

Utilities Commission, City of New Smyrna Beach

2020-2021 Utility Rate Study

June 28, 2021 Commission Meeting



Our Mission...

As a vital community partner to greater New Smyrna Beach, we operate and maintain infrastructure that provides essential, reliable services. We strive to maintain and build upon the confidence that we earn as a trusted water resources and energy advisor by providing sustainable, conservation-focused utilities. We are characterized by community stewardship, including volunteerism and charitable giving, and will operate with a strong focus on pride in our community.

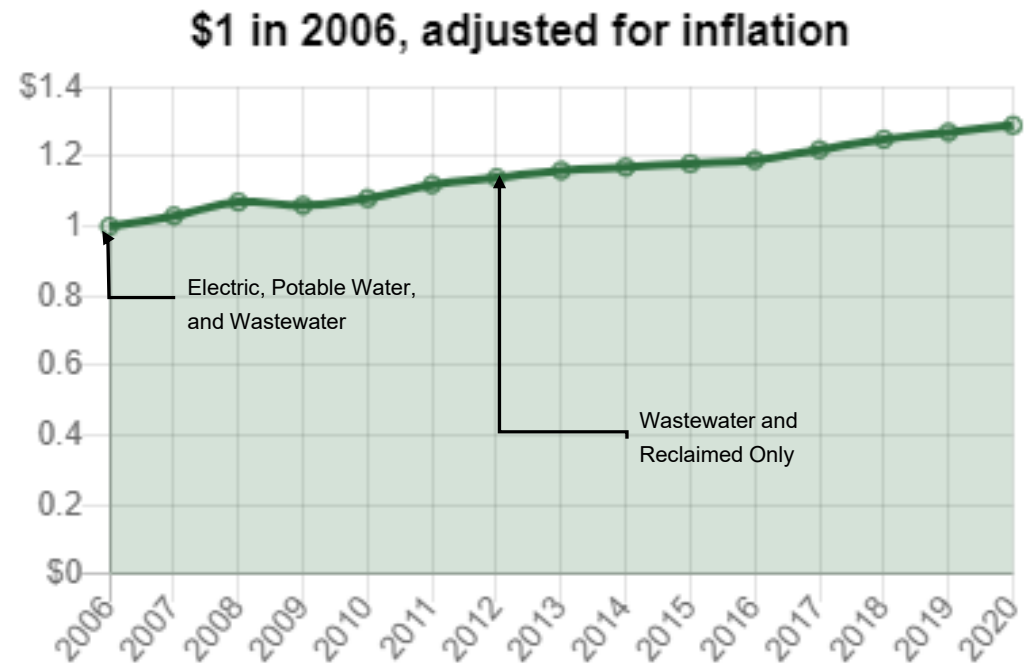
Our Core Values

Safety. Integrity & Transparency. Financial Prudence.
Innovation, Learning, & Improvement. Diversity & Inclusion.

UCNSB Electric and Water Rates History

The UC has not had a utility rate increase for Electric and potable Water services **since 2006**. Wastewater and Reclaimed utility rates were last updated in 2012. Over the 14-year period from 2006 to 2020, the cumulative inflation over this period was **more than 29%**.

- In 2012, over 8 years ago, Wastewater and Reclaimed Rates increased by 7.3%*
- In 2006, over 14 years ago, Water and Wastewater Rates increased by 7.5%*. Water gallonage was slightly reduced and Wastewater increased at that time. Base Facility charge remained unchanged.
- In 2006, over 14 years ago, Electric Rates increased by 6.1%*. Customer Charge has remained unchanged since 2001.
- In the 14+ year period since 2006, cumulative inflation was over 29%
- Since 2006, the UC's wages and benefits, costs, materials, etc. have increased over 1-2% PER YEAR over the same 14+ year period.



Rate History Observations and Next Steps

- In 2012, after some discussion and against the recommendation of the rate consultant, the Utilities Commission opted to NOT increase electric and water utility rates and instead, defer capital projects
 - › To make up for the revenue deficits and the deferred and needed system maintenance, replacement and renewal that exists now because the 2012 Rate Study water rate increase recommendation was not instituted, a phased-in 5-year approach is now recommended
- Over the last 14+ years, the UC staff managed operating expenses to partially offset increased cost of business
 - › However, “Cash and Cash Equivalents” and “Renewal and Replacement (R&R) Fund” balances have declined
 - › Balances: 2016 (\$29.1M) vs. 2020 (\$16.6M) – a **\$12.5M or a 43% decrease**, reduction in the cash balances effectively funded revenue deficits
 - › These cash balances now need to be replenished to maintain an appropriate reserve
- In FY 2020, to mitigate and ensure the long-term reliability, resiliency and security of the UC’s infrastructure, the Commission and Staff contracted with outside consultants to perform a rate adequacy study incorporating the following:
 - › All-in cost of service model
 - › Five (5) year Capital Improvement Plan (CIP) [2021-2025], including Utility Modernization Initiatives
 - › Working capital targets
 - › Operating expense cash reserves
- Rate Study results and expected implementation effective date: October 1, 2021 (start of FY 2022)
- Going forward, the UC is committed via Resolutions 2021-01 & 2021-03 to perform an assessment of rates and fees every three (3) years to ensure that our rates and fees such as capital connection fees are appropriate for the long-term capacity, reliability and resiliency of the UC’s Infrastructure

Rate History Observations and Next Steps

- As part of the comprehensive rate study performed in FY 2021, the Electric and Water/Water-Related miscellaneous service fees were also reviewed and updated. Service fees include one-time infrequent charges for services such as initial customer connection, customer-requested service call, etc.
- Service fees were reviewed and updated for the following characteristics:
 - › Eliminated fees which were no longer applicable or duplicative
 - Cut-out fees were eliminated
 - › Confirmed that the UC service fees were in line with UC peers - municipal and investor-owned utilities
- Consistent with Resolutions 2021-01 & 2021-03, the UC will perform an assessment of rates and fees every three (3) years

Rate Study Objectives / Tasks

- Develop a financial forecast through fiscal year 2025, including a projection of:
 - › Customers and revenues
 - › Operating expenses
 - › Capital improvement requirements and funding
 - Capital program includes system Modernization initiatives
 - › Future debt service payments associated with the Series 2020 Bonds
 - › FPPCAC (Fuel Adjustment) over-recovery balance
 - › Cash reserve for O&M expenditures
- Estimate the revenue requirements to be recovered from utility services
- Identify the appropriate rate adjustments during the study period to support the long-term system capacity, reliability and resiliency of the UC's Infrastructure

Sample Residential Monthly UC Bill – Existing vs. Proposed *

Description	Existing	FY 2022	FY 2023	FY 2024	FY 2025 *
Electric Bill **	\$97.85	\$94.43	\$95.00	\$96.61	\$97.05
Water & WW Bill	\$50.88	\$55.66	\$59.98	\$63.70	\$66.47
Total Monthly Bill	\$148.73	\$150.09	\$154.98	\$160.31	\$163.52
\$ Increase		\$1.36	\$4.89	\$5.33	\$3.21
% Increase		0.9%	3.3%	3.4%	2.0%

* The UC is requesting Commission Approval for FY22 – FY24. FY25 is shown for illustrative and discussion purposes only.

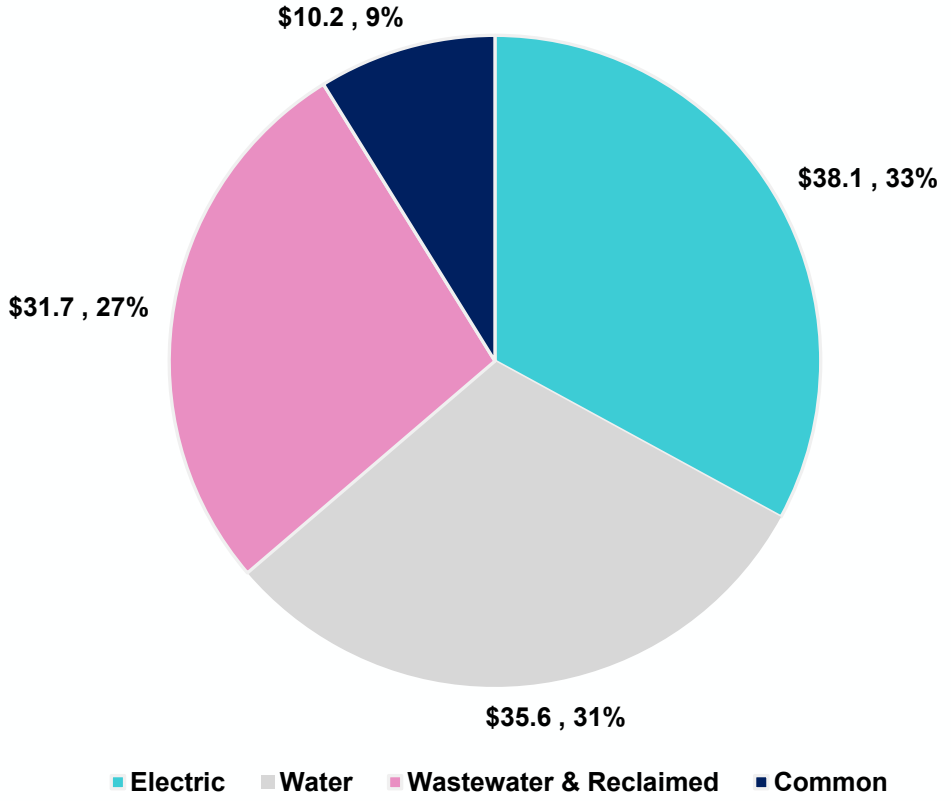
** Includes application of existing FPPCAC (Fuel and Purchased Power Cost Adjustment Clause)

- Customer use assumptions:
 - › Water and Wastewater: 5/8-inch meter using 4,000 gallons of consumption
 - › Electric: Single phase service using 1,000 kWh which is an industry standard comparison. UC historical average use is 910 kWh.

As a result of the Rate Study and the ratable work down of the existing fuel over-recovery, the all-in year-over-year rate modifications provide for the latest five (5) year CIP plan, utility operations and the buildup of working capital reserves while maintaining reasonable and gradual customer rate increases

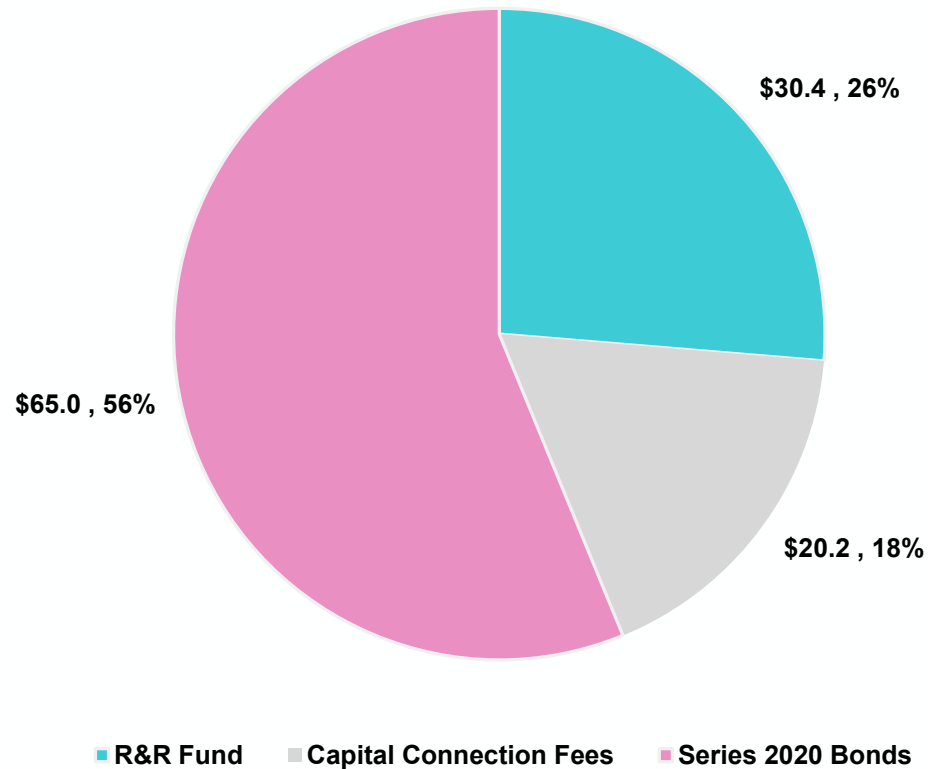
Projected Capital Spending by Line of Business (FY 2021 – 2025)

- Amounts on pie chart shown in millions of dollars
- Total Capital Improvement Plan Spend \$115.6M



Projected Capital Funding Sources (FY 2021 – 2025)

- Amounts on pie chart shown in millions of dollars
- The CIP over the next five (5) years is funded in order of spend as follows: 1) Series 2020 Bonds, 2) Renewal & Replacement, and 3) Capital Connection Fees
- Total Capital Improvement Plan Spend \$115.6M



Major Study Assumptions

Escalation Factors Summary

Description	FY 2022	FY 2023	FY 2024	FY 2025
General Inflation	2.00%	2.00%	2.00%	2.00%
Repair & Maintenance	3.00%	3.00%	3.00%	3.00%
Labor	3.00%	3.00%	3.00%	3.00%
Health Insurance	5.00%	5.00%	5.00%	5.00%

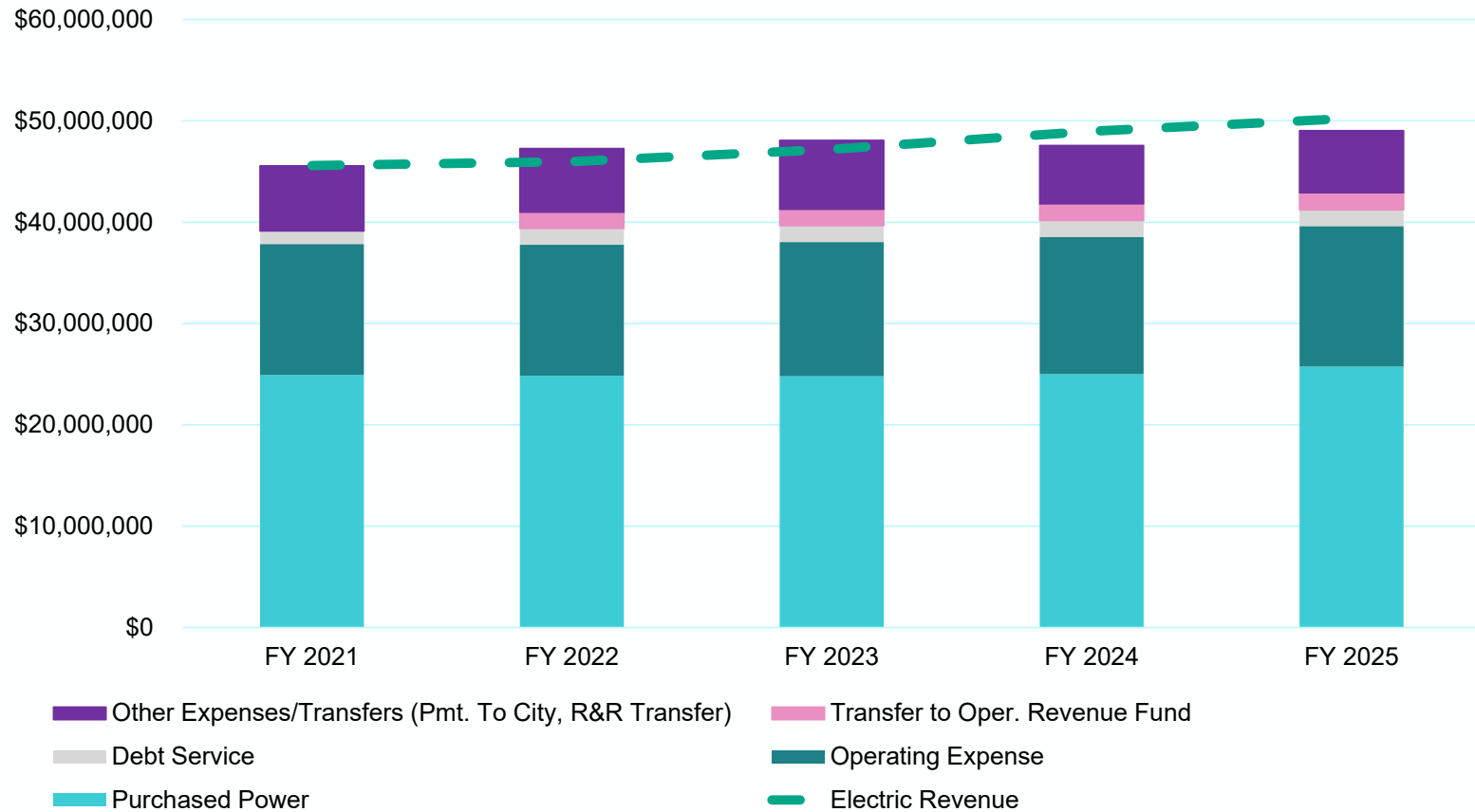
Description	FY 2022	FY 2023	FY 2024	FY 2025
Elec Customer Growth	2.29%	2.22%	2.23%	2.26%
Water Customer Growth	1.91%	1.91%	1.94%	1.97%
WW Customer Growth	1.88%	1.89%	1.94%	1.95%
RW Customer Growth	2.66%	2.96%	2.87%	2.79%

The cost escalation and the customer growth assumptions are reasonable and consistent with past historical trends

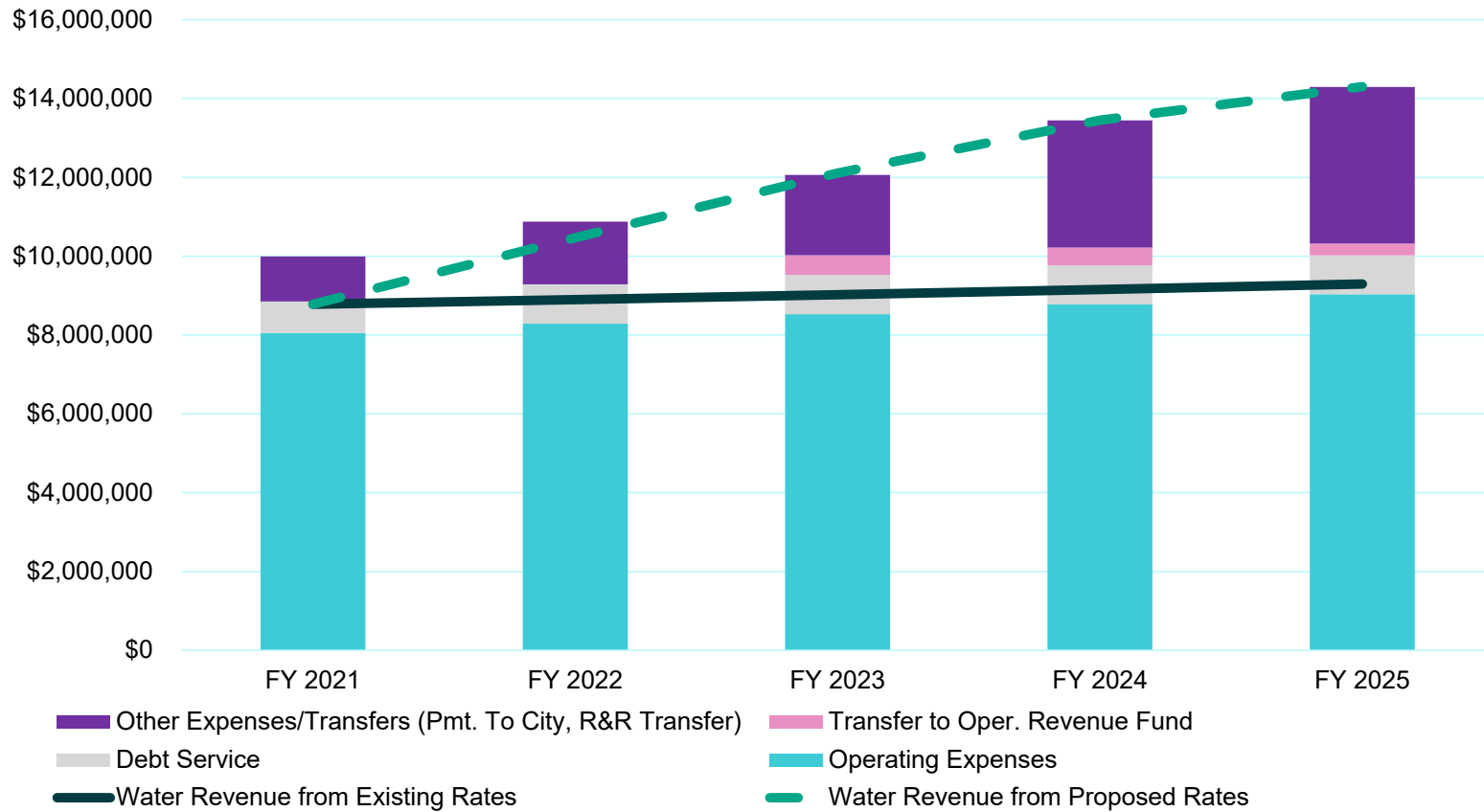
Major Study Assumptions Summary (Cont.)

- No additional debt will be issued to fund the Five (5) year Capital Improvement Plan beyond the existing Series 2020 Bonds
- Five (5) year Capital Improvement Plan is projected to be fully funded
- Rate study assumes the adoption of the approved Water, Wastewater, and Reclaimed water Capital Connection Fees
- Satisfy bond covenant requirements related to debt service coverage
- Achieve Water and Wastewater minimum operating reserves of 90 days of O&M expenses in FY2025
 - › Electric previously met target
- FPPCAC (Fuel Adjustment) over-recovery target is \$5 million, current May 31st balance is \$7.6 million
- Rate study updates do not impact payment calculation to the City

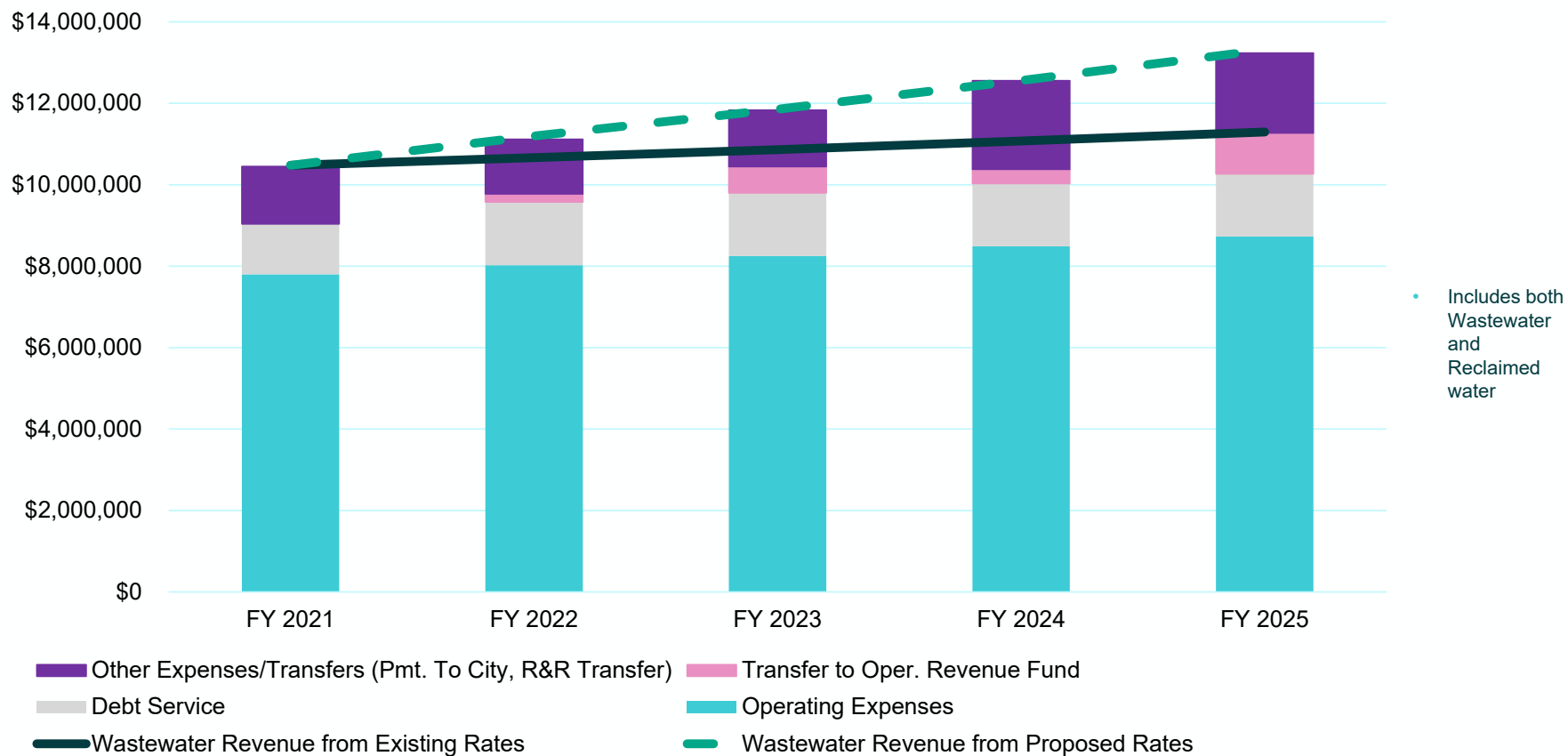
Electric Revenue Sufficiency at Proposed Rates



Water Revenue Sufficiency at Proposed Rates



Wastewater Revenue Sufficiency at Proposed Rates



Proposed System-Wide Rate Adjustments

Description	FY 2022	FY 2023	FY 2024	FY 2025
Electric	0.00%	0.60%	1.60%	0.50%
Water	19.00%	15.00%	10.00%	5.00%
Wastewater	5.00%	4.00%	4.00%	4.00%
Reclaimed Water	5.00%	4.00%	4.00%	4.00%

- Electric rate changes vary by customer class (i.e. residential versus general/commercial service demand and non-demand)
- Water - To make up for the revenue deficits that exists now because the 2012 Rate Study water rate increase recommendation was **NOT** instituted, a phased-in 5-year approach is now recommended.
 - › The dollar and related percentage increase on a monthly bill for a 5/8-inch residential customer using 4,000 gallons of consumption is as follows:

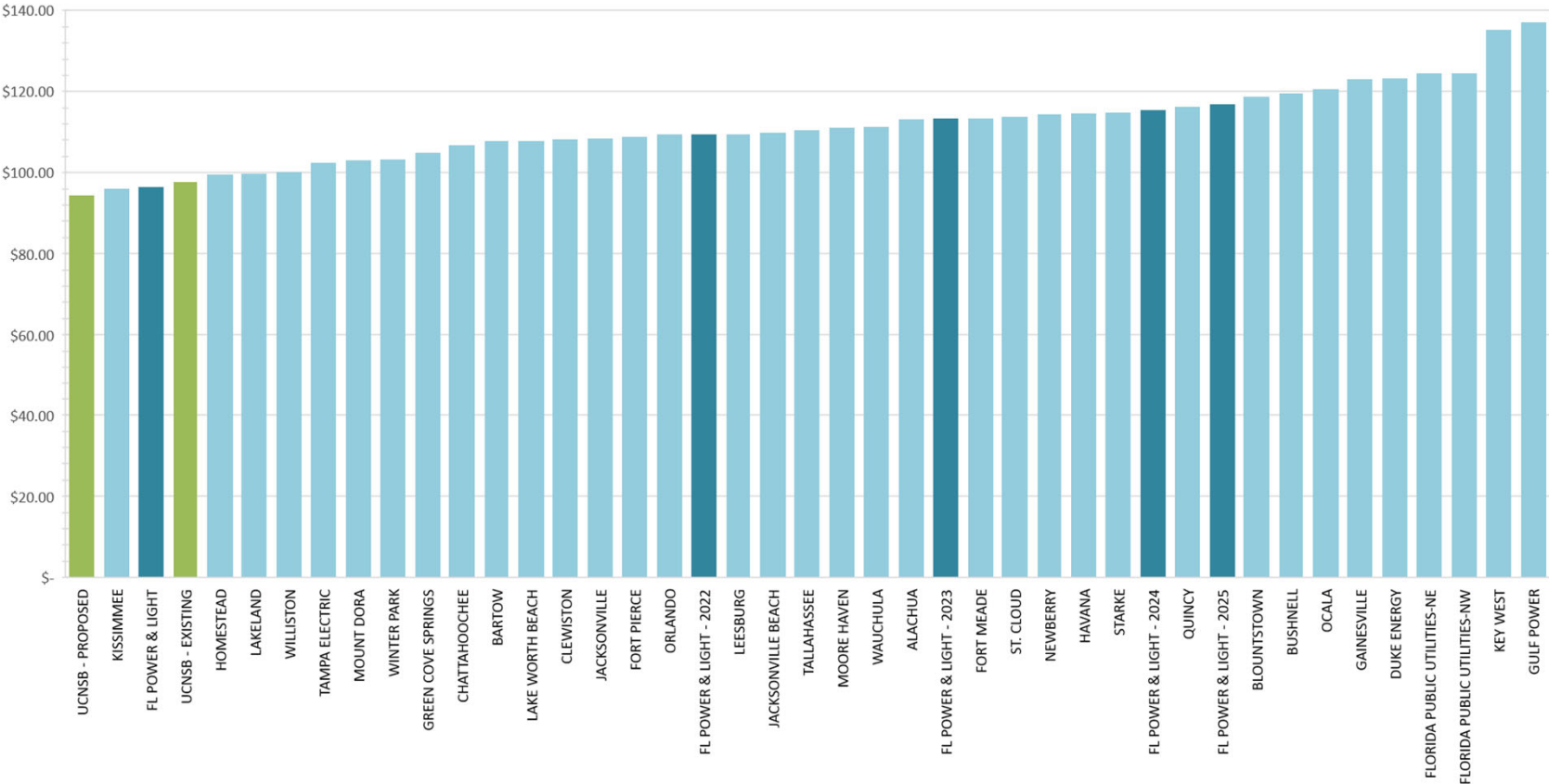
Description	Existing	FY 2022	FY 2023	FY 2024	FY 2025
Total Water & Wastewater Bill	\$50.88	\$55.66	\$59.98	\$63.70	\$66.47
\$ Increase		\$4.78	\$4.32	\$3.72	\$2.77
% Increase		9.4%	7.8%	6.2%	4.3%

Operating Reserve Projections

Description	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Operating Revenue Fund – Electric	\$5,996,550	\$6,292,653	\$7,054,814	\$10,107,973	\$13,017,589
<i>Calculated Days of O&M Expense</i>	169	178	194	272	343
Operating Revenue Fund – Water System	\$35,068	\$126,278	\$1,570,208	\$2,025,440	\$2,332,124
<i>Calculated Days of O&M Expense</i>	2	6	67	84	94
Operating Revenue Fund – Wastewater System	\$28,982	\$305,733	\$976,713	\$1,330,992	\$2,408,811
<i>Calculated Days of O&M Expense</i>	1	14	43	57	101
R&R Fund – All Systems	\$5,649,679	\$5,149,679	\$4,249,679	\$4,249,679	\$4,249,679
Cap. Connection Fee Fund	\$15,638,446	\$12,952,846	\$7,953,046	\$5,429,996	\$2,092,496

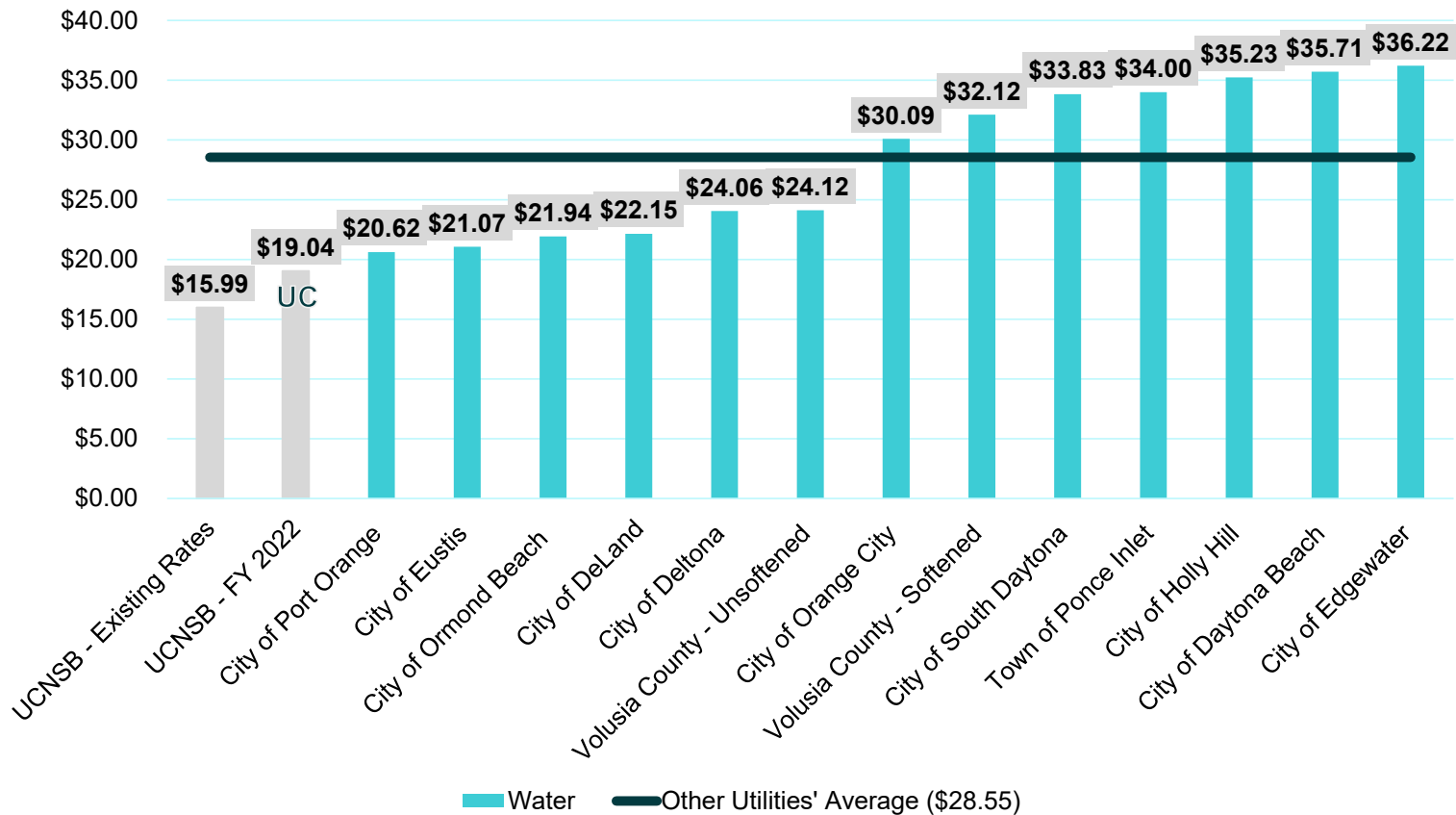
- Ending balances shown above
- 90 days operating expenses reserve balance achieved in FY 2025 for water and wastewater
- With consideration of the FPPCAC over-recovery balance liability, 90 days operating expenses reserve balance achieved in FY 2024 for electric
- Capital connection fee fund balances include resolution of outstanding infrastructure fee credits

FY22 Residential Electric Bill Comparison 1,000 kWh



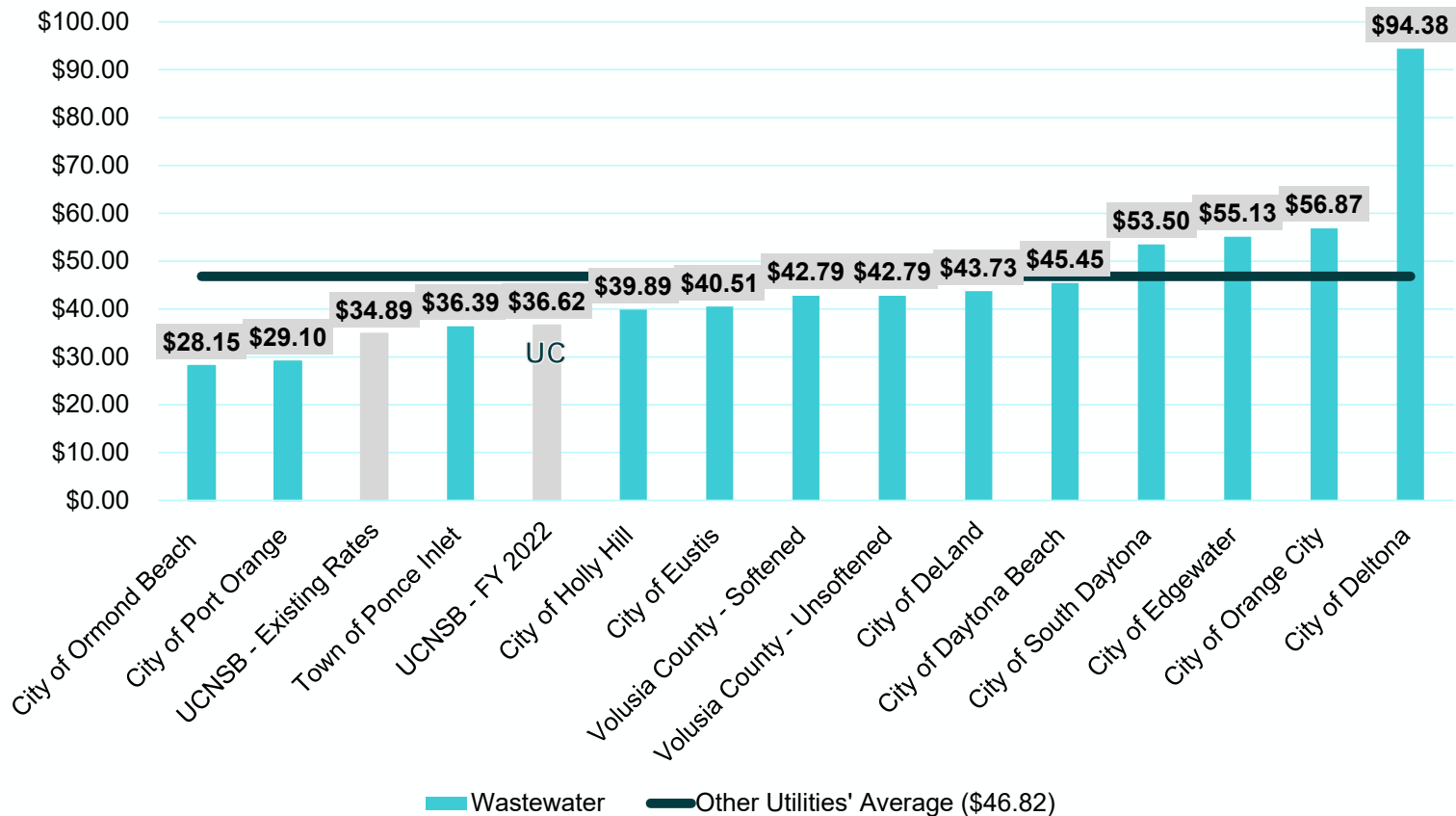
- With the work down of the existing fuel over-recovery, the UC's proposed Electric rates for a typical 1,000 kWh bill will be lower than the existing typical UC electric bill and the UC will remain the lowest cost electric provider

FY22 Residential Water Rate Comparison 4,000 Gallons



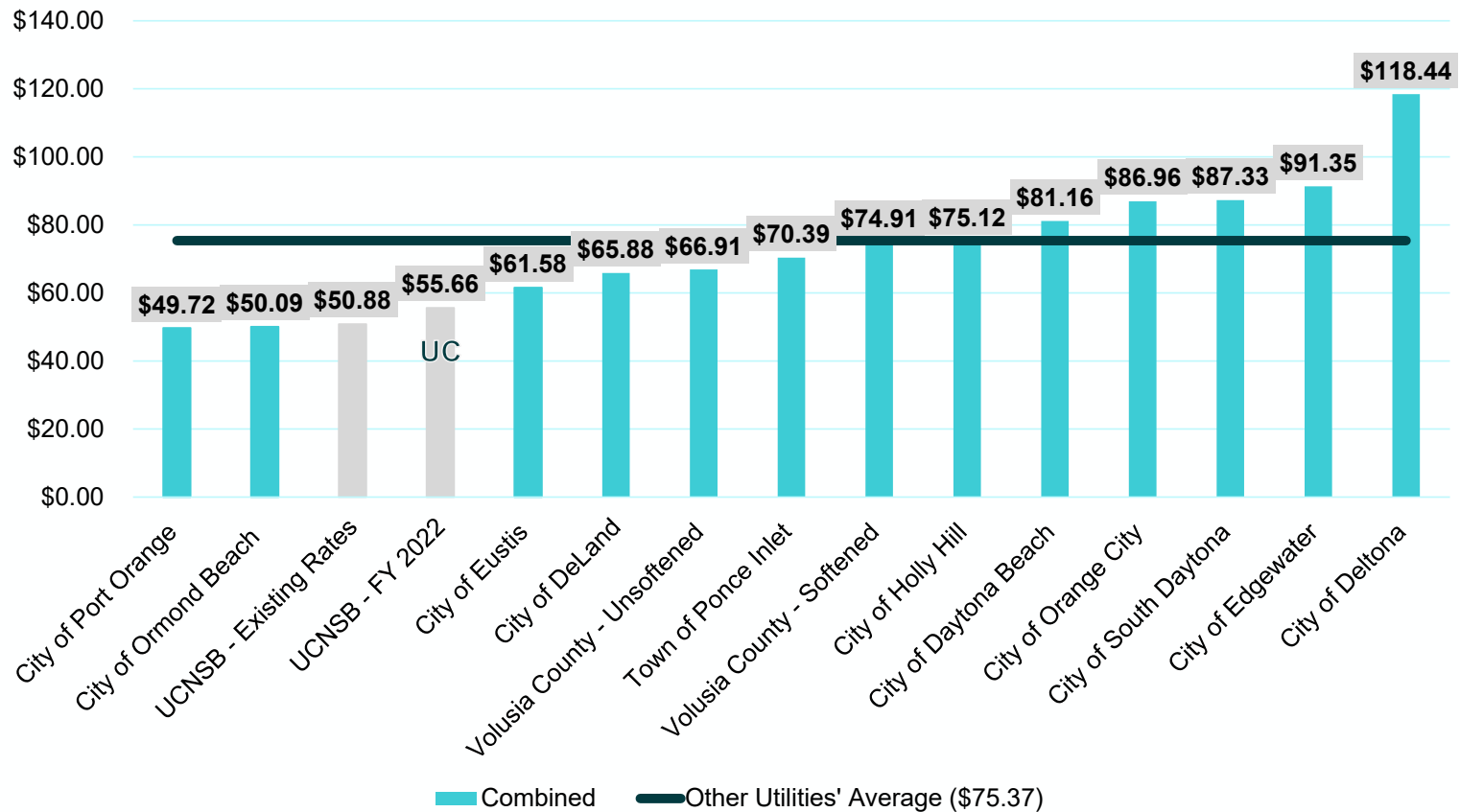
- Even with the proposed Water rate modifications, the UC's proposed Water rates for 4,000 gallons of typical usage will remain in the top quartile for lowest cost and will be over 33% lower than the Other Utilities' Average

FY22 Residential Wastewater Rate Comparison 4,000 Gallons



- Even with the proposed Wastewater rate modifications, the UC's proposed Wastewater rates for 4,000 gallons of typical usage will remain in the top quartile for lowest cost and will be over 21% lower than the Other Utilities' Average

FY22 Residential Water & Wastewater Rate Comparison – 4,000 Gallons



- Even with the proposed Water and Wastewater rate modifications, the UC's proposed combined rate for 4,000 gallons of typical usage will remain in the top quartile for lowest cost and will be over 26% lower than the other Utilities' Average

Major Study Assumptions – Purchased Power

Description	FY 2022	FY 2023	FY 2024	FY 2025
<u>Purchased Power</u>				
St. Lucie - FMPA Nuclear Purchases	\$ 4,661,055	\$ 4,661,055	\$ 4,661,055	\$ 4,661,055
FPL Purchases	19,661,500	19,367,038	18,929,330	19,075,300
Generation	23,201	23,201	23,201	23,201
Interchange (Non-Firm Energy Purchases)	504,568	754,356	1,045,400	1,523,820
FMPA Solar	-	-	360,523	487,413
Total Purchased Power Charges	\$ 24,850,324	\$ 24,805,649	\$ 25,019,509	\$ 25,770,789
\$/MWh	\$ 50.56	\$ 49.47	\$ 48.88	\$ 49.29
Assumed Natural Gas Pricing (Average \$/MMBTu):				
Base Case	\$ 2.71	\$ 2.54	\$ 2.49	\$ 2.53
25% Above Base Case	\$ 3.39	\$ 3.17	\$ 3.12	\$ 3.17
50% Above Base Case	\$ 4.07	\$ 3.80	\$ 3.74	\$ 3.80
Impact to Purchased Power:				
25% Above Base Case	\$ 27,651,326	\$ 27,564,466	\$ 27,723,904	\$ 28,603,745
Variance From Base Case	\$ 2,801,001	\$ 2,758,816	\$ 2,704,395	\$ 2,832,956
50% Above Base Case	\$ 30,452,327	\$ 30,323,282	\$ 30,428,299	\$ 31,436,700
Variance From Base Case	\$ 5,602,003	\$ 5,517,632	\$ 5,408,790	\$ 5,665,911

Changes in UCNSB forecasted purchased power is driven primarily by changes in natural gas forward [future] pricing.

Electric Major Study Assumptions Cost of Service

Description	Total System	Residential	General Service Non-Demand	General Service Demand	Large Demand	Street & Private Lighting
From Cost of Service:						
Net Revenue Requirement	\$ 46,745,428	\$ 32,842,437	\$ 5,615,533	\$ 4,039,692	\$ 3,925,746	\$ 322,020
Total Revenue Increase(Decrease) Required	\$ 1,822,258	\$ 2,204,468	\$ 434,401	\$ (356,151)	\$ (478,363)	\$ 17,904
Total Percent Increase(Decrease) Required	4.06%	7.20%	8.38%	-8.10%	-10.86%	5.89%
Adjusted for Rate Design:						
Net Revenue Requirement	\$ 46,745,428	\$ 32,129,776	\$ 5,493,680	\$ 4,395,843	\$ 4,404,109	\$ 322,020
Total Revenue Increase(Decrease) Required	\$ 1,822,258	\$ 1,491,807	\$ 312,547	\$ -	\$ -	\$ 17,904
Total Percent Increase(Decrease) Required	4.06%	4.87%	6.03%	0.00%	0.00%	5.89%

Electric rate adjustments shown above *exclude* the impact of the FPPCAC (Fuel Adjustment) over-recovery reimbursement to UC customers which *reduces* the impact of rate increases over the rate study implementation period [2022-2025].

Electric Major Study Assumptions Proposed Rate Design

Description	Existing	Proposed	% Change
Base Rate Revenues:			
Residential	\$ 25,720,055	\$ 32,129,842	24.9%
General Service - No-Demand	\$ 4,310,667	\$ 5,493,830	27.4%
General Service - Demand	\$ 3,730,148	\$ 4,396,047	17.9%
Large Demand	\$ 3,657,692	\$ 4,404,332	20.4%
Street & Private Outdoor Lighting	\$ 514,941	\$ 585,498	13.7%
Total Base Rate Revenues	\$ 37,933,504	\$ 47,009,550	23.9%
FPPCAC (Fuel Adjustment) Revenues:			
Residential	\$ 4,917,915	\$ (1,242,749)	-125.3%
General Service - No-Demand	\$ 870,465	\$ (219,965)	-125.3%
General Service - Demand	\$ 665,695	\$ (168,220)	-125.3%
Large Demand	\$ 746,417	\$ (188,618)	-125.3%
Street & Private Outdoor Lighting	\$ 57,195	\$ (14,453)	-125.3%
Total FPPCAC Revenues	\$ 7,257,687	\$ (1,834,006)	-125.3%
Total Revenues:			
Residential	\$ 30,637,970	\$ 30,887,092	0.8%
General Service - No-Demand	\$ 5,181,133	\$ 5,273,865	1.8%
General Service - Demand	\$ 4,395,843	\$ 4,227,827	-3.8%
Large Demand	\$ 4,404,109	\$ 4,215,714	-4.3%
Street & Private Outdoor Lighting	\$ 572,136	\$ 571,045	-0.2%
Total Revenues	\$ 45,191,191	\$ 45,175,544	0.0%

- FPPCAC (Fuel Adjustment) over-recovery year-end balance:
 - › FY 2022 - \$6 million
 - › FY 2023 - \$5 million
 - › Current plan has a \$5 million over-recovery target balance maintained through FY 2025

Major Study Assumptions Summary

Residential Electric Rate Design

Description	Existing	Proposed	% Change
Customer Charge:			
Single Phase	\$ 5.65	\$ 8.25	46.0%
Three Phase	\$ 7.85	\$ 11.46	46.0%
Energy Rate:			
First 1,000 kWh	\$ 0.07645	\$ 0.09016	17.9%
Over 1,000 kWh	\$ 0.07645	\$ 0.10570	38.3%
FPPCAC	\$ 0.01575	\$ (0.00398)	-125.3%
Revenues:			
Base Rates	\$25,720,055	\$32,129,842	24.9%
PPAC	<u>\$ 4,917,915</u>	<u>\$ (1,242,749)</u>	<u>-125.3%</u>
Total	\$30,637,970	\$30,887,092	0.8%

The proposed Electric rates reflect the rate changes and the reduction in FPPCAC (Fuel Adjustment) over-recovery resulting in a less than 1% customer rate increase. The impact of the Electric rate modifications vary by customer class (i.e. residential versus general/commercial service (demand and non-demand)).

Summary of Major Study Assumptions

Residential Electric Rate Comparison

Usage - kWh	New Smyrna		FPL - Effect. Jan. 2021
	Existing	Proposed	
400	\$ 42.53	\$ 42.72	\$ 43.63
600	\$ 60.97	\$ 59.96	\$ 61.28
800	\$ 79.41	\$ 77.19	\$ 78.92
1,000	\$ 97.85	\$ 94.43	\$ 96.57
1,200	\$ 116.29	\$ 114.77	\$ 118.16
1,400	\$ 134.73	\$ 135.12	\$ 139.75
1,600	\$ 153.17	\$ 155.46	\$ 161.34
1,800	\$ 171.61	\$ 175.81	\$ 182.93

UC's proposed rate of \$94.43 is **\$2.14 or 2.3% less** than the FPL rate of \$96.57

Summary of Major Study Assumptions Preliminary Operating Results (All Systems)

Description	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Rate Revenue	\$63,298,000	\$66,077,004	\$69,572,928	\$73,355,693	\$76,194,795
Miscellaneous Revenue	1,547,178	1,567,243	1,593,520	1,628,924	1,671,310
Total Revenue	\$64,845,178	\$67,644,248	\$71,166,448	\$74,984,617	\$77,866,105
Operating Expenses	\$53,706,782	\$54,092,416	\$54,832,141	\$55,832,122	\$57,390,536
Net Revenue Available for Debt Service	\$11,138,396	\$13,551,832	\$16,334,307	\$19,152,495	\$20,475,569
Debt Service	\$3,326,559	\$4,170,750	\$4,155,500	\$4,142,125	\$4,135,250
Other Expenditures/Transfers	8,982,157	11,011,212	12,978,356	13,608,162	15,042,015
Surplus/(Deficiency)	(\$1,170,321)	(\$1,630,130)	(\$799,549)	\$1,402,207	\$1,298,304
Debt Service Coverage Calculated	3.35	3.25	3.93	4.62	4.95
DSC Minimum	1.25	1.25	1.25	1.25	1.25

Next Steps

- Prepare Electric rate tariff submission to the FL Public Service Commission (PSC) for review – Applicable to Electric rates and fees only
 - › According to PSC general filing instructions, the electric rates and fees shall be filed with the Commission Clerk at least thirty (30) days prior to adoption by the utility
 - › After June Commission approval-to-proceed with rate changes, UC counsel to submit electric rates and fees filing with PSC
- At the June 2021 Commission meeting, the FY22-FY31 [O&M and Capital] Budget will be submitted for Commission approval
 - › The Budget revenues reflect the new UC Electric, Water, Wastewater and Reclaimed customer rates and fees
- Customer bill insert will be sent notifying customers of the rate changes [effective for each fiscal year: FY22, FY23 & FY24] and upcoming hearing dates. Bill insert will be included in the next UC customer billing.
 - › Bill insert provided sample residential monthly UC Bill and provided notification of the required two (2) hearings:
 - July [First/Preliminary] Hearing
 - August [Second/Final] Hearing
- Draft Electric and Water/Wastewater and fees rate resolutions will be presented to the Commission at the July 2021 Meeting [First/Preliminary Hearing]
 - › Resolutions approved at the August [Second/Final] Hearing
- Upon Commission Approval [August Hearing], updated Water/Wastewater and fees will also be formally adopted by the UC
 - › Once approved, adopted rates are effective at the beginning of the subsequent three (3) fiscal years: FY22 [effective 10/1/21], FY23 [effective 10/1/22] and FY24 [effective 10/1/23]
- During the next 2-3 months, the UC will be working on loading the new rates and perform the applicable testing to ensure smooth transition to newly adopted rates
- Finalize Field Street Generation evaluation
- Finalize Rate Study report