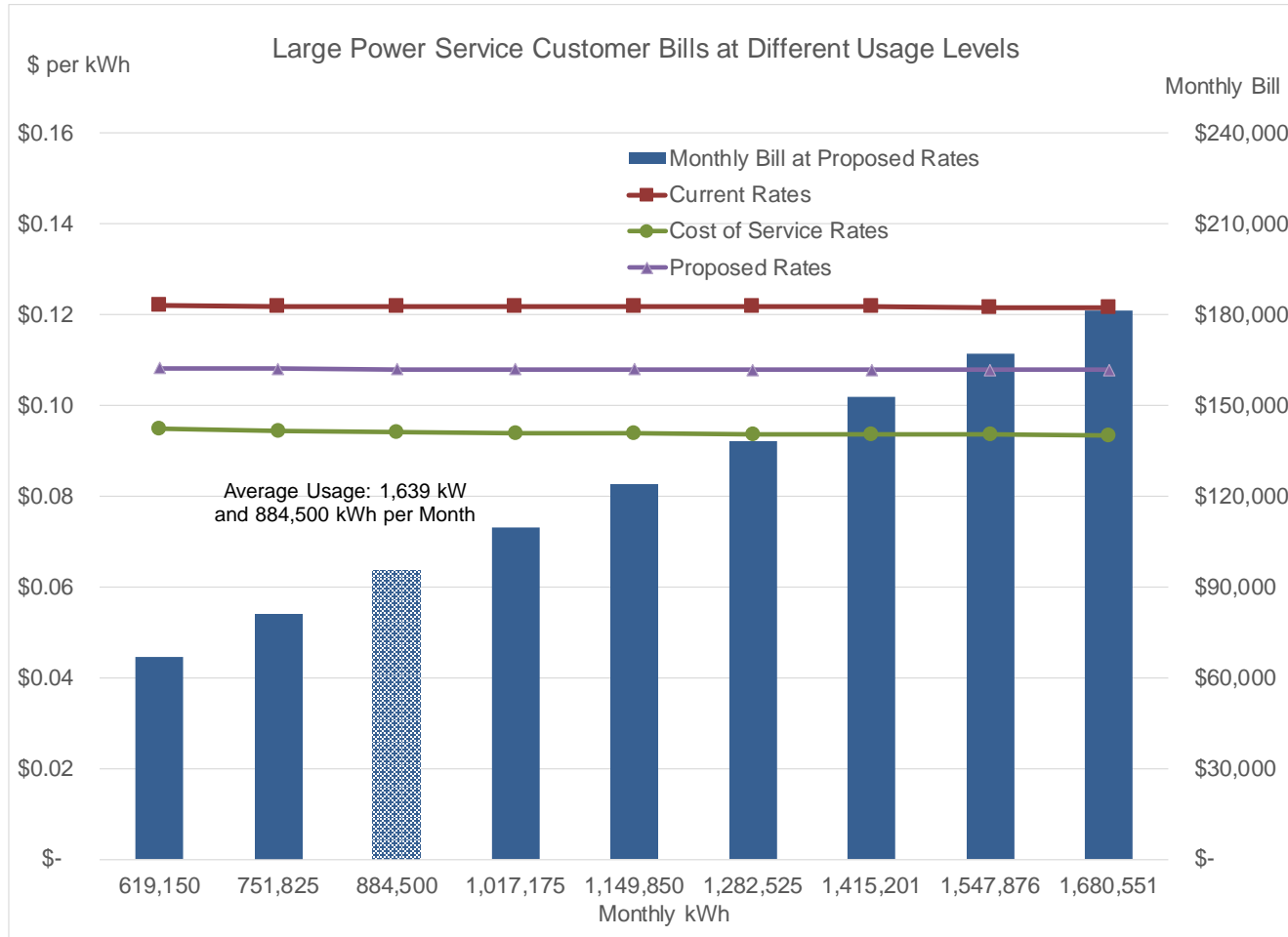
General Service Demand



Average GS Demand customer would see 12.2% decrease at COS rates (against Feb. 1 current rates).

Typical Bill Comparisons - Electric

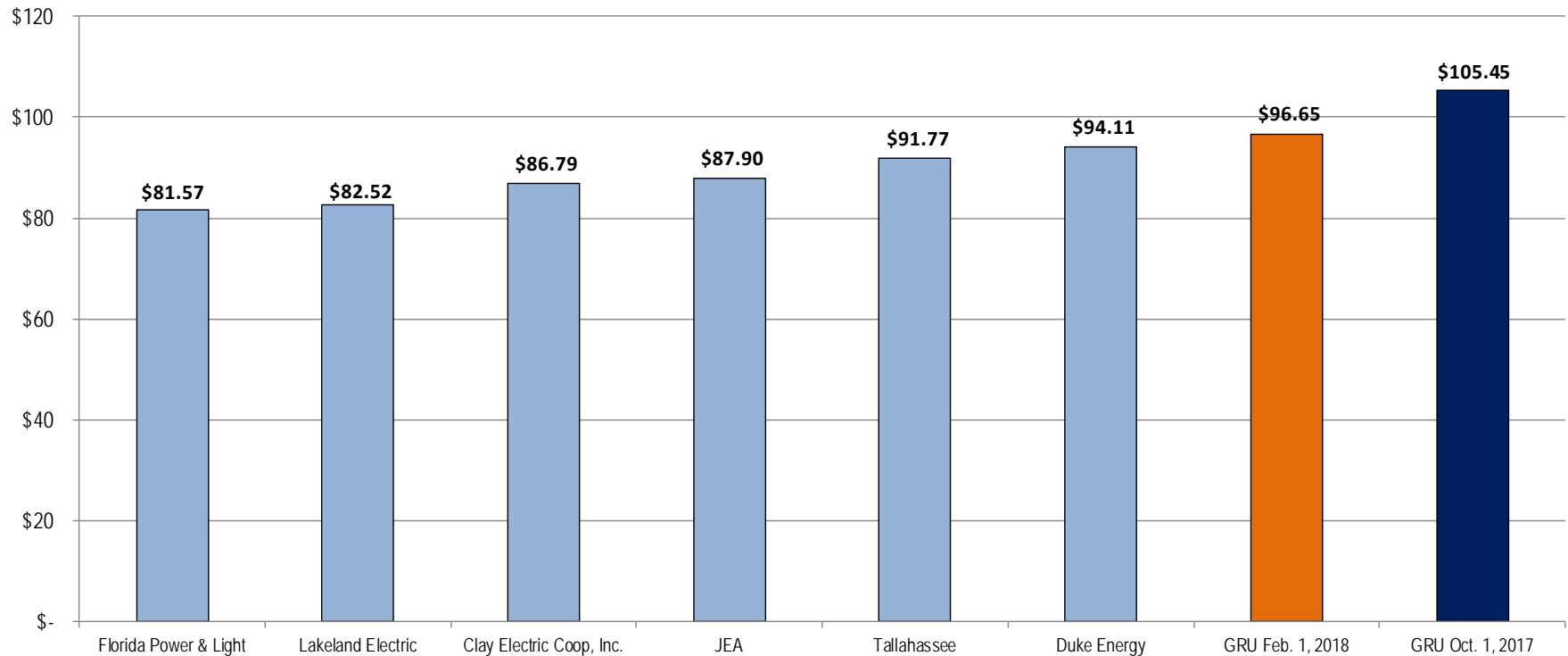
Large Power



Average Large Power customer would see 12.8% decrease at COS rates (against Feb. 1 current rates).

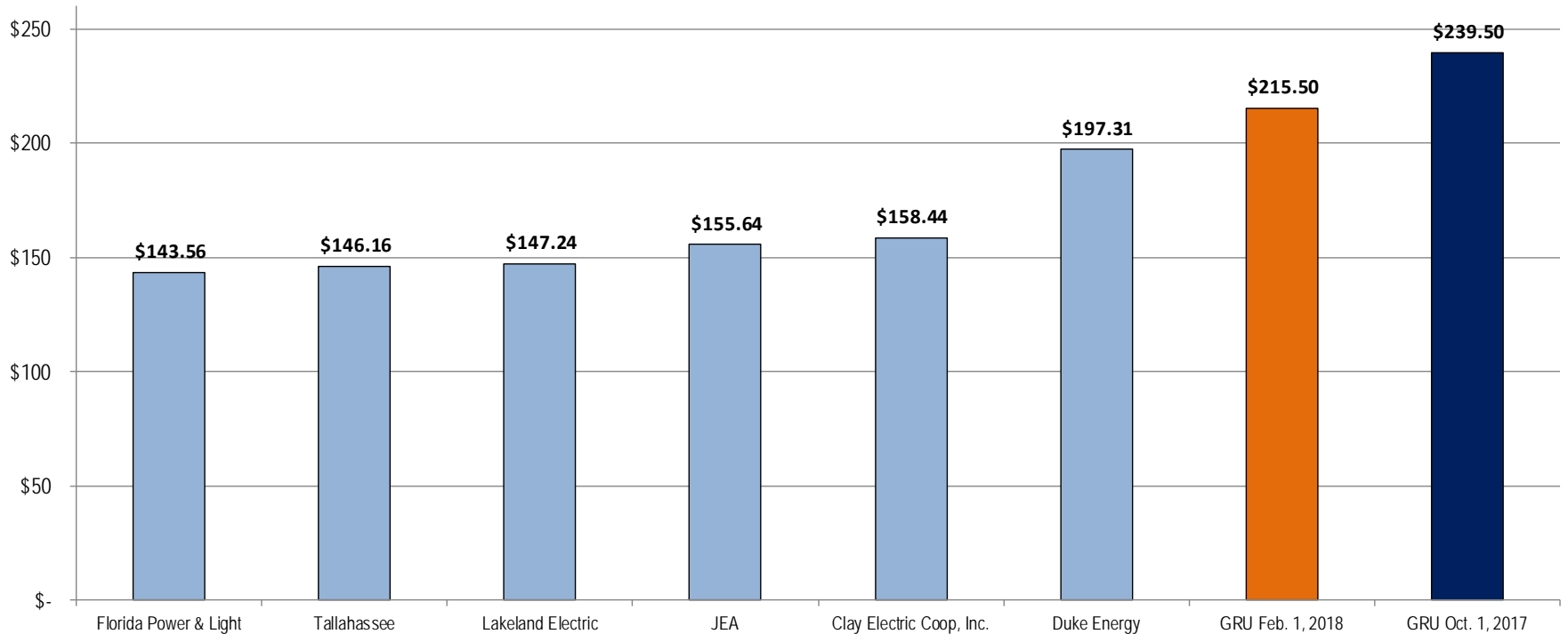
Neighboring Utility Comparisons - Electric

Residential – 800 kWh Per Month



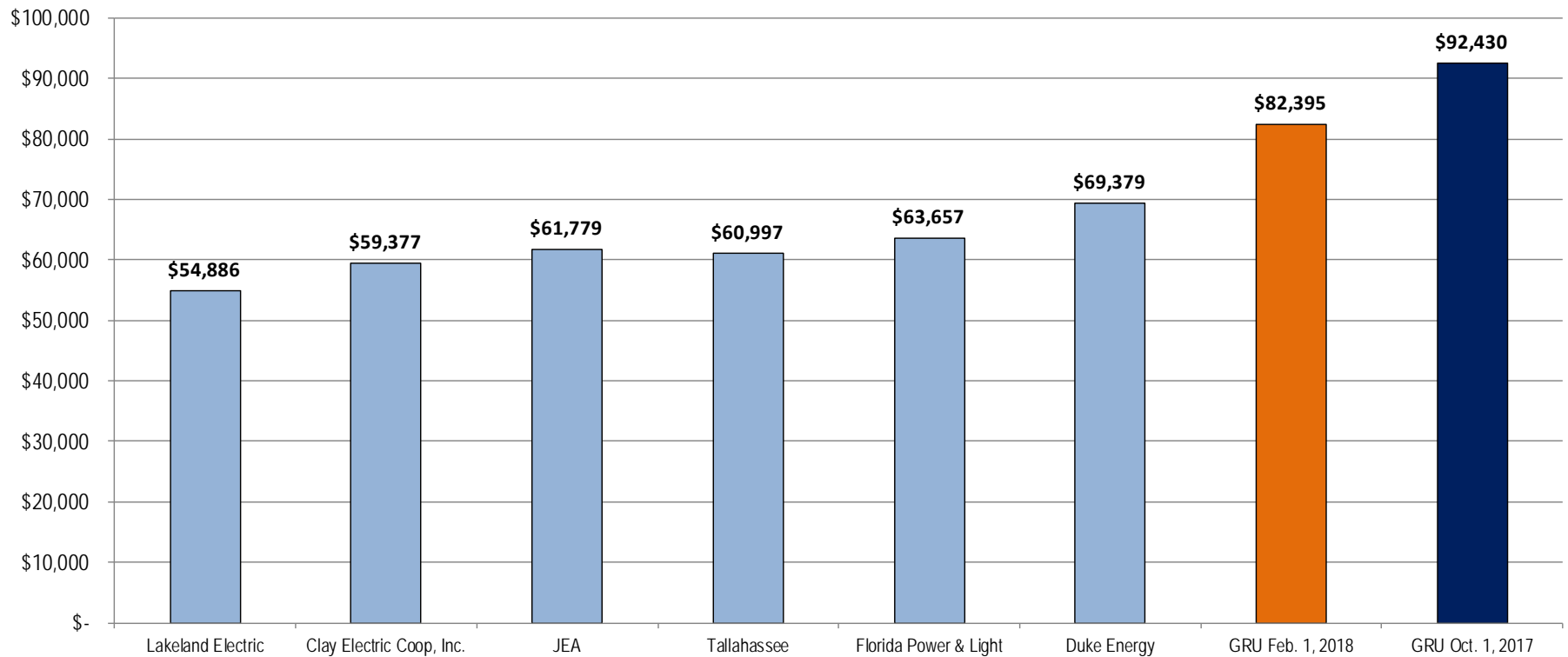
Neighboring Utility Comparisons - Electric

Small Commercial – 1,500 kWh Per Month



Neighboring Utility Comparisons - Electric

Large Commercial – 750,000 kWh Per Month



Recommendations - Electric

- Move retail rate classes towards cost-based rates over a three to five-year time period, recognizing that additional revenue increases may be required in FY 2020, FY 2022, and FY 2023.
- Change the applicability of the Primary Metering Discount to only the energy portion of the bill (rather than energy plus demand).
- If additional incentives for conservation and energy efficiency are desired, lower the consumption setpoint for Tier 1 energy for both Residential and General Service Non-Demand customer classes, with commensurate rate changes to avoid over-collection.
- Maintain competitive wholesale rates to provide systemwide benefits.



ELECTRIC

Comments & Questions



CONNECTION CHARGES

Connection Charges - General

- A one-time fee applied only to new/future system customers (separate for water and wastewater).
- Recovers capital costs incurred to provide system capacity to new/future users (major facilities).
- Helps growth pay for growth.
- Protects existing customers from paying for expansions needed to support system growth.

Recoverable Capital Costs – Existing Assets

Water System

	Original Cost	Replacement Cost New	Depreciation	RCNLD
Total Utility Assets	\$ 287,120,565	\$ 1,451,965,644	\$ (116,012,243)	\$ 1,335,953,402
Assets Over Cost Limit	\$ 245,063,103	\$ 1,374,522,350	\$ (101,297,187)	\$ 1,273,225,163
Excluded From Recovery	\$ (137,814,003)			\$ (885,376,298)
Recoverable Asset Costs	\$ 107,249,100			\$ 387,848,865
Recoverable Assets:				
Treatment Facilities				\$ 72,523,530
Transmission Facilities				315,325,335
Total				\$ 387,848,865

Recoverable Capital Costs – Existing Assets

Wastewater System

	Original Cost	Replacement Cost New	Depreciation	RCNLD
Total Utility Assets	\$ 378,453,166	\$1,180,539,031	\$ (153,619,048)	\$1,026,919,983
Assets Over Cost Limit	\$ 322,957,026	\$1,077,862,703	\$ (130,705,968)	\$ 947,156,734
Excluded From Recovery	\$ (112,218,489)			\$ (404,020,935)
Recoverable Asset Costs	\$ 210,738,537			\$ 543,135,799
Recoverable Assets:				
Treatment Facilities				\$ 137,424,790
Transmission Facilities				405,711,009
Total				\$ 543,135,799

Recoverable Capital Costs – Planned Assets

Water System

	Total CIP	Allocation Amount		
		Expand/Upgrade	R&R	Other
Treatment Projects	\$ 23,902,500	\$ 3,667,500	\$ 20,235,000	\$ 0
Transmission Projects	22,397,000	630,000	8,617,500	13,149,500
Other Projects	8,038,738	0	0	8,038,738
Total	\$ 54,338,238	\$ 4,297,500	\$ 28,852,500	\$ 21,188,238

Recoverable Capital Costs – Planned Assets

Wastewater System

	Total CIP	Allocation Amount		
		Expand/Upgrade	R&R	Other
Treatment Projects	\$ 27,170,000	\$ 300,000	\$ 26,870,000	\$ 0
Transmission Projects	3,420,000	140,000	290,000	2,990,000
Other Projects	172,000	0	0	172,000
Total	\$ 30,762,000	\$ 440,000	\$ 27,160,000	\$ 3,162,000

Allocated Recoverable Costs

	Recoverable Capital Costs	
	Water	Wastewater
Combined:		
Treatment Facilities	\$ 76,191,030	\$ 137,724,790
Transmission Facilities	315,955,335	405,851,009
Subtotal	<u>\$ 392,146,365</u>	<u>\$ 543,575,799</u>
Less Debt Service Credit:		
Treatment Facilities	\$ (22,212,053)	\$ (36,686,555)
Transmission Facilities	(96,575,869)	(108,307,528)
Subtotal	<u>\$(118,787,922)</u>	<u>\$(144,994,083)</u>
Net Capital Costs:		
Treatment Facilities	\$ 53,978,977	\$ 101,038,235
Transmission Facilities	219,379,466	297,543,481
Net Recoverable Capital Costs	<u>\$ 273,358,443</u>	<u>\$ 398,581,716</u>

Existing & Proposed Connection Charges

Water System

	Connection Charge - Water		Difference
	Existing	Proposed	
Charge Per Gallon of Capacity (GPD):			
Treatment Facilities	\$ 2.410	\$ 1.645	\$ (0.765)
Transmission Facilities	1.600	3.358	1.758
Cost Per GPD	\$ 4.010	\$ 5.003	\$ 0.993
Adopted Level of Service (GPD)	280	280	
Connection Charge Per ERU:			
Treatment Facilities	\$ 675	\$ 460	\$ (215)
Transmission Facilities	448	940	492
Connection Charge	\$ 1,123	\$ 1,400	\$ 277

Existing & Proposed Connection Charges

Wastewater System

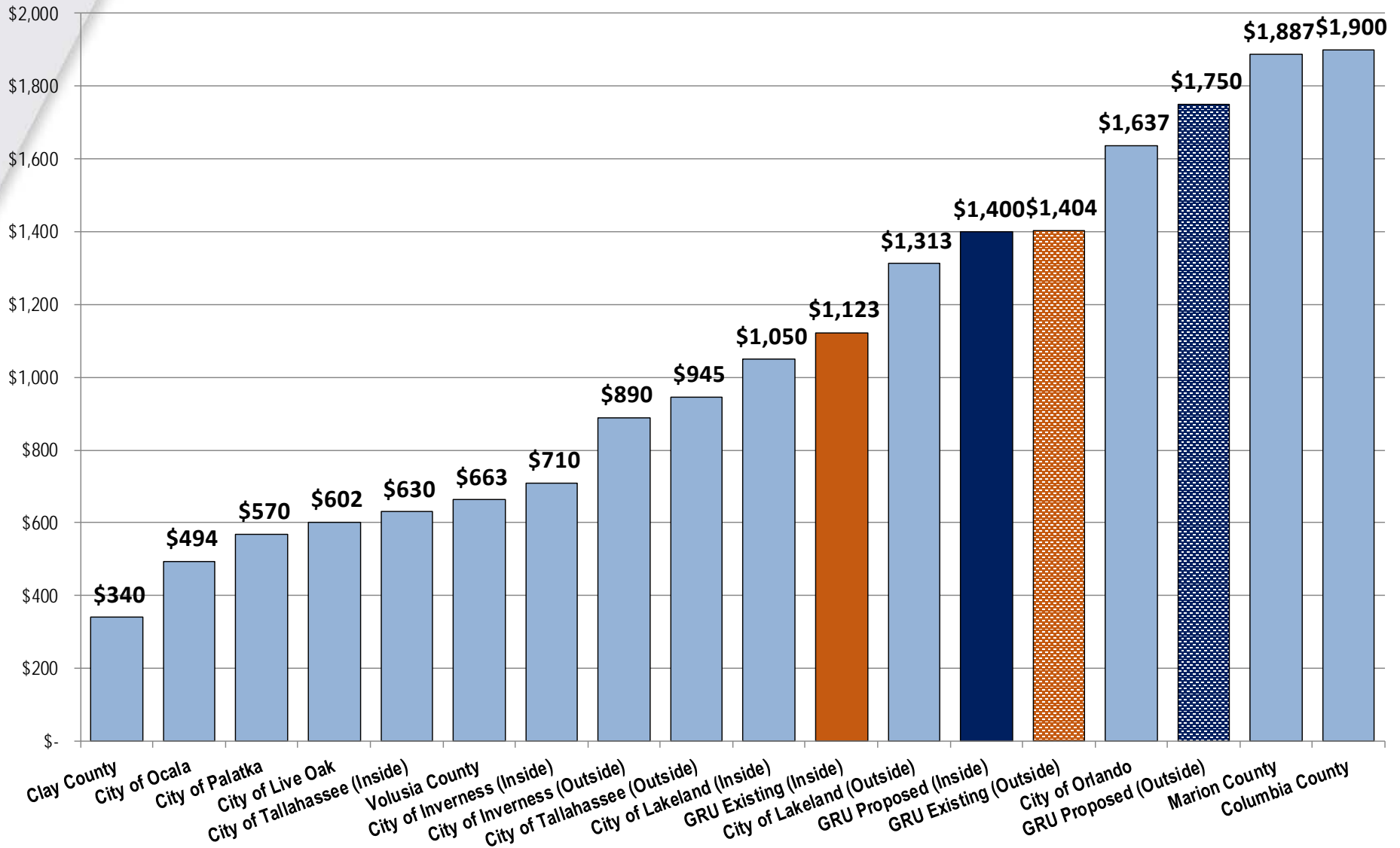
	Connection Charge - Wastewater		Difference
	Existing	Proposed	
Charge Per Gallon of Capacity (GPD):			
Treatment Facilities	\$ 9.120	\$ 5.285	\$ (3.835)
Transmission Facilities	2.660	7.785	5.125
Cost Per GPD	\$ 11.780	\$ 13.070	\$ 1.290
Adopted Level of Service (GPD)	280	280	
Connection Charge Per ERU:			
Treatment Facilities	\$ 2,554	\$ 1,480	\$ (1,074)
Transmission Facilities	744	2,180	1,436
Connection Charge	\$ 3,298	\$ 3,660	\$ 362

Proposed Connection Charge Structure

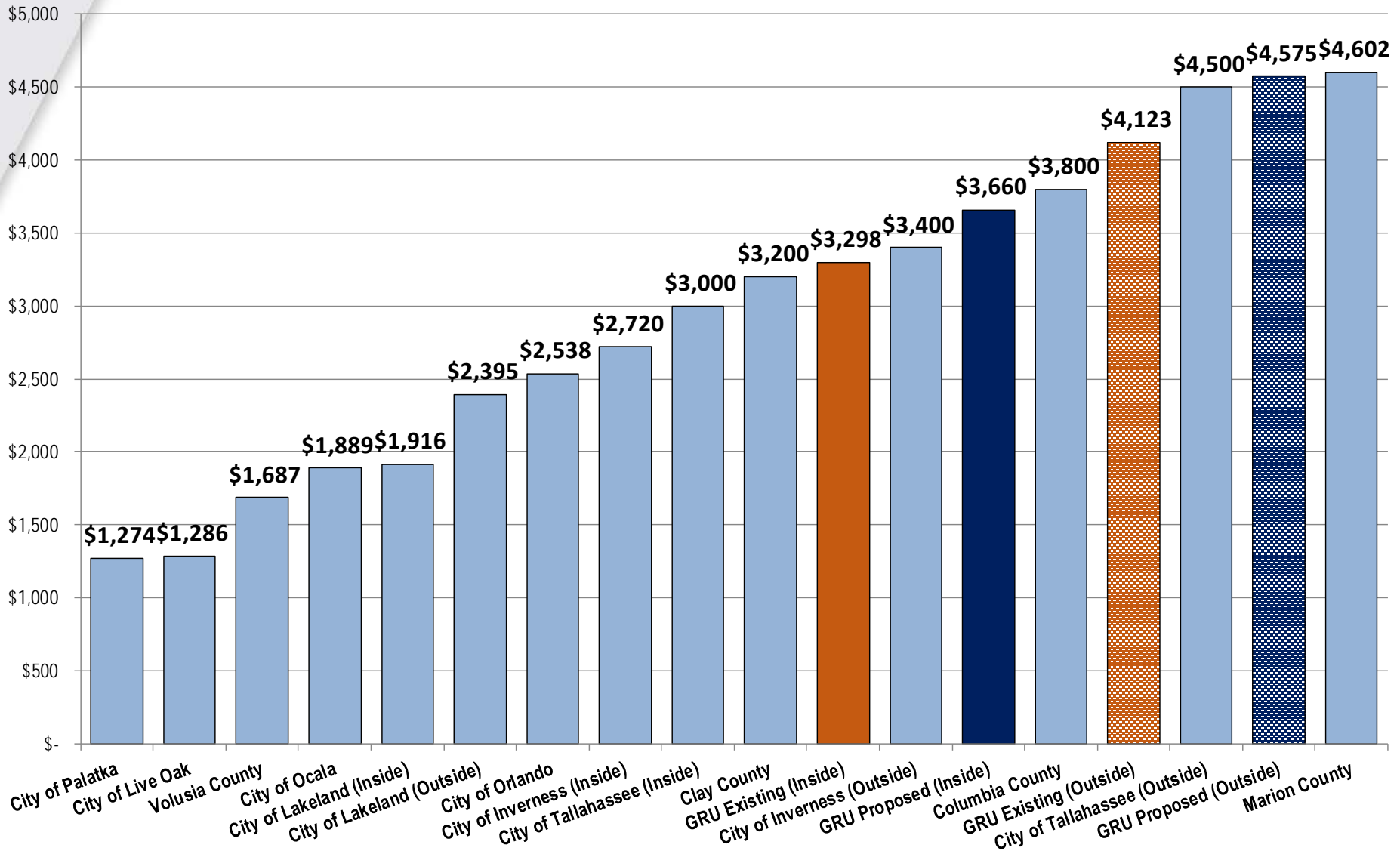
Charges By Meter Size

Meter Size:	Meter-Based ERU Factor	Proposed Connection Charges	
		Water	Wastewater
5/8 & 3/4 Inch	1.00	\$ 1,400	\$ 3,660
1.0 Inch	2.50	\$ 3,500	\$ 9,150
1.5 Inch	5.00	\$ 7,000	\$ 18,300
2.0 Inch	8.00	\$ 11,200	\$ 29,280
3.0 Inch	16.00	\$ 22,400	\$ 58,560
4.0 Inch	25.00	\$ 35,000	\$ 91,500
6.0 Inch	50.00	\$ 70,000	\$ 183,000
8.0 Inch	80.00	\$ 112,000	\$ 292,800
10.0 Inch	125.00	\$ 175,000	\$ 457,500

Neighboring Utility Comparison - Water



Neighboring Utility Comparison - Wastewater



Recommendations – Connection Charges

- Adopt the proposed Connection Charges to become effective as of October 1, 2018 (or other such date as deemed appropriate by the City Commission)
- Apply a meter-based fee structure to be consistent with AWWA meter equivalency factors
- Review the fees as needed to ensure sufficient recovery of capital costs



CONNECTION CHARGES

Comments & Questions



THANK YOU