Utilities Advisory Board Minutes

July 27, 2021 at 12:00 p.m.

Public Safety Bldg., Ray Beary Community Room
500 N. Virginia Ave. | Winter Park, Florida

Present

Jack Miles (Chair), Paul Conway, Mary Dipboye, Frederic Guitton, Leon Huffman (Phoned In), Linda Lindsey

City of Winter Park Staff

Dan D'Alessandro, Director of Electric Utility

Michael Passarella, Engineer Electric Utility

David Zusi, Director of Water & Wastewater Utility

Wes Hamil, Director of Finance

Vanna Lawitzke, Chief Accountant

Vanessa A. Balta, Sustainability Program Manager

Karen Hood, Recording Secretary

Guest

Navid Nowakhtar, FMPA – Phoned In

Absent

Michael Poole (Vice Chair)

Justin Isler, Operations Manager

Jason Riegler, Asst. Director of Water & Wastewater Utility

Clarissa Howard, Director of Communications

Agnieszka Tarnawska, Sustainability Specialist

Craig Shepard, Leidos

Meeting called to order

Jack Miles called the meeting to order at 12:03 p.m.

Approval of minutes

Motion made by Mary Dipboye and seconded by Paul Conway to approve the minutes from the May 25, 2021 meeting. Motion carried 6-0

Motion made by Paul Conway and seconded by Mary Dipboye to approve the minutes from the June 22, 2021 meeting. Motion carried 6-0

Citizen Comments

None

Items for discussion

A. Time of Use Rate Discussion - Wes Hamil presented the report. Questions and discussion ensued, there was no action taken. Wes Hamil will look at coincident peak of customers with TOU rate, and give a suggestion next month.

B. Rate Policy Guidelines – Wes Hamil made the presentation. Questions were asked and comments were made. A motion was made by Paul Conway and seconded by Mary Dipboye approve the Winter Park Utility Rate Guidelines as presented (attached). Motion carried 6-0

C. Proposed Rate Increase for Water & Wastewater - discussion was led by Wes Hamil. Questions were asked and a discussion ensued particularly regarding the compounding on the index the model. Discussion to be continued next month.

D. Utility Assistance Program – Wes Hamil presented the report and there was a brief discussion.

E. Review and Discuss the Electric, Water and Wastewater Budget – discussion was led by Wes Hamil.

Department Updates

A. Water & Wastewater Utility – David Zusi spoke about capital improvement projects and their impact on the budget. Questions were asked and a discussion ensued.

B. Electric Utility – Dan D'Alessandro presented the report. Questions were asked and a discussion ensued.

C. Performance Measurements – report was attached.

D. Financial – Wes Hamil presented the financial report. Discussion regarding the format of quarterly financial reports took place. Wes Hamil asked for a sub-committee of interested UAB members to look at the financial reporting that we do and suggest changes that may be made to help provide the board with the kind of information it would like to see.

Adjournment

Chmn. Miles adjourned the meeting at 2:10 p.m. Next meeting is August 24, 2021.

Respectfully Submitted,
Karen Hood
Recording Secretary
Approved August 24, 2021

Items for discussion

A. Paul Conway nominated Jack Miles as Chairman and Leon Huffman seconded the nomination. A vote was taken, 7-0, Jack Miles was elected Chairman. Mary Dipboye nominated Michael Poole as Vice Chairman and Frederic Guitton seconded the nomination. A vote was taken, 6-1, Paul Conway opposed. Michael Poole was elected Vice Chairman.

B. UAB Board Recommendation - Cost of Service Study – Wes Hamil presented the report. Questions and discussion ensued.

	Test Year 2020		
	Total Existing Revenue	Rate Adjustments	
Customer Class	($000)	($000)	(%) [1]
Residential	$23,416	($601)	-2.9%
Commercial			
General Service Non-Demand	1,488	(17)	-1.3%
GS Non-Demand (100% Load Factor)	40	(0)	-0.4%
General Service Demand	12,545	519	4.8%
General Service Demand TOU	4,809	50	1.2%
Public Authority	2,129	48	2.6%
Lighting	485	1	0.3%
Total System	$44,912	$0	0.0%

The table above moved recommended rates 60% of the way to the cost of service study numbers.

Jack Miles asked if a motion was needed "to approve the recommendation that we do this realignment in accordance with what Wes has presented with the understanding that we are going to come back and take a look at the general service demand time of use grouping at the July meeting." Michael Poole so moved and Mary Dipboye seconded. Motion carried 7-0. Then Michael Poole had to leave the meeting.

There was more discussion regarding the four options for the proposed service rates. Jack Miles moved to recommend option 2 (keeping customer charges the same), moving to 40% of the cost of service study numbers, and delaying implementation to October 1, 2022 in order to reduce the impact to small businesses. Paul Conway seconded the motion. The vote was 6-0 and the motion was carried.

C. Budget Review discussion was led by Wes Hamil. Questions were asked and a discussion ensued.

Department Updates

A. Water & Wastewater Utility – Jason Riegler gave a brief report. Questions were asked and a discussion ensued.

B. Electric Utility – Dan D'Alessandro presented the report. Questions were asked and a discussion ensued.

C. Utility Monthly Performance Measurements – report was attached.

D. Financial – Wes Hamil incorporated the financial report with the budget presentation.

Adjournment

Chmn. Miles adjourned the meeting at 2:30 p.m. Next meeting is June 22, 2021.

A. Discussion of Rate Guidelines for the Utilities - Wes Hamil presented the report. Questions and discussion ensued, there was no action taken. After the meeting Wes Hamil will distribute to the UAB members the Winter Park Electric Solar PV Incentive Program aka Net Metering Policy approved by the City Commission in 2012.

B. Proposed Rate Increase for Water & Wastewater – Wes Hamil and David Zusi presented the report. Questions were asked, comments were made, and discussion ensued. Michael Poole asked the members if there was a consensus for option 2, the 1.5% (cannot vote without a quorum but just to get a sense for the next board meeting) and all members said they agreed this is where the board is headed.

C. July 1 Electric Fuel Cost Recovery Rate Increase - discussion was led by Wes Hamil. Questions were asked and a discussion ensued.

D. Semi-Annual Sustainability Update – Vanessa Balta announced Sustainability has moved into the Communications department. She then shared a sustainability presentation. Several questions were asked by members and answered.

Department Updates

A. Electric Utility – Dan D'Alessandro presented the report.

B. Water & Wastewater Utility – David Zusi briefly spoke about water quality issues. Questions were asked and a discussion ensued.

C. Utility Monthly Performance Measurements – report was attached.

D. Financial – Wes Hamil presented the financial report.

Adjournment

Vice Chmn. Poole adjourned the meeting at 1:39 p.m. Next meeting is July 27, 2021.

Respectfully Submitted,
Karen Hood
Recording Secretary
Approved _____

Time of Use Rate Discussion

Background:

When we were going through the electric cost of service study, the question was asked if we should consider eliminating time of use (TOU) rates since this class has been closed to new customers since 2006. The cost of service study was approved along with a commitment to examine the TOU class at a later date. If we were to eliminate this customer class, customers currently on TOU rates would move to the general service demand class.

Here are the current classes the City uses for billings its electric customers:

		Test Year 2020
Customer Class	**Number of Customers**	**Annual kWh**
Residential (RS)	12,180	187,842,000
Commercial and Public Authority:		
General Service Non-Demand (GS)	1,310	12,532,063
GS Non-Demand (100% Load Factor) (G2)	63	550,325
General Service Demand (GSD-1)	1,108	148,871,248
General Service Demand Time of Use (TOU)	23	68,080,417
Lighting	795	2,123,947
Total System	15,479	420,000,000

Customer class definitions:

Residential - Residential customers in a single dwelling house, a mobile home, or individually metered single apartment unit or other unit having housekeeping facilities, occupied by one family or household as a residence.

General service non-demand (GS) - To any customer, other than residential, for light and power purposes for which no other rate schedule is specifically applicable.

General service non-demand 100% load factor (G2) - To any customer, other than residential, with fixed wattage loads operating continuously throughout the billing period (such as traffic signals and cable TV amplifiers)

General service demand (GSD-1) - To any customer, other than residential, for light and power purposes for which no other rate schedule is specifically applicable with a measured annual kWh consumption of 24,000 kWh or greater per year.

General service demand time of use (TOU) - At the option of the customer, otherwise eligible for service under Rate Schedule GSD-1, provided that all of the electrical load requirements on the customer's premises are metered through one point of deliver (closed to new customers as of 06/01/06).

The City bills its general service demand and TOU customers a demand charge equivalent to the applicable demand rate times the amount of kW consumed during the customer's highest usage hour in a given billing cycle. It is a bit like a speedometer recording the highest speed achieved during a trip. Also, the City pays a demand charge to its bulk power providers based on its highest hour of electricity usage during a monthly billing cycle.

TOU rates provide lower demand and kWh charges for energy used in off-peak hours and higher rates during on-peak hours. Here are the definitions used for on-peak hours:

For the calendar months of November through March, Monday through Friday	6:00 am to 10:00 am, and 6:00 pm to 10:00 pm
For the calendar months of April through October, Monday through Friday	12:00 noon to 9:00 pm

The City's peak demand (coincident peak) for purchased power typically occurs on a late afternoon for most of the year except during the months of December – February where it sometimes occurs in the early morning hours.

Here are the coincident peaks for the City's electric system for the past twelve months:

Day	Hour	Peak Demand (coincident peak)
July 14, 2020	5:00 PM	93.003
August 4, 2020	3:00 PM	90.814
September 4, 2020	3:00 PM	91.615
October 7, 2020	4:00 PM	85.935
November 11,2020	3:00 PM	66.687
December 26, 2020	10:00 AM	67.690
January 19, 2021	9:00 AM	64.046
February 4, 2021	8:00 AM	78.308
March 31, 2021	5:00 PM	74.830
April 29, 2021	5:00 PM	75.534
May 5, 2021	5:00 PM	88.874
June 11, 2021	5:00 PM	90.385

The purpose of TOU rates is to incentivize the customer to shift their usage of power to the off-peak hours. This reduces the overall peak demand for power and, in turn, reduces the City's cost of bulk power purchases.

The City closed the TOU class to new customers because our power purchases do not have time of use characteristics. However, other utilities like Ocala, New Smyrna Beach, and Lake Worth Beach also do not generate power but do offer TOU rates.

In the table below, you can see the difference in rates charged to a general service demand customer vs. a TOU customer.

Rates to be implemented October 1, 2022:

	General Service Demand Rates	Time of Use Rates
Customer charge:		
Secondary	$18.28	$29.01
Primary	$231.26	$234.93
Demand charge:		
On peak	$5.22	$4.00
Off peak	$5.22	$1.40
Energy charge:		
On peak	$0.04425	$0.07100
Off peak	$0.04425	$0.02843
Fuel charge*:		
On peak	$0.03007	$0.03854
Off peak	$0.03007	$0.02732

* These are the current fuel rates for General Service Demand and Time of Use and will be adjusted periodically to cover the cost of the fuel component of bulk power purchases

Current time of use customers include (numbers below are based on actual demand and kWh used from January 2019 to June 2021):

Customer Name	No. of TOU Accts.	Average Annual On-Peak kWh	Average Annual Off-Peak kWh	Average Non-Coincident Peak Load Factor	Projected Annual Increase in Costs of Moving to General Service Demand Rates
Rollins College	5	4,181,450	13,364,979	72%	$97,782
Adventist Health System	3	2,362,696	7,329,326	71%	$51,613
Publix Super Markets	4	2,316,659	6,456,620	73%	$38,289
Winter Park High School	1	2,265,600	5,941,440	50%	$30,893
Embarq	2	1,832,920	5,886,840	92%	$44,623
Mayflower Retirement Center	3	1,420,656	4,290,256	65%	$29,351
Winter Park Towers	1	1,113,920	3,425,280	74%	$23,771
Plymouth Apartments	1	482,880	1,523,760	73%	$11,013
Aloma Bowling Center	1	161,832	501,456	57%	$3,404
Winter Park Gardens Owners Association	1	76,352	245,232	85%	$1,751
Winter Park Library	1	122,480	342,280	43%	$2,013
Total	23	16,337,445	49,307,469		$334,503

The load factors above for each TOU customer are based on the non-coincident peaks for each customer (averaged for those with multiple TOU metered accounts).

Here are some definitions:
Non-coincident peak load factor (NCP) – the numerator is all kWh used by the customer during a billing cycle. The denominator is the customer's demand (highest kW hour in the billing cycle) times the total number of hours in the billing cycle. It should be noted that the higher a customer's load factor, the less ability they have to further shift their use of electricity to off peak hours.

Coincident peak load factor (CP) – the numerator is all kWh used by the customer during a billing cycle. The denominator is the customer's kW used during the peak hour for the system as a whole times the number of hours in the billing cycle. A TOU customer's highest hour of KW consumption is usually something different than the system wide highest hour of consumptions. As a result, their CP load factor would be higher than their NCP load factor (the denominator would be greater in the NCP calculation).

The non-coincident peaks are the absolute peaks during billing cycles. The coincident peaks are based on the peak hour each month on a system wide basis for all customers. Coincident peaks

for TOU customers as a whole average 90% as compared to 63% for the general service demand class as a whole (see attached Table 4-2 from the cost of service study). This means that overall, our TOU customers use power more evenly throughout billing cycles than the general service demand customers. Thus, contributing less to the demand charges the City pays as part of its bulk power purchases.

Below are some points developed by Craig Shepard from Leidos (electric rate study consultant) regarding TOU rates. In addition, Craig has estimated that if load factors of our TOU customers were the same as average load factors of our general service demand customers, the cost of bulk power purchases would increase by about $300,000 on an annual basis (see attached computation).

1. Utilities often promote TOU rates to benefit the entire system and all customers by promoting use in off-peak periods and avoid peak demand related costs.
2. The PSC has recognized the benefit of TOU rates in avoiding demand related costs, even if the hourly energy costs do not change, as shown in establishing Tallahassee's TOU rate.
3. Many utilities in Florida have TOU rates, including non-generating utilities such as Ocala.
4. Winter Park's TOU customers use about 75% of their energy during off-peak periods. The high load factor means that they have shifted significant energy to off-peak hours. This indicates that the TOU class is benefitting the system and all customers.
5. The on- and off-peak hours are typical of other Florida utilities and are identical to those shown on the PSC website.
6. Even if the hourly costs do not vary, the TOU rate provides for avoiding purchased demand costs.
7. The proposed TOU rate has an increased on-peak demand charge, providing a further incentive to avoid purchased demand costs.
8. The TOU class has a significantly higher load factor than the GSD class, so it is appropriate to have a separate class for TOU.
9. This is not a protected rate class, in the sense that if a customer uses too much on-peak energy and demand, the rate is higher than the GSD rate.
10. The City may want to make this rate available to others that might benefit themselves and the City.
11. The TOU rate is not necessarily unfair to other customers, but may actually benefit other customers. If the City eliminates this class, there may be more on-peak usage and higher purchased demand costs, which could mean higher rates for the residential class.
12. If the City eliminates the TOU class, it should wait to see the effect on purchased demand costs for at least a one-year period.
13. The TOU customers may have made capital improvements to make use of the TOU rate and therefore it may not be appropriate to eliminate this class.
14. Eliminating the TOU class would be a rate structure change that the PSC would have to approve, which they may not since they promote TOU rates.
15. The City should periodically review customers on the TOU rate and determine if they are on the appropriate rate.

Staff reached out to Adventist Health System, Rollins College, and Publix regarding actions they may take to shift load to off peak periods and any capital investments to help shift load. Rollins

College and Publix responded that while they have invested in energy efficiency improvements, these do not necessarily shift load to off peak hours.

Here is part of the response received from the Energy Manager of Publix Super Markets:

"Publix runs our refrigeration and HVAC 24/7/52, typically the only thing we turn-off are the lights, which causes our stores to have very high load factors at 72-74%. (i.e we use electricity during low demand periods) Publix receives electricity from 112 different electric suppliers, If the utility has a TOU rate the Publix store is on it. I am frustrated by the utilities that have two rates residential and commercial. Does it make sense that a Doctor's office open 8:00 to 5:00 (with a load factor of less than 50%) versus a Grocery Store that is open from 7:00 AM to 11:00 PM and has refrigeration running all night be on the same rate? The cost to serve the Doctor's office is much higher since most of their usage is on peak."

Options for consideration:

1. Keep TOU rates in place for current TOU customers and keep the class closed to any new customers.

Pros	Cons
Keeps our largest customers happy because they stay at the same rates which reward them for using a large portion of their power in off-peak hours	General service demand customers with the same usage patterns pay more on average for power simply because they were not on TOU rates at the time the City acquired the electric utility

2. Keep TOU rates in place but move those below a certain annual kWh and demand usage to the General Service Demand class.

Pros	Cons
Keeps our largest customers happy and moves the smallest TOU rates to the general service demand class	Customers moved to general service demand will pay higher rates than they are used to paying

3. Close the TOU rate class and move the current TOU rate customers to the General Service Demand Class

Pros	Cons
Would increase revenue to the City by about $300,000 on an annual basis	Would effectively increase rates for some of the City's largest customers
	Could potentially increase costs of purchased power if TOU customers reduced efforts to shave peak load

4. Make TOU rates available to new commercial customers on a case by case basis for those likely to use most of their power in off peak hours, phase in more customers over time who meet a to be established criteria

Pros	Cons
Potentially reduces the City's cost of purchasing power if the customer can shift load to off peak hours and if by doing so, it reduces total demand for the City	If more than 63% of the customers power usage is in off-peak hours, the City's electric revenues will decrease
	If new customers to TOU rates keep their same usage patterns, City revenues will decrease with no corresponding decrease in the City's cost of purchasing power

Winter Park Utility Rate Guidelines

Background:
As we went through the electric cost of service study, there was discussion of the need for guidelines concerning rates charged to customers of Winter Park's electric and water and wastewater utilities. The purpose of this agenda item is to continue the discussion of how we want to develop these guidelines.

Below are some objectives for consideration as edited based on input from the June UAB meeting:

Objectives:

Electric:

1. Electric rates should be based on a policy which calls for the lowest possible prices consistent with customer requirements, quality service efficiently rendered, and a payment to the City
2. Electric rates should be simple and understandable
3. Electric rates should be equitable among classes of customers and individuals within classes, taking into consideration the cost of service
4. Electric rates should be designed to encourage the most efficient use of the utility plant and discourage unnecessary of wasteful use of service
5. Electric rates should comply with applicable orders and requirements of local, state and federal regulatory authorities that have jurisdiction
6. Rate sources should encourage the use of renewable energy but, not to the extent it requires subsidization by other rate payers.
7. Rates should be sufficient to cover ongoing operating costs and to establish and maintain adequate capital reserves

Water:

1. Continue to utilize an inclining block rate structure to encourage conservation of potable water
2. Price reclaimed water at 80% of potable water rates to recognize its lower quality and encourage its use for irrigation where possible in place of potable water
3. Design rates to align water, wastewater, and reclaim rate revenues with the costs to provide those services
4. Rates should be sufficient to cover ongoing operating costs and to establish and maintain adequate capital reserves

Consent Agenda January 9, 2012

Electric Department [redacted]

[redacted] 9-0

subject

Solar Incentives

motion | recommendation

Recommend the Commission approve the following components of a Winter Park Electric Solar PV incentive Program:

1) Net Metering Policy Attachment -1
2) Tier 1 interconnection agreement Attachment -2
3) Tier 2 interconnection agreement, Attachment – 3

background

At the November 14 City Commission meeting the City Commission approved entering into a master agreement with Progress Energy Florida (PEF) to provide energy auditor services for City of Winter Park electric customers. Customer energy audits is the foundational piece of a comprehensive energy conservation program. PEF was selected because it was the only willing Central Florida utility that was large enough to provide those services on a cost effective basis. PEF, via contract, already provides surge protection and home wire services to the City's electric customers.

Net Metering. At the November 28 City Commission meeting, the City Commission approved the various rebates for a City of Winter Park electric department conservation program. The rebates approved by the City Commission were identical to those offered by Progress Energy Florida with the exception that no rebates were proposed for the installation of customer-owned solar photovoltaic (PV) generation. Instead, the Utilities Advisory Board recommended that a net metering program be implemented as the mechanism to create appropriate incentives for customer-owned solar PV generating systems. Net metering is a mechanism that allows customers to be billed only for the kWh that they purchase net of the KWh that their solar system generates. Under a net metering policy, excess KWh that are shipped out into the electric system are mathematically held over for the benefit of the customer in subsequent months. This a bit like having a virtual battery and is the most common approach used by electric utilities for addressing customer-owned solar. If there are kWh left over after a year, under a net metering program, the customer would be paid for those kWh. The UAB recommended that the rate used to derive that payment be based on the customer's retail rates. In making that determination, the UAB considered the following three criteria:

1) The rate should provide incentive for the customer installing solar PV generation,
2) The rate should not create an undue subsidy from non-solar customers and thereby measurably increase the retail rates of Winter Park Electric.

3) The rate should not be out of line when compared to the rates offered by other Central Florida utilities.

The UAB considered the range of rates from that of the City's wholesale cost of power at the low end to the retail rate at the high end. The UAB determined that paying Winter Park retail rates would reasonably meet all three criteria.

There are currently three solar PV generation systems installed by Winter Park Electric customers. A fourth system is currently under construction. The three existing systems consist of two 5 kW installations and one 7kW installation. The one under construction is rated at 15 kW. The four systems total 32 kW of installed capacity. Solar panels in Florida will generate electricity at about a 17% capacity factory. That means that on an annual basis the 5 kW systems will generate about 7,446 kWh per year. Another way of understanding a 17% capacity factor is the solar facility will generate electricity at its full output for 17% of the hours on an annual basis. For instance 17% of the hours is 1,489 hours per year or an average of about 4.1 hours per day. An average Winter Park Electric customer consumes about 1,400 kWh per month or 16,800 kWh per year. The smaller systems will generate less electricity in a year than the customer consumes. It is therefore unlikely that there will be a net sale of power to the Winter Park Electric system. Depending on the size and consumption of the residences associated with the two larger systems, sales, if any of excess kWh back to the City's electric system are expected to be small.

Table 1 below summarizes the solar incentive rates provided by Progress Energy Florida (PEF), Orlando Utilities Commission (OUC) and Gainesville Regional Utilities (GRU). GRU is included in the survey since it has a reputation of being a world leader in incentivizing customer-owned generation.

Survey of Net Metering Rates
Table 1

Utility	**Net Metering Rate**
OUC	Retail Rate + 5¢/kWh for all generated solar kWh
PEF	Retail Rate ≈ 12¢/kWh sold back into the system
GRU Feed-in Tariff	Tier 1 (<10kW) = 32¢/kWh
	Tier 2 (>10kW< 300 kWh roof mount) = 29¢/kWh
	Tier 3 (>300kW< 1,000 kW ground mount) = 24¢/kWh

As can be seen by the above table GRU offers a rate for solar kWh that is dramatically above its retail rates. As a result of its policies, GRU is facing rapidly increasing penetration of solar in its utility system and has lost its position as a low cost electricity provider. On a per capita basis GRU leads the country and Japan in solar generation. GRU offers a net metering approach, but also offers a "feed-in tariff" approach where it agrees to buy kWh from customer-owned renewable generation. GRU sets the rate at a level to provide the customer a 4% return on its investment over the expected 20 year life of the facility. GRU fixes the rate to yield that return and agrees to it for the entire 20 year period.

The following Table 2 provides the subsidy analysis for 50 kW of solar which is 43% more than exists and/or is presently under construction in Winter Park.

As can be seen, at a 50 kW level and a 17% capacity factor, absorbing 74,460 kWh of solar generation has an annual financial impact of $3,351 which is financially De minimis to the City and far less than the accuracy of our annual load/revenue forecasts.

Subsidy Analysis
Table 2

Value of Solar in avoided Wholesale Cost	7.5 ¢/kWh
Estimated average FY 2012 residential retail rate	12¢/kWh
Subsidy (¢/kWh)	4.5¢/kWh
Annual output of 50 kW of solar (17% cap. Factor)	74,460 kWh
Total subsidy	$3,351
Estimated FY 2012 Electric Sales Revenues (base + fuel)	$48.14 Million
Total subsidy as a percent of annual Retail Sales	.007%
Annual impact on a 1,000 kWh customer	9.9¢

The UAB concluded that implementing a net metering policy with credits occurring at the full retail rate was an appropriate incentive and met all three of the criteria described above. In staff's opinion, the proposed net metering policy is reasonably competitive with those offered by other comparable electric utilities in Florida.

Interconnection Agreements. In addition to implementing a net metering policy, allowing customers to install and operate what amounts to a small power plant that is connected to the City of Winter Park's electric system, an interconnection agreement between the customer and the City is required. Generally speaking, an interconnection agreement lays out the responsibilities of both parties as relates to the installation and operation of a customer owned Renewable Generation System (RGS). Customer owned generation of the type envisioned by the net metering policy operates in "parallel" with the City of Winter Park's electric system. That means that kWh are simultaneously being provided by the City's purchases from its wholesale supplier and the customer's RGS. As the customer's electricity requirements change from second to second and the output of the RGS changes, the customer either consumes all of the electricity produced by the RGS plus kWh supplemented by the City or the customer consumes less than the RGS output and kWh flow back into the City's distribution system for the instantaneous use by other City customers. The net metering policy described above, credits these excess kWh to the customer's usage in subsequent months thereby giving the customer the full value of the excess kWh generated. This would be like the customer having a battery system in which the customer saves the kWh for future usage, e.g. at night or at other times when the customer's usage exceeds the output of the RGS.

Parallel operation creates safety issues that are addressed by the interconnection agreement. If operation of the City's electric system creates a situation either planned or unplanned whereby the distribution system is de-energized, the customer's RGS could energize the system creating safety concerns for electric system workers or citizens in the case of downed wires. In the beginning of the RGS industry, it was felt that physical disconnect switches should be required such that passing electric linemen could ascertain that the customer's RGS was physically disconnected. As the industry matured, however, technical standards such as the Institute of Electrical and Electronic Engineers (IEEE) standards 1547 and Underwriters Laboratory 1741 were introduced that required control equipment on solar and other RGS that prevent islanding. In other words anti-islanding protection shuts down a customer owned solar RGS if it detects that that the City's electric system has lost power. All RGS are required by the interconnection agreements to meet the National Electric Code (NEC), IEEE 1547 and UL 1741. After the adoption of the anti-islanding standards, physical disconnect switches were no longer seen as essential to achieve safe operation of customer-owned RGS.

Staff is proposing two interconnection agreements, Tier 1 for customer-owned RGS with an output capacity of 10 kW or less and Tier 2 for customer-owned RGS with an output capacity of more than 10kW, but less than 100 kW. To put a cost perspective on these systems, solar can be installed today at a price of about $4.00 per watt. A 1,000 watt system or 1 kW system will cost about $4,000. A 5 kW system would cost around $20,000, a 15 kW system around $60,000 and a 100, kW system would cost around $400,000. Although shade, latitude, number of rain days, age of the solar panels, and cleanliness all affect the output of a solar system, a good round number is about 10 watts per square foot, or 1,000 watts (i.e. 1 kW) per 100 square feet. A 5 kW system would require about 500 square feet of panels and a 15 kW system would require about 1,500 square feet.

The proposed interconnection agreements are comparable to the interconnection agreements required by other utilities and generally mirror the requirements that the Florida Public Service Commission (FPSC) and the investor owned utilities developed and agreed to. The major features of the Tier 1 and Tier 2 Interconnection Agreements are summarized in Table 3 below.

Interconnection Agreement – Summary of Major Provisions
Table 3

Provision	Tier 1	Tier 2
Liability Insurance with City as Additonal Insured	$100,000 recommended	$1.0 million required
Manual Disconnect Switch	Not Required	Required Customer furnished
Application Fee	None	$240
Must meet NEC, IEEE 1547, & UL 1741	Yes	Yes
Net metering provided at City's expense	Yes	Yes
Separate metering for RGS output may provided at City's expense	Yes	Yes

As can be seen, the interconnection agreements for the smaller system < 10kW recommend, but do not require liability insurance, do not require a manual disconnect switch, and do not require an application fee. The FPSC and the IOUs determined to avoid placing too many obstacles on the smaller systems and therefore adopted interconnection requirements that tended to reduce the costs of the smaller systems when compared to the larger Tier 2 systems.

With regard to metering, the new AMR meters recently installed by the City on its electric customers already have net metering capability and so new net meters will not be required. Staff is recommending the City have the right to install separate meters on the output of the customer-owned RGS in order to measure the amount of power generated by the RGS vs. the amount being net consumed by the customer. This will give staff the ability to quantify the output of the RGS, the customer's requirements, and the amount of supplementary power provided by the City.

1) All Florida utilities are required under FPSC rules to develop net metering policies. The City does not therefore have, as an alternative the right to not implement a net metering policy.
2) The City can implement other interconnection standards such as requiring physical disconnect switches and minimum liability coverage on the smaller systems
3) The City can offer a net metering credit that provides value to the customer at rates lower or higher than those included in the proposed net metering policy.

fiscal impact

At the level of retail rates and likely penetration rates of solar RGS, the fiscal impact on the City is not expected to be material. Staff notes, however, that adjustments can quickly be made to any aspect of the proposed program if the impact warrants a change.

long-term impact

The adoption of net metering policies and RGS interconnection standards will encourage the installation of customer-owned solar PV Renewable Generation Systems. The installation of customer owned solar PV provides two advantages:

1) kWh generated by solar displace kWh that would have otherwise been generated by fossil fuels which reduces the carbon footprint caused by the City's electric customers; and
2) Encourages the maturation of the solar industry, which will result in decreasing the cost of solar, thereby making it more cost effective in the future.

strategic objective

Quality Environment and Exceptional Customer Service

Attachments:

ATTACHMENT – 1

NET METERING POLICY

PART VIII

BILLING
(Continued)

8.08 Net Metering for Customer-Owned Renewable Generation

For customers with renewable generation equipment that have executed an interconnection agreement with the City monthly billing will be prepared in the following manner:

(1) At no additional cost to the customer, metering equipment will be installed by the City capable of measuring the difference between the electricity supplied to the customer from the City and the electricity generated by the customer and delivered to the City's electric grid. Additionally, at the discretion of the City and at no additional cost to the Customer, the City may install metering equipment to measure the output of the customer-owned renewable generation.

(2) Meter readings will be taken monthly on the same cycle as required under the otherwise applicable rate schedule in accordance with normal billing practices of the City.

(3) The City will charge the customer for energy used by the customer in excess of the generation supplied by customer owned renewable generation for the entire billing cycle in accordance with the otherwise applicable rate schedule.

(4) During any billing cycle, excess customer-owned renewable generation delivered to the City's electric grid will be credited to the customer's energy consumption for the next month's billing cycle.

(5) Regardless of whether excess energy is delivered to the City's electric grid, the customer will be required to pay the greater of:
   i. the minimum charge as stated in their otherwise applicable rate schedule, or
   ii. the applicable monthly customer charge plus the applicable demand charge, if any, for the monthly maximum 3O-minute demand measured on the company's usage meter during the billing period in accordance with the otherwise applicable rate schedule

(6) Energy credits produced pursuant to section 4 above will accumulate and be used to offset the customer's energy usage in subsequent months for a period of not more than twelve months. After the end of each calendar year the City will credit the customer (on the February bill) for any unused energy credits at an average annual rate based on the customer’s applicable rate tariff then in effect for the previous calendar year.

(7) Excess energy consumption will be applied only to the electric service provided at the location of the renewable generation system and will not be applied to other locations or services at the same location that the customer may take from the City.

(8) When a customer leaves the Company's system, unused credits for excess kWh generated will be credited to the customer at an average annual rate based on the customer’s applicable rate tariff then in effect.

ATTACHMENT – 2

NET METERING – TIER 1

STANDARD INTERCONNECTION AGREEMENT

Tier 1

Standard Interconnection Agreement

Customer-Owned Renewable Generation System

This Agreement is made and entered into this _____day of _____, 20_____ by and between _____, (hereinafter called "Customer"), located at_____ in _____, Florida, and the City of Winter Park, Florida (hereinafter called the "City"), a Florida municipal corporation. Customer and the City shall collectively be called the "Parties". The physical location or premise where the interconnection is taking place: _____.

WITNESSETH

WHEREAS, a Tier 1 customer-owned renewable generation system (“RGS”) is an electric generating system located at customer’s premises that uses one or more of the following fuels or energy sources: hydrogen, biomass, solar energy, geothermal energy, wind energy, ocean energy, waste heat, or hydroelectric power as defined in Section 377.803, Florida Statutes, rated at no more than 10 kilowatts (10 kW) alternating current (AC) power output and is primarily intended to offset part or all of the Customer’s current electric requirements; and

WHEREAS, the City operates an electric utility serving customers within the City limits; and

WHEREAS, Customer has made a written application to the City, a copy being attached hereto, to interconnect its RGS with the City’s electrical supply grid at the location indentified above; and

WHEREAS, in order to promote the development of small customer-owned renewable generation, the City offers net metering service by which customers may interconnect their customer-owned renewable generation system with the City’s electric system and to allow the City’s customers to offset their electric consumption with customer-owned renewable generation, and agrees to credit Customer for excess customer-owned generation; and

WHEREAS, the City desires to provide interconnection of customer-owned renewable generation systems under conditions which will insure the safety of the City’s customers and employees, and the reliability and integrity of its distribution system;

NOW, THEREFORE, for and in consideration of the mutual covenants and agreements herein set forth, the parties hereto covenant and agree as follows:

1. This agreement is strictly limited to cover a Tier 1 RGS as defined above. It is the customer’s responsibility to notify the City of any change to the gross power rating of the RGS by submitting a new application for interconnection specifying the modifications at least 30 days prior to making the modifications. The term “gross power rating” (GPR) means the total manufacturer’s AC nameplate generating capacity of an on-site customer-owned renewable generation system that will be interconnected to and operate in parallel with the City distribution facilities. For inverter-based systems, the GPR shall be calculated by multiplying the total installed DC nameplate generating capacity by 0.85 in order to account for losses during the conversion from DC to AC. An Increase in GPR above the 10 kW limit

would necessitate entering into a new agreement at Tier 2 which may impose additional requirements on the Customer. In no case does the Tier 1 or Tier 2 interconnection agreement cover increases in GPR above 100 kilowatts (kW).

2. The RGS GPR must not exceed 90% of the City's distribution service rating at the Customer's location. If the GPR does exceed the 90% limit, the Customer shall be responsible to pay the cost of upgrades to the distribution facilities required to accommodate the GPR capacity and ensure the 90% threshold is not breached.

3. The Customer is not required to pay an application fee for the review and processing of the application.

4. The Customer shall fully comply with the City's Rules and Procedures for Electric Service as those documents may be amended or revised by the City from time to time.

5. The Customer certifies that its installation, its operation and its maintenance shall be in compliance with the following standards:

a. IEEE-1547 (2003) Standard for Interconnecting Distributed Resources with Electric Power System;

b. IEEE-1547.1 (2005) Standard Conformance Test Procedures for Equipment Interconnection Distributed Resources with Electric Power Systems;

c. UL-1741 (2005) Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources;

d. The National Electric Code, state and/or local building codes, mechanical codes and/or electrical codes;

e. The manufacturer's installation, operation and maintenance instructions.

6. The Customer is not precluded from contracting for the lease, operation or maintenance of the RGS with a third party. Such lease may not provide terms or conditions that provide for any payments under the agreement to any way indicate or reflect the purchase of energy produced by the RGS. Customer shall not enter into any lease agreement that results in the retail purchase of electricity; or the retail sale of electricity from the customer-owned renewable generation. Notwithstanding this restriction, in the event that Customer is determined to have engaged in the retail purchase of electricity from a party other than the City, then Customer shall be in breach of this Agreement and may be subject to the jurisdiction of the Florida Public Service Commission and to fines/penalties.

7. The Customer shall provide a copy of the manufacturer's installation, operation and maintenance instructions to the City. If the RGS is leased to the Customer by a third party, or if the operation or maintenance of the RGS is to be performed by a third party, the lease and/or maintenance agreements and any pertinent documents related to these agreements shall be provided to the City.

8. Prior to commencing parallel operation with the City's electric system, Customer shall have the RGS inspected and approved by the appropriate code authorities having jurisdiction. Customer shall provide a copy of this inspection and approval to the City's Electric Department.

9. The Customer agrees to permit the City, if it should so choose, to inspect the RGS and its component equipment and the documents necessary to ensure compliance with this Agreement both before and after the RGS goes into service and to witness the initial testing

of the RGS equipment and protective apparatus. The City will provide Customer with as much notice as reasonably possible, either in writing, email, facsimile or by phone as to when the City may conduct inspections and or document review. Upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, Customer agrees to provide the City access to the Customer's premises for any purpose in connection with the performance of the obligations required by this Agreement or, if necessary, to meet the City's legal obligation to provide service to its customers. At least ten (10) business days prior to initially placing the customer-owned renewable generation system in service, Customer shall provide written notification to the City advising the City of the date and time at which Customer intends to place the system in service, and the City shall have the right to have personnel present on the in-service date in order to ensure compliance with the requirements of this Agreement.

10. Customer certifies that the RGS equipment includes a utility-interactive inverter or interconnection system equipment that ceases to interconnect with the City system upon a loss of the City power. The inverter shall be considered certified for interconnected operation if it has been submitted by a manufacturer to a nationally recognized testing laboratory (NRTL) to comply with UL 1741. The NRTL must be approved by the Occupational Safety & Health Administration (OSHA).

11. If Customer adds another RGS which (i) utilizes the same utility-interactive inverter for both systems; or (ii) utilizes a separate utility-interactive inverter for each system, then Customer shall provide the City with sixty (60) days advance written notice of the addition.

12. The Customer shall not energize the City system when the City's system is deenergized. The Customer shall cease to energize the City system during a faulted condition on the City system and/or upon any notice from the City that the deenergizing of Customer's RGS equipment is necessary. The Customer shall cease to energize the City system prior to automatic or non-automatic reclosing of the City's protective devices. There shall be no intentional islanding, as described in IEEE 1547, between the Customer's and the City's systems.

13. The Customer is solely responsible for the protection of its generation equipment, inverters, protection devices, and other system components from damage from the normal and abnormal operations that occur on the City's electric system in delivering and restoring system power. Customer agrees that any damage to any of its property, including, without limitation, all components and related accessories of its RGS system, due to the normal or abnormal operation of the City's electric system, is at Customer's sole risk and expense. Customer is also responsible for ensuring that the customer-owned renewable generation equipment is inspected, maintained, and tested regularly in accordance with the manufacturer's instructions to ensure that it is operating correctly and safely.

14. In the event the City elects to install a manual disconnect switch, it shall be at the City's expense. The City-installed manual disconnect switch will be of the visible load break type to provide a separation point between the AC power output of the customer-owned renewable generation system and any Customer wiring connected to the City's electric system, such that back feed from the customer-owned renewable generation system to the City's electric system cannot occur when the switch is in the open position. The manual disconnect switch shall be mounted separate from the meter socket on an exterior surface adjacent to the meter. The Customer shall insure that such disconnect switch shall be readily accessible to the City and capable of being locked in the open position with a City padlock. When locked and tagged in the open position by the City, this switch will be under the control of the City.

15. Subject to an approved inspection, including installation of acceptable manual disconnect switch (if installed), this Agreement shall be executed by the City within thirty

(30) calendar days of receipt of a completed application. Customer must execute this Agreement and return it to the City at least thirty (30) calendar days prior to beginning parallel operations with the City's electric system, and within one (1) year after the City executes this Agreement.

16. Once the City has received Customer's written documentation that the requirements of this Agreement have been met, all agreements and documentation have been received and the correct operation of the manual switch, if any, has been demonstrated to a City representative, the City will, within fifteen (15) business days, send written notice that parallel operation of the RGS may commence.

17. The City recommends the Customer maintain general liability insurance for personal injury and property damage in the amount of not less than one hundred thousand dollars ($100,000.00) and name the City as an additional insured on Customer's general liability insurance policy.

18. The City will furnish, install, own and maintain metering equipment capable of measuring any excess kilowatt-hours (KWHs) of energy produced by Customer's renewable generation system and delivered to the City's electric grid. The value of such excess generation shall be reflected on Customer's bill in accordance with the City's applicable net metering tariff for customer-owned renewable generation. Customer agrees to provide safe and reasonable access to the premises for installation, maintenance and reading of the metering and related equipment. The Customer shall not be responsible for the cost of the installation and maintenance of the metering equipment necessary to measure the energy delivered by the Customer to the City. Additionally, the City, at its own expense may elect to install, own, and maintain metering equipment that measures directly the output of energy produced by the Customer's renewable generation system.

19. The Customer shall be solely responsible for all legal and financial obligations arising from the design, construction, installation, operation, maintenance and ownership of the RGS.

20. The Customer must obtain all permits, inspections and approvals required by the City of Winter Park with respect to the generating system and must use a licensed, bonded and insured contractor to design and install the generating system. The Customer agrees to provide the City's Electric Department with a copy of the building Department's inspection and certification of installation. The certification shall reflect that the local code official has inspected and certified that the installation was permitted, has been approved, and has met all electrical and mechanical qualifications.

21. In no event shall any statement, representation, or lack thereof, either express or implied, by the City, relieve the Customer of exclusive responsibility for the Customer's system. Specifically, any City inspection of the RGS shall not be construed as confirming or endorsing the system design or its operating or maintenance procedures nor as a warranty or guarantee as to the safety, reliability, or durability of the RGS. The City's inspection, acceptance, or its failure to inspect shall not be deemed an endorsement of any RGS equipment or procedure. Further, as set forth in Sections 13, 17, 19, 22 and 24 of this Agreement, Customer shall remain solely responsible for any and all losses, claims, damages and/or expenses related in any way to the operation or mis-operation of its RGS equipment.

22. Notwithstanding any other provision of this Interconnection Agreement, the City, at its sole and absolute discretion, may isolate the Customer's system from the distribution grid by whatever means necessary, without prior notice to the Customer. To the extent practical, however, prior notice shall be given. The system will be reconnected as soon as practical once the conditions causing the disconnection cease to exist. The City shall have no

obligation to compensate the Customer for any loss of energy during any and all periods when Customer's RGS is operating at reduced capacity or is disconnected from the City's electrical distribution system pursuant to this Interconnection Agreement. Typical conditions which may require the disconnection of the Customer's system include, but are not limited to, the following:

a. The City's electrical distribution system emergencies, forced outages, uncontrollable forces or compliance with prudent electric utility practice.

b. When necessary to investigate, inspect, construct, install, maintain, repair, replace or remove any City equipment, any part of the City's electrical distribution system or Customer's generating system.

c. Hazardous conditions existing on the City's utility system due to the operation of the Customer's generation or protective equipment as determined by the City.

d. Adverse electrical effects (such as power quality problems) on the electrical equipment of the City's other electric consumers caused by the Customer's generation as determined by the City.

e. When Customer is in breach of any of its obligations under this Interconnection Agreement or any other applicable policies and procedures of the City.

f. When the Customer fails to make any payments due to the City by the due date.

23. Upon termination of services pursuant to this Agreement, the City shall open and padlock the manual disconnect switch (if installed) and remove any additional metering equipment related to this Agreement. At the Customer's expense, within thirty (30) working days following the termination, the Customer shall permanently isolate the RGS and any associated equipment from the City's electric supply system, notify the City that the isolation is complete, and coordinate with the City for return of the City's lock (if manual disconnect switch is installed).

24. To the fullest extent permitted by law, and in return for adequate, separate consideration, Customer shall indemnify, defend and hold harmless the City, any and all of their members of its governing bodies, and its officers, agents, and employees for, from and against any and all claims, demands, suits, costs of defense, attorneys' fees, witness fees of any type, losses, damages, expenses, and liabilities, whether direct, indirect or consequential, related to, arising from, or in any way connected with:

a. Customer's design, construction, installation, inspection, maintenance, testing or operation of Customer's generating system or equipment used in connection with this Interconnection Agreement, irrespective of any fault on the part of the City.

b. The interconnection of Customer's generating system with, and delivery of energy from the generating system to, the City's electrical distribution system, irrespective of any fault on the part of the City.

c. The performance or nonperformance of Customer's obligations under this Interconnection Agreement or the obligations of any and all of the members of Customer's governing bodies and its officers, agents, contractors (and any subcontractor or material supplier thereof) and employees.

Customer's obligations under this Section shall survive the termination of this Interconnection Agreement.

25. Customer shall not have the right to assign its benefits or obligations under this Agreement without the City's prior written consent and such consent shall not be unreasonably withheld. If there is a change in ownership of the RGS, Customer shall provide written notice to the City at least thirty (30) days prior to the change in ownership. The new owner will be required to assume, in writing, the Customer's rights and duties under this Agreement, or execute a new Standard Interconnection Agreement. The new owner shall not be permitted to net meter or begin parallel operations until the new owner assumes this Agreement or executes a new Agreement.

26. This Agreement supersedes all previous agreements and representations either written or verbal heretofore made between the City and Customer with respect to matters herein contained. This Agreement, when duly executed, constitutes the only Agreement between parties hereto relative to the matters herein described. This Agreement shall continue in effect from year to year until either party gives sixty (60) days notice of its intent to terminate this Agreement.

27. This Agreement shall be governed by and construed and enforced in accordance with the laws, rules and regulations of the State of Florida and the City of Winter Park Electric Department's tariff filed with the Florida Public Service Commission, as it may be modified, changed, or amended from time to time, including any amendments modification or changes to the City's Net Metering Service Rate schedule, the schedule applicable to this Agreement. The Customer and the City agree that any action, suit, or proceeding arising out of or relating to this Interconnection Agreement shall be initiated and prosecuted in the state court of competent jurisdiction located in Orange County, Florida, and the City and the Customer irrevocably submit to the jurisdiction and venue of such court. To the fullest extent permitted by law, each Party hereby irrevocably waives any and all rights to a trial by jury and covenants and agrees that it will not request a trial by jury with respect to any legal proceeding arising out of or relating to this Interconnection Agreement.

None of the provisions of this Interconnection Agreement shall be considered waived by either Party except when such waiver is given in writing. No waiver by either Party of any one or more defaults in the performance of the provisions of this Interconnection Agreement shall operate or be construed as a waiver of any other existing or future default or defaults. If any one or more of the provisions of this Interconnection Agreement or the applicability of any provision to a specific situation is held invalid or unenforceable, the provision shall be modified to the minimum extent necessary to make it or its application valid and enforceable, and the validity and enforceability of all other provisions of this Interconnection Agreement and all other applications of such provisions shall not be affected by any such invalidity or unenforceability. This Interconnection Agreement does not govern the terms and conditions for the delivery of power and energy to non-generating retail customers of the City's electrical distribution system.

28. This Agreement incorporates by reference the terms of the tariff filed with the Florida Public Service Commission by the City, including the City's Net Metering Service Rate Schedule, and associated technical terms and abbreviations, general rules and regulations and standard electric service requirements (as may be applicable) are incorporated by reference, as amended from time to time. To the extent of any conflict between this Agreement and such tariff, the tariff shall control.

29. The City and Customer recognize that the Florida Statutes and/or the Florida Public Service Commission Rules, including those directly addressing the subject of this Agreement, may be amended from time to time. In the event that such statutes and/or rules are amended that affect the terms and conditions of this Agreement, the City and Customer agree to supersede and replace this Agreement with a new Interconnection Agreement which complies with the amended statutes/rules.

30. Customer acknowledges that its provision of electricity to the City hereunder is on a first-offered first-accepted basis and is subject to diminution and/or rejection in the event the total amount of electricity delivered to the City pursuant to the City's Net Metering Service Rate Schedule, (as filed with the Florida Public Service Commission), from all participating City customers, exceeds 2,560 KW of customer generated renewable energy.

31. This Agreement is solely for the benefit of the City and Customer and no right nor any cause of action shall accrue upon or by reason, to or for the benefit of any third party not a formal party to this Agreement. Nothing in this Agreement, expressed or implied, is intended or shall be construed to confer upon any person or corporation other than the City or Customer, any right, remedy, or claim under or by reason of this Agreement or any of the provisions or conditions of this Agreement; and, all provisions, representations, covenants, and conditions contained in this Agreement shall inure to the sole benefit of and be binding upon the City and Customer and their respective representatives, successors, and assigns. Further, no term or condition contained in this Agreement shall be construed in any way as a waiver by the City of the sovereign immunity applicable to the City as established by Florida Statutes, 768.28.

32. Renewable Energy Credits. Customer shall retain the rights to any renewable energy credits produced by the customer-owned renewable generation; and any additional meters necessary for measuring the total renewable energy generated by the customer owned renewable generation for the purpose of receiving renewable energy credits shall be installed at Customer's expense, unless otherwise determined during negotiations for the sale of Customer's renewable energy credits to City.

IN WITNESS WHEREOF, Customer and the City have executed this Agreement the day and year first above written.

City: Customer:

By: _____ By: _____

(Print Name)

Title: _____

Date: _____

_____

(Signature)

Date: _____

City Account Number:

_____

CITY OF Winter Park APPLICATION FOR INTERCONNECTION OF

CUSTOMER-OWNED RENEWABLE GENERATION SYSTEMS

Circle One:

TIER 1 - 10 kW or Less

TIER 2 - Greater than 10 kW and Less Than or Equal to 100 kW

City of Winter Park customers who install customer-owned renewable generation systems (RGS) and desire to interconnect those facilities and operate in parallel with City of Winter Park's electrical system are required to complete this application. When the completed application and fees are returned to the City of Winter Park, the process of completing the appropriate Interconnection Agreement can begin. This application and copies of the Interconnection Agreements may be obtained in person at 401 Park Avenue South Winter Park, Fl 32789.

1. Customer Information:

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Phone Number: _____ Alternate Phone Number: _____

Email Address: _____ Fax Number: _____

Customer Account Number: _____

2. RGS Facility Information:

Facility Location:

_____

RGS Manufacturer:

_____

Manufacturer's Address:

_____

_____

Reference or Model Number:

_____

Serial Number: _____

3. Facility Rating Information:

Gross Power Rating: _____ ("Gross power rating" means the total manufacturer's AC nameplate generating capacity of an on-site customer-owned renewable generation system that will be interconnected to and operate in parallel with the utility's distribution facilities. For inverter-based systems, the AC nameplate generating capacity shall be calculated by multiplying the total installed DC nameplate generating capacity by 0.85 in order to account for losses during the conversion from DC to AC.)

Fuel or Energy Source: _____

Anticipated In-Service Date: _____

4. Application Fee:

There is no application fee for Tier 1 installations. The non-refundable application fee is $240 for Tier 2 installations and must be submitted with this application.

5. Required Documentation:

Prior to completion of the Interconnection Agreement, the following information must be provided to the City of Winter Park by the Customer:

A. Documentation demonstrating that the installation complies with:

   1. IEEE 1547 (2003) Standard for Interconnecting Distributed Resources with Electric Power Systems.
   2. IEEE 1547.1 (2005) Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems.
   3. UL 1741 (2005) Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources.
   4. National Electrical Safety Code, National Electric Code 2008 or latest version, Florida Building Code, and local codes and regulations.

B. Documentation that the customer-owned renewable generation has been inspected and approved by local code officials and utility officials prior to its operation in parallel with the City of Winter Park's electric system to ensure compliance with applicable local codes and utility regulations.

C. Proof of general liability insurance in the amount of shown below naming the City of Winter Park as an additional insured:

   Tier 1 – Not required (recommended amount is $100,000).
   Tier 2 - $1,000,000.00

Customer

By: _____ Date: _____

(Print Name)

_____

(Signature)

ATTACHMENT – 3

NET METERING – TIER 2

STANDARD INTERCONNECTION AGREEMENT

Tier 2

Standard Interconnection Agreement

Customer-Owned Renewable Generation System

This Agreement is made and entered into this _____day of _____, 20_____ by and between _____, (hereinafter called "Customer"), located at _____in _____, Florida, and the City of Winter Park, Florida (hereafter called the "City"), a Florida municipal corporation. Customer and the City shall collectively be called the "Parties". The physical location/premise where the interconnection is taking place: _____.

WITNESSETH

WHEREAS, a Tier 2 customer-owned renewable generation system (RGS) is an electric generating system located at customer's premises that uses one or of more of the following fuels or energy sources: hydrogen, biomass, solar energy, geothermal energy, wind energy, ocean energy, waste heat, or hydroelectric power as defined in Section 377.803, Florida Statutes, rated at more than 10 kilowatts (10 kW) but not greater than 100 kilowatts (100 kW) alternating current (AC) power output and is primarily intended to offset part or all of the customer's current electric requirements; and

Whereas, the City operates an electric utility serving customers within the City limits; and

WHEREAS, Customer has made a written application to the City, a copy being attached hereto, to interconnect its RGS with the City's electrical supply grid at the location indentified above; and

WHEREAS, in order to promote the development of small customer-owned renewable generation, the City offers net metering service by which customers may interconnect their customer-owned renewable generation system with the City's electric system and to allow the City's customers to offset their electric consumption with customer-owned renewable generation, and agrees to credit Customer for excess customer-owned generation; and

WHEREAS, the City desires to provide interconnection of customer-owned renewable generation systems under conditions which will insure the safety of the City's customers and employees, and the reliability and integrity of its distribution system;

NOW, THEREFORE, for and in consideration of the mutual covenants and agreements herein set forth, the parties hereto covenant and agree as follows:

1. This agreement is strictly limited to cover a Tier 2 RGS as defined above. It is the Customer's responsibility to notify the City of any change to the gross power rating of the RGS by submitting a new application for interconnection specifying the modifications at least 30 days prior to making the modifications. The term "gross power rating" (GPR) means the total manufacturer's AC nameplate generating capacity of an on-site customer-owned renewable generation system that will be interconnected to and operate in parallel with the City distribution facilities. For inverter-based systems, the GPR shall be calculated by multiplying the total installed DC nameplate generating capacity by 0.85 in order to account for losses during the conversion from DC to AC. In no case does the Tier 2 interconnection

agreement cover increases in GPR above 100 kilowatts (kW).

2. The RGS GPR must not exceed 90% of the City's distribution service rating at the Customer's location. If the GPR does exceed the 90% limit, the Customer shall be responsible to pay the cost of upgrades to the distribution facilities required to accommodate the GPR capacity and ensure the 90% threshold is not breached.

3. The Customer shall be required to pay a non-refundable application fee as noted in the Net Metering Rate Schedule for the review and processing of the application.

4. The Customer shall fully comply with the City's Rules and Procedures for Electric Service as those documents may be amended or revised by the City from time to time.

5. The Customer certifies that its installation, its operation and its maintenance shall be in compliance with the following standards:

a. IEEE-1547 (2003) Standard for Interconnecting Distributed Resources with Electric Power System;

b. IEEE-1547.1 (2005) Standard Conformance Test Procedures for Equipment Interconnection Distributed Resources with Electric Power Systems;

c. UL-1741 (2005) Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources;

d. The National Electric Code, state and/or local building codes, mechanical codes and/or electrical codes;

e. The manufacturer's installation, operation and maintenance instructions.

6. The Customer is not precluded from contracting for the lease, operation or maintenance of the RGS with a third party. Such lease may not provide terms or conditions that provide for any payments under the agreement to any way indicate or reflect the purchase of energy produced by the RGS. Customer shall not enter into any lease agreement that results in the retail purchase of electricity; or the retail sale of electricity from the customer-owned renewable generation. Notwithstanding this restriction, in the event that Customer is determined to have engaged in the retail purchase of electricity from a party other than the City, then Customer shall be in breach of this Agreement and may be subject to the jurisdiction of the Florida Public Service Commission and to fines/penalties.

7. The Customer shall provide a copy of the manufacturer's installation, operation and maintenance instructions to the City. If the RGS is leased to the Customer by a third party, or if the operation or maintenance of the RGS is to be performed by a third party, the lease and/or maintenance agreements and any pertinent documents related to these agreements shall be provided to the City.

8. Prior to commencing parallel operation with the City's electric system, Customer shall have the RGS inspected and approved by the appropriate code authorities having jurisdiction. Customer shall provide a copy of this inspection and approval to the City's Electric Department.

9. The Customer agrees to permit the City, if it should so choose, to inspect the RGS and its component equipment and the documents necessary to ensure compliance with this Agreement both before and after the RGS goes into service and to witness the initial testing

of the RGS equipment and protective apparatus. The City will provide Customer with as much notice as reasonably possible, either in writing, email, facsimile or by phone as to when the City may conduct inspections and or document review. Upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, Customer agrees to provide the City access to the Customer's premises for any purpose in connection with the performance of the obligations required by this Agreement or, if necessary, to meet the City's legal obligation to provide service to its customers. At least ten (10) business days prior to initially placing the customer-owned renewable generation system in service, Customer shall provide written notification to the City advising the City of the date and time at which Customer intends to place the system in service, and the City shall have the right to have personnel present on the in-service date in order to ensure compliance with the requirements of this Agreement.

10. Customer certifies that the RGS equipment includes a utility-interactive inverter or interconnection system equipment that ceases to interconnect with the City system upon a loss of the City power. The inverter shall be considered certified for interconnected operation if it has been submitted by a manufacturer to a nationally recognized testing laboratory (NRTL) to comply with UL 1741. The NRTL must be approved by the Occupational Safety & Health Administration (OSHA).

11. If Customer adds another RGS which (i) utilizes the same utility-interactive inverter for both systems; or (ii) utilizes a separate utility-interactive inverter for each system, then Customer shall provide the City with sixty (60) days advance written notice of the addition.

12. The Customer shall not energize the City system when the City's system is deenergized. The Customer shall cease to energize the City system during a faulted condition on the City system and/or upon any notice from the City that the deenergizing of Customer's RGS equipment is necessary. The Customer shall cease to energize the City system prior to automatic or non-automatic reclosing of the City's protective devices. There shall be no intentional islanding, as described in IEEE 1547, between the Customer's and the City's systems.

13. The Customer is solely responsible for the protection of its generation equipment, inverters, protection devices, and other system components from damage from the normal and abnormal operations that occur on the City's electric system in delivering and restoring system power. Customer agrees that any damage to any of its property, including, without limitation, all components and related accessories of its RGS system, due to the normal or abnormal operation of the City's electric system, is at Customer's sole risk and expense. Customer is also responsible for ensuring that the customer-owned renewable generation equipment is inspected, maintained, and tested regularly in accordance with the manufacturer's instructions to ensure that it is operating correctly and safely.

14. The Customer must install, at Customer's expense, a manual disconnect switch of the visible load break type to provide a separation point between the AC power output of the customer-owned renewable generation system and any Customer wiring connected to the City's electric system, such that back feed from the customer-owned renewable generation system to the City's electric system cannot occur when the switch is in the open position. The manual disconnect switch shall be mounted separate from the meter socket on an exterior surface adjacent to the meter. The switch shall be readily accessible to the City and capable of being locked in the open position with a City padlock. When locked and tagged in the open position by the City, this switch will be under the control of the City.

15. Subject to an approved inspection, including installation of acceptable manual disconnect switch, this Agreement shall be executed by the City within thirty (30) calendar

days of receipt of a completed application. Customer must execute this Agreement and return it to the City at least thirty (30) calendar days prior to beginning parallel operations with the City's electric system, and within one (1) year after the City executes this Agreement.

16. Once the City has received Customer's written documentation that the requirements of this Agreement have been met, all agreements and documentation have been received and the correct operation of the manual switch has been demonstrated to a City representative, the City will, within fifteen (15) business days, send written notice that parallel operation of the RGS may commence.

17. Customer shall maintain general liability insurance for personal injury and property damage in the amount of not less than one million dollars ($1,000,000.00). Customer shall name the City as an additional insured on Customer's general liability insurance policy.

18. The City will furnish, install, own and maintain metering equipment capable of measuring any excess kilowatt-hours (KWHs) of energy produced by Customer's renewable generation system and delivered to the City's electric grid. The value of such excess generation shall be reflected on Customer's bill in accordance with the City's applicable net metering tariff for customer-owned renewable generation. Customer agrees to provide safe and reasonable access to the premises for installation, maintenance and reading of the metering and related equipment. The Customer shall not be responsible for the cost of the installation and maintenance of the metering equipment necessary to measure the energy delivered by the Customer to the City. Additionally, the City, at its own expense may elect to install, own, and maintain metering equipment that measures directly the output of energy produced by the Customer's renewable generation system.

19. The Customer shall be solely responsible for all legal and financial obligations arising from the design, construction, installation, operation, maintenance and ownership of the RGS.

20. The Customer must obtain all permits, inspections and approvals required by the City of Winter Park with respect to the generating system and must use a licensed, bonded and insured contractor to design and install the generating system. The Customer agrees to provide the City's Electric Department with a copy of the Building Department's inspection and certification of installation. The certification shall reflect that the local code official has inspected and certified that the installation was permitted, has been approved, and has met all electrical and mechanical qualifications.

21. In no event shall any statement, representation, or lack thereof, either express or implied, by the City, relieve the Customer of exclusive responsibility for the Customer's system. Specifically, any City inspection of the RGS shall not be construed as confirming or endorsing the system design or its operating or maintenance procedures nor as a warranty or guarantee as to the safety, reliability, or durability of the RGS. The City's inspection, acceptance, or its failure to inspect shall not be deemed an endorsement of any RGS equipment or procedure. Further, as set forth in Sections 13, 17, 19, 22 and 24 of this Agreement, Customer shall remain solely responsible for any and all losses, claims, damages and/or expenses related in any way to the operation or misoperation of its RGS equipment.

22. Notwithstanding any other provision of this Interconnection Agreement, the City, at its sole and absolute discretion, may isolate the Customer's system from the distribution grid by whatever means necessary, without prior notice to the Customer. To the extent practical, however, prior notice shall be given. The system will be reconnected as soon as practical once the conditions causing the disconnection cease to exist. The City shall have no

obligation to compensate the Customer for any loss of energy during any and all periods when Customer's RGS is operating at reduced capacity or is disconnected from the City's electrical distribution system pursuant to this Interconnection Agreement. Typical conditions which may require the disconnection of the Customer's system include, but are not limited to, the following:

a. The City electrical distribution system emergencies, forced outages, uncontrollable forces or compliance with prudent electric utility practice.

b. When necessary to investigate, inspect, construct, install, maintain, repair, replace or remove any City equipment, any part of the City's electrical distribution system or Customer's generating system.

c. Hazardous conditions existing on the City's utility system due to the operation of the Customer's generation or protective equipment as determined by the City.

d. Adverse electrical effects (such as power quality problems) on the electrical equipment of the City's other electric consumers caused by the Customer's generation as determined by the City.

e. When Customer is in breach of any of its obligations under this Interconnection Agreement or any other applicable policies and procedures of the City.

f. When the Customer fails to make any payments due to the City by the due date thereof.

23. Upon termination of services pursuant to this Agreement, the City shall open and padlock the manual disconnect switch and remove any additional metering equipment related to this Agreement. At the Customer's expense, within thirty (30) working days following the termination, the Customer shall permanently isolate the RGS and any associated equipment from the City's electric supply system, notify the City that the isolation is complete, and coordinate with the City for return of the City's lock.

24. To the fullest extent permitted by law, and in return for adequate, separate consideration, Customer shall indemnify, defend and hold harmless the City, any and all of their members of its governing bodies, and its officers, agents, and employees for, from and against any and all claims, demands, suits, costs of defense, attorneys' fees, witness fees of any type, losses, damages, expenses, and liabilities, whether direct, indirect or consequential, related to, arising from, or in any way connected with:

a. Customer's design, construction, installation, inspection, maintenance, testing or operation of Customer's generating system or equipment used in connection with this Interconnection Agreement, irrespective of any fault on the part of the City.

b. The interconnection of Customer's generating system with, and delivery of energy from the generating system to, the City's electrical distribution system, irrespective of any fault on the part of the City.

c. The performance or nonperformance of Customer's obligations under this Interconnection Agreement or the obligations of any and all of the members of Customer's governing bodies and its officers, agents, contractors (and any subcontractor or material supplier thereof) and employees.

Customer's obligations under this Section shall survive the termination of this Interconnection Agreement.

25. Customer shall not have the right to assign its benefits or obligations under this Agreement without the City's prior written consent and such consent shall not be unreasonably withheld. If there is a change in ownership of the RGS, Customer shall provide written notice to the City at least thirty (30) days prior to the change in ownership. The new owner will be required to assume, in writing, the Customer's rights and duties under this Agreement, or execute a new Standard Interconnection Agreement. The new owner shall not be permitted to net meter or begin parallel operations until the new owner assumes this Agreement or executes a new Agreement.

26. This Agreement supersedes all previous agreements and representations either written or verbal heretofore made between the City and Customer with respect to matters herein contained. This Agreement, when duly executed, constitutes the only Agreement between parties hereto relative to the matters herein described. This Agreement shall continue in effect from year to year until either party gives sixty (60) days notice of its intent to terminate this Agreement.

27. This Agreement shall be governed by and construed and enforced in accordance with the laws, rules and regulations of the State of Florida and the City of Winter Park Electric Department's tariff filed with the Florida Public Service Commission, as it may be modified, changed, or amended from time to time, including any amendments/modification or changes to the City's Net Metering Service Rate Schedule, the schedule applicable to this Agreement. The Customer and the City agree that any action, suit, or proceeding arising out of or relating to this Interconnection Agreement shall be initiated and prosecuted in the state court of competent jurisdiction located in Orange County, Florida, and the City and the Customer irrevocably submit to the jurisdiction and venue of such court. To the fullest extent permitted by law, each Party hereby irrevocably waives any and all rights to a trial by jury and covenants and agrees that it will not request a trial by jury with respect to any legal proceeding arising out of or relating to this Interconnection Agreement.

None of the provisions of this Interconnection Agreement shall be considered waived by either Party except when such waiver is given in writing. No waiver by either Party of any one or more defaults in the performance of the provisions of this interconnection Agreement shall operate or be construed as a waiver of any other existing or future default or defaults. If any one or more of the provisions of this Interconnection Agreement or the applicability of any provision to a specific situation is held invalid or unenforceable, the provision shall be modified to the minimum extent necessary to make it or its application valid and enforceable, and the validity and enforceability of all other provisions of this Interconnection Agreement and all other applications of such provisions shall not be affected by any such invalidity or unenforceability. This Interconnection Agreement does not govern the terms and conditions for the delivery of power and energy to non-generating retail customers of the City's electrical distribution system.

28. This Agreement incorporates by reference the terms of the tariff filed with the Florida Public Service Commission by the City, including the City's Net Metering Service Rate Schedule, and associated technical terms and abbreviations, general rules and regulations and standard electric service requirements (as may be applicable) are incorporated by reference, as amended from time to time. To the extent of any conflict between this Agreement and such tariff, the tariff shall control.

29. The City and Customer recognize that the Florida Statutes and/or the Florida Public Service Commission Rules, including those directly addressing the subject of this Agreement, may be amended from time to time. In the event that such statutes and/or rules are amended that affect the terms and conditions of this Agreement, the City and Customer agree to supersede and replace this Agreement with a new Interconnection Agreement which complies with the amended statutes/rules.

30. Customer acknowledges that its provision of electricity to the City hereunder is on a first-offered first-accepted basis and subject to diminution and/or rejection in the event the total amount of electricity delivered to the City pursuant to the City's Net Metering Service Rate Schedule, (as filed with the Florida Public Service Commission), from all participating City customers, exceeds 2,560 KW of customer generated renewable energy.

31. This Agreement is solely for the benefit of the City and Customer and no right or any cause of action shall accrue upon or by reason, to or for the benefit of any third party not a formal party to this Agreement. Nothing in this Agreement, expressed or implied, is intended or shall be construed to confer upon any person or corporation other than the City or Customer, any right, remedy, or claim under or by reason of this Agreement or any of the provisions or conditions of this Agreement; and, all provisions, representations, covenants, and conditions contained in this Agreement shall inure to the sole benefit of and be binding upon the City and Customer and their respective representatives, successors, and assigns. Further, no term or condition contained in this Agreement shall be construed in any way as a waiver by the City of the sovereign immunity applicable to the City as established by Florida Statutes, 768.28.

32. Renewable Energy Credits. Customer shall retain the rights to any renewable energy credits produced by the customer-owned renewable generation; and any additional meters necessary for measuring the total renewable energy generated by the customer owned renewable generation for the purpose of receiving renewable energy credits shall be installed at Customer's expense, unless otherwise determined during negotiations for the sale of Customer's renewable energy credits to City.

IN WITNESS WHEREOF, Customer and the City have executed this Agreement the day and year first above written.

City: Customer:

By: _____ By: _____

(Print Name)

Title: _____

Date: _____

_____

(Signature)

Date: _____

City Account Number:

_____

CITY OF Winter Park APPLICATION FOR INTERCONNECTION OF

CUSTOMER-OWNED RENEWABLE GENERATION SYSTEMS

Circle One:

TIER 1 - 10 kW or Less

TIER 2 - Greater than 10 kW and Less Than or Equal to 100 kW

City of Winter Park customers who install customer-owned renewable generation systems (RGS) and desire to interconnect those facilities and operate in parallel with City of Winter Park's electrical system are required to complete this application. When the completed application and fees are returned to the City of Winter Park, the process of completing the appropriate Interconnection Agreement can begin. This application and copies of the Interconnection Agreements may be obtained in person at 401 Park Avenue South Winter Park, Fl 32789.

1. Customer Information:

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Phone Number: _____ Alternate Phone Number: _____

Email Address: _____ Fax Number: _____

Customer Account Number: _____

2. RGS Facility Information:

Facility Location:
_____

RGS Manufacturer:
_____

Manufacturer's Address:
_____

_____

Reference or Model Number:
_____

Serial Number: _____

3. Facility Rating Information:

Gross Power Rating: _____ ("Gross power rating" means the total manufacturer's AC nameplate generating capacity of an on-site customer-owned renewable generation system that will be interconnected to and operate in parallel with the utility's distribution facilities. For inverter-based systems, the AC nameplate generating capacity shall be calculated by multiplying the total installed DC nameplate generating capacity by 0.85 in order to account for losses during the conversion from DC to AC.)

Fuel or Energy Source: _____

Anticipated In-Service Date: _____

4. Application Fee:

There is no application fee for Tier 1 installations. The non-refundable application fee is $240 for Tier 2 installations and must be submitted with this application.

5. Required Documentation:

Prior to completion of the Interconnection Agreement, the following information must be provided to the City of Winter Park by the Customer:

A. Documentation demonstrating that the installation complies with:

   1. IEEE 1547 (2003) Standard for Interconnecting Distributed Resources with Electric Power Systems.
   2. IEEE 1547.1 (2005) Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems.
   3. UL 1741 (2005) Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources.
   4. National Electrical Safety Code, National Electric Code 2008 or latest version, Florida Building Code, and local codes and regulations.

B. Documentation that the customer-owned renewable generation has been inspected and approved by local code officials and utility officials prior to its operation in parallel with the City of Winter Park's electric system to ensure compliance with applicable local codes and utility regulations.

C. Proof of general liability insurance in the amount of shown below naming the City of Winter Park as an additional insured:

   Tier 1 – Not required (recommended amount is $100,000).
   Tier 2 - $1,000,000.00

Customer

By: _____ Date: _____

(Print Name)

_____

(Signature)

Water and Sewer Rate Increase

Background:

We have upcoming capital improvements that will be too large to fund from operating revenues and will require increasing rates to either fund these improvements on a pay as you go basis or debt finance. The purpose of this agenda item is to begin the discussion on the upcoming requirements that will culminate in a recommendation to the City Commission to become effective October 1, 2022.

In 1998, the City Commission adopted ordinances providing for increases in water and wastewater rates equal to the water and wastewater utility index published annually by the Florida Public Service Commission (PSC). Since that time, these increases have ranged from a low of 0.56% to a high of 3.09%.

For most years, these index increases have been adequate to keep pace with cost increases. The exceptions have been when water and wastewater rate studies were completed in 2004 and 2012.

Upcoming capital requirements:
The table below shows the upcoming capital project requirements that will be too significant to be funded from operating revenues of the water and wastewater utility.

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Iron Bridge	$1,572,235	$1,379,317	$1,394,789	$3,042,580	$1,442,320	
SR 434 utility line relocated		$2,200,000	$25,000	$25,000		
Richard Crotty Parkway utility line relocates					$865,000	$50,000
	$1,572,235	$3,579,317	$1,419,789	$3,067,580	$2,307,320	$50,000

Winter Park is responsible for 14.90% of the costs of improvements to the Iron Bridge wastewater treatment facility owned by City of Orlando. In the past, these improvements have been debt funded but, the last of the debt proceeds were exhausted in FY 2020.

The water and wastewater utility has a healthy reserves balance ($14,810,548, or 207 days, in working capital as of September 30, 2020). This will allow the City to pay for some of these improvements from reserves without depleting working capital to an unacceptable level. The Government Finance Officers Association recommends and the City's Administrative Policy requires a minimum of 45 days working capital for enterprise funds. If no action is taken to increase rates above those provided for by the PSC index, working capital of the water and wastewater utility is projected to dip below 45 days beginning in FY 2025.

Rate adjustment options:

For discussion purposes, the following four options have been prepared:

Option 1 – no rate increase other than PSC index

Pros:

1. Rates continue to increase at only the PSC index

Cons:

1. Working capital dips below 45 days in FY 2025

Option 2 – increase rates by 1.5% above PSC index each year for four years beginning October 1, 2022

Pros:

1. Small increase each year
2. Generates an additional $4,800,000 in rate revenue for FYs 2023 – 2026
3. Working capital never dips lower than 62 days and is at 84 days for FY 2026

Cons:

1. Requires adjusting rates above the PSC index for four years vs. one year

Option 3 – increase rates by 6.0% above PSC index October 1, 2022

Pros:

1. One time adjustment to rates above the PSC index
2. Generates an additional $7,500,000 in rate revenue for FYs 2023 – 2026
3. Working capital never dips lower than 98 days and is at 118 days for FY 2026

Cons:

1. Requires largest adjustment of the four options

Option 4 – finance improvements coming due in FYs 2022 – 2026 ($10,424,006) over ten years with a fixed rate loan. Borrowing would occur in FY 2022 with first debt service due in FY 2023.

Pros:

1. Working capital never dips lower than 152 days and is at 152 days for FY 2026

Cons:

1. Requires a 3.9% increase in rates. Most of this would be for wastewater rates as Iron Bridge is all wastewater and the utility line relocate projects for SR 434 and Richard Crotty Parkway are partially wastewater.
2. Requires $1,500,000 in interest costs over the ten year term of the loan
3. Debt service becomes a fixed cost that must be paid each year and the amounts and timing of these capital improvements is controlled more by other entities. Historically, improvements at Iron Bridge have occurred slower than projected.

Assumptions used:

1. No rate adjustments above the PSC index will be implemented prior to October 1, 2022
2. As in years past, PSC index increases will provide adequate rate revenues to cover operating costs and capital outlay with the exception of the projects noted above
3. PSC index increases will average 1.72% as they have for the past five years
4. Water and wastewater sales in terms of thousands of gallons will remain consistent across the projection period
5. Operating expenses will increase by 3%, debt service will be level (with the exception of option 4), and capital spending will be as outlined in the proposed capital improvement plan
6. For option 4, the City will be able to finance improvements for FYs 2023 – 2026 using a ten year loan at 2.5%

Options for Addressing Upcoming Capital Improvement Requirements

	Percentage Increase	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Option 1:							
Projections with no additional rate increase above PSC index:							
Projected working capital at end of fiscal year		13,238,313	9,658,996	7,899,707	4,487,127	1,928,807	1,857,807
Projected number of days of working capital		191	137	109	60	25	24
Monthly water and sewer bill for residential customer using 8,000 gallons		73.87	74.73	76.02	77.33	78.66	80.01
Option 2:							
Projections with rate increase above PSC index for FYs 2023 - 2026:	1.50% each year for four years						
Projected working capital at end of fiscal year		13,238,313	9,658,996	8,357,084	5,881,852	4,764,309	6,661,865
Projected number of days of working capital		191	137	115	79	62	84
Monthly water and sewer bill for residential customer using 8,000 gallons		73.87	74.73	77.14	79.62	82.19	84.84
Option 3:							
Projections with one time rate increase above PSC index for FY 2023:	6.00%						
Projected working capital at end of fiscal year		13,238,313	9,658,996	9,729,215	8,177,610	7,512,274	9,366,817
Projected number of days of working capital		191	137	134	109	98	118
Monthly water and sewer bill for residential customer using 8,000 gallons		73.87	74.73	80.50	81.89	83.30	84.73
Option 4:							
Finance the improvements for FYs 2022 - 2026 over 10 years, one time rate increase above PSC index for FY 2023:	3.90%						
Projected working capital at end of fiscal year		13,238,313	11,858,996	11,857,142	11,873,888	11,930,039	12,046,759
Projected number of days of working capital		191	168	163	159	155	152
Monthly water and sewer bill for residential customer using 8,000 gallons		73.87	78.02	79.36	80.73	82.12	83.53

Winter Park Utility Assistance Program

Winter Park utility customers experiencing a financial hardship have several resources to receive assistance. These are summarized on the City's website at https://cityofwinterpark.org/departments/finance/utility-billing/:

1. The emergency utility assistance program managed by Heart of Florida United Way
2. Orange County energy bill assistance (LIHEAP, a federally funded program)
3. Senior Resource Alliance Emergency Home Energy Assistance Program for the Elderly (EHEAP, a federally funded program)
4. City of Winter Park Payment Plan Options. Since the COVID-19 pandemic began, the City has extended payment plan arrangements to 632 customers allowing them to pay a total of $473,301 over a period of up to 12 months. As of June 30, 2021, a total of $189,108 remained outstanding.
5. Winter Park utility customers who purchase their electricity from either Duke Energy or OUC also have options 1 – 3 available to them since Duke and OUC also partner with Heart of Florida United Way for emergency utility assistance

Heart of Florida United Way (HFUW) Emergency Utility Assistance Program

- This is the assistance program Winter Park customers can contribute to through their utility bill to assist other customers experiencing financial hardship. The City has provided $25,000 in direct assistance to this program as part of its COVID-19 relief package and pledged up to an additional $25,000 in matching contributions ($5,890 of the matching has been contributed to date)
- Winter Park utility customers contribute $550/month to the program
- The program has provided a total of $39,212.59 in assistance to 110 Winter Park customers from September 1, 2020 to May 31, 2021
- As of May 31, 2021, the program has a balance of $68,460 to assist Winter Park customers.

HFUW Program Criteria

- Must be a Winter Park electric utility customer
- Must be customer of record or authorized on the account
- Not involved in criminal activity related to tampering
- Must provide: (1) Name and contact information, (2) Last four digits of social security number, and (3) Winter Park utility account number
- Assistance is limited to up to $650 per household in a 12-month period

Budget Highlights - Capital

- **<u>Electric</u>:**
  - $6.4 million: Expanded City-wide undergrounding program to reach 8 miles annually
  - $1.2 million: Routine capital repair and replacement
  - $500,000: Solar array expansions
  - $250,000: Substation assessment and improvements

Budget Highlights - Capital

- **<u>Water & Sewer</u>: Investment in accelerated replacement of aging water meters. Capital funding for SR434 improvements, routine investment in system infrastructure, and upgrades to the city's water and wastewater plants.**
  - $2.2 million: Contribution to FDOT's regional project related to relocation of facilities on SR434.
  - $1.7 million: Expansion, Repair, and Replacement to system water and sewer lines as well as Lift Station facility improvements.
  - $100,000: Design and engineering to relocate 17-92 facilities once the FDOT project begins.
  - $496,500: Investment in the Utility's water and wastewater treatment facilities.

Utility Rate Outlook

The FY22 budget and Ten-Year Pro-formas, highlight some solid successes and areas of needed action in the utilities. The remaining slides will highlight the following:

- **Water & Wastewater** regional capital obligations that are not fundable within the existing indexed rate increases over the longer-term.

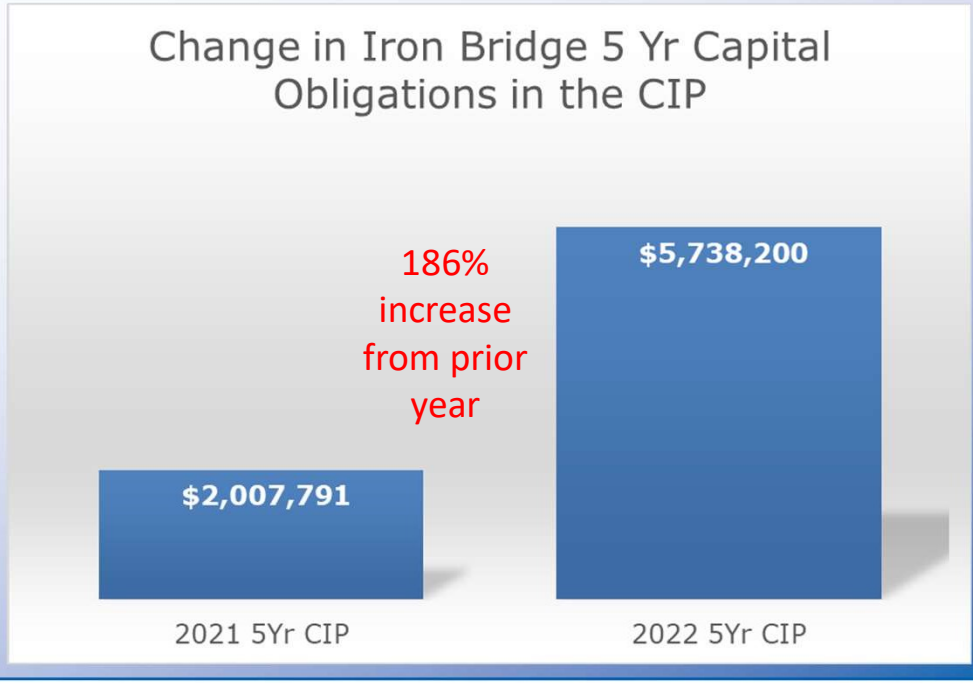
- **Electric Utility** substantial increase in capital spending as well as improving cash reserves positions while maintaining some of the lowest system rates and reliability among utility providers in the state. (19% lower than Duke Energy)

Water & Wastewater Capital Obligations

Over the next 5 years, the W&WW Utility expects to spend over $9 million in fund balance, with almost $6 million solely for capital obligations for the Iron Bridge treatment facility at the City of Orlando, and the remainder for regional road projects mandated by FDOT.

Without management intervention, the Ten-Year Pro-Forma indicates that cash reserves will become depleted.

Est. Capital contributions have been revised upward significantly



Water & Wastewater Capital Obligations

Increased capital contribution requirements coupled with a rising inflationary environment, may necessitate a conversation on future rate increases in excess of the PSC index amount.

Over the long-term the PSC index has increased rates at 1.76% annually. This long term revenue growth rate is not sufficient to cover both operational and capital pressures.

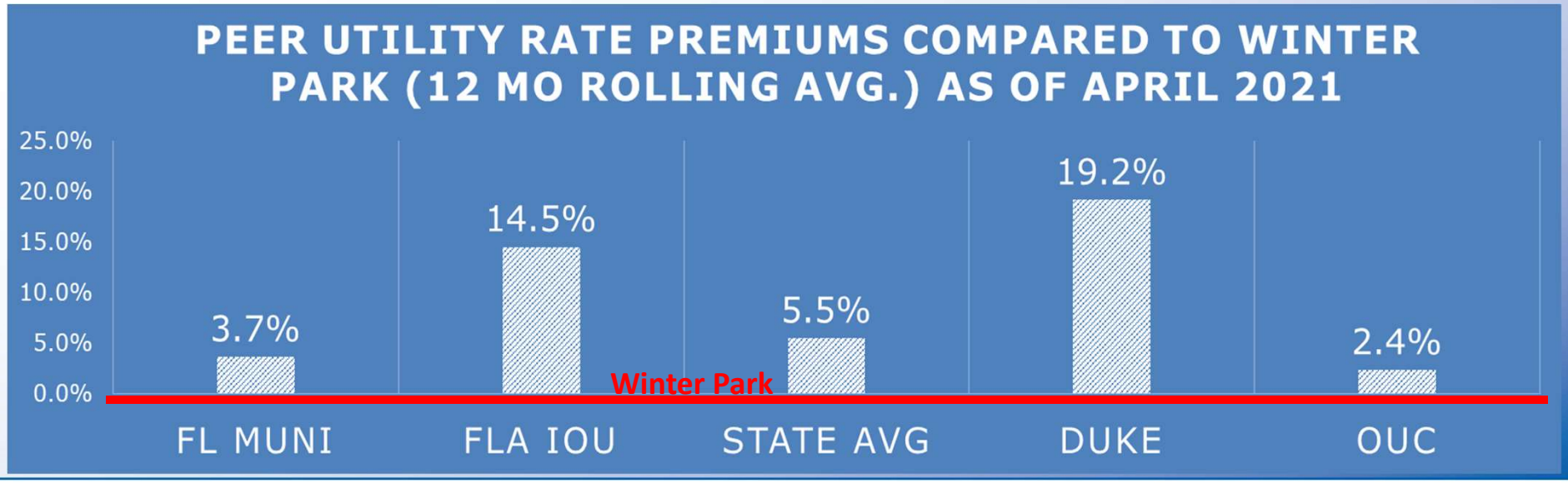
For FY22, the PSC index rate is 1.17%, well below inflationary levels. To maintain cash sufficiency, the Utility needs to consider a series of supplemental increases in future years.

Two Scenarios in the Ten-Year Pro-Forma detail the status quo and moderate rate increase options. Staff is already working with UAB on potential options and this will be analyzed further as more details are gathered on shorter-term capital projects.

Electric Utility Rates

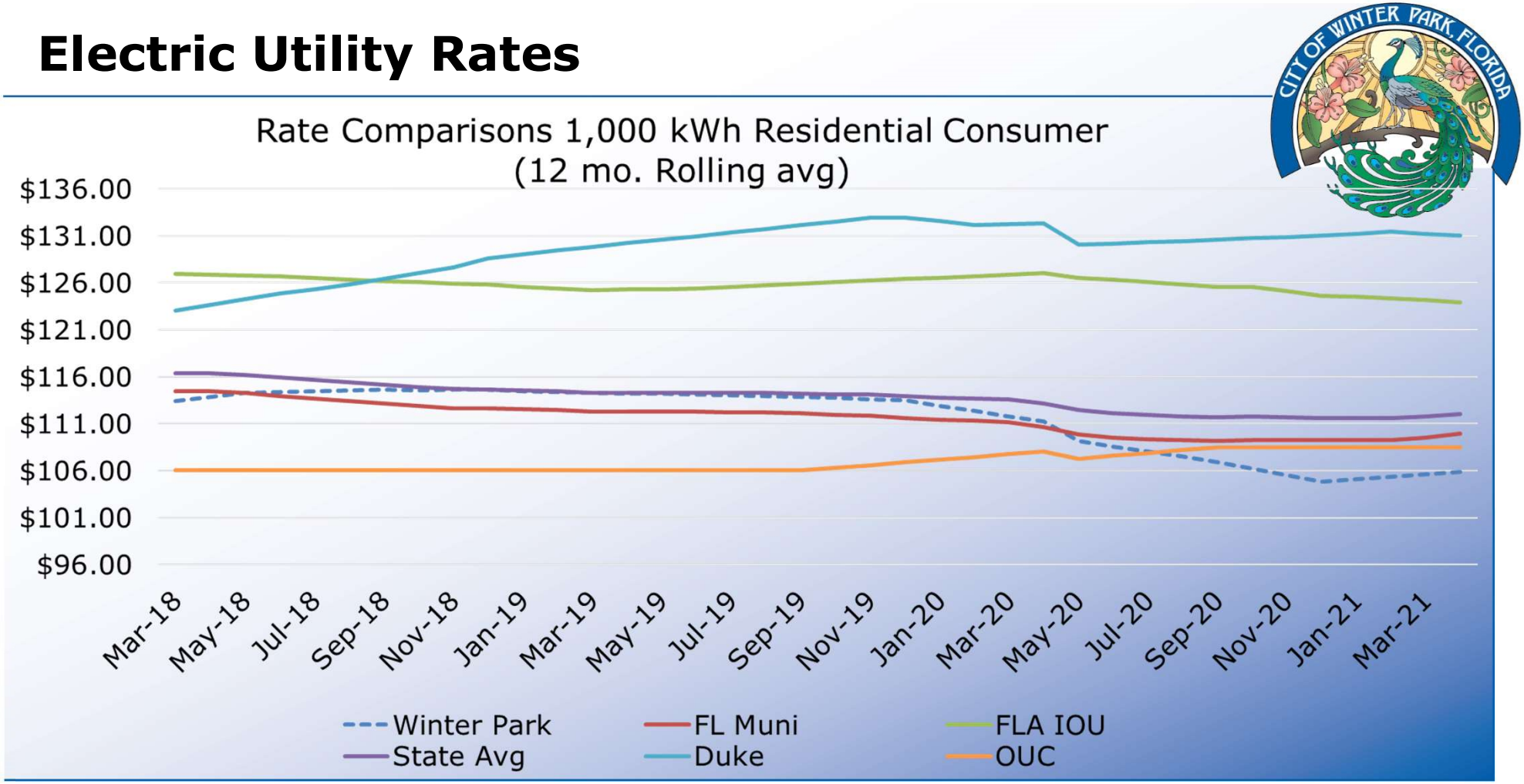
The Electric Utility continues to enjoy a favorable cost structure due to the bulk power deal and is sharing that benefit with its ratepayers.

As of April 2021, on a 12 month rolling basis, ratepayers in other jurisdictions pay a premium compared to Winter Park.

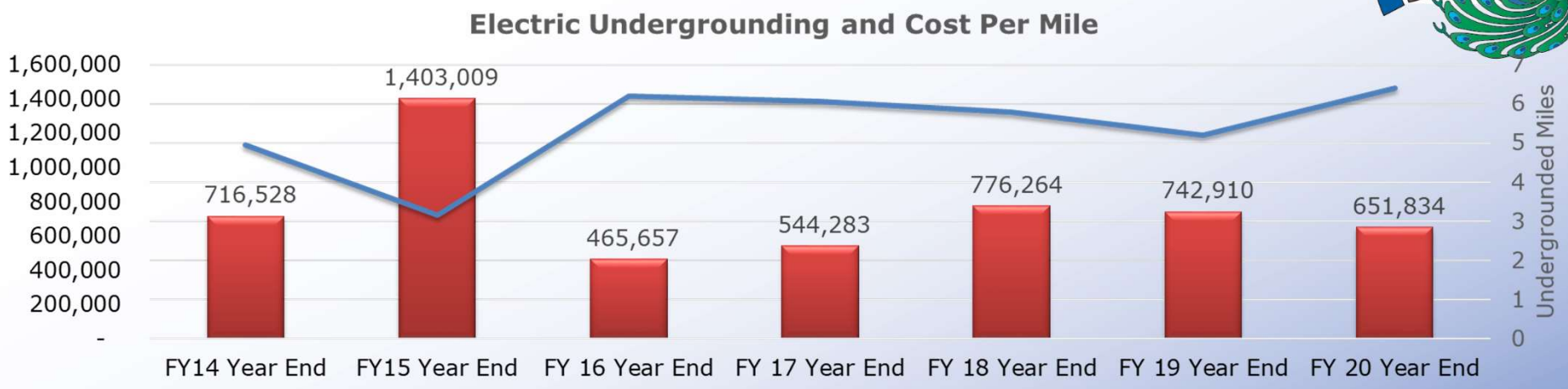


Calculated rates for a 1,000 kWh residential user.

Electric Utility Rates

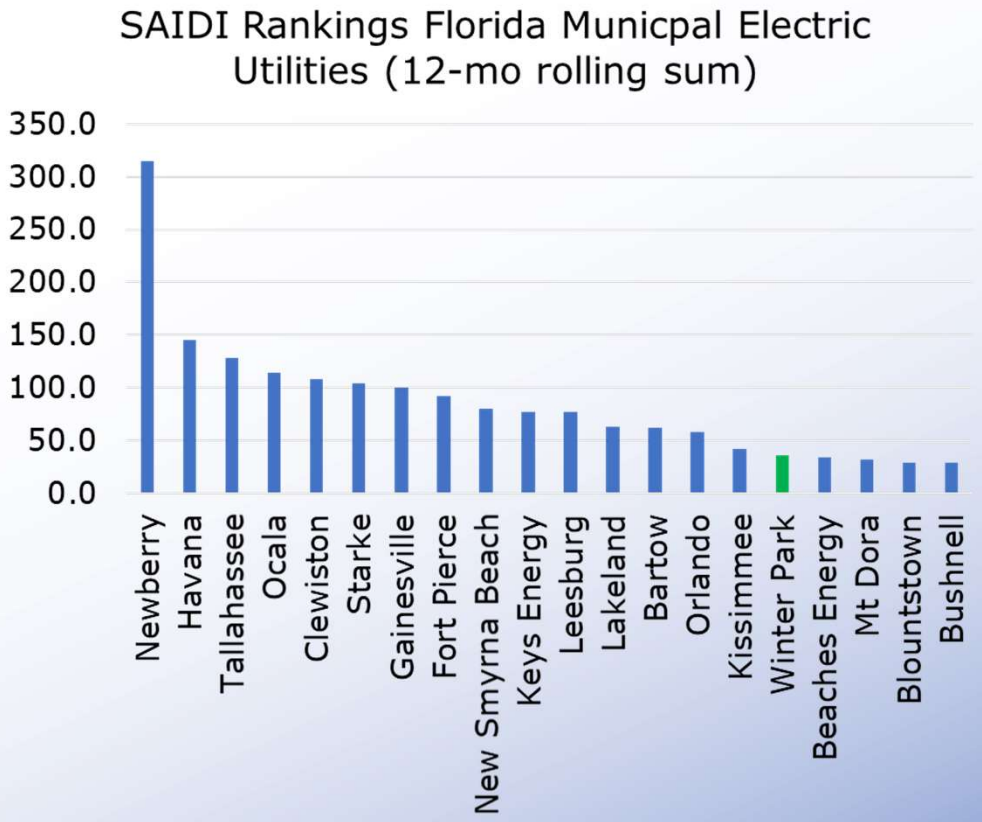


Electric Utility Performance



The last seven years have seen an average cost per mile of just over $750k. The proposed budget includes a $1.4 million increase in funding for undergrounding effort to plan for completion of 8 miles at an average cost of $800k. This will help to mitigate inflationary cost pressures and keep the undergrounding program on-track.

Electric Utility Performance



The undergrounding program has clearly improved reliability as Winter Park has one of the best reliability index ratings and will likely become #1 again after July.

In addition to improved performance, the utility will have a projected $3 million cash reserve, after a negative +$4 million just three years ago. With opportunities for improvement in cost savings with the expiration of the Covanta energy supply contract in FY24.

Utility Budget Highlights

Electric Utility:

- *Undergrounding Funding & Cost Inflation:* Attempting to be prepared for unprecedented cost increases while also increasing the number of miles that could be completed annually by the utility, the FY22 budget raise undergrounding electric line funding to $6.4 million. At historical prices this would allow the utility to complete 8 miles annually. When lead times and pricing started to rise, the utility and warehouse division moved quickly to buy a number of materials in advance. Lead times on items that used to be a month are now more than four months, and pricing for steel and metal and plastics have been rising by more than 20%. The utility is hoping that early action on stockpiling will help the utility to continue on schedule, however anticipating what shipping and material problems may emerge is difficult to forecast. Regardless, the extra funding will be used to mitigate long lasting price increases while also offering significant funding to complete more mileage to meet the goal of having all overhead wires underground in 2026.
- *Infrastructure Improvements:* The newly negotiated bulk power rates for the city's Electric Utility have dropped bulk power costs 20% and utility continues to benefit from this decreased cost structure. This has allowed the utility to expand funding for undergrounding, set aside contingency for improving the cash position, and making sustainable improvements such as solar canopies at city facilities and needed substation improvements, all without raising rates. The FY22 budget will also continue funding the replacement of existing meters with smart meters that allow for all the analytics and remote functionality that will improve customer response and utility efficiency ($500k). The utility has also set aside additional capital funds to consider expanding the solar canopy at the city's Operation Compound and $250k to begin making improvements to the utility's substations. Over the last four years, rating agencies have expressed concern over the utility's cash position. While staff has explained to the agencies that the discretionary undergrounding program could be delayed any year to add back to cash, this new bulk power agreement now gives the utility the opportunity to set aside $1 million for reserves. During the next five years, the utility will have a cost structure advantage that will allow it to complete its undergrounding program and return to a strong cash position before power supply contracts are again negotiated.
- *Rate Structure:* In FY 21, staff and the UAB commissioned a rate structure study to best align the billing of services to customers with the cost associated with providing service to those customers. This will result in a revenue neutral realignment of cost structure that will have the effect of shifting cost away from residential customers and towards commercial ones, which will become effective on Oct. 1, 2021. Overall changes will be minimal (less than 3.5%) on any customer bill and as of April 2021 the rate payer[1] in Winter Park pays 5.5% less than the state average, and 19.2% less than Duke Energy rates, on a rolling 12-month basis.

[1] Based on a residential 1,000 kWh consumer per Florida Municipal Electrical Association data.

- *Reliability*: The electric undergrounding program has been proving its worth. The Florida Municipal Power Agency (FMPA), which represents municipally owned electric utilities in the State of Florida, compiles outage duration and provides monthly reports. For the 12 months ending March 2021, the City of Winter Park Electric Utility was in the top 5 most reliable out of the 21 municipally owned utilities. The System Average Interruption Duration Index (SAIDI) is the industry accepted measure of reliability and Winter Park's stood at 35.5 minutes, verses an average of almost 81 for municipalities in its size class. The city's undergrounding program funded in this budget continues to make reliability gains for residents and businesses in this city.
-

Water & Wastewater Utility:

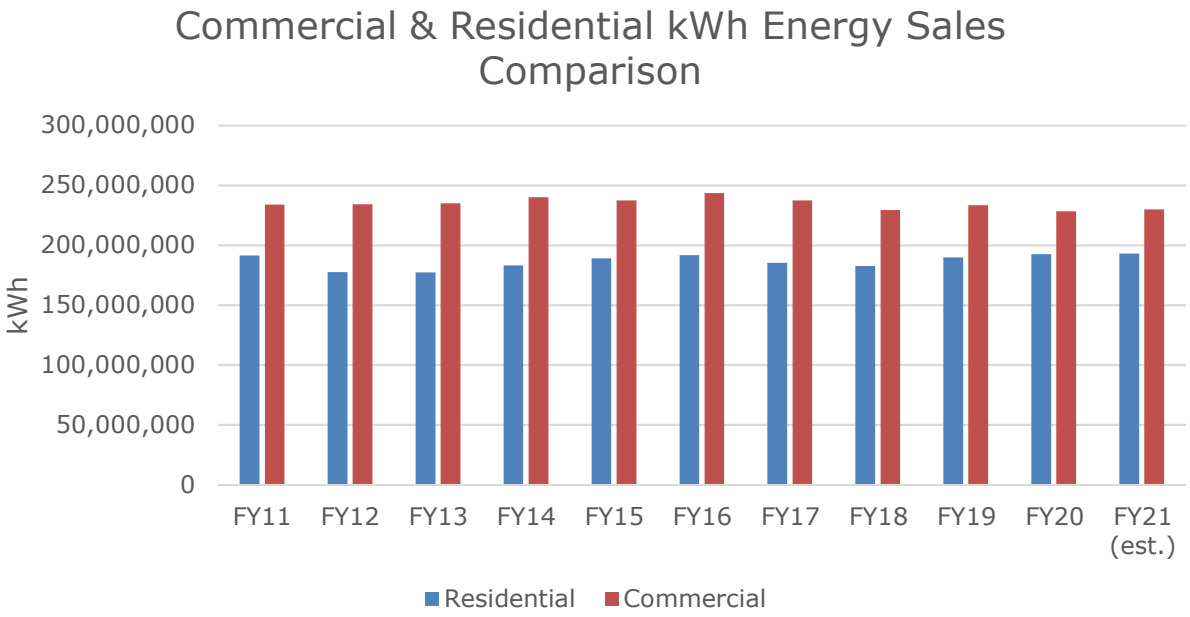
- *Rates:* By policy, the city references the Public Service Commission price index for water and sewer rate comparisons each year. For FY 22 the adjustment will be 1.17%. This adjustment may prove to be ultimately insufficient as price increases for pipe and metal components such as copper and brass have been skyrocketing with the reopening. The index typically lags a year and has had an average annual change of 1.72%, which over the long term, in an environment that does not allow for new customer acquisition, is too low to support long term healthy operations. Many upcoming significant costs that the utility will be facing are out of the city's control, such as capital maintenance agreements with the City of Orlando for wastewater treatment at Iron Bridge, or regional road realignments by FDOT that require the utility to relocate utility infrastructure. These new costs are presented in the 5-Year CIP portion of this document and will significantly reduce the utility's cash position in the near term. This year's proposed budget is balanced but if the PSC index does not begin to grow significantly next year, further rate action may be necessary to maintain appropriate working capital.
- *Routine Capital Investments:* The utility will make $910k in repairs and replacement funding to the systems water & sewer mains, and lift stations. In addition, it will make almost a half million investment in replacements and upgrades at the Water and Wastewater plants including, recoating of the clarifier and weir realignment, security enhancements, and ozone generator dielectric and pump motor replacements.
- *SR 434 Water & Sewer Relocation:* This regional project by FDOT will require the utility to spend over $2.2 million to relocate utilities in the effected area. This project is planned to start in FY22 and is being funded from cash reserves however final cost estimates have not been completed and this figure could increase, or the whole project may be delayed as a result.
- *Richard Crotty Parkway*: Orange County is realigning Hanging Moss Rd. which will necessitate the city relocating utilities in the area including a water main upgrade and force main replacement. This project was expected to start in FY22 but was recently rescheduled to FY25. The CIP includes the just over $900k to accommodate this project.
- *Accelerated Water Meter Replacement:* As water meters age, readings become less accurate and the differential between what is pumped and what is billed becomes larger. This is tracked, in part, through the unaccounted for water loss statistic. Over the last few years this number has started to tick up (6.8% in FY18, 7.1% in FY19, 8.7% in FY20) and may indicate that meters are aging and need to be

replaced. The FY 22 budget includes an additional $300k in operating funds to accelerate the replacement of old meters.

- *17/92 Water/Sewer Realignment:* FDOT plans on making a significant improvement to the 17/92 corridor and has partnered with the City's CRA to invest over $20 million into reconstruction, decorative lighting, undergrounded electric, stormwater, and landscaping improvements to the area. The utility has a large old force main that will need to be replaced and relocated as part of this future project. The budget contains $100k to begin the design work and may ultimately have a project cost of $3 million.
- *Wastewater Treatment:* A large part of the annual budget for the Utility involves cost sharing partnerships for the treatment of wastewater. The largest is the city's partnership with Orlando for the Iron Bridge facility. Staff has received revised 5-year CIP estimates from Orlando regarding future capital contribution needs, and the CIP has been updated to reflect these figures. It represents a significant increase over prior estimates in future years however the utility has sufficient funding already earmarked for FY22 available to cover planned draws. Funding contribution needs for these capital contribution agreements is a primary reason for considering future action on rates to maintain reserves.

Electric Utility Charges for Services

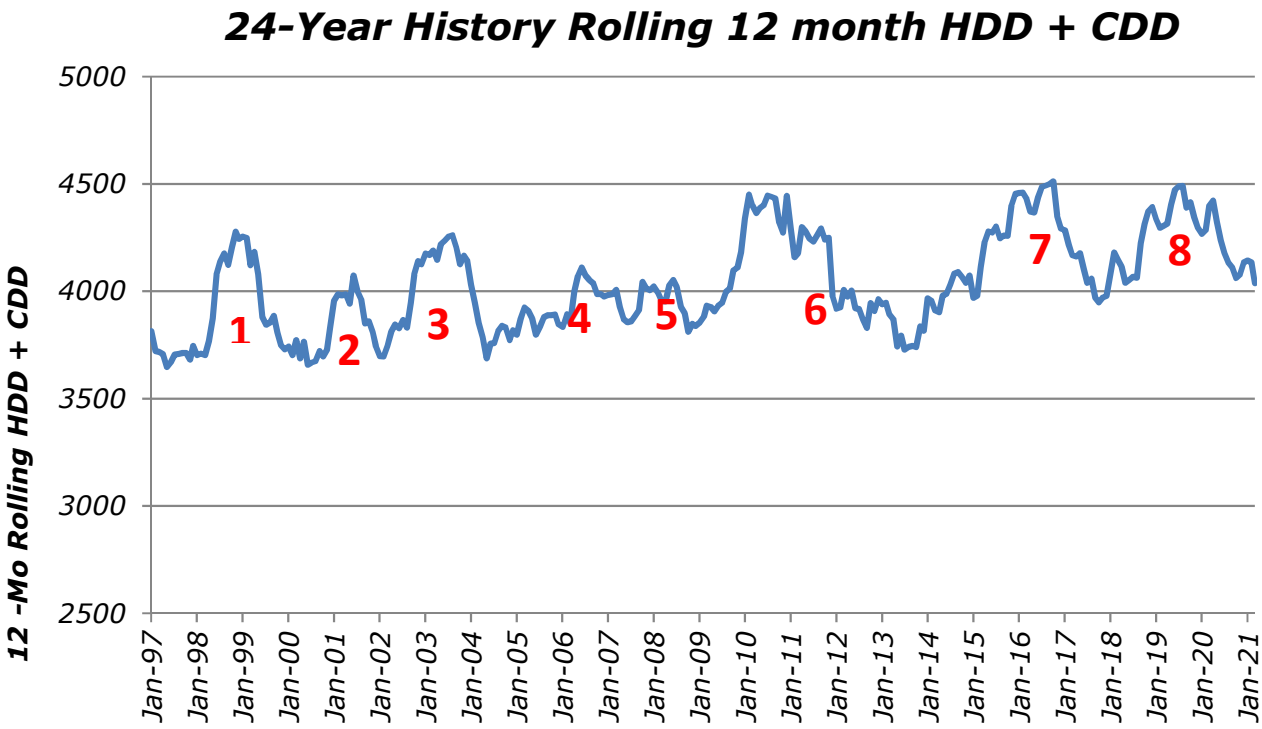
The advent of the pandemic brought concerns that electric energy consumption would drop as offices and businesses shut down. To prepare, the FY21 budget was built on the lowest level of energy sales in recent years at 407 million kWh. However electric demand showed surprising strength and largely continued the performance of pre-pandemic years. It is likely that FY21 sales will end at about 420 – 423 million kWh. The FY22 returns to this historic norm by factoring in total sales of 418 kWh, which is a conservative outlook given the last few years (excepting FY18) going back to FY14 were all over this level. Returning to this level will grow electric revenues 3.3%[1] when compared to the prior year budget estimate. Despite this resilience during the pandemic, over all electric energy sales have been in a long slow decline over time as better conservation technologies and efficient systems require less power to operate. In 2008 total Commercial customer sales were 252 million kWh. By 2020 they were almost 10% lower at 228 million kWh. Residential sales have stayed more consistent and are largely unchanged over the last twelve years, going from 188 million kWh to 192 million kWh.



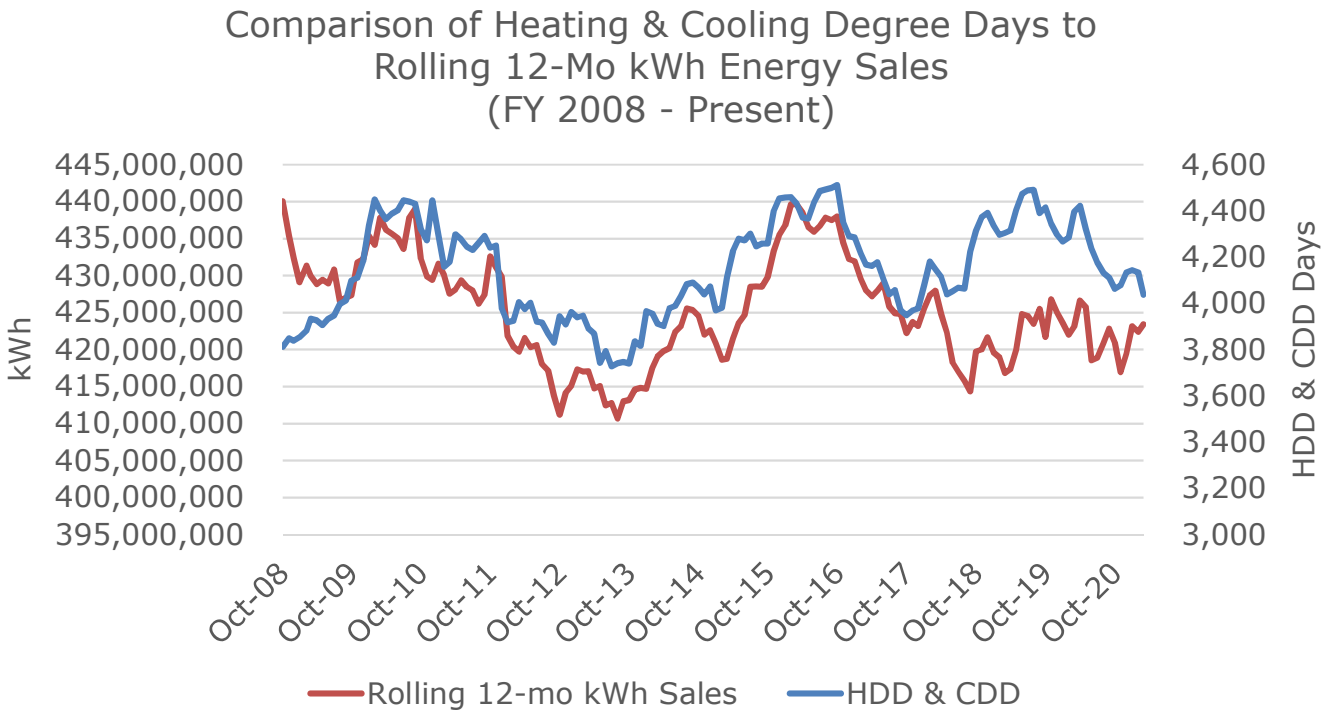
More than any other factor, the changes in weather are directly correlated to total energy sales in the utility. When weather is moderate and the amount of time that customers run HVAC systems is reduced, revenues decline. When weather is more extreme, and there are more days where customers run their units, revenues will grow. These days are called heating degree days (HDD) and cooling degree days (CDD). Times of more extreme weather rotates through cycles as can be seen from the graph below which seems to indicate that the end of an 8th less extreme cycle is

[1] Excludes Contribution in Aid of Construction (CIAC) and Fuel Cost Recovery.

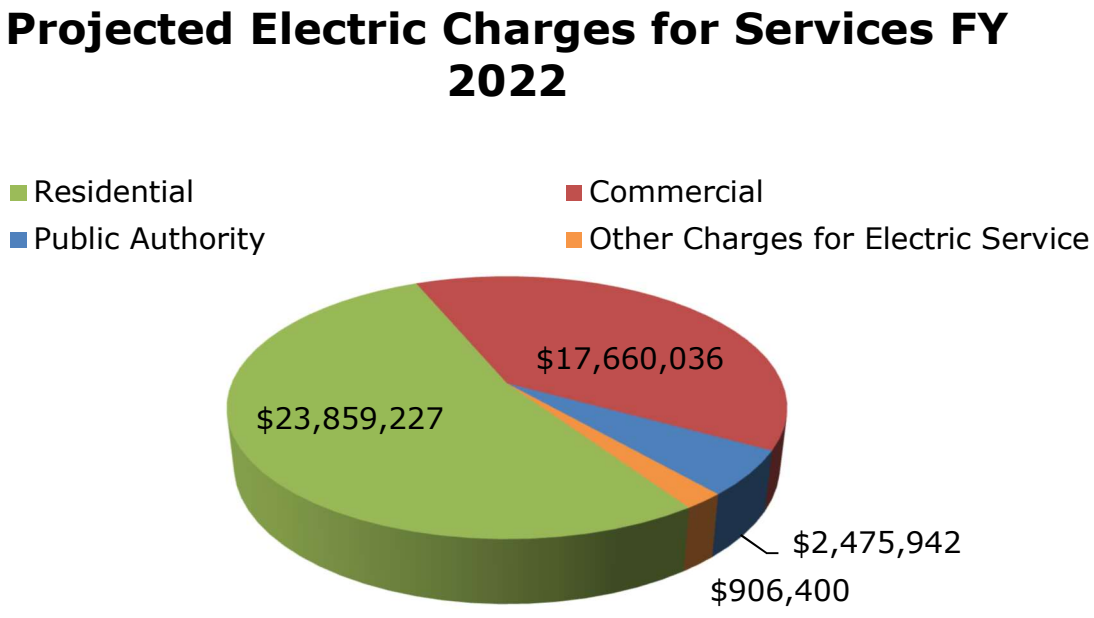
ending. If this is true, then future extreme weather may be coming and be of a financial support to energy sales.



The heavy correlation of weather to energy sales is clearly evidenced in the following graph which shows about 13 years of data comparing HDD & CDD day totals to the rolling 12-month kWh sales of energy.



As can be seen in the chart below, the residential customers provide the largest portion of revenues followed closely by commercial customers which are fewer in number but tend to be greater consumers of energy.



Two years ago, the utility entered a 7-year all requirements power supply agreement with the Florida Municipal Power Authority (FMPA) that reduces fuel and non-fuel costs to the ratepayer. This significant deal has eliminated the need to raise rates and has afforded expansions in capital spending on electric undergrounding and other needed infrastructure improvements. Staff estimates savings of almost $5 million in FY21 wholesale power costs, which include fuel, non-fuel, and transmission line costs and this is expected to continue into FY22. This drops energy costs by 20% and frees up significant cash flow.

With this funding the utility will be able to make a needed expansion in undergrounding funding which achieves two ends. The first, is that it supplies additional capital to complete additional undergrounding miles so that the goal of being completely underground by FY26 can be achieved. Secondly, the utility is seeing unprecedented price increases across all materials. Steal is up 25% and plastics and wiring are rising quickly. Conduit for bringing wires underground has increased by a third in just the first few months of the year. As such, the utility will allocate $6.4 million towards undergrounding throughout the rest of the project schedule. In past years, completing a mile of undergrounding cost between $650k - $800k. At this level of funding, that means that the utility is projecting to complete eight miles of undergrounding in FY22.

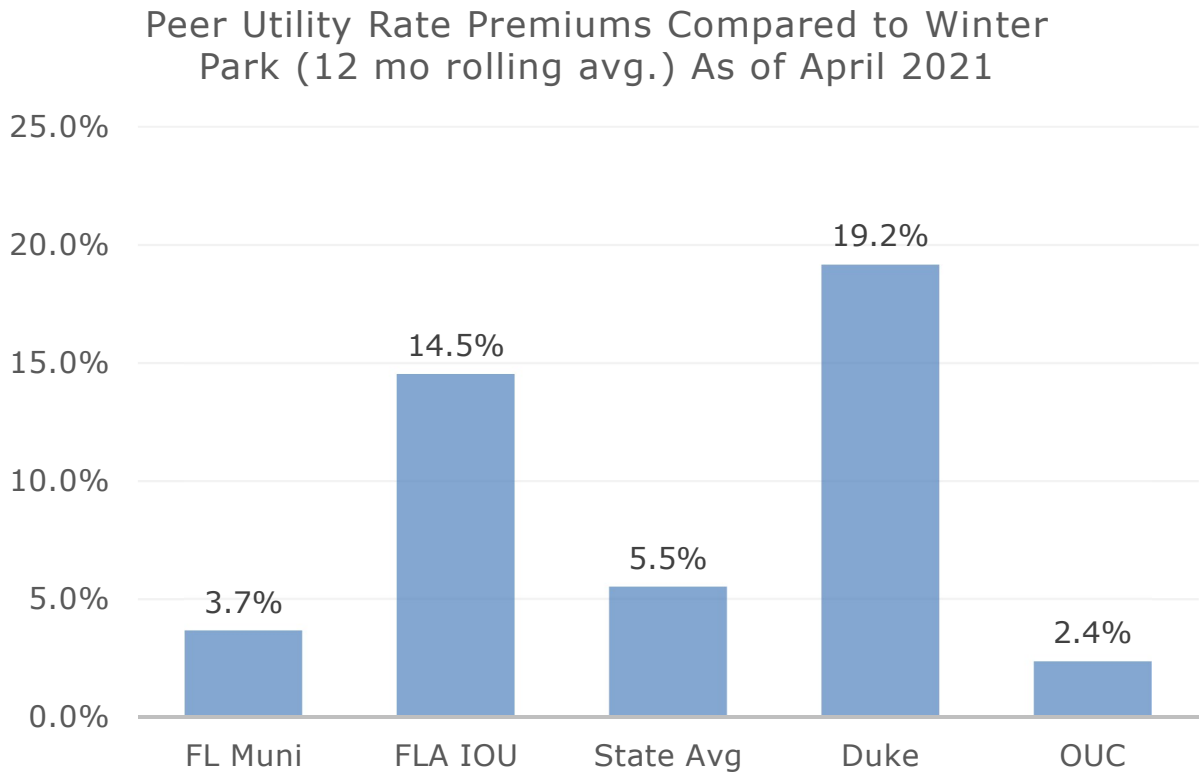
In addition to making expansions to undergrounding, the utility will begin multi-year investments into substation infrastructure. The utility has set aside some funding in FY22 to begin determining the scope of infrastructure needs and has set aside a placeholder of $1 million a year after that to address improvements. Building on funding set aside in FY21, the utility will put another $500k towards making solar improvements at city facilities. In FY22 this will likely be an expansion of the scope of work at the city's Operations Compound which is building a solar canopy around the utility warehouse.

The utility has improved its cash balance dramatically with the benefit of the new bulk power contract, from negative $4.2 million in FY19, to an anticipated $1 – $1.5 million by the end of FY21. The FY22 budget, continues to build this cash position by dedicating another $1 million to contingency which will give the utility over $2 million by the end of the next fiscal year. This is a crucial consideration as the bond rating agencies have long criticized the utility for its low cash position. The improvement in cash should strengthen outlook and may perhaps put the city on track for a ratings upgrade in the future.

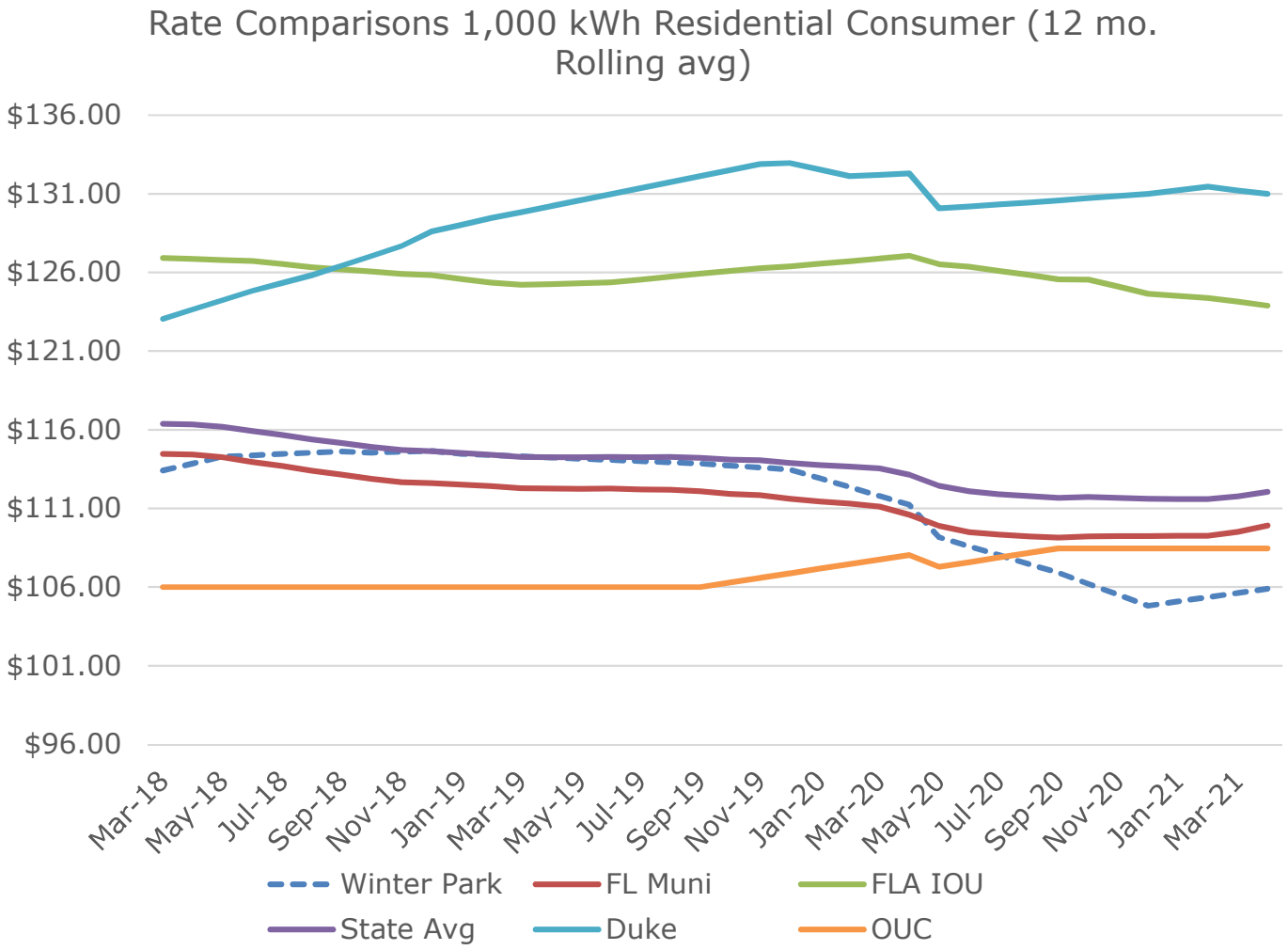
The Utility Advisory Board and staff have worked with outside consultants on a rate cost structure study. This seeks to balance the charge a customer class is charged in accordance with the cost of providing the energy to them. The findings of the study disclosed that rates will need to shift slightly away from residential and raise commercial rates by no more than a 3.5% adjustment at the greatest. This modest adjustment will be revenue neutral and generate no net new revenues to the utility

but is an effort to equitably balance costs among customers. This proposed FY22 budget does not propose any increase to rates overall.

In addition to generating record cash flow, the Electric Utility is doing it with rates far less than the competition. Electric ratepayers in Winter Park currently have rates that are slightly below the other municipal utilities, and 5.5% better than the state average. Compared to the predecessor utility that used to serve Winter Park, Duke Energy, rates are 19.2% better as of 12-month rolling rates recorded on April 2021 for a 1,000 kWh residential consumer. In addition, OUC has long been the low rate leader, and now Winter Park is even lower by 2.4%.



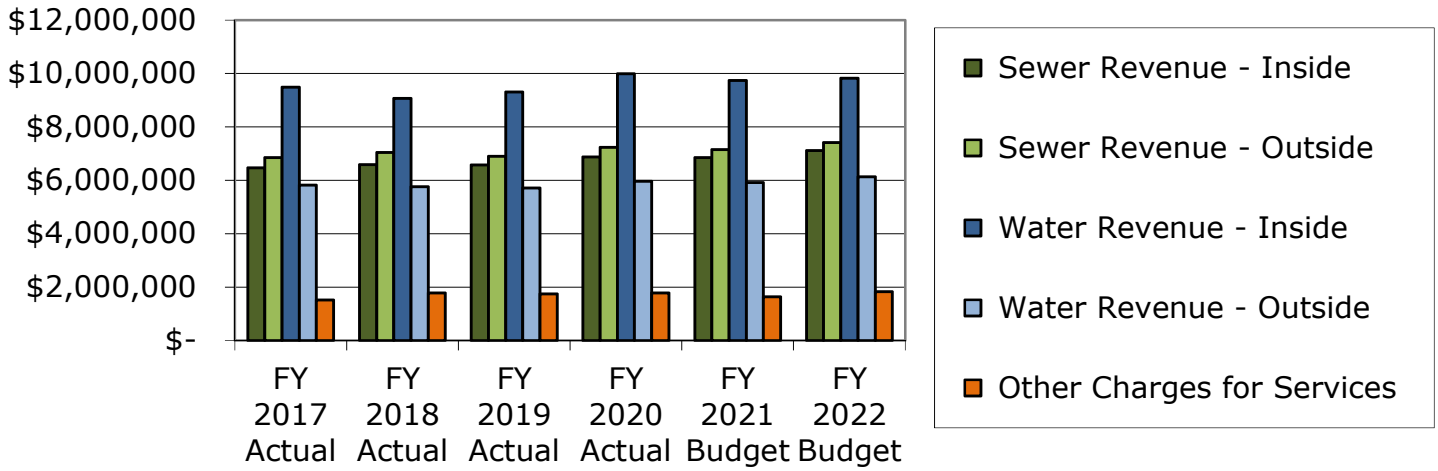
Over the longer term, Winter Park rates have been consistently below most of the market. The following graph shows rolling 12-month comparisons which differ from the snapshot of rates as of April 2021.



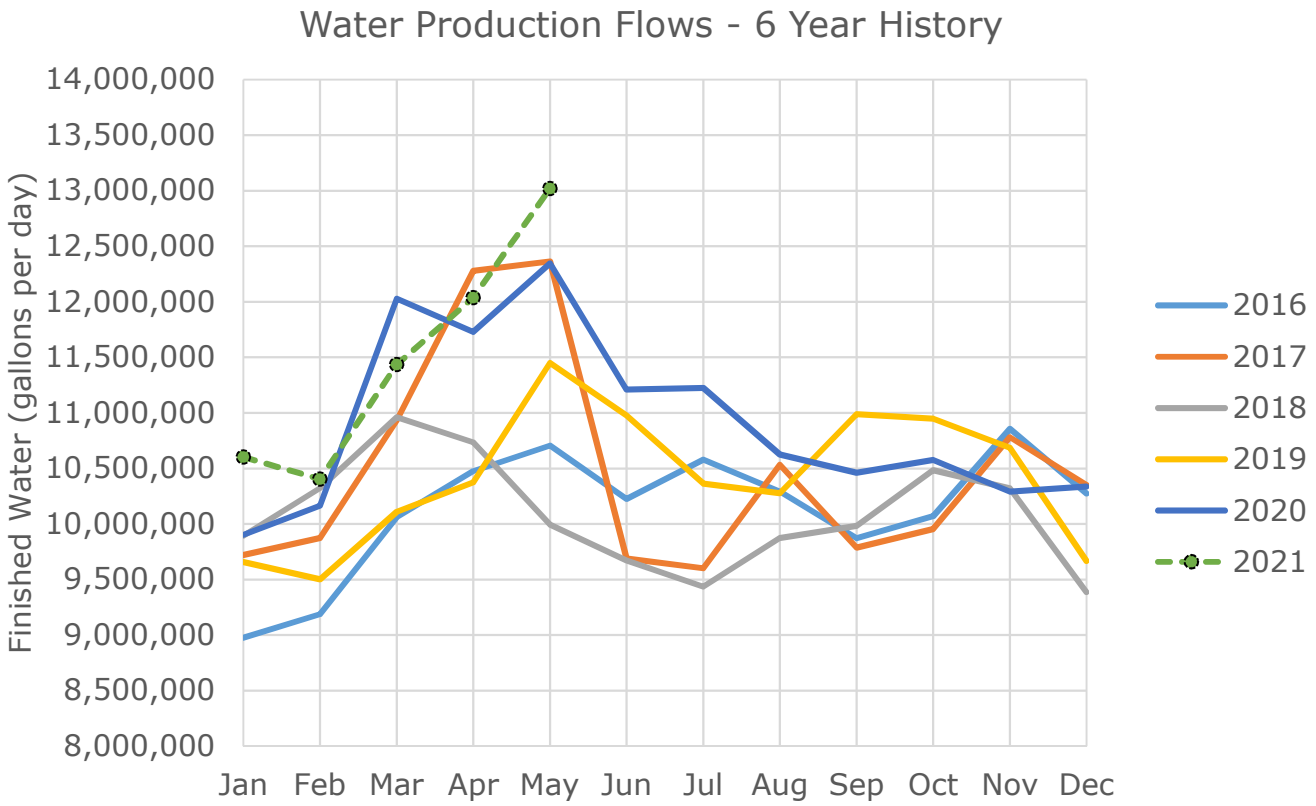
Water & Sewer Charges for Services

Charges for services is the revenue category that primarily makes up the bulk of the Water and Sewer Utility revenues. These revenues have fluctuated year-over-year but have remained relatively flat. The annualized rate of change from FY 2017 to FY 2022 is 1.4%. This reflects the overall reality that is being seen in the industry, where revenue growth is fairly flat or negative, due to conservation, greater efficiency standards in building construction, variances in weather, and limited growth in the consumer base. Absent annual indexed increases matched to the Public Service Commission (PSC) rate, the utility would struggle to show any organic revenue growth. Overall charges for services are expected to increase 3.2% from $31.3 million in FY21 to $32.3 million in FY22. This higher than normal rate of increase is due to FY21 budget being set too conservatively while the impact of the pandemic was still uncertain. The FY22 budget, revises these estimates to historical norms.

Water and Sewer Charges for Services: 5 Year Trend



Thankfully the economic shutdown did not appear to affect utility water production. The following graph shows water production for the current calendar year and compares it with flows from the prior five years. Currently production is above average and seems to be following a similar trend from 2017 and 2020.



Water and Sewer Fund capital projects funded include:

$2,200,000 for UT lines replacement and relocations for State Road 434 road widening.

$731,000 to replace sub-standard water mains.

$668,000 for rehabilitation of defective sewer mains.

$416,500 for capital improvements to the city's Water treatment plants.

$260,000 for Lift Station repair and replacement.

$100,000 for water and sewer relocation during FDOT 1792 road project.

$80,000 for capital improvements to the Winter Park Estates Water and Wastewater plant.

Electric Services Fund capital projects funded include:

$6,400,000 to underground electric utility lines. This is an expansion of funding made possible by savings from the new bulk power deal.

$1,227,672 million for annual routine capital improvements to the distribution system.

$500,000 to expand the solar awning project at the city compound.

$250,000 for upgrades to electric substations.

Water & Wastewater Pro-forma:

The expenditure side assumptions utilized in the general fund pro-forma are also used for this pro-forma. Growth in water and sewer revenue is based on the 10-year average (1.76%) PSC index increasing 2% annually.

Water & Wastewater Pro-forma Findings:

Use of fund balance to fulfill capital obligations associated with wastewater agreements and road projects with regional partners are going to take a significant reduction to cash balances ($9 million over five years) while general operating costs and allocations to CIP work will show negative cashflow on an annual basis throughout the model without management action. Days of working capital which are projected at a healthy 142 will fall negative within 6 years. This may look fairly bleak but highlights the cost pressures and revenue constraints that the utility is facing where revenues growth under 2% and costs grow over 3%. Over the past, the utility has followed the Public Service Commission (PSC) index for rate increases. This is an advised increase in rates offered by the state, which the city is not obligated to follow, that provides inflation guidance for indexing costs in the industry. With a 1.17% increase headed into the 5% inflationary environment of FY22, these small increases are starting to show the strain of having to also afford major regional infrastructure projects. Road widenings and utility relocations mandated by FDOT and changes to capital contributions for wastewater treatment plant partnerships are not under the control of the utility and have to be paid when requested. In FY22 planned costs for supporting the Iron Bridge facility will grow by $3 million over the five-year term. As timing of these projects cannot be controlled, maintaining a healthy cash balance has long been a practice of the utility to afford these swings in budgeted needs. Hopefully, the PSC index, which lags a year, will show a much more significant allowed increase in rates in FY23, but this model highlights that the utility may need to act on rates to support cashflow and cash balance over the next five years. As this was contemplated in last year's budget as a looming issue, making a modest change to future budget years seems prudent. Absent action on rates, the utility will need to examine its 5-Year CIP and reduce annual allocations to address revenue stagnation. In the past, the utility has been able to reduce costs by refinancing its debt obligations, but with those completed, avenues to continue cutting operating costs are limited.

Staff is currently exploring the opportunity with the city's Utility Advisory Board of making minor annual additions (+1.5%) to rate increases over the next four years (FY23 – FY26) to maintain capital flexibility and positive cashflow without significant sudden impact to the consumer. To demonstrate the impact of this minor change, two pro-formas have been provided. Scenario–1 is based on keeping rates at the 2% annual PSC index level. Scenario–2 is based on adding 1.5% to this for four years which would result in a 3.5% rate increase annually for the short-term. While no action results in a negative working capital level of -$5 million in FY31, making this modest temporary adjustment under Scenario-2 maintains working capital at $9 million by the end of FY31. Staff will spend FY22 reviewing its long-term capital needs and discussing the best appropriate action to begin addressing this longer-term horizon concern so that the integrity and performance of the utility is maintained at the highest standard.

Electric Services Pro-forma:

This pro-forma reflects increasing undergrounding to $6.4 million annually until the project is completed in FY26. While the last few years of increasing funding contributions to the project have been implemented to deal with cost pressures, the inflationary impact coming out of the pandemic has been surprising and this 28% increase in annual underground cost will help to keep the project on schedule and mitigate any unusual pricing activity. It costs approximately $650k - $800k to complete a mile of undergrounding based on recent experience and this would allow for eight miles of completion at the higher cost level. The model also assumes that the annual cost to trim trees to comply with line clearance will decrease gradually and then fall significantly once undergrounding is completed. Staff anticipates low to no growth in revenues over time using 1% annual appreciation for demand growth in the model. Investment earnings are calculated at the city's average rate of return on investments at 1.5% against the prior year's cash balance. In FY24 the bulk power contract with the incinerator waste-to-energy plant Covanta, will expire and a new contract for about 10% of total annual use will need to be secured. It is largely assumed that this will be another green source of energy but that pricing should be significantly more favorable than Covanta which is the highest rate paid in the utility's portfolio, at over double for fuel and non-fuel energy on a MkWh basis. The pro-forma assumes that any new agreement will be less expensive and for modeling purposes uses the average of cost for the utility's other two energy providers, OUC and FMPA. In FY27 the electric undergrounding program is expected to end and the $6.4 million annual contributions will then accrue to the bottom line. It is likely that these surplus funds will then be turned towards another project such as expanding decorative lighting and LED replacement of streetlights in the city. Because the bulk power deal with FMPA is so favorable, the utility is able to support additional capital projects and add funds to cash balance without raising rates. That contract will end in FY27 and the utility will need to renegotiate a new deal. As there is no way to determine what the energy market will be at that time, the model just maintains the current pricing through the ten years of the pro-forma. If there is any cost structure surprise, the completion of the undergrounding program and the freeing up of cashflow will give the utility significant room to absorb any shock. As always, weather plays an enormous variable role in future revenues. Total energy sold can vary significantly and, as discussed in other parts of this document, weather and conservation is having a negative effect on current sales with the entire positive outlook in the utility coming from cost reductions on the expenditure side of the ledger.

Electric Services Findings: If the Water & Wastewater Utility future looks constrained, the Electric Utility is the opposite, with seemingly nothing but good news from a financial standpoint. The restructuring of the Covanta portion of energy costs in FY24 adds back well over $1 million in savings while the annual undergrounding program's completion in FY26, gives the utility discretionary cashflow to take on cost pressures and new projects. Long a source of concern for rating agencies, the cash position of the utility will also continue its improvement with 145 days of working capital in FY22 and an unrestricted cash balance of almost $3 million after adjusting for payments still owed the utility for FDOT reimbursement for work on Fairbanks Ave. and $463k in reimbursement from FEMA for Hurricane Irma. The model also

assumes that a half million dollar payment will be made for territorial purchases at the Ravaudage development from Duke Energy. As cashflow continues to be positive and then expands greatly once the discretionary undergrounding program is completed, days working capital becomes significant by the end of the proforma term. Now it is unlikely that no other discretionary capital project would be pursued after FY26 and it is likely that other capital spending and projects will use up some of this surplus cashflow.

Water & Wastewater Fund 10 Year Pro-Forma - Scenario 1 *(No supplemental increase in rates)*

	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Inflows:										
Charges for services	32,320,794	32,976,355	33,645,256	34,327,769	35,024,172	35,734,750	36,459,792	37,199,593	37,954,455	38,724,687
Other	54,000	55,010	56,040	57,091	58,163	59,256	60,371	61,508	62,669	63,853
Use of excess reserves for capital	2,200,000	1,378,300	3,167,580	2,307,320	50,000	-	-	-	-	-
Total Inflows	34,574,794	34,409,665	36,868,876	36,692,180	35,132,335	35,794,006	36,520,163	37,261,101	38,017,124	38,788,539
Outflows:										
General administration	2,201,449	2,277,693	2,358,114	2,441,246	2,523,217	2,610,627	2,701,697	2,796,525	2,895,304	2,998,242
Operations	18,615,906	19,346,110	20,095,769	20,479,402	21,131,094	21,820,931	22,540,722	23,288,629	24,066,014	24,874,320
Principal on debt	3,577,500	3,620,000	3,695,000	3,770,000	3,840,000	3,915,000	3,995,000	4,070,000	4,140,000	4,220,000
Interest on debt	1,170,226	1,103,834	1,012,808	919,971	825,404	729,099	630,912	530,857	429,071	325,467
Capital improvements	3,706,500	3,224,300	5,006,580	4,052,320	1,565,000	1,470,000	1,470,000	1,470,000	1,470,000	1,470,000
Reimbursements	2,396,350	2,469,842	2,545,638	2,622,769	2,702,133	2,784,168	2,868,780	2,956,030	3,046,007	3,138,801
Transfers to other funds	2,906,863	2,955,494	3,022,979	3,077,178	3,136,976	3,202,291	3,268,738	3,336,582	3,405,855	3,476,586
Total Outflows	34,574,794	34,997,273	37,736,888	37,362,887	35,723,824	36,532,115	37,475,848	38,448,624	39,452,251	40,503,416
Net Inflow (Outflow)	-	(587,608)	(868,012)	(670,707)	(591,489)	(738,109)	(955,686)	(1,187,522)	(1,435,127)	(1,714,877)
Est. Working Capital	10,422,927	8,457,019	4,421,427	1,443,399	801,910	63,801	(891,884)	(2,079,406)	(3,514,534)	(5,229,410)
No. of Days of Working Capital	142	111	56	18	10	1	(10)	(23)	(38)	(54)
Bonds Outstanding	45,076,666	41,456,666	37,761,666	33,991,666	30,151,666	26,236,666	22,241,666	18,171,666	14,031,666	9,811,666
Debt Service Coverage	1.93	1.89	1.85	1.89	1.87	1.85	1.82	1.79	1.75	1.71

Water & Wastewater Fund 10 Year Pro-Forma - Scenario 2 *(+1.5% supplemental increase in rates FY23 - 26)*

	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Inflows:										
Charges for services	32,320,794	33,433,732	34,585,165	35,776,430	37,008,909	37,759,181	38,524,712	39,305,811	40,102,798	40,915,996
Other	54,000	55,010	56,040	57,091	58,163	59,256	60,371	61,508	62,669	63,853
Use of excess reserves for capital	2,200,000	1,378,300	3,167,580	2,307,320	50,000	-	-	-	-	-
Total Inflows	34,574,794	34,867,042	37,808,785	38,140,841	37,117,071	37,818,437	38,585,083	39,367,320	40,165,467	40,979,849
Outflows:										
General administration	2,201,449	2,277,693	2,358,114	2,441,246	2,523,217	2,610,627	2,701,697	2,796,525	2,895,304	2,998,242
Operations	18,615,906	19,346,110	20,095,769	20,479,402	21,131,094	21,820,931	22,540,722	23,288,629	24,066,014	24,874,320
Principal on debt	3,577,500	3,620,000	3,695,000	3,770,000	3,840,000	3,915,000	3,995,000	4,070,000	4,140,000	4,220,000
Interest on debt	1,170,226	1,103,834	1,012,808	919,971	825,404	729,099	630,912	530,857	429,071	325,467
Capital improvements	3,706,500	3,224,300	5,006,580	4,052,320	1,565,000	1,470,000	1,470,000	1,470,000	1,470,000	1,470,000
Reimbursements	2,396,350	2,469,842	2,545,638	2,622,769	2,702,133	2,784,168	2,868,780	2,956,030	3,046,007	3,138,801
Transfers to other funds	2,906,863	2,995,844	3,105,897	3,204,977	3,312,067	3,380,884	3,450,903	3,522,391	3,595,379	3,669,901
Total Outflows	34,574,794	35,037,623	37,819,806	37,490,686	35,898,915	36,710,708	37,658,013	38,634,432	39,641,776	40,696,731
Net Inflow (Outflow)	-	(170,581)	(11,020)	650,155	1,218,156	1,107,729	927,069	732,888	523,691	283,118
Est. Working Capital	10,422,927	8,874,046	5,695,446	4,038,281	5,206,437	6,314,166	7,241,235	7,974,123	8,497,814	8,780,932
No. of Days of Working Capital	142	117	72	50	63	74	82	88	91	91
Bonds Outstanding	45,076,666	41,456,666	37,761,666	33,991,666	30,151,666	26,236,666	22,241,666	18,171,666	14,031,666	9,811,666
Debt Service Coverage	1.93	1.99	2.05	2.19	2.30	2.28	2.26	2.24	2.22	2.19

Electric Services Fund 10 Year Pro-Forma

	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Electric Sales:										
Fuel	10,146,220	10,155,027	10,256,577	8,805,581	8,893,637	8,982,573	9,072,399	9,163,123	9,254,754	9,347,302
Non-Fuel	33,848,986	34,223,896	34,603,466	34,987,765	35,376,864	35,770,834	36,169,749	36,573,683	36,982,713	37,396,915
Other Operating Revenues	943,242	952,073	961,125	970,403	979,913	899,661	909,652	919,894	930,391	941,151
Investment Earnings	(38,000)	43,348	54,756	68,152	92,903	112,812	223,760	329,799	428,940	521,012
Transfers in	154,458	160,693	167,215	172,993	178,864	185,200	191,843	198,786	206,046	213,640
Total Inflows	45,054,906	45,535,037	46,043,139	45,004,895	45,522,181	45,951,081	46,567,404	47,185,285	47,802,843	48,420,019
General and Administrative	2,285,376	2,364,880	2,447,392	2,533,043	2,617,356	2,707,024	2,800,277	2,897,296	2,998,269	3,103,400
Operating Expenses	6,067,266	6,188,278	5,864,580	5,984,961	6,080,079	6,031,413	6,138,479	6,300,780	6,468,529	6,641,951
Purchased Power	18,714,504	19,121,989	19,674,200	17,612,655	18,205,152	18,841,448	19,525,694	20,262,450	21,056,731	21,914,048
Routine Capital	2,227,672	2,269,725	2,312,882	2,357,174	2,399,861	2,443,568	2,488,321	2,534,145	2,581,067	2,629,115
Principal on Debt	3,125,000	3,125,000	3,225,000	3,340,000	3,465,000	3,590,000	3,680,000	3,795,000	3,860,000	3,935,000
Interest on Debt	1,658,940	1,601,417	1,484,440	1,363,303	1,237,483	1,120,306	1,012,864	901,699	783,075	658,215
Total Outflows	34,078,758	34,671,289	35,008,495	33,191,136	34,004,931	34,733,759	35,645,636	36,691,370	37,747,672	38,881,730
Available Funds	10,976,148	10,863,749	11,034,644	11,813,759	11,517,250	11,217,322	10,921,768	10,493,915	10,055,171	9,538,290
Operating Transfers Out	2,677,784	2,703,253	2,741,530	2,763,689	2,789,983	2,820,806	2,852,484	2,884,560	2,917,034	2,949,915
Other Capital Projects	750,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Undergrounding Power Lines	6,400,000	6,400,000	6,400,000	6,400,000	6,400,000	-	-	-	-	-
Reserves Surplus/Deficit	1,148,364	760,496	893,114	1,650,071	1,327,267	7,396,516	7,069,284	6,609,355	6,138,137	5,588,374
Est. Working Capital	10,778,783	11,539,279	12,432,393	14,082,464	15,409,731	22,806,246	29,875,531	36,484,886	42,623,023	48,211,397
No. of Days of Working Capital	145	152	162	197	209	302	383	452	510	556
Bonds Oustanding	49,810,000	46,685,000	43,460,000	40,120,000	36,655,000	33,065,000	29,385,000	25,590,000	21,730,000	17,795,000
Debt Service Coverage	3.73	3.74	3.80	3.98	3.92	3.86	3.82	3.73	3.68	3.60

CITY OF WINTER PARK
ENTERPRISE FUNDS
WATER AND SEWER FUND
MULTI-YEAR ACTUAL AND BUDGET SUMMARY

	ACTUAL FY 2018	ACTUAL FY 2019	ACTUAL FY 2020	BUDGET FY 2021	BUDGET FY 2022
REVENUES/SOURCES					
Charges for services	$ 30,273,043	$ 30,262,535	$ 31,852,002	$ 31,304,501	$ 32,320,794
Capital contributions	5,222,105	1,268,930	2,924,227	1,080,000	749,000
Other	(41,949)	1,395,830	740,431	189,400	54,000
Transfers from other funds	-	-	-	-	-
Total Revenues/Sources	35,453,199	32,927,295	35,516,660	32,573,901	33,123,794
EXPENSES/USES					
General administration	2,149,253	1,995,381	2,063,986	1,895,187	2,201,449
Operations	15,718,943	16,348,828	15,933,137	17,944,732	18,615,906
Depreciation	2,965,103	2,993,110	2,807,728	-	-
Amortization	664,439	664,439	773,331	-	-
Interest and fiscal charges	2,473,096	2,366,212	2,202,565	1,421,242	1,187,726
Amount allocated for principal payment	-	-	-	3,234,167	3,560,000
Amount allocated for capital projects	-	-	-	2,421,791	4,455,500
Reimbursements	1,800,772	2,568,908	2,438,981	2,495,996	2,396,350
Transfers to other funds	2,627,093	2,875,440	2,832,091	2,873,827	2,906,863
Total Expenses/Uses	28,398,699	29,812,318	29,051,819	32,286,942	35,323,794
Change in Net Assets (Cash Flows for Budget Years Presented)	7,054,500	3,114,977	6,464,841	286,959	(2,200,000)
Adjustments to Budget Years to Convert to GAAP Accounting:					
Deduct estimate for depreciation	-	-	-	(3,000,000)	(3,000,000)
Deduct estimate for amortization	-	-	-	(700,000)	(700,000)
Add back payment of principal	-	-	-	3,234,167	3,560,000
Add back investment in capital assets	-	-	-	2,421,791	4,455,500
Change in Net Assets (After Adjustments to Budget Years)	7,054,500	3,114,977	6,464,841	2,242,917	2,115,500
Net Assets at Beginning of Year, as Restated	71,806,965	78,861,465	81,976,442	88,441,283	90,684,200
Net Assets at End of Year	**$ 78,861,465**	**$ 81,976,442**	**$ 88,441,283**	**$ 90,684,200**	**$ 92,799,700**
Invested in capital assets, net of related debt	$ 47,832,994	$ 47,832,994	$ 51,333,036	$ 53,288,994	$ 57,604,494
Restricted	14,816,689	14,816,689	21,123,667	21,123,667	21,123,667
Unrestricted	16,211,782	19,326,759	15,984,580	16,271,539	14,071,539
Total Net Assets	**$ 78,861,465**	**$ 81,976,442**	**$ 88,441,283**	**$ 90,684,200**	**$ 92,799,700**

CITY OF WINTER PARK
ENTERPRISE FUNDS
ELECTRIC SERVICES FUND
MULTI-YEAR ACTUAL AND BUDGET SUMMARY

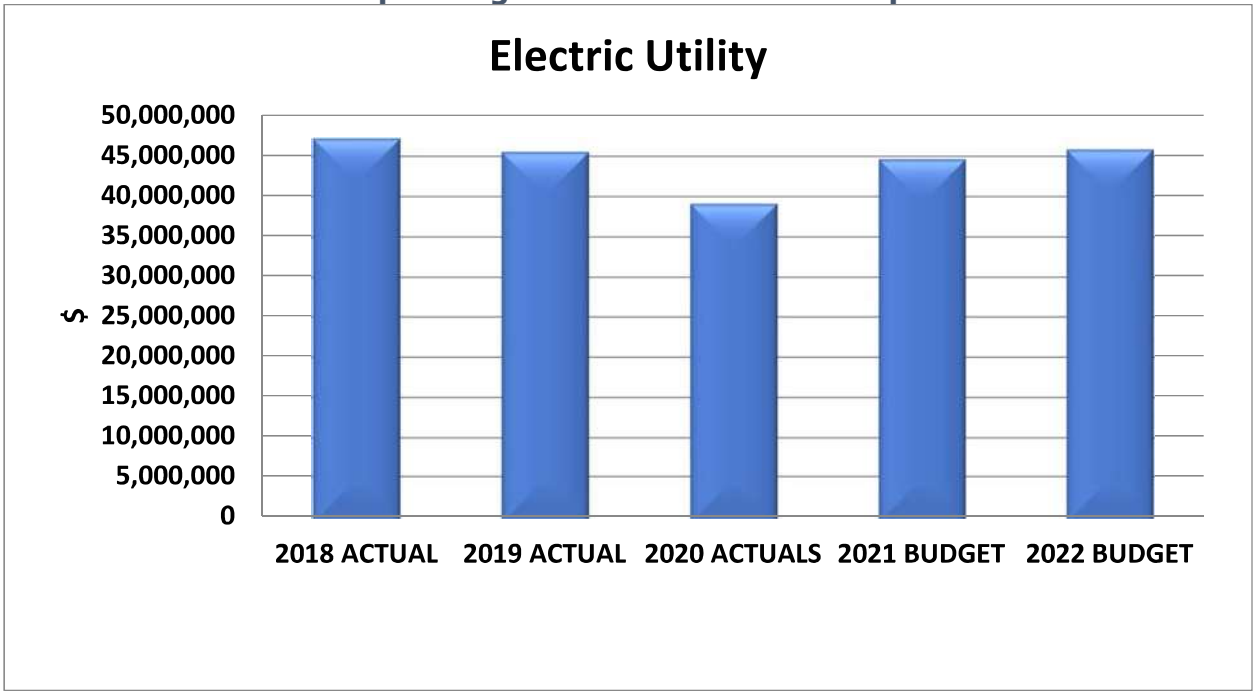
	ACTUAL FY 2018	ACTUAL FY 2019	ACTUAL FY 2020	BUDGET FY 2021	BUDGET FY 2022
REVENUES/SOURCES					
Charges for services	$ 48,298,538	$ 48,833,925	$ 46,212,766	$ 43,720,509	$ 44,901,606
Other	81,982	(199,619)	55,197	(5,000)	(1,158)
Transfers from other funds	-	-	-	-	-
Reimbursements	-	-	-	148,360	154,458
Total Revenues/Sources	48,380,520	48,634,306	46,267,963	43,863,869	45,054,906
EXPENSES/USES					
General administration	1,814,309	2,060,921	2,100,247	2,338,326	2,285,376
Operations	31,268,137	31,351,752	25,659,465	24,813,356	25,312,860
Depreciation	2,661,326	2,858,999	3,098,075	-	-
Amortization	656,300	656,300	696,619	-	-
Interest and fiscal charges	2,840,342	2,339,193	2,288,428	2,249,588	2,113,940
Amount allocated for principal payment	-	-	-	2,530,000	2,670,000
Amount allocated for capital projects	-	-	-	5,500,000	7,150,000
Reimbursements	1,554,341	1,484,107	1,728,412	1,740,681	1,696,582
Transfers to other funds	2,801,041	2,803,255	2,632,602	2,533,805	2,677,784
Total Expenses/Uses	43,595,796	43,554,527	38,203,848	41,705,756	43,906,542
Change in Net Assets (Cash Flows for Budget Years Presented)	4,784,724	5,079,779	8,064,115	2,158,113	1,148,364
Adjustments to Budget Years to Convert to GAAP Accounting:					
Deduct estimate for depreciation	-	-	-	(3,000,000)	(3,000,000)
Deduct estimate for amortization	-	-	-	(700,000)	(700,000)
Add back payment of principal	-	-	-	2,530,000	2,670,000
Add back investment in capital assets	-	-	-	5,500,000	7,150,000
Change in Net Assets (After Adjustments to Budget Years)	4,784,724	5,079,779	8,064,115	6,488,113	7,268,364
Net Assets at Beginning of Year, as Restated	30,825,036	35,609,760	40,689,539	48,753,654	55,241,767
Net Assets at End of Year	**$ 35,609,760**	**$ 40,689,539**	**$ 48,753,654**	**$ 55,241,767**	**$ 62,510,131**
Invested in capital assets, net of related debt	$ 26,481,724	$ 36,356,732	$ 38,520,362	$ 42,850,362	$ 48,970,362
Unrestricted	9,128,036	4,332,807	10,233,292	12,391,405	13,539,769
Total Net Assets	**$ 35,609,760**	**$ 40,689,539**	**$ 48,753,654**	**$ 55,241,767**	**$ 62,510,131**

electric utility

Electric Services

Mission: The city of Winter Park will provide electric service: with top tier customer service; with superior reliability in a fiscally prudent manner; operating with a low physical and aesthetic impact on the environment; and at competitive rates.

Historical Spending & Future Estimated Expenditures



Key Performance Indicators

Indicator	Actual FY20	Rolling 12 month	Goal FY22	Notes
System Average Interruption Duration Index (SAIDI)	35.8	32.3	28.00	Measures the average duration of outage (minutes) a customer experiences in a year
Annual Undergrounding Miles Completed	4.42	7.4	8	
WPE Electric Rates as a % of State Municipal Average	98.3% (12 months rolling April 2020)	<105.00%	<105%	Average Monthly bill for 1,000 kWh residential customer + 6% franchise fee. Rolling 12 mo. basis
Debt Service Coverage	3.39	2.75	2.75	Measure of financial performance

Administration

Program Resources:

Expenditures	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Personnel	$959,199	$1,011,814	$1,025,727	$1,047,754
Operating Expenses	$429,615	$352,152	$435,116	$412,647
Capital Outlay	$0	$0	$0	$0
Total	$1,388,814	$1,363,966	$1,460,843	$1,460,401

No. of Positions	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Full-time	8	7	8	8
Part-time	-	-	-	-
Seasonal	-	-	-	-

Program Summary:

The Electric Department is responsible for purchasing bulk electric power and maintaining the poles, wires and other components of the distribution system to reliably deliver the power to the city's customers. Electric Department Administrative staff manages the crews, operations, and contracts of the utility.

Level of Service Provided in Budget:

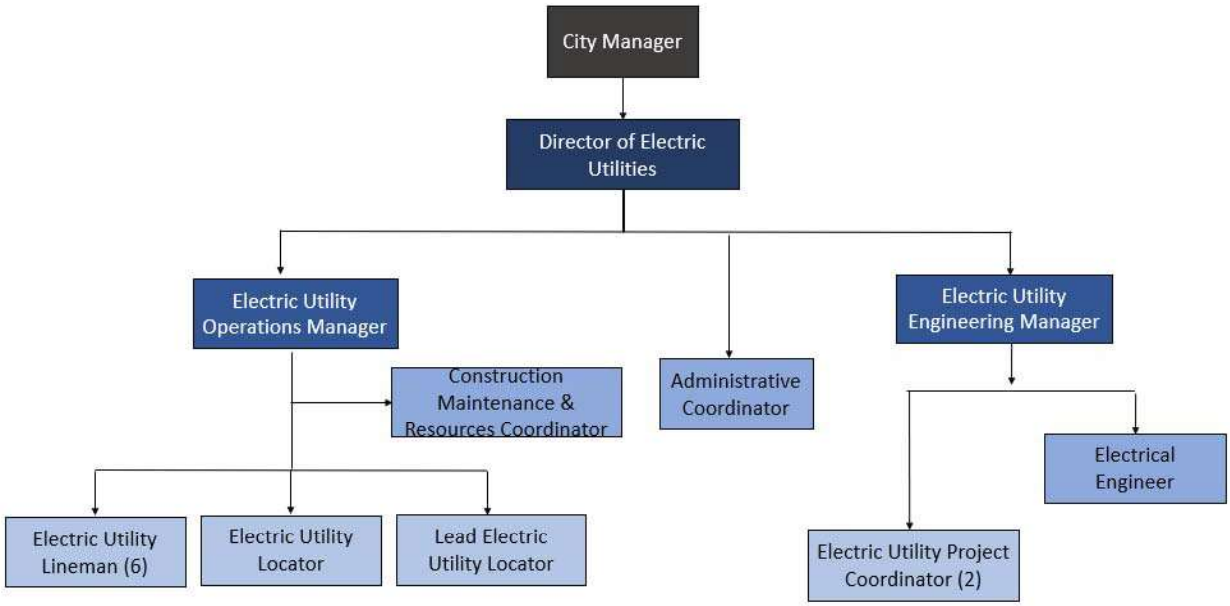
- Manage the city's electric distribution system including the city's electric undergrounding initiative with an estimated completion in the 4th quarter of 2026
- Maintain electric rates that are not more than 5% above the state average
- Maintain Debt Service coverage at 2.75x or greater

Prior Year Accomplishments:

- Completed undergrounding of Fairbanks avenue transmission and distribution from I-4 ramp East to Harper Avenue
- Completion of city-wide undergrounding project W and 89% of I
- Fairbanks underground conversion complete

Next Year Goals:

- Complete city-wide underground projects J, Q and K



Org Chart includes Electric Admin and Electric Operations staff

Distribution System - Operations

Program Resources:

Expenditures	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Personnel	$794,267	$886,758	$827,770	$814,576
Operating Expenses	$26,346,000	$20,004,779	$20,609,306	$21,049,167
Capital Outlay	$1,602,067	$637,073	$1,203,600	$1,227,672
Total	$28,742,334	$21,528,609	$22,640,676	$23,091,415

No. of Positions	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Full-time	8	9	9	8
Part-time	-	-	-	-
Seasonal	-	-	-	-

Program Summary:

This budget represents the contract costs for ENCO call center, the purchase of bulk power under contracts from (FMPA, Orlando Utilities Commission, and Covanta Energy and Clean Footprint), other subcontractors used in the construction and maintenance of the electric system, operating expenses associated with the electric operations center, and the cost of materials purchased for the electric system's inventory.

Level of Service Provided in Budget:

Maintain the city's electric distribution system within the following goals and guidelines:

- Obtain a System Average Interruption Duration Index of 21 minutes or less FMPA standard is to be below 60 minutes

Prior Year Accomplishments:

- Completed 65% of GIS mapping

Next Year Goals:

- Improve implementation of processes, policies, and guidelines to benefit workflow, response times, and customer satisfaction
- System Average Interruption Duration Index target to 21 minutes
- Continue process of mapping our Electrical infrastructure on GIS
- Continue to optimize GIS to better display and manage outages

Street Lighting

Program Resources:

Expenditures	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Personnel				
Operating Expenses	$123,003	$66,671	$130,000	$130,000
Capital Outlay	$0	$0	$380,000	$380,000
Total	$123,003	$66,671	$510,000	$510,000

Program Summary:

City crews will handle all aspects of lighting repair and replacement.

Level of Service Provided in Budget:

Funding provided in this division will maintain all public street lighting in an efficient and effective manner. In an effort to enhance sustainability, replacements are done with LEDs where possible.

Meter Services

Program Resources:

Expenditures	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Personnel	$167,535	$94,680	$63,747	$25,780
Operating Expenses	$143,331	$86,776	$661,290	$717,801
Capital Outlay	$0	$0	$0	$0
Total	$310,866	$181,455	$725,037	$743,581

Positions included in the Water and Sewer section.

Program Summary:

Meter Reading is managed by the Utility Billing department. Costs above represent the Electric Utility's funding responsibility as a share of total costs. The level of service by AMR greatly enhances while the annual operating cost has been reduced.

Level of Service Provided in Budget:

- Accurately measure and monitor meter consumption and provide valuable information to the consumer

Prior Year Accomplishments:

- Implemented a system wide upgrade of the Sensus Advanced Metering Infrastructure (AMI) including the Remote Network Interface (RNI) and the Meter Data Management (MDM) system. Providing the utility with improved data on electrical meter outages and improve response times and efficiencies.

Next Year Goals:

- Complete the AMI upgrade and train staff on the capabilities and improvements
- Evaluate option for conversion of some meters to remote disconnect

Electric Undergrounding

Program Resources:

Expenditures	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Personnel				
Operating Expenses				
Capital Outlay				
Total				

Financials are reported with the Capital Budget

Program Summary:

Electric Undergrounding represents the city's efforts to underground all overhead wires out of revenues in excess of operating expenses from the Electric Utility. Fluctuations in sales (revenues) and market costs will cause the funding available each year to vary however the city has a goal of undergrounding all wires in the city by 4thQTR 2026. As of June 2021, 67% of total project is complete.

Level of Service Provided in Budget:

- Complete the planned underground schedule in line with the 5-year remaining project horizon.

Electric Tree Trimming

Program Resources:

Expenditures	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Personnel	$151,124	$123,971	$138,073	$77,923
Operating Expenses	$526,281	$517,992	$505,988	$581,024
Capital Outlay				
Total	$677,405	$641,963	$644,061	$658,947

Position included in Natural Resources section

Program Summary:

Natural Resources organizes, prioritizes, manages, directs, and provides QAQC for contractual services provided by line clearance vendors throughout the electric facility within the city. Electric Tree Trimming notifies the customers of proposed work to be completed. Which keep ANSI Z133 and ANSI A300 Standards and insure ISA BMP's are upheld. Serves as Staff liaison to City Commission regarding all trees within the city.

Level of Service Provided in Budget:

Natural Resources serves as the staff liaison to the Electric department as well as all other departments in the city regarding Electric Tree Trimming and ITN. The Electric Tree Trimmings goal is to provide for long range safety and reliability by designing specifications and ITN/RFQ implementation, minimize three caused outages by maintaining routine maintenance cycle, manage watering cycles for newly planted trees for a 95% survival rate, fund $50,000 to support planting of new trees this budget year, and earn the Tree Line USA accreditation.

Warehousing

Program Resources:

Expenditures	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Personnel	$310,301	$258,033	$232,716	$240,477
Operating Expenses	-$45,322	$32,861	$60,866	$68,440
Capital Outlay	$7,650	$28,202	$0	$0
Total	$272,629	$319,096	$293,582	$308,917

No. of Positions	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Full-time	4	4	3	3
Part-time	-	-	-	-
Seasonal	-	-	-	-

Org chart shown in the Admin Procurement chart.

Program Summary:

The Warehousing division is responsible for the acquisition, inventory, and issuance of materials and supplies for the Electric and Water & Wastewater Utilities. Created in FY16 with the completion of the new 10,000 SF facility at the Public Works Compound, the Warehousing division operates in cooperation with the utilities under the oversight of the Budgeting Division. Costs are accounted for in the Electric Fund and then split with the Water & Wastewater Fund on an equal basis.

Level of Service Provided in Budget:

- Provide 11 hour daily 'peak time' operating hours during the work week
- Provide prompt after hours emergency response time of under 1 hour
- Safe and accurate storage and accountability of materials and supplies under management

Prior Year Accomplishments:

- Maintained Covid supplies for City use
- Warehouse remained open through the entire pandemic
- Moved Electric meter management to warehouse

Next Year Goals:

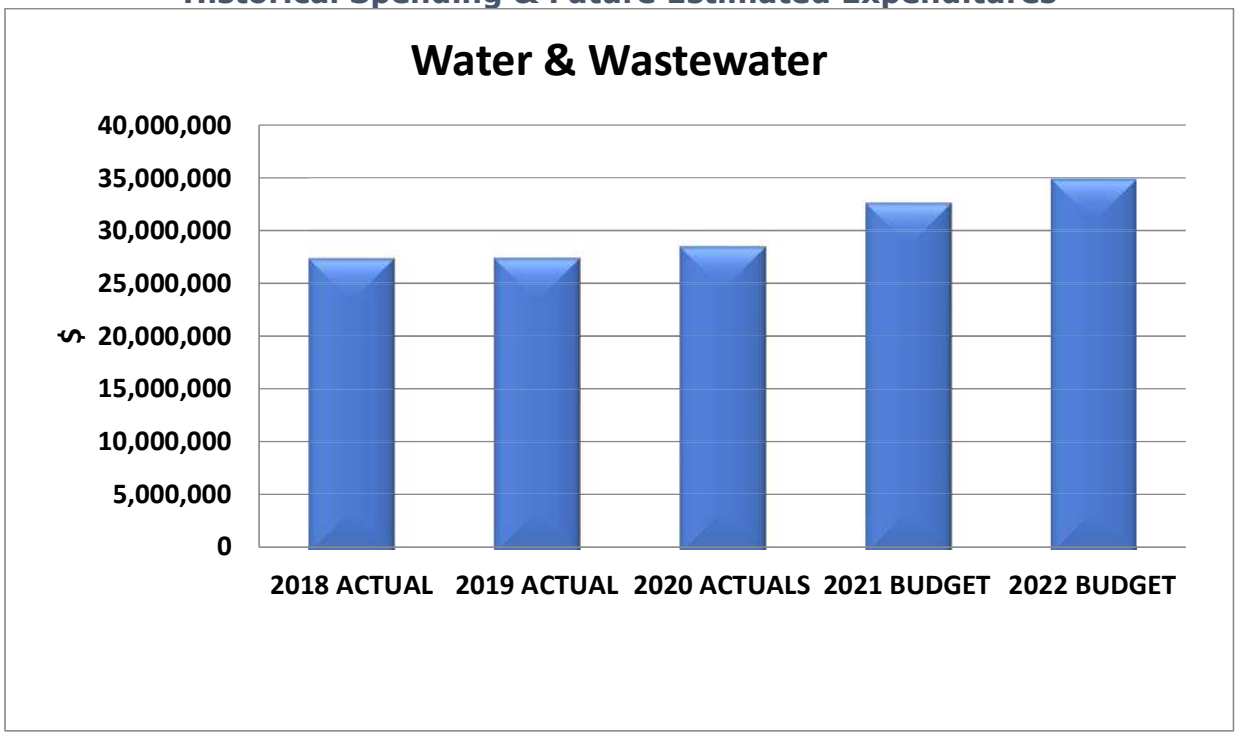
- Less than $20k in total manual adjustments to inventory levels
- Upgrade warehouse software and barcode scanners
- Annual inventory tolerance for discrepancy of less than 1%

water & waste water utilities

Water & Sewer Services

Mission: The Water & Wastewater Utility Department employees are dedicated to providing our customers with the highest quality water and utility service in a safe, reliable, and efficient manner, with care and concern for the environment.

Historical Spending & Future Estimated Expenditures



Key Performance Indicators

Indicator	Actual FY20	YTD FY21	Goal FY22	Notes
Unaccounted for water	8.7%	<10%	<10%	Industry standard is <10%
Water quality sampling MCL violations	0	1	0	Water quality indicator reported annually in CCR
Conformance to State/Federal Drinking Water and Wastewater guidelines	100%	75%*	100%	*Except for MCL violation noted above

Administration

Program Resources:

Expenditures	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Personnel	$866,784	$844,507	$769,332	$795,201
Operating Expenses	$420,879	$392,264	$387,459	$469,685
Capital Outlay	$0	$0	$0	$0
Total	$1,287,663	$1,236,771	$1,156,791	$1,264,886

No. of Positions	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Full-time	8	8	7	6
Part-time	-	-	-	-
Seasonal				

Program Summary:

The administration of the Utility Department provides leadership, direction, rate and fee development, and long-term planning and assistance for the City's potable water, wastewater and reclaimed water utilities throughout the 23 square mile service area.

Level of Service Provided in Budget:

- Management of the $29 million a year Water and Wastewater Utility
- The administration also coordinates with local, state and federal regulatory agencies including the USEPA, the FDEP, the SJRWMD, the SSNOCWTA, the EPD, the DOH, Orange County, Seminole County, the City of Orlando, Altamonte Springs, Maitland, OSHA, design consultants, contractors, developers, and other departments within the City. This division is responsible for collecting, updating, and managing utility GIS data. The Utility must comply with SDWA, CWA, CUP, DBP's, TMDL's
- This division has a liaison on the Utility Advisory Board

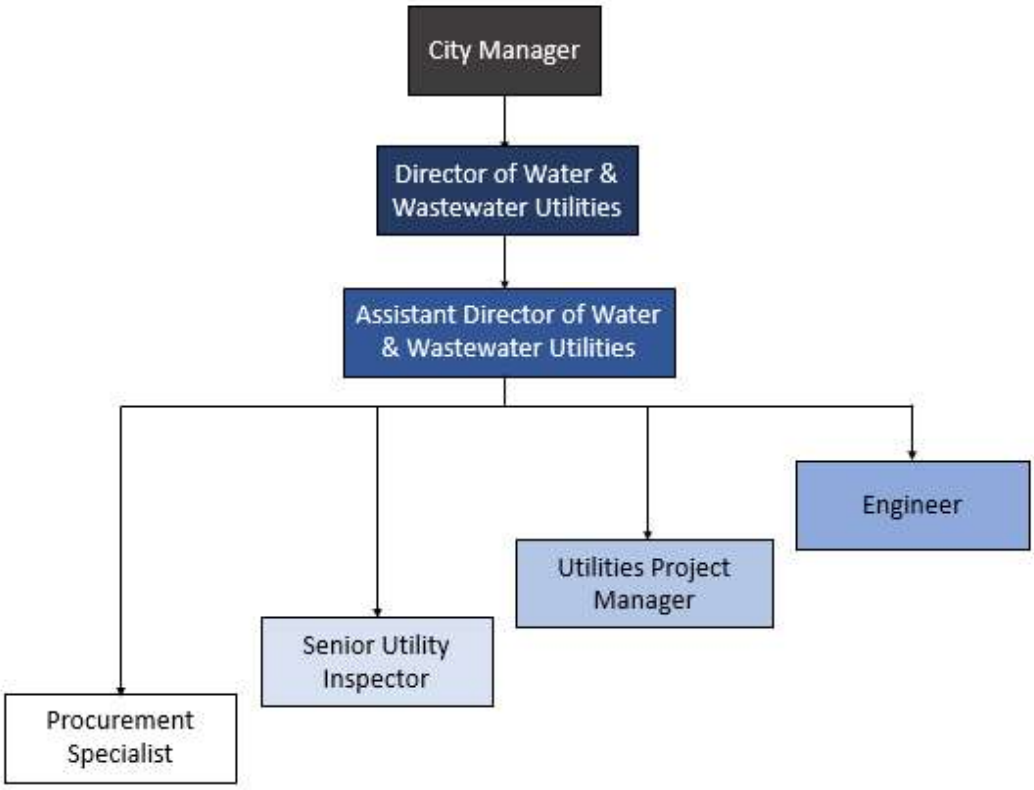
Prior Year Accomplishments:

- Completed Risk and Resilience Assessment in accordance with the America's Water Infrastructure Act (AWIA) for the water and wastewater systems
- Designed and procured modifications to the Nitrogen Boost Air System at the Aloma and Magnolia Water Treatment Plants
- Procured permits through FDEP for the replacement of potable water system upgrades in various residential subdivisions
- Completed the 90% design for water and wastewater utilities relocation associated with FDOT SR 434 (Forest City Road) Roadway Improvements Project
- Completed the 95% design for water and wastewater utilities relocation associated with the Orange County Richard Crotty Parkway Project

- Continued coordination with other City Departments on implementation of Tyler/Munis enterprise system upgrades
- Provided input and coordination for ongoing Sensus and SmartWorks AMR/AMI metering system upgrade including new RNI, MDM and Electric Outage Management system

Next Year Goals:

- Complete new AMR/AMI system upgrades
- Continue water system replacement in various areas of our utility system service area
- Continue GIS field data collection and mapping
- Continue migration to electronic field data management and work orders



Water Treatment

Program Resources:

Expenditures	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Personnel	$971,036	$1,054,030	$1,023,729	$1,047,212
Operating Expenses	$1,392,609	$1,307,667	$1,501,770	$1,526,877
Capital Outlay	$0	$0	$0	$0
Total	$2,363,645	$2,361,697	$2,525,499	$2,574,089

No. of Positions	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Full-time	12	12	12	13
Part-time	1	1	1	0
Seasonal	-	-	-	-

Program Summary:

The Water Treatment Division is responsible for the water quality of the potable water system for the City. The City's drinking water system consists of four interconnected water plants that serve approximately 23, 721 connections in a 23 square mile service area in and outside the City limits.

Our Cross Connection Control Program protects the City's water quality through the installation of backflow preventers on all connections that may be a potential hazard to the water system. The City has an in-house testing and repair program for backflow preventers that meets regulatory requirements while saving our customers hundreds of dollars annually.

Level of Service Provided in Budget:

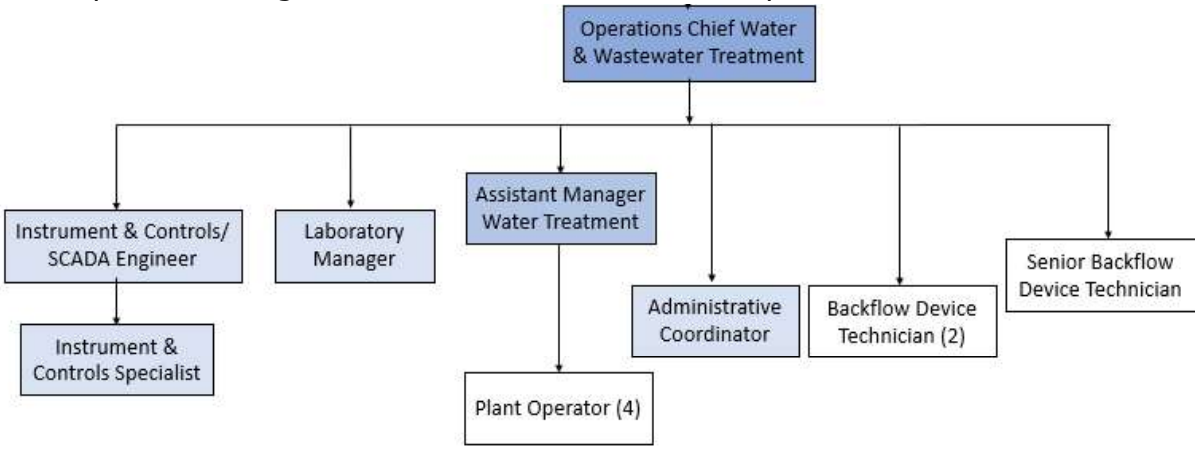
- Available funding for FY 2022 will support adequate treatment for 3.85 billion gallons of water and provide sufficient funding for repair and maintenance for the water plants and equipment

Prior Year Accomplishments:

- Replaced sodium hypochlorite storage tanks at the Swoope and Magnolia Water Treatment Plants
- Painted sodium hypochlorite storage containment area
- Treated 3.91 billion gallons of water in FY20, treated 1.87 billion gallons for 2 quarters of FY21
- Generated 164 MWh of power from the solar array at the Aloma Water Treatment Plant since start up in June 2020
- Replaced 6 low concentration ozone monitors at the three water treatment plants
- Replaced the Nitrogen Boost Air System at the Magnolia and Aloma Water Treatment Plants

Next Year Goals:

- Maintain unaccounted for water to 10% or less
- Meet all Federal and State regulations
- Replace all chlorine analyzers at the three water treatment plants and one repump facility
- Complete the sodium hypochlorite storage tank replacements
- Replace ozone generator dielectrics at the Swoope Water Treatment Plant



Wastewater Treatment

Program Resources:

Expenditures	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Personnel	$712,719	$748,755	$774,953	$847,886
Operating Expenses	$456,658	$390,571	$470,652	$480,488
Capital Outlay	$0	$0	$0	$0
Total	$1,169,376	$1,139,327	$1,245,605	$1,328,374

No. of Positions	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Full-time	10	10	10	11
Part-time	-	-	-	-
Seasonal				

Program Summary:

The Wastewater Treatment Division monitors all domestic and industrial waste generated within the service area in accordance with federal and state requirements. This division is responsible for preserving and maintaining the wastewater treatment facilities and ensuring that the final effluent for spray irrigation sites meets regulatory standards.

This division operates and maintains the Winter Park Estates Wastewater Treatment Facility and four effluent spray sites. This facility is staffed 24 hours per day, 7 days per week by state certified operators. The in-house state certified lab schedules and performs all testing and sampling required by regulatory agencies. The Industrial Waste Program monitors the concentration of chemicals and strength of raw sewage coming from commercial users. The three water treatment plants, potable water repump facility and sixty lift stations are monitored from the telemetry computer located at this facility.

Level of Service Provided in Budget:

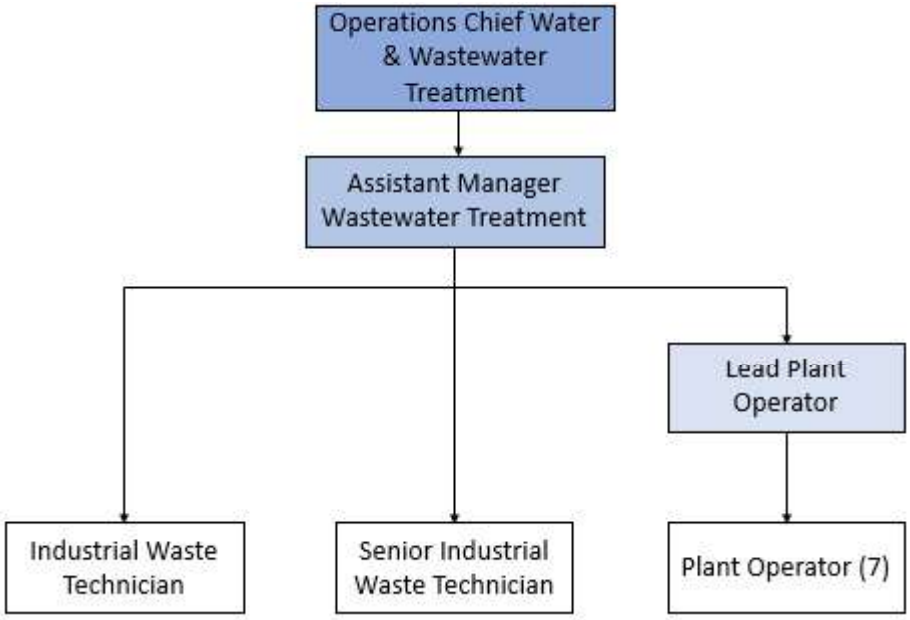
- Treatment for 200 million gallons of reuse water
- Repair and maintenance for the wastewater treatment facility and equipment

Prior Year Accomplishments:

- Renovation of the facility bathrooms and operation staff lockers
- Upgraded 3 effluent chlorine analyzers, one return activated sludge pump and gear box, and one waste activated sludge pump
- Replaced halogen lights with LED lights throughout the plant property
- Cleaned 3 aeration basins by removing sand/grit and accumulated rags and debris on aeration diffusers
- Treated 190 million gallons of reuse water in FY 2020, treated 88 million gallons in 2 quarters of FY 2021

Next Year Goals:

- Stay in compliance with FDEP Permit
- Install new auxiliary generator
- Replace plant property entrance gate and perimeter fencing
- Replace drain valve for Clarifier #2
- Rehabilitate Clarifier #2 metal components (sandblasting and protective coating)
- Rehabilitate three storage tanks (outside structure)
- Coat aeration basin structure



Water Distribution

Program Resources:

Expenditures	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Personnel	$1,314,666	$1,382,041	$1,533,908	$1,316,986
Operating Expenses	$1,038,900	$855,258	$1,031,067	$1,122,430
Capital Outlay	$0	$0	$100,000	$0
Total	$2,353,566	$2,237,300	$2,664,975	$2,439,416

No. of Positions	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Full-time	22	19	21	17
Part-time	-	-	-	-
Seasonal				

Program Summary:

The Water Distribution Division maintenance and repair program will in a safe and sanitary manner repair all water mains, water services, fire hydrants, valves, and install new services and AMR radio read meters with minimal disruption of service. This Division will always provide the most efficient and highest quality of service possible to all residents and businesses.

Level of Service Provided in Budget:

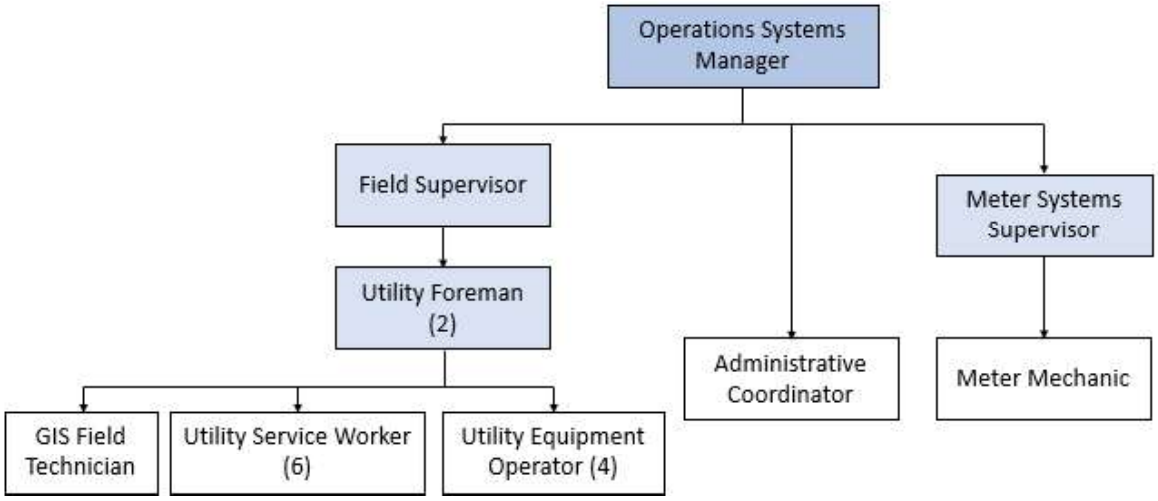
- The Water Distribution Division is responsible for the maintenance and repair of over 560 miles of water mains within the City of Winter Park's 23 square mile service area. This Division provides the maintenance and testing to approximately 1,200 fire hydrants inside the City and 900 fire hydrants in the unincorporated Orange County service area and approximately 10,720 isolation valves throughout the City's Water Distribution System. The Meter Services Division with the assistance of the Water Distribution Division reads and maintains approximately 25,000 radio read water meters and water services. We are currently reading 99.7% of all our radio read meters through the Senses AMI FlexNet system. Many of the services that this Division provides are mandated by specific regulatory requirements.

Prior Year Accomplishments:

- Performed 51 water main break repairs as well as 328 water service line repairs
- Serviced 1,000 fire hydrants, replaced 110 meter boxes, set 131 new water meters, exchanged 1,197 existing meters, completed 91 service demos, relocated 40 meter services, removed 52 meters, performed service and maintenance on 682 isolation valves, and completed 15 large water main wet taps for water main extensions

Next Year Goals:

- Continue to minimize scheduled water outages utilizing line stop or valve insertion equipment
- Continue proactive fire hydrant testing and maintenance programs
- Continue to relocate water meters out of sidewalk and traveled areas
- Continue with proactive maintenance to reduce number of leaks and after hour emergencies



Wastewater Collection

Program Resources:

Expenditures	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Personnel	$1,041,444	$1,155,341	$1,254,118	$1,283,516
Operating Expenses	$706,069	$624,153	$674,594	$731,698
Capital Outlay	$0	$0	$0	$8,000
Total	$1,747,512	$1,779,494	$1,928,712	$2,023,214

No. of Positions	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Full-time	19	19	19	20
Part-time	-	-	-	-
Seasonal				

Program Summary:

To ensure the safe, healthful, and economical transportation of domestic and commercial wastewater to an approved treatment facility.

Level of Service Provided in Budget:

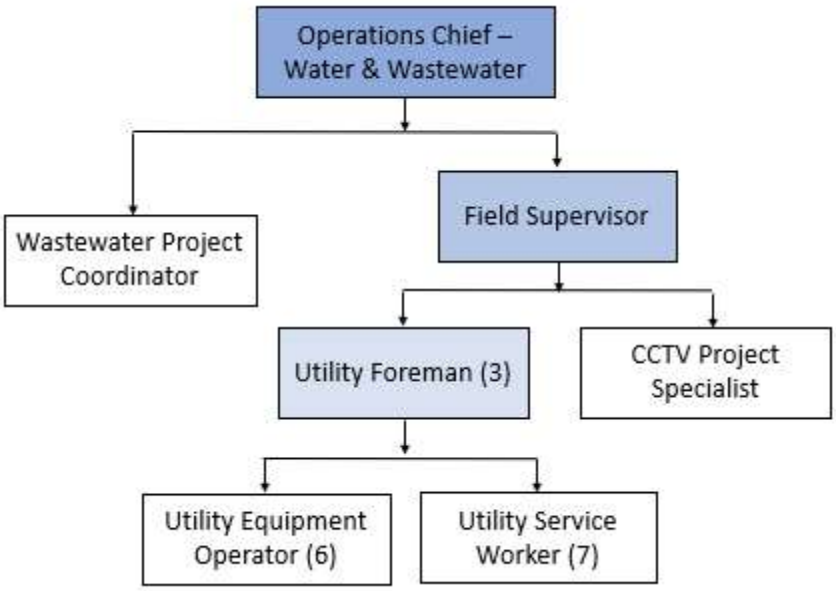
- The Wastewater Collection Division is responsible for the maintenance and repair of the sanitary sewer collection system. The sanitary collection system is comprised of over 146 miles of gravity mains, 45 miles of pressure force mains and 3,762 manholes; 2,348 in the city and 1,414 in the county. The collection system is considered a "mature" system and requires extensive pro-active measures to insure safe conveyance of sanitary waste. In addition, this division performs emergency response and repairs for approximately 8 miles of large diameter force main owned by the South Seminole North Orange County Wastewater Transmission Authority (SSNOCWTA).

Prior Year Accomplishments:

- Performed 64 sanitary sewer main repairs
- 133 sanitary sewer lateral repairs
- Installed 288 cleanouts
- Installed 34 new sanitary sewer laterals
- Resolved 67 sanitary sewer backups
- Inspected 202,061 feet of sanitary sewer main
- Cleaned 587,559 feet of sanitary sewer main
- Installed 485 feet of sanitary sewer main
- Installed/replaced 11 manhole structures
- Inspected 631 laterals and 229 manholes

Next Year Goals:

- Minimize overflows to <1,000 gal. per event with quick response time and aggressive mainline cleaning
- Continue to maintain the collection system proactively to prevent depressions and possible road collapses



Construction Services

Program Resources:

Expenditures	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Personnel	$753,644	$669,610	$869,669	$1,097,264
Operating Expenses	$529,644	$493,981	$491,029	$527,146
Capital Outlay	$0	$0	$97,000	$0
Total	$1,283,288	$1,163,591	$1,457,698	$1,624,410

No. of Positions	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Full-time	16	16	13	16
Part-time	-	-	-	-
Seasonal				

Program Summary:

To provide total construction support for all funded utility capital projects, while assisting other divisions and departments as needed, thereby providing significant savings to the City as compared to the costs of outside contracting for like services.

Level of Service Provided in Budget:

- The Construction Services Division is responsible for providing installation, repairs or upgrades of the following: water mains, fire hydrants, force mains, gravity sanitary sewer mains, manholes, lift stations, undersized and or rear lot water mains, asbestos cement water or force main replacements, and other miscellaneous construction needs. Additionally, the Division provides construction services for the installation of various electrical conduits for traffic signalization and underground power and fiber conduit utilizing horizontal directional drilling equipment. Projects are implemented in the 23 square mile service area on a priority basis utilizing conventional construction methods, horizontal directional drilling, and pipe bursting techniques.

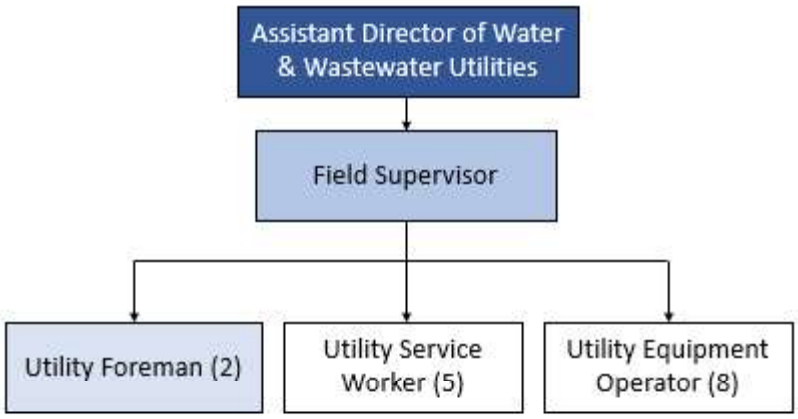
Prior Year Accomplishments:

- Installed over 25,000 feet of upgraded water main distribution system and 6,000 feet of service lines providing improved fire protection and water quality. Upgrades include St. Andrews Boulevard and Loch Lomond area, Northwood Subdivision, Park North Subdivision, Lake Killarney Shores Subdivision, and Albert Lee Ridge Subdivision. Completed in excess of 15,000 feet of miscellaneous horizontal directional drilling installations.

Next Year Goals:

- Continue with upgrades to water main and force main projects, by replacing substandard materials and rear lot line mains and improving fire protection and reliability

– Continue construction support to other departments as needed



Utility Maintenance

Program Resources:

Expenditures	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Personnel	$951,405	$938,867	$1,012,675	$1,046,577
Operating Expenses	$869,471	$714,010	$735,682	$773,555
Capital Outlay	$0	$0	$0	$0
Total	$1,820,877	$1,652,876	$1,748,357	$1,820,132

No. of Positions	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Full-time	15	15	15	15
Part-time	-	-	-	-
Seasonal				

Program Summary:

The Utility Maintenance Division is responsible for maintaining, in a safe and sanitary manner, the utility system that collects and transmits wastewater from the service area to the regional treatment plants and the City's water treatment facility.

Level of Service Provided in Budget:

Funding provided will maintain:

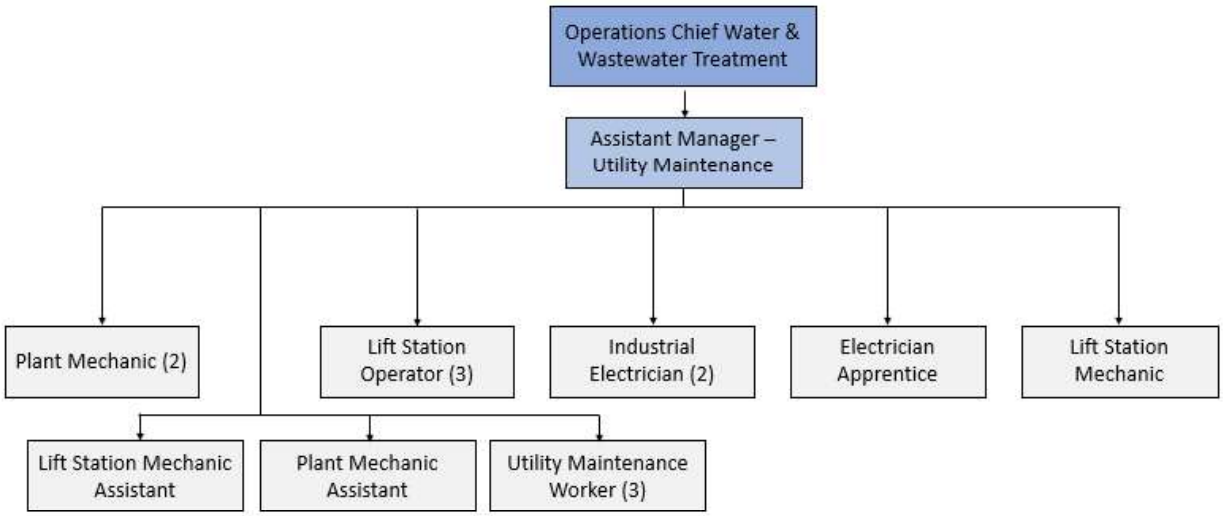
- 103 sewage pumping lift stations
- The City’s wastewater treatment
- 3 water treatment plants and one water repump facility
- 45 generators

Prior Year Accomplishments:

- Completed repairs and upgrades to the following lift stations: LS #6 Fairway, LS #24 Pennsylvania, LS #33 Park Manor, LS #61 Howard Johnson’s (aka RaceTrac) and LS #65 McDonalds
- Replaced 2 sodium hypochlorite storage tanks at Swoope and Magnolia Water Treatment Plants
- Roof replacement at LS #28 Kraft Gardens and LS #64 Asbury Park

Next Year Goals:

- Repair and upgrade the following lift stations: LS #26 New York, LS #44 Red Lobster and LS #59 Lakeside Manor
- Replace 4 sodium hypochlorite storage tanks at Swoope, Magnolia and Aloma Water Treatment Plants


Operations Chief Water & Wastewater Treatment
Assistant Manager – Utility Maintenance
Plant Mechanic (2)
Lift Station Operator (3)
Industrial Electrician (2)
Electrician Apprentice
Lift Station Mechanic
Lift Station Mechanic Assistant
Plant Mechanic Assistant
Utility Maintenance Worker (3)

Utility Patch Crew

Program Resources:

Expenditures	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Personnel	$188,987	$187,489	$227,101	$235,905
Operating Expenses	$100,524	$95,238	$144,401	$107,716
Capital Outlay	$0	$0	$0	$0
Total	$289,511	$282,727	$371,502	$343,621

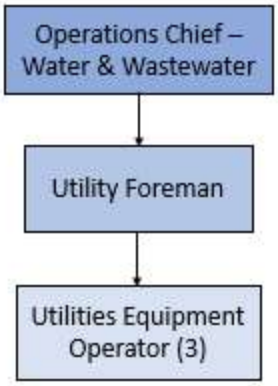
No. of Positions	Actual FY19	Actual FY20	Projected FY21	Budgeted FY22
Full-time	4	4	4	4
Part-time	-	-	-	-
Seasonal				

Program Summary:

This program provides for the labor, material, and equipment to perform repair of concrete sidewalk and curb along with asphalt or brick repair related to water and sewer utility work throughout the entire service area, (both in City and County). This division also performs services for the Electric Utility undergrounding efforts and city's private fiber efforts.

Level of Service Provided in Budget:

- A significant amount of utilities repairs are unscheduled however the funding provided is sufficient to provide necessary and expected repair based on previous expenditure history.



Water and Sewer Revenue Bonds, Series 2020

The proceeds of this bond issue were used to refund the Water and Sewer Revenue Bonds, Series 2010, which were used to refinance the Series 2004 and financed upgrades to the ozone water treatment process at all City WTPs, construct two new WTPs to replace the old Swoope and University WTPs, the remainder of the City's obligation for improvements at the Iron Bridge Wastewater Treatment Facility, the City's portion of the improvements to the South Seminole and North Orange County Wastewater Treatment Authority system, two years of the City's renewal and replacement program and other distribution system improvements. The 2010 bonds also provided funding for the extension of sanitary sewer service along Fairbanks Avenue from 17-92 to I-4.

Issue	Year	Principal	Interest	Total
Water and Sewer Revenue Bond, Series 2020	2022	1,292,500	309,111	1,601,611
Original Issue Amount: $14,565,000	2023	1,295,000	289,399	1,584,399
Original Issue Date: December 1, 2020	2024	1,330,000	259,343	1,589,343
Interest Rate: 2.29%	2025	1,385,000	228,256	1,613,256
Pledged revenue: net revenues of the water and sewer system	2026	1,430,000	196,024	1,626,024
Moody's rated Aa2	2027	1,480,000	162,704	1,642,704
Standard & Poors rated AA-	2028	1,515,000	128,412	1,643,412
	2029	1,575,000	93,032	1,668,032
	2030	1,615,000	56,506	1,671,506
	2031	1,660,000	19,007	1,679,007
TOTAL		14,577,500	1,741,794	16,319,294

Water and Sewer Revenue Bonds, Series 2011

The proceeds of this bond issue were used to refund the Water and Sewer Revenue Bonds, Series 2002 maturing after December 1, 2012. The 2002 bonds were used to finance basic improvements at the City's water treatment plants (WTP) and a portion of the City's share of improvements at the Iron Bridge Wastewater Treatment Facility owned by City of Orlando.

Issue	Year	Principal	Interest	Total
Water and Sewer Revenue Bonds, Series 2011	2022	1,855,000	46,375	1,901,375
Original Issue Amount: $14,155,000				
Original Issue Date: October 20, 2011				
Interest Rate: 2.00% - 5.00%				
Pledged revenue: net revenues of the water and sewer system				
Moody's rated Aa2				
Standard & Poors rated AA-				
TOTAL		1,855,000	46,375	1,901,375

Water and Sewer Revenue Bonds, Series 2017

The proceeds of this bond issue were used to refund the Water and Sewer Revenue Bonds, Series 2009, which were a partial refunding of the Series 2004 bonds that provided funding for an automated meter reading system and improvements at the Iron Bridge Wastewater Treatment Facility.

Issue	Year	Principal	Interest	Total
Water and Sewer Revenue Bonds, Series 2017	2022	1,975,833	843,657	2,819,490
Original Issue Amount: $35,030,000	2023	2,325,000	812,435	3,137,435
Original Issue Date: December 19, 2017	2024	2,365,000	751,465	3,116,465
Interest Rate: 2.60%	2025	2,385,000	689,715	3,074,715
Pledged revenue: net revenues of the water and sewer system	2026	2,410,000	627,380	3,037,380
Moody's rated Aa2	2027	2,435,000	564,395	2,999,395
Standard & Poors rated AA-	2028	2,480,000	500,500	2,980,500
	2029	2,495,000	435,825	2,930,825
	2030	2,525,000	370,565	2,895,565
	2031	2,560,000	304,460	2,864,460
	2032	2,575,000	237,705	2,812,705
	2033	2,595,000	170,495	2,765,495
	2034	2,615,000	102,765	2,717,765
	2035	2,645,000	34,385	2,679,385
TOTAL		34,385,833	6,445,747	40,831,580

Electric Revenue Bonds, Series 2019

The proceeds of this bond issue were used to refund a portion of the Electric Revenue Bonds, Series 2009A and 2009B

Issue	Year	Principal	Interest	Total
Electric Revenue Bond, Series 2019	2022	1,395,000	798,573	2,193,573
Original Issue Amount: $25,405,000	2023	1,450,000	749,070	2,199,070
Original Issue Date: July 9, 2019	2024	1,485,000	698,001	2,183,001
Interest Rate: 3.48%, fixed	2025	1,530,000	645,540	2,175,540
Pledged revenue: net revenues of the electric system	2026	1,585,000	591,339	2,176,339
Moody's rated A1	2027	1,640,000	535,224	2,175,224
Fitch Ratings rated A+	2028	1,680,000	477,456	2,157,456
	2029	1,745,000	417,861	2,162,861
	2030	1,760,000	356,874	2,116,874
	2031	1,770,000	295,452	2,065,452
	2032	1,820,000	232,986	2,052,986
	2033	1,890,000	168,432	2,058,432
	2034	1,955,000	101,529	2,056,529
	2035	985,000	50,373	1,035,373
	2036	955,000	16,617	971,617
TOTAL		23,645,000	6,135,327	29,780,327

Electric Revenue Bonds, Series 2010

The proceeds of this bond issue were used to refund the remaining Electric Revenue Bonds, Series 2005B

Issue	Year	Principal	Interest	Total
Electric Revenue Bonds, Series 2010	2022	265,000	93,520	358,520
Original Issue Amount: $5,245,000	2023	270,000	84,960	354,960
Original Issue Date: December 20, 2010	2024	280,000	76,160	356,160
Interest Rate: 3.2%, subject to adjustment after 15 years	2025	290,000	67,040	357,040
Pledged revenue: net revenues of the electric system	2026	300,000	57,600	357,600
Moody's rated A1	2027	310,000	47,840	357,840
Fitch Ratings rated A+	2028	320,000	37,760	357,760
	2029	330,000	27,360	357,360
	2030	340,000	16,640	356,640
	2031	350,000	5,600	355,600
TOTAL		3,055,000	514,480	3,569,480

Electric Refunding Revenue Bonds, Series 2014

The proceeds of this bond issue were used to refund a portion of the variable rate Electric Revenue Bonds, Series 2005A to a fixed rate financing at a historically low rate.

Issue	Year	Principal	Interest	Total
Electric Revenue Bonds, Series 2014	2022	365,000	148,302	513,302
Original Issue Amount: $7,680,000	2023	375,000	138,165	513,165
Original Issue Date: June 13, 2014	2024	385,000	127,753	512,753
Interest Rate: 2.74%, fixed	2025	395,000	117,066	512,066
Pledged revenue: net revenues of the electric system	2026	405,000	106,106	511,106
Moody's rated A1	2027	415,000	94,873	509,873
Fitch Ratings rated A+	2028	430,000	83,296	513,296
	2029	440,000	71,376	511,376
	2030	450,000	59,183	509,183
	2031	465,000	46,648	511,648
	2032	475,000	33,771	508,771
	2033	490,000	20,550	510,550
	2034	505,000	6,918	511,918
TOTAL		5,595,000	1,054,007	6,649,007

Electric Refunding Bonds, Series 2014A

The proceeds of this bond issue were used to refund an additional portion of the variable rate Electric Revenue Bonds, Series 2005A to a fixed rate financing at a historically low rate. This adds to the bonds refunded from the Series 2014.

Issue	Year	Principal	Interest	Total
Electric Revenue Bonds, Series 2014A	2022	280,000	127,076	407,076
Original Issue Amount: $7,680,000	2023	290,000	118,554	408,554
Original Issue Date: November 3, 2014	2024	300,000	109,733	409,733
Interest Rate: 2.99%, fixed	2025	310,000	100,614	410,614
Pledged revenue: net revenues of the electric system	2026	315,000	91,270	406,270
Moody's rated A1	2027	325,000	81,701	406,701
Fitch Ratings rated A+	2028	335,000	71,834	406,834
	2029	345,000	61,668	406,668
	2030	355,000	51,203	406,203
	2031	365,000	40,440	405,440
	2032	380,000	29,302	409,302
	2033	390,000	17,790	407,790
	2034	400,000	5,980	405,980
TOTAL		4,390,000	907,165	5,297,165

Electric Refunding Bonds, Series 2016

The proceeds of this bond issue were used to refund the majority portion of the variable rate Electric Revenue Bonds, Series 2007 to a fixed rate financing at a historically low rate.

Issue	Year	Principal	Interest	Total
Electric Revenue Bonds, Series 2016	2022	705,000	524,293	1,229,293
Original Issue Amount: $18,260,000	2023	740,000	488,168	1,228,168
Original Issue Date: May 12, 2016	2024	775,000	450,293	1,225,293
Interest Rate: 2.74%, fixed	2025	815,000	410,543	1,225,543
Pledged revenue: net revenues of the electric system	2026	860,000	368,668	1,228,668
Moody's rated A1	2027	900,000	338,168	1,238,168
Fitch Ratings rated A+	2028	915,000	320,018	1,235,018
	2029	935,000	300,934	1,235,934
	2030	955,000	276,675	1,231,675
	2031	985,000	247,575	1,232,575
	2032	1,015,000	217,575	1,232,575
	2033	1,045,000	186,675	1,231,675
	2034	1,070,000	154,950	1,224,950
	2035	1,105,000	122,325	1,227,325
	2036	1,140,000	88,650	1,228,650
	2037	1,175,000	53,925	1,228,925
	2038	1,210,000	18,150	1,228,150
TOTAL		16,345,000	4,567,585	20,912,585

Cash Reserves

Governments hold cash in reserve for a variety of reasons. Often money is set aside to prepare for emergencies, such as natural disasters or unrealized revenues. Reserves may also be accumulated to fund specific projects or to position the City to take advantage of matching grants or land purchase opportunities.

Water and Wastewater Utility

The Commission adopted goal for Water and Wastewater Utility Fund working capital is 45 days of operating expenses less amortization. At the end of FY 22 the Water and Wastewater Utility is expected to have 142 days of working capital on hand ($10.4 million) well in excess of the budget goal. This is a decline from the prior year as use of fund balance to pay large capital obligations, such as the shared used agreement with the City of Orlando for the Iron Bridge wastewater facility, have dropped this balance. Additional other major future major projects such as payments to regional partners for capital costs associated with treatment plants as well as large county led road projects that require relocation of utilities, will draw down on cash balances. These upcoming projects highlight the difficulty for the utility in performing long-range capital planning as significant changes (over $3 million difference since last year) can occur to capital requirements and the projects are outside of the utility's control. Having a strong cash position is the best long-term planning strategy for the utility to face this challenge and near-term action on rates may be necessary to begin addressing these needs. This is discussed more fully in the Ten-Year Pro-forma section of this document.

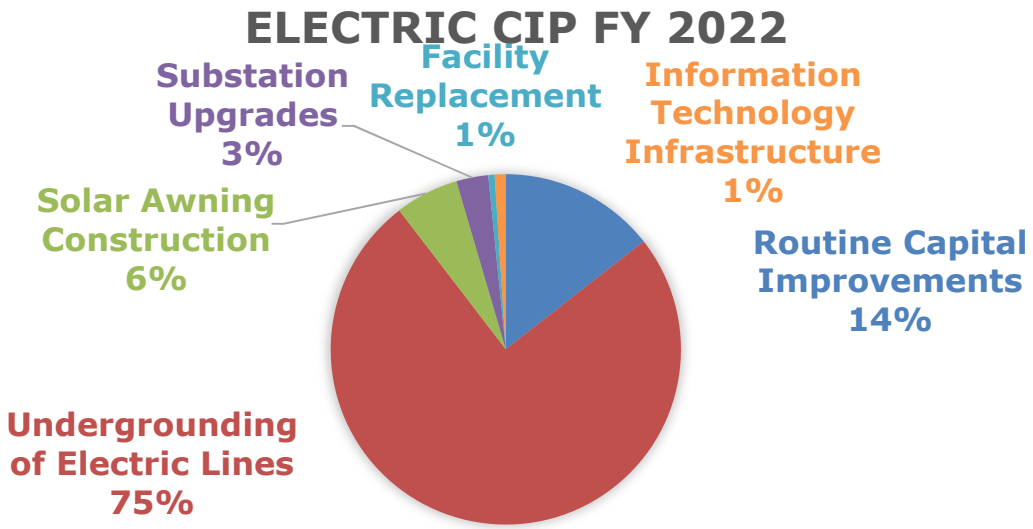
Electric Utility

The Commission adopted goal for Electric Fund working capital is 45 days of operating expenses less amortization. At the end of FY 22 the Electric Utility is expected to have 145 days of working capital or about $10.8 million and a positive cash balance of almost $3 million. This is a significant improvement from only a couple years ago when the utility's cash position was negative and rating agencies were expressing concern. This highlights the benefit the utility is receiving from its negotiated bulk power deal with FMPA, which is saving over 20% on expenses on an ongoing basis. This has enabled the utility to expand its undergrounding effort, promote sustainable solar projects, and invest in the reliability of its infrastructure and substations all while adding cash back to the balance sheet. The cash balance of the utility expressed here and in the Ten-Year Pro-forma section of this document assume that $1.8 million in FDOT reimbursement for undergrounding work the utility performed on W. Fairbanks Ave, will be received, as well as $463k from FDOT for Hurricane Irma reimbursement, and a half-million payout to Duke Energy for territory acquisition in the Ravaudage development. Overall the utility is in an excellent and rapidly improving cash position which will give it great flexibility to pursue other capital projects while having some of the lowest electric rates in the state.

Capital Improvements Plan

Electric Utility

The pandemic did not adversely affect electric demand in FY 21, so forecasts for total energy sales in FY 22 will increase back to 418 MWh. (See Budget Highlights discussion of the Electric Utility for further analysis.) This consistent demand for power combined with the new bulk power contracts have significantly dropped operating costs and freed up cash flow to expand investment in the system and is the reason that capital investment has been expanded in the utility in the last two years.



Routine Capital: Funding in this category provides for the capital repair and replacement of the utility's infrastructure to continue to provide exceptional electric service to the city's customers. Previously performed by contractors, a large portion of this work will now be accomplished through city crews. Estimated routine capital spending is $1.2 million for FY22 and is based on historical levels that inflates at the expected cost of wage inflation over time.

Electric Undergrounding: A detailed long-term undergrounding plan has been developed with a focus on reducing tree conflicts and improving reliability. The plan calls for annual undergrounding expenditures of approximately $6.4 million which, if continued, should underground the entire system by FY 26. This year's budget adds $1.4 million on an annual basis to the previous year's funding level to accommodate price increases and to potentially accelerate undergrounding. The amount budgeted provides for 6 miles of planned undergrounding along with 2 miles of reliability project replacement as a stretch goal. The average cost to complete a mile of undergrounding has ranged in recent years from $650k - $800k, depending upon complexity and types of services being undergrounded. With early signs that price increases could be here to stay longer than expected, the CIP designates additional funding to the

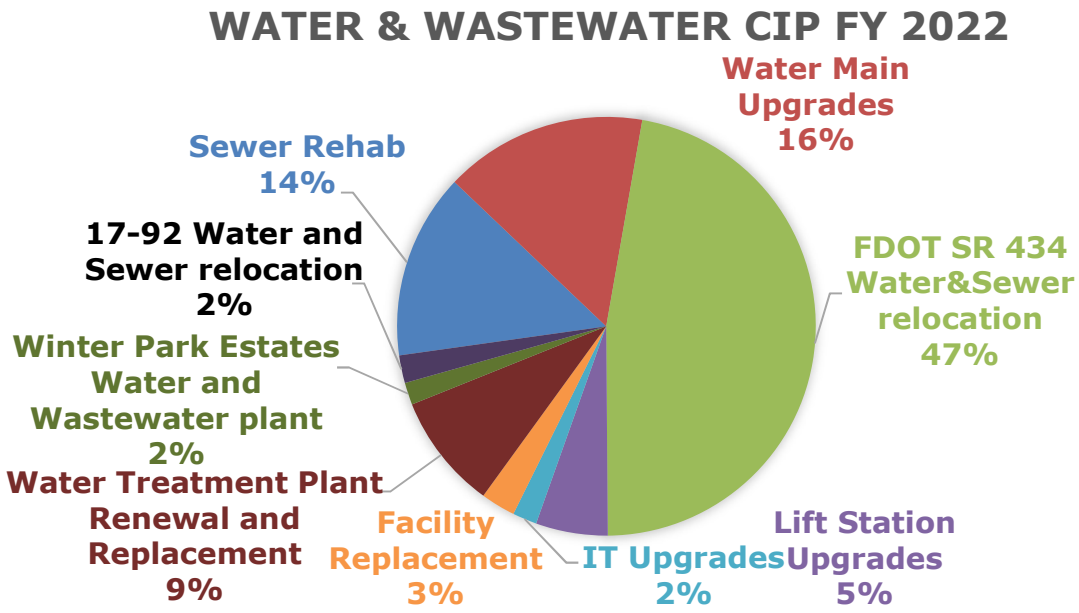
program to make sure that cost increases do not adversely affect the ability to complete this project while also adding additional funds to complete extra miles where possible.

Solar Awning Construction: An additional $500k is budgeted to extend solar projects at the city's Operations Compound or on other public buildings. The previous year's funding of $500k, put in motion the Electric Utility's long desire to install a solar awning around the utility warehouse. Together these enhancements will provide protection for equipment as well as enhance the city's commitment to sustainability and renewable energy sources.

Substation Upgrades: Substations around the city will need capital upgrades to maintain exceptional quality of service. This account will serve as ongoing capital upgrades to the substations. Design is budgeted at $250k in FY22 with $1 million budgeted ongoing thereafter.

Water & Wastewater Utility

The enormity of the I-4 project that used much of the Utility's manpower and budget for the last few fiscal years, has concluded, the utility is now shifting its focus to regional transportation collaborations.



Regional Transportation Collaborations:

- *FDOT SR 434 Water & Sewer Relocation:* Collaboration with Orange County and FDOT road widening, milling, and resurfacing. Responsible to relocate and replace water and wastewater utilities budgeted at $2.2 million in FY22 with an addition $25k in FY23 and FY24.
- *17-92 Water & Sewer Relocation*: Collaboration with FDOT roadway project. Responsible to replace existing asbestos cement water main along US 17-92 corridor. Project planning budgeted in FY22 at $100k

with an estimated future funding $3 million needed to complete the project.

Routine Rehabilitation and Upgrades: This includes lift stations, sewer mains, and water mains. Replacement of asbestos force mains, short line sewer installations, asbestos force main replacement, sanitary manholes, and short line sewer liner installations will be accomplished using remaining project funds. Total new routine funding will total $910k in FY 22. In addition to funds set aside for repair and replacement, the city's impact fee funds are expected to set aside $749k for improvements to the system. In the past impact funds have been recorded as contingency in the budget but general routine spending is commonplace and will now start to appear as budgeted spending in the CIP. As impact revenues are extremely volatile, the CIP will update future spending based on most recent annual performance and is using $300k as a placeholder for future years in each fund.

Upgrade Water & Wastewater Treatment Plants: Renewal and replacement of components for the Water Treatment plants, pump facilities, and Wastewater Reclamation facility is funded at $500k in FY22.

Lift Station Upgrades: Renewal and replacement of aging lift stations throughout the city with lift stations #47, #44, and #26, all highlighted for replacement. New funding is allocated at $260k in FY22.

Future Water & Wastewater Utility Projects: Many major projects will need to be considered over the longer term and the CIP indicates these funding needs.

- Expansion of Reclaimed Water: It is anticipated that at some point in the future the demand for portable water will exceed the capacity allowed under our consumptive use permit at which time we may need more reclaimed water capacity. This project would expand the reclaimed water system. Estimated at $1.35 million.
- Ground Storage Tank Expansion: Construction of a new 5-million-gallon ground storage tank for reuse water storage to replace the existing lined storage ponds and increase reclaimed water supply capacity to meet irrigation demands. Estimated at $6.1 million, the utility is investigating making repairs to the existing pond system to find a more cost-efficient alternative to the high priced tanks.
- As part of the agreement with Orlando to provide wastewater treatment at the Iron Bridge facility the city is obligated for a portion of any planned capital spending improvements 5yr CIP estimated total of $5.7 million. This is a $3.7 million increase in the future five-year period over the prior year CIP, and highlights the difficulty of capital planning in the utility when regional partnerships can make significant changes to planned near-term capital obligations. The utility has set aside significant funding to meet funding obligations in FY22, but planned capital improvements by the City of Orlando will make significant dents in the utility's cash reserves. Coupled with regional projects being pursued by FDOT, the utility will need to explore increasing rates in excess of the annual PSC indexed rate.

- *Richard Crotty Parkway Utility Upgrade*: Orange County is planning to realign Hanging Moss Road. As a result, the city is required to relocate its water and sewer facilities. Our project portion future funding estimated at $915k. This project was originally projected to start in FY22 but the city received notice that it has now been delayed till FY25. It is likely that re-bidding of pricing has caused a delay in this project, and that other project delays to regional projects could show up as costs are re-evaluated in this inflationary environment.
- *Kennedy Blvd Road Widening:* Orange County roadway project. The city is responsible for moving any force main conflicts. Project future funding estimated at $1.6 million.

CITY OF WINTER PARK
SUMMARY OF CAPITAL PROJECTS
WATER AND WASTEWATER FUND

Department	Description	Funding Source	Estimated 5 Yr. Cost	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Other Long-term Needs
Water and Sewer	Upgrade sewer mains - Rehabilitation of defective sewer mains with heavy ground water infiltration.	Water and Sewer Fees	1,650,000	300,000	300,000	350,000	350,000	350,000	
		Sewer Impact Fees	368,000	368,000					
Water and Sewer	Rehabilitation of sanitary manholes to restore their structural integrity	Water and Sewer Fees	460,000	-	100,000	120,000	120,000	120,000	
Water and Sewer	Short Liner Installation - for rehabilitation of sanitary sewer mains and laterals from the main to the property line.	Water and Sewer Fees	1,175,000	-	200,000	325,000	325,000	325,000	
Water and Sewer	Upgrade water mains - Replacement of sub-standard water mains throughout the water distribution system.	Water Impact Fees	381,000	381,000					
		Water and Sewer Fees	2,550,000	350,000	550,000	550,000	550,000	550,000	
Water and Sewer	Replacement of asbestos cement sanitary force mains deteriorated by hydrogen	Water and Sewer Fees	80,000	-	20,000	20,000	20,000	20,000	
Water and Sewer	Lift Station Upgrades	Water and Sewer Fees	860,000	260,000	150,000	150,000	150,000	150,000	
Water and Sewer	Upgrading/rerating of Iron Bridge Regional Wastewater Treatment Facility (City of Orlando).	Water and Sewer Reserves	5,738,200		1,253,300	3,042,580	1,442,320		
Water and Sewer	Richard Crotty Parkway Utility Upgrade	Water and Sewer Reserves	915,000				865,000	50,000	
Water and Sewer	Kennedy Blvd Road Widening Force Main Upgrade	Sewer Impact Fees	1,600,000		1,000,000	600,000			
Water and Sewer	FDOT SR 434 Water and Sewer Relocation	Water and Sewer Reserves	2,250,000	2,200,000	25,000	25,000			
Water and Sewer	Water Treatment Plant Renewal and Replacement	Water and Sewer Fees	1,166,500	416,500	426,000	324,000			

CITY OF WINTER PARK
SUMMARY OF CAPITAL PROJECTS
WATER AND WASTEWATER FUND

Department	Description	Funding Source	Estimated 5 Yr. Cost	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Other Long-term Needs
Water and Sewer	Winter Park Estates Water and Wastewater plant	Water and Sewer Fees	410,000	80,000	100,000		230,000		
Water and Sewer	17-92 Water and Sewer relocation	Water and Sewer Fees	100,000	100,000					3,000,000
ITS	Information Technology Infrastructure Upgrades (50% General Fund, 25% Water and Sewer Fund and 25% Electric Services Fund).	Water and Sewer Fees	475,000	87,500	87,500	100,000	100,000	100,000	
Public Works	Facility replacement account funding (replacement of flooring, roofing, air conditioning, painting, & other capital needs) (65% General Fund, 25% Water and Sewer Fund, and 10% Electric Fund).	Water and Sewer Fees	625,000	125,000	125,000	125,000	125,000	125,000	
Water and Sewer	Expansion of reclaimed water system	Water and Sewer Reserves	200,000		100,000	100,000			1,350,000
		Sewer Impact Fees	-						1,100,000
		Water Impact Fees	-						1,100,000
Water and Sewer	Ground Storage Tank Expansion	Water and Sewer Fees	-						6,100,000
	Totals		21,003,700	4,668,000	4,436,800	5,831,580	4,277,320	1,790,000	12,650,000

Totals by Funding Source:	**Funds Available**							
Water and Sewer Fees		9,551,500	1,719,000	2,058,500	2,064,000	1,970,000	1,740,000	9,100,000
Water and Sewer Reserves	12,010,826	9,103,200	2,200,000	1,378,300	3,167,580	2,307,320	50,000	1,350,000
Sewer Impact Fees	10,356,290	1,968,000	368,000	1,000,000	600,000	-	-	1,100,000
Water Impact Fees	5,914,335	381,000	381,000	-	-	-	-	1,100,000
	21,882,991	21,003,700	4,668,000	4,436,800	5,831,580	4,277,320	1,790,000	12,650,000

CITY OF WINTER PARK
CAPITAL IMPROVEMENT PLAN - Water & Sewer
Fiscal Year 2021 - 2022

Function	Project	Project Description	Primary Funding Source	Capital Funding Amount	Impact on Operating Budgets	Operating Impact Amount
Water and Sewer	Upgrade sanitary sewer mains	Defective sanitary sewer mains will be rehabilitated to decrease heavy ground water infiltration, in effect reducing the total flow to waste water facilities.	Water and Sewer Fees	$ 300,000	This project will reduce wastewater treatment costs by reducing ground water infiltration	-
Water and Sewer	Upgrade water mains	Water main upgrades consist of construction and upgrade of water mains and service lines to replace sub-standard water mains throughout the water distribution system. This work will improve water quality, flows and fire protection in the impacted areas.	Water and Sewer Fees	$ 731,000	No additional impact on operating budget	-
Water and Sewer	Lift station upgrades	Replacement of "can" type lift stations close to failure with submersible "rail" type lift stations.	Water and Sewer Fees	$ 260,000	No additional impact on operating budget	-
Water and Sewer	FDOT SR 434 Water and Sewer Relocation	Relocating and replacing water and wastewater utilities during the FDOT widening, milling, and resurfacing of S.R. 434 from Edgewater Drive to Maitland Boulevard.	Water and Sewer Reserves	$ 2,200,000	No additional impact on operating budget	-
Water and Sewer	Upgrade Water Treatment Plants	Renewal and replacement of components for the Water treatment plants and repump facilities.	Water and Sewer Fees	$ 416,500	No additional impact on operating budget	-
Water and Sewer	Upgrade Winter Park Estates Wastewater Treatment Plant	Renewal and replacement of components for the Winter Park Estates Wastewater Reclamation Facility.	Water and Sewer Fees	$ 80,000	No additional impact on operating budget	-
Water and Sewer	17-92 Water and Sewer relocation	Replacement of existing asbestos cement water main along US 17/92 corridor in conjunction with FDOT roadway project.	Water and Sewer Fees	$ 100,000	No additional impact on operating budget	-
Total Funding FY22				4,087,500		-

CITY OF WINTER PARK
SUMMARY OF CAPITAL PROJECTS
ELECTRIC SERVICES FUND

Department	Description	Funding Source	Estimated 5 Yr. Cost	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Electric Services	Routine Capital improvements including: renewals, replacements, and other improvements required to provide service and improve the reliability of the electric system	Electric System Revenues	6,388,854	1,227,672	1,252,225	1,277,270	1,302,815	1,328,872
Electric Services	Undergrounding of Electric Lines	Electric System Revenues	32,000,000	6,400,000	6,400,000	6,400,000	6,400,000	6,400,000
Electric Services	Solar Awning Construction	Electric System Revenues	500,000	500,000				
Electric Services	Substation Upgrades	Electric System Revenues	4,250,000	250,000	1,000,000	1,000,000	1,000,000	1,000,000
Public Works	Facility replacement account funding (replacement of flooring, roofing, air conditioning, painting, & other capital needs) (65% General Fund, 25% Water and Sewer Fund, and 10% Electric Fund)	Electric System Revenues	250,000	50,000	50,000	50,000	50,000	50,000
ITS	Information Technology Infrastructure Upgrades (50% General Fund, 25% Water and Sewer Fund and 25% Electric Services Fund)	Electric System Revenues	475,000	87,500	87,500	100,000	100,000	100,000
	Totals		43,863,854	8,515,172	8,789,725	8,827,270	8,852,815	8,878,872

Totals by Funding Source:

Electric System Revenues	43,863,854	8,515,172	8,789,725	8,827,270	8,852,815	8,878,872

Note: No additional bond issues are anticipated in the period covered by this Capital Improvement Plan

CITY OF WINTER PARK
CAPITAL IMPROVEMENT PLAN - Electric Services
Fiscal Year 2021 - 2022

Function	Project	Project Description	Primary Funding Source	Capital Funding Amount	Impact on Operating Budgets	Operating Impact Amount
Electric Services	Routine Capital: annual electric system improvements	These improvements include repair and replacement of utility infrastructure to increase the reliability of the electric system.	Electric Service Fees	$ 1,227,672	No impact on operating budget	-
Electric Services	Undergrounding Electric Utilities	This is part of an ongoing plan to underground electric utility lines over the next 8 years.	Electric Service Fees	$ 6,400,000	As electric utilities are placed underground there will be less costs for trimming trees around power lines.	-
Electric Services	Solar Awning Construction	Construction of an awning at the Utility Warehouse to provide protection for heavy vehicles as well as increasing the city's use of renewable energy sources.	Electric Service Fees	$ 500,000	Solar energy savings will reduce operating costs, but also reduce revenues to the Electric Utility as this is in Winter Park's service area.	-
Electric Services	Substation Upgrades	Substations around the city will need capital upgrades to maintain exceptional quality of service. This account will serve as ongoing capital upgrades to the substations.	Electric Service Fees	$ 250,000	Replacing the aging capital reduces the costs of repairs.	-
Total Funding FY22				$ 8,377,672		$ -

Monthly Electric Utility Update 7/1/21

Miles of Undergrounding performed

- Project G: 4.1 miles (97% complete) *anticipate finish 09/30/21*
- Project I: 6.9 miles (99% complete) *anticipate finish 07/01/21*
- Project J: 1.9 miles (1% complete)
- Project Q: 1.85 miles (45% complete) Reliability project
- Project O (Rapidan Trl): 0.15 miles (Completed) Reliability project
- Project O (Mandan Trl): 0.15 miles (0% complete) – Reliability (deteriorated line)
- Project U: (Oaks Blvd. n/o Beloit): 0.11 miles (75% complete) Reliability project

TOTAL so far for FY 2021- 6.7 miles

OH/UG Budget update

2020 Undergrounding budget = 5M

- FYTD = 3.4M

Total Project Review

- Total Citywide Project Miles- 127.5
- Total Miles Completed- 86.2
- Percentage Completed- 67.6 %
- Total miles remaining- 41.3

Notes of Interest

- The Commission approved the UAB option 2 recommendation from the UAB in regard to the Cost of Service Study. Changes will take effect in October of 2022
- RFP for solar was withdrawn and will be resubmitted… There were issues with multiple applicants that necessitated cancellation.
- We have had an hired a new engineer. Her name is Kristen Cordel. Her start date has not yet been secured.

Issues/Concerns

- Our replacement Circuit Switcher is being shipped on July 13th and will be installed soon thereafter. This will relieve us from serious reliability exposure when installed.
- We will have to complete 8 miles per year this year and for the next 5 years to meet deadline. This is achievable with the additional funds. We must perform very well.
- Materials are going up exponentially (especially anything resin based like conduit) and the lead-time is extending.
- We have had no applicants for lineman.

2021 Goals

- Zero personal injuries within work group
  - We had an employee injure his shoulder requiring light duty
- Zero controllable vehicle accidents within work group
  - We had an employee bump into a parked vehicle causing damage to customer vehicle
- Complete 8 miles (to include stretch goal) of underground conversions on the projects as designed
  - G and H , I & J
- Identify and complete areas with poor reliability for targeted undergrounding advancement (stretch goal of 2 miles) Project "Q" is our first target.
- We will utilize targeted overtime with Heart crews to accomplish the additional 2 mile stretch goal
- Negotiate and secure a 2nd interconnection with OUC
  (Obviously depends on appropriate deal)

- Green indicates goal has been met
- Red indicates goal will not be met
- Orange indicates still underway

Utility Monthly Performance Measurements

The Utility Advisory Board identified performance measurements for the Electric and Water Utilities. These are activity and profitability measures used as management tools to set baseline performance measures to be reviewed monthly to implement strategies for improved performance on those baselines. This report organizes the performance measurements by service type.

Water Sewer Utility

Service **Type**	**Measure**	**Goal**	**Mar**	**Apr**	**May**	**On Target**
Environment	Count of Rebates Processed		4	4	0	
	Total MWh generated from Aloma solar system	15 MWh	16.39	17.22	20.37	Goal Met
Operational	Average % Water meters reporting	98.50%	98.86%	98.88%	98.75%	Goal Met
	Count of Wastewater Incidents	0	0	0	0	Goal Met
	Wastewater Incident Overflow in 1,000s Gallons	0	0	0	0	Goal Met
	Water pumped compared to CUP allocation	<12.4 mgd	9.94	10.80	10.30	Goal Met

Both

Service **Type**	**Measure**	**Goal**	**Mar**	**Apr**	**May**	**On Target**
Customer Service	Call Abandonment Rate		23.60%	23.40%	No data	
	Utility Billing Call Average Wait Time		8:18	6:25	No data	
	Volume of calls to City Utility Billing		5,428	4763	No data	
	Number of disconnects for non-pay		193	141	119	
Financial	Accounts receivable/billed revenue – FYTD	<10%	5.21%	5.63%	6.66%	Goal Met
	Average cost of purchased power per kWh - FYTD	<$0.05	$0.0458	$0.0455	$0.0426	Goal Met
	Average revenue per kWh – FYTD	>$0.10	$0.1037	$0.1040	$0.1055	Goal Met
	Bad debt expense/billed revenue – FYTD	<0.25%	0.14%	0.20%	0.16%	Goal Met
	Debt service coverage ratios - W&S - FYTD	>1.5	2.24	2.40	2.49	Goal Met
	Debt service coverage ratios - Electric - FYTD	>1.5	3.39	3.33	3.93	Goal Met
	Percentage of utility accounts receivable over 60 days outstanding		3.04%	2.90%	2.15%	
	Utility accounts receivable over 60 days outstanding		$141,433	$142,349	$130,926	

**Technical issues in our call reporting system caused no collection of data during system interruption. Working towards resolution.*

Index Key- the monthly data text is colored green when the change from the previous month is an improvement, and red when it is not. The On Target column is highlighted comparing the most recent monthly data to the Goal: Red if below, Yellow if Near, Green if Above.

Electric Utility

Service **Type**	**Measure**	**Goal**	**Mar**	**Apr**	**May**	**On Target**
Environment	Electric Car Charger kWh use		5,791	5,100	5,960	
	Solar Metering Count of Customers		121	122	125	
	Solar Net new metering Customers		1	1	3	
Financial	Rolling 12 month kWh	420 (FY20)	423,452,727	421,398,974	423,237,618	Goal Met
Operational	Heart of Florida United Way Emergency Utility Assistance Program: Assistance provided to customers		$711	$506	$250	
	Heart of Florida United Way Emergency Utility Assistance Program: Available balance		$62,674	$65,922	$68,460	
	Heart of Florida United Way Emergency Utility Assistance Program: Number of customers approved for assistance		2	5	1	
	Underground System Complete (%)		65.30%	66.00%	67.00%	
Reliability	CAIDI		132.56	134.5	131.7	
	Outage Occurrences		7	10	13	
	SAIDI		0.6	1.0	3.1	
	SAIDI Rank to Peers (12 mo rolling)	Top 5	5th/21	4th/20	6th/18	Goal Met
	SAIDI Sum	< 19 Annually	35.5	36.0	36.3	Below Goal

**FMPA and FMEA data often lag 1or2 months.*

Translation Table

L-Bar	*Measures the average length of a single outage*
SAIDI	*Measures the average frequency of momentary interruption events for the average customer*
KWH	*Kilowatt hour*
CUP	*Consumptive Use Permit*
YTD	*Year to Date*
MWh	*Megawatt hour*

Financial Report

For the Month of June (75% of fiscal year lapsed) Fiscal Year 2021

Water and Sewer Fund

Operating revenues for the nine months ended June 30, 2021 were $24,248,830, which is $588,737, or 2.49%, greater than the YTD budget.

Operating expenses for the nine months ended June 30, 2021 were $13,390,127, which is $1,923,891, or 11.45%, less than the YTD budget. The most significant areas where spending is less than budget are in engineering studies, water treatment plant chemicals, and wastewater treatment by City of Orlando. Wastewater treatment costs are typically higher in the summer as heavier rainfall leads to infiltration in sewer lines.

Investment earnings to date are negative due to unrealized losses on the City's fixed income investment portfolio. As market interest rates have been higher overall for the past eight months, market values of investments are reduced. These swings in market value generally have no impact in the long-term as the City follows and buy and hold to maturity investment approach. In April and May, we have experienced unrealized gains as rates have come down. Overall, for the eight months though, the total is negative.

The $462,000 transfer from the electric fund is to help fund the cost of connecting all facilities by private fiber, which will benefit both utilities.

Other capital spending to date includes $953,053 for the City's share of improvements at Iron Bridge and $491,250 for connecting City facilities by private fiber.

The bottom line reflects an increase in funds of $1,356,143. The negative bottom line for YTD budget is due to planned use of reserves for capital purposes (most notably Iron Bridge) and the rollover of open purchase order commitments from the prior fiscal year.

Electric Services Fund

Fiscal YTD sales of kWh are 300,978,041 as compared to a YTD budget of 286,222,581. Sales for the past twelve months are 428,529,133, which is higher than the totals for any of the past four fiscal years.

Net revenue from sales of electricity to date were $17,477,321, which is $69,526, or 0.4%, less than the YTD budget.

Other operating income (expense) was ($5,049,240), or $1,137,201 less than the YTD budget. Significant areas where spending to date has been less than budgeted are meter

replacements (will be completed in FY 2022 after go live of new utility billing system), street lighting and tree trimming.

The bottom line reflects an increase in funds of $1,728,164. This is primarily due to FY 2021 being the first full fiscal year of the new bulk power deals with OUC and FMPA that became effective January 1, 2020.

	FY 2021 YTD	FY 2020 YTD
Total kWh purchases	300,978,041	295,283,498
Non-fuel portion of bulk power costs	$4,087,118	$5,088,446

Although kWh purchases are almost an exact match, the cost of buying that power was $1,001,328 less in FY 2021.

Fuel cost recovery revenues to date were $1,029,131 lower than fuel costs. Some of this loss was intentional as part of a conscious effort to give customers rate relief over the course of 2021 by reducing the fuel cost stabilization fund balance to $745,000 by December 31, 2021. As a result of higher than anticipated natural gas prices, fuel cost recovery rates are being increased from $24.23/MWh to $30.07/MWh effective July 1, 2021. We are still maintaining a target balance at 12/31/21 of $745,000. This correction is designed to help us stay on track to meet that target.

WINTER PARK WATER AND WASTEWATER METRICS
June 30, 2021

	FY 2021 YTD Actual	FY 2021 YTD Budget	FY 2020 YTD Actual	FY 2020 Actual	FY 2019 Actual
Operating Performance:					
Water and Irrigation Sales (thousands of gallons)					
Sewer - inside city limits	796,736	769,813	781,460	1,042,266	1,011,909
Sewer - outside city limits	639,857	673,839	641,389	864,206	875,441
Water - inside city limits	1,250,786	1,132,805	1,234,135	1,648,234	1,570,520
Irrigation - Inside City	436,835	439,670	450,652	600,301	597,526
Water - outside city limits	918,849	930,894	879,611	1,183,691	1,191,314
Irrigation - Outside City	83,496	86,338	80,377	113,192	113,481
Total	**4,126,559**	**4,033,360**	**4,067,624**	**5,451,890**	**5,360,191**
Operating revenues:					
Sewer - inside city limits	$ 5,351,558	$ 5,194,507	$ 5,120,048	$ 6,870,798	$ 6,578,659
Sewer - outside city limits	5,534,043	5,418,678	5,364,175	7,225,392	6,904,201
Water - inside city limits	7,513,577	7,356,327	7,427,501	9,977,058	9,311,730
Water - outside city limits	4,622,858	4,464,495	4,433,735	5,959,849	5,715,448
Other operating revenues	1,226,794	1,226,087	1,343,349	1,773,249	1,774,573
Total operating revenues	**24,248,830**	**23,660,093**	**23,688,808**	**31,806,347**	**30,284,611**
Operating expenses:					
General and adminstration	1,426,082	1,553,166	1,490,910	2,081,314	1,935,137
Operations	9,360,313	10,721,787	9,107,941	12,567,762	13,048,300
Wastewater treatment by other agencies	4,092,550	4,527,883	4,002,370	5,316,122	5,114,188
Total operating expenses	**14,878,944**	**16,802,836**	**14,601,221**	**19,965,198**	**20,097,625**

WINTER PARK WATER AND WASTEWATER METRICS
June 30, 2021

	FY 2021 YTD Actual	FY 2021 YTD Budget	FY 2020 YTD Actual	FY 2020 Actual	FY 2019 Actual
Net Operating income	**9,369,886**	**6,857,258**	**9,087,587**	**11,841,149**	**10,186,986**
Other sources (uses):					
Investment earnings	(1,959)	97,050	171,309	222,203	446,431
Miscellaneous revenue	54,210	7,500	16,954	22,698	19,899
Transfer from Electric Fund	462,000	346,500	-	-	-
Transfer to Renewal and Replacement Fund	(1,462,689)	(1,462,689)	(1,223,092)	(1,630,789)	(2,096,335)
Transfer to General Fund	(1,910,866)	(1,910,866)	(1,910,206)	(2,546,941)	(2,446,548)
Transfer for Organizational Support	(58,880)	(58,880)	(58,237)	(77,650)	(77,354)
Transfer to Capital Projects Fund	(185,625)	(185,625)	(155,625)	(207,500)	(351,538)
Other Capital Spending	(1,444,303)	(3,307,690)	(509,980)	(181,995)	(169,358)
Debt service sinking fund deposits	(3,465,632)	(3,491,557)	(3,635,714)	(4,846,491)	(5,176,360)
Total other sources (uses)	**(8,013,743)**	**(9,966,256)**	**(7,304,591)**	**(9,246,464)**	**(9,851,163)**
Net increase (decrease) in funds	**$ 1,356,143**	**$ (3,108,998)**	**$ 1,782,996**	**$ 2,594,685**	**$ 335,823**
Debt service coverage	**2.72**		**2.55**	**2.44**	**2.09**

WINTER PARK ELECTRIC UTILITY METRICS
June 30, 2021

	FY'21 YTD Actual	FY'21 YTD Budget	FY'20 YTD Actual	FY'20	FY'19
Technical Performance					
Net Sales (kWh)	300,978,041	286,222,581	295,283,498	422,834,590	425,487,483
Average Revenue/kWh	0.1042	0.1066	0.1021	0.1019	0.1098
Wholesale Power Purchased (kWh)	307,755,613	300,934,192	307,838,438	437,181,072	439,804,052
Wholesale Power Cost/kWh	(0.0451)	(0.0430)	(0.0451)	(0.0432)	(0.0591)
Gross margin	0.0591	0.0635	0.0570	0.0587	0.0507
Sold vs. Purchased kWh Ratio	97.80%	95.11%	95.92%	96.72%	96.74%
Revenues and Expenses Directly Related to Sales of Electricity:					
Electric Sales:					
Customer charges - residential	1,847,180	1,861,735	1,845,929	2,462,962	2,232,225
Customer charges - commercial and public authority	404,284	411,272	407,989	543,319	499,223
Demand charges	2,128,843	2,187,366	2,106,551	2,866,683	2,694,021
Street Lighting	251,942	287,325	282,842	377,120	380,733
Non-Fuel kWh charges	19,800,917	18,682,010	19,167,727	27,749,383	28,308,084
Fuel	6,928,651	7,070,810	6,348,625	9,091,571	12,623,109
Purchased Power :					
Fuel	(7,950,441)	(7,062,532)	(6,486,122)	(9,057,266)	(12,616,487)
Non-Fuel	(4,087,118)	(3,839,543)	(5,088,446)	(6,708,454)	(9,916,779)
Transmission Power Cost	(1,846,936)	(2,051,597)	(2,320,277)	(3,139,275)	(3,468,020)
Net Revenue from Sales of Electricity	**17,477,321**	**17,546,847**	**16,264,817**	**24,186,043**	**20,736,109**
Other Operating Income (Expenses):					
Other Operating Revenues	345,597	150,375	329,084	255,681	319,801
General and Adminstrative Expenses	(1,527,552)	(1,761,243)	(1,452,732)	(2,100,245)	(2,011,213)
Operating Expenses	(3,867,285)	(4,575,572)	(3,879,831)	(5,421,884)	(5,721,815)
Total Other Operating Income (Expenses)	(5,049,240)	(6,186,441)	(5,003,479)	(7,266,447)	(7,413,227)
Net Operating Income	**12,428,081**	**11,360,406**	**11,261,338**	**16,919,595**	**13,322,883**

WINTER PARK ELECTRIC UTILITY METRICS
June 30, 2021

	FY'21 YTD Actual	FY'21 YTD Budget	FY'20 YTD Actual	FY'20	FY'19
Nonoperating Revenues (Expenses):					
Investment Earnings	(44,973)	(22,500)	(57,733)	(35,720)	(386,874)
Principal on Debt	(2,257,500)	(2,257,500)	(2,186,250)	(2,915,000)	(2,670,000)
Interest on Debt	(1,327,191)	(1,327,191)	(1,390,520)	(1,854,026)	(2,218,854)
Miscellaneous Revenue	64,454	-	30,545	36,910	22,635
Proceeds from Sale of Assets	11,815	18,750	49,475	55,398	25,886
Contributions in Aid of Construction (CIAC)	204,692	375,000	234,593	264,227	479,648
Residential Underground Conversions	88,625	52,500	72,115	92,280	68,245
Capital (including the costs of improvements paid for by CIAC revenues)	(1,090,764)	(2,027,700)	(575,499)	(1,058,970)	(2,174,625)
Reimbursement of Hurricane Irma recovery costs	-	-	8,711	356,943	
Reimbursement of Fairbanks Distribution Line Costs	318,566	-	-	2,092,676	1,333,048
Undergrounding Fairbanks Distribution Lines	(176,271)	-	(1,604,953)	(3,260,841)	(1,333,048)
Undergrounding of Power Lines	(4,230,223)	(3,786,702)	(2,990,988)	(4,171,735)	(3,851,032)
Total Nonoperating Revenues (Expenses)	**(8,438,771)**	**(8,975,343)**	**(8,410,504)**	**(10,397,857)**	**(10,704,970)**
Income Before Operating Transfers	**3,989,310**	**2,385,063**	**2,850,833**	**6,521,738**	**2,617,913**
Operating Transfers In/Out:					
Transfers from Water and Sewer Fund	111,270	111,270	136,496	181,995	188,431
Transfer to Water and Sewer Fund	(462,000)	(346,500)	-		
Transfers to General Fund	(1,720,429)	(1,603,752)	(1,908,976)	(2,376,904)	(2,577,382)
Tranfers for organizational support	(86,863)	(86,863)	(92,399)	(123,198)	(126,258)
Tranfers to capital projects	(103,125)	(103,125)	(99,375)	(132,500)	(99,615)
Total Operating Transfers	**(2,261,147)**	**(2,028,970)**	**(1,964,253)**	**(2,450,607)**	(2,614,824)
Net Change in Working Capital	**1,728,164**	**356,093**	**886,580**	**4,071,131**	**3,089**
Other Financial Parameters					
Debt Service Coverage	3.45		3.13	3.38	2.59
Fixed Rate Bonds Outstanding	52,935,000			55,945,000	56,595,000
Auction Rate Bonds Outstanding	-			-	-

WINTER PARK ELECTRIC UTILITY METRICS
June 30, 2021

	FY'21 YTD Actual	FY'21 YTD Budget	FY'20 YTD Actual	FY'20	FY'19
Total Bonds Outstanding	52,935,000			55,945,000	56,595,000
Principal Retired	3,010,000			2,915,000	2,670,000
Fuel Cost Stabilization Fund Balance:					
Beginning Balance	1,320,208		1,315,743		
Fuel Revenues	6,921,310		5,627,119		
Fuel Expenses	(7,950,441)		(5,111,311)		
Ending Balance	291,077		1,831,550		
Current year change in fuel stabilization fund	**(1,029,131)**		**515,807**		

Notes
Fiscal Years run from October to September; FY'20 is 10/1/20 to 9/30/21