Pursuant to Florida's Interlocal Cooperation Act of 1969, Chapter 163, Florida Statutes, the System entered into an Interlocal Agreement with Winter Park on February 24, 2014, effective January 1, 2015 and expiring on December 31, 2018. Pursuant to this Agreement, the System has agreed to sell 10 MW of capacity and the associated energy on a 7 day/24 hours a day "must-take" basis, except that Winter Park may designate up to 500 hours per year during which the "must-take" quantity may be 5 MW.

Interchange and Economy Wholesale Sales

The System has participated in short-term power sales to other utilities through TEA when market opportunities exist. Due to new natural gas-fired generation in the market, and low and stable natural gas prices, these opportunities are limited. In recent years, net revenues from interchange sales as reflected in the following table have been modest.

Net Revenues from Interchange and Economy Wholesale Sales[1]
(Fiscal Years ended September 30)
(dollars in thousands)

	2013	2014	2015	2016	2017
Net Revenues (Loss)	$123	$673	$369	$126	$3,064
Percent of Total Electric System Net Revenues	0.1%	0.9 %	0.5%	0.2%	3.73%

(1) Variable in nature due to regional capacity availability, weather effects on demand and fuel price volatility.

Interchange and Economy Wholesale Purchases

Interchange and economy wholesale purchases made when power is available from the market at prices below the System's production costs are among the factors that allow the System to assure competitive power costs for retail and firm wholesale customers. Purchases for a duration of less than 24 months are made through TEA. Longer-term contracts are negotiated by the System's staff. The benefits of the System's purchases are passed on to retail and firm wholesale customers by affecting the fuel and purchased power adjustment portion of their rates (see "– Rates – Electric System" below). In the fiscal year ended September 30, 2017, **[21%]** of power for retail and wholesale sales was obtained through non-firm off-system purchases, allowing customers to benefit from less expensive gas-fired power available for purchase from the market.

Renewable Energy

On November 8th, 2017 Gainesville Regional Utility purchased a biomass plant, formerly known as Gainesville Renewable Energy Center ("GREC"). Upon acquisition of the facility the plant was renamed Deerhaven Renewable ("DHR"). With the reductions in the cost of natural gas, a slower growth in load than forecasted, an evolving legislative and regulatory environment, and energy efficiency increases, among other factors, the need for energy from the DHR had become less economical. Upon acquisition of DHR the restriction imposed by the previous Power Purchase Agreement (PPA) were no longer applicable, as such we were able to operate the plant with greater flexibility, and with more economical biomass fuel than under the PPA. These 2 factors as well as unit tuning and optimization have made DHR more economical. GRU continues to consider the DHR Biomass Plant to be a useful long-term strategic energy resource, and expects it will continue to play an integral part in its long-term strategy to hedge against any potential future carbon tax and trade programs.

Since 2006, renewable energy and carbon management strategies became a major component of the System's long-term power supply acquisition program. These renewable resources include the purchase of energy generated by landfill gas emissions, bio-mass and solar. The System instituted the nation's first European-style solar feed-in-tariff ("FIT") (discussed below) to be offered by a utility. The System's renewable energy portfolio is part of a long-term strategy to hedge against potential future carbon tax and trade programs. See "-- Future Power Supply" below for more information on the System's renewable energy resources. See also "-- Factors Affecting the Utility Industry - Air Emissions - *The Clean Air Act*" below concerning the cap and trade program under which utilities have several options for complying with the emissions cap, including installation of emission controls, purchasing allowances or switching fuels.

Energy Supply System

Generating Facilities

The DHR Biomass Plant is an approximately 102.5 MW net (116 MW gross) wood biomass-fired facility.. The GREC Biomass Plant is located on a 131-acre site approximately 10 miles northwest of the City within Alachua County, adjacent to GRU's current Deerhaven electric generation facilities. The DHR Biomass Plant uses advanced combustion technology in which biomass materials are burned in a fluidized bed boiler under controlled, low emissions conditions to generate steam, which in turn drives a turbine/generator that converts the power into electricity. The DHR Biomass Plant is more particularly described below in "THE SYSTEM – The Electric System – Energy Supply System –Deerhaven Renewable."

The System owns generating facilities having a net summer continuous capability of 626MW of net dispatchable summer continuous capacity. The System also is entitled to the capacity and non-dispatchable energy from a landfill gas to energy plant of approximately 3.0 MW. These facilities are connected to the Florida Grid and to the System's service territory over 138 kilovolt ("kV") and 230 kV transmission facilities that include three interconnections with Duke and one interconnection with FPL.

See also "-- Energy Sales – *Interchange and Economy Wholesale Purchases*" above for a discussion of certain power purchases employed to allow the System to assure competitive power costs.

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The Generating Facilities are set forth in the following table and described herein.

Existing Generating Facilities		Fuels		Net Summer Capability (MW)
Plant Name	Unit No.	Primary	Alternative	
JRK Station				
	Steam Unit 8	Waste Heat	—	36
	Combustion Turbine 4	Natural Gas	Distillate Fuel Oil	72
				108
Deerhaven Generating Station				
	Steam Unit 2	Bituminous Coal	—	228
	Steam Unit 1	Natural Gas	Residual Fuel Oil	75
	Combustion Turbine 3	Natural Gas	Distillate Fuel Oil	71
	Combustion Turbine 2	Natural Gas	Distillate Fuel Oil	17.5
	Combustion Turbine 1	Natural Gas	Distillate Fuel Oil	17.5
				409
South Energy Center				
	SEC-1	Natural Gas	—	3.5
	SEC-2	Natural Gas	—	6.9
				10.4
Plant Entitlement	DHR	Biomass	—	102.5
Total Owned Resources				629.9
Baseline Landfill		Landfill Gas	—	3.7
Total Available Capacity				**633.6**
Total Purchased Power Renewable Resources				106.2

JRK Station – The John R. Kelly Station (the "JRK Station") is located in downtown Gainesville. The JRK Station consists of one combined cycle combustion turbine ("CC1") unit with a net summer generation capability of 108 MW. CC1's primary fuel is natural gas and the alternate fuel is #2 oil. With current natural gas prices and unit efficiency, CC1 operates mostly as a baseload unit. .

Deerhaven – The Deerhaven Generating Station ("Deerhaven" or "DGS") is located approximately six miles northwest of the City and encompasses approximately 3,474 acres, which provides room for future expansion as well as a substantial natural buffer. The DGS consists of two steam turbines and three combustion turbines with a cumulative net summer capability of 409 MW. Unit 1 ("DH 1") is a conventional steam unit with a net summer capability of 75 MW. Its primary fuel is natural gas and its emergency backup fuel is #6 oil. DH 1 began commercial operation in 1972 and is expected to be retired in 2022. Unit 2 ("DH 2") is a coal-fired, conventional steam unit with a net summer capability of 228 MW.

Two combustion turbines are rated at 17.5 MW each and the third combustion turbine at 71 MW. All three combustion turbines have natural gas as their primary fuel and #2 oil as an alternate fuel.

DH 2 was the first zero liquid discharge power plant built east of the Mississippi River. No industrial wastewater or contact storm water leaves the site. Brine salt by-product from process water treatment is transported off site to a Class III landfill due to capacity constraints. The Deerhaven site has a coal combustion products/coal combustion residuals ("CCP"/"CCR") landfill that provides disposal capacity for CCR, fly and bottom ash, as well as flue gas scrubber by-product from the air quality control system ("AQCS"). DH 2 has an AQCS consisting of an electrostatic precipitator and fabric filter for particulate control, a dry circulating scrubber for sulfur dioxide ("SO_2"), acid gas, and mercury ("Hg") reduction, and a selective catalytic reduction ("SCR") system for reduction of the oxides of nitrogen ("NO_x") to meet or exceed regulatory requirements.

Since 2009, the operational mode of DH 2 has shifted from a high capacity factor base load to deep load cycling operation. This is the result of many factors including: flat megawatt-hour sales. A cost of cycling engineering study has been performed to accurately determine the long term maintenance cost resulting from this operational mode. The costs are utilized in both long range generation planning and short term unit commitment. Additionally, operational and physical changes necessary to reduce the cost of this mode of operation have been identified and are in various stages of implementation. The findings of the cycling engineering study have been incorporated into the budget and reflected in the CIP.

To assure reliability, considerable investment continues to be made in both physical components and control systems. In addition, the System has invested in a full scale, high fidelity simulator for operator training and control logic quality control. During fiscal year 2017, the System spent approximately $5.2 million on rebuild and upgrade to the Circulating Dry Scrubber ("CDS") that was installed in 2009 due to structural integrity issues. This environmental control equipment was replaced with upgraded structural support and a corrosion/erosion resistance liner that is made of C-276 alloy. The replacement and upgrades were completed before the summer peak season and will better ensure the long-term reliability of the environmental control equipment. GRU is currently coordinating with City of Gainesville Risk Management on an insurance claim related to the failure of the Deerhaven Unit #2 CDS. With intentions to recover the cost of the CDS decommissioning (approximately $1.5 million), and the erection of vessel to the original design specifications (approximately $4 million). In parallel, GRU is coordinating with outside counsel on possible litigation with the CDS Original Equipment Manufacturer (Babcock Power) related to the recovery of cost that may not be recovered by the City's insurance claim.

Crystal River 3–Crystal River 3 ("CR-3") is a retired nuclear powered electric generating unit which had a net summer capability of 838 MW, located on the Gulf of Mexico in Citrus County, Florida, approximately 55 miles southwest of Gainesville. Duke was the majority owner. In February of 2013, Duke announced that CR-3 would be permanently shut down and retired. The System owned a 1.4079% ownership share of CR-3 equal to approximately 12.7 MW (11.846 MW delivered to the System). In 2012, the minority owners, including the System, agreed to have the Florida Municipal Power Agency ("FMPA") represent their interests in negotiating a settlement with Duke for damages resulting from the premature retirement of CR-3. Duke maintained insurance for property damage and incremental costs of replacement power resulting from prolonged accidental outages from Nuclear Electric Insurance, LTD. ("NEIL"). The System has received its allocated insurance proceeds of $1,308,211, of which $660,951 was credited on invoices.

FMPA, on behalf of the minority owners, negotiated a settlement with Duke. The settlement was executed by all parties with an effective date of September 26, 2014. The settlement transferred all of the System's ownership interests in CR-3 and the requisite Decommissioning Funds to Duke. In October 2014, the System received reimbursement of $219,706 in operation and maintenance expenses forgiven by the settlement. The ownership transfer was approved by the Nuclear Regulatory Commission (the "NRC") on May 20, 2015. Upon the NRC's approval of ownership transfer, the minority owners received certain cash settlements and Duke agreed to be responsible for all future costs and liabilities relating to CR-3 including decommissioning costs. On October 30, 2015, the transfer of ownership interests in CR-3 closed, and the System received a settlement of $9.56 million as a minority owner of CR-3 and $618,534 as a former purchaser of power from CR-3. Consequently, CR-3 is not shown on the table of generating facilities.

For further discussion regarding CR-3, see Note 5 to the audited financial statements of the System "Jointly Owned Electric Plant" referenced in APPENDIX B-1 attached hereto.

South Energy Center – The South Energy Center was completed in 2 phases of construction and is a combined heat and power facility dedicated to serve a 1,000,000 square foot, 400-bed teaching hospital with Level I trauma center belonging to UF Health/Shands Teaching Hospital and Clinics ("UF Health") at the University of Florida. The South Energy Center provides for all of the hospital's energy needs for electricity, steam, and chilled water. The South Energy Center is also responsible for providing medical gas infrastructure.

The South Energy Center provides the hospital with a highly redundant electric microgrid that is capable of operating either grid-connected or grid-independent to meet 100% of the hospital's needs. The South Energy Center Phase 1 has two grid connections for normal power, and a 3.5 MW on-site combustion turbine to provide full standby power to the hospital and energy center, as well as a planned 2.25 MW fast-start diesel generator to provide code-compliant essential power for the hospital. The combustion turbine is installed in a combined-heat-and-power configuration and is typically run base-loaded to provide export power to the grid and steam to the hospital. All plant systems for electric, chilled water, and steam have high levels of equipment redundancy to minimize the potential of an outage. The South Energy Center Phase 2 has two grid connections for normal power, and both a 6.9 MW on-site reciprocating internal combustion engine to provide full standby power to two towers of the hospital and energy center, as well as a planned 3 MW fast-start diesel generator to provide code-compliant essential power for the hospital. The reciprocating internal combustion engine is installed in a combined-heat-and-power configuration and is typically run base-loaded to provide export power to the grid and steam to the hospital. During 2017, the South Energy Center provided 1.7% of the System's generation.

The South Energy Center is owned and operated by the System, and provides services under a 50-year "cost plus" contract with UF Health. The medical campus has been master planned for 3,000,000 square feet of facilities at build out, the timing of which is contingent upon future economic conditions.

Gainesville Renewable Energy Center –The fuel supply is primarily forest residuals left in the field after normal timber harvesting as well as materials from urban forestry and suitable sources of clean wood, and biomass such as pallets, and mill residues. The DHR Biomass Plant began commercial operation on December 17, 2013 ("COD"). The DHR Biomass Plant is equipped with Best Available Control Technology ("BACT") air emission controls including; dry sorbent injection, selective catalytic reduction of NO_x and fabric filters for particulate control. The type of fuel to be employed makes it unnecessary to control SO_2 or mercury. The DHR Biomass Plant received its Title V Operating Air Emissions Permit effective January 1, 2015, which was transferred to GRU in November 2017, and must be renewed every five years. .

Upon the city acquiring the DHR Biomass Plant in November of 2017 considerable effort has been spent in optimizing the plant. The plant currently has the ability to operate between a range of 35-102.5 MW, with no restrictions. As such the DHR Biomass Plant is now more economical to be used for dispatch then under the previous Power Purchase Agreement ("PPA") with GREC LLC.

Strategic Advantages

The acquisition of the DHR Biomass Plant offered several strategic advantages that were in the best financial interests of GRU and its ratepayers:

1. Termination of the PPA (see "—Benefits of Terminating the Power Purchase Agreement" below for a description of resulting operational flexibility;
2. An immediate reduction of operating costs and an immediate one-time reduction of electric rates of approximately 8% addressing the City's policy for rate competitiveness (GRU anticipates subsequent annual 2-3% rate increases over the next five years);
3. The realization of future annual cash flow savings from the elimination of the minimum annual fixed payments under the PPA, compared to the estimated annual debt service on the Utilities System Revenue Bonds, 2017 Series A, Variable Rate Utilities System Revenue Bonds, 2017 Series B and Variable Rate Utilities System Revenue Bonds, 2017 Series C;
4. The flexibility to operate the DHR Biomass Plant as a strategic reliability hedge, based on the market cost of power, cost of fuel, and operating and maintenance requirements of the DHR Biomass Plant;
5. A reduction of long-term contractual capitalized obligations on GRU's balance sheet of approximately $1 billion in exchange for adding $680,920,000 of long-term debt; and
6. The final resolution of all on-going arbitration between the City and GREC LLC.

Operational Flexibility

Termination of the PPA in connection with the acquisition of the GREC Biomass Plant offered operational flexibility that was in the best financial interests of GRU and its ratepayers, including:

1. GRU no longer has to coordinate for the planned dispatch of the DHR Biomass Plant as was mandated by the PPA. Rather, GRU can optimize the mix of generating resources and market purchases to meet the necessary demand in the most cost-effective manner.
2. Prior to the termination of the PPA, GRU was required to dispatch the plant at 70 MWs, which is a large percentage of GRU's overall load and has proven difficult to manage across the generation fleet. The larger block size of 70 MWs prevented the use of other GRU generating resources or market purchases that could provide energy at a savings compared to the energy from the DHR Biomass Plant. A smaller blocksize, such as 35 MWs or lower, allows GRU to better optimize its fleet to more economically meet the requisite demand with multiple generation resources fueled by less expensive coal, natural gas, biomass and market purchases.

3. Prior to the termination of the PPA, GRU could not schedule any shutdowns during the summer period. As a result, if the GREC Biomass Plant started the summer season, it had to remain "On" for the duration of the summer season. Terminating the PPA eliminated this operational inflexibility and financial burden. Additionally, GRU had the ability to manage the DHR Biomass Plant such that for certain periods of the year, if the DHR Biomass Plant was not expected to be operational, staffing levels can be significantly reduced for a period of time. The PPA required a full workforce compliment whether the GREC Biomass Plant was operating or in stand-by mode.
4. The DHR Biomass Plant is adjacent to GRU's current Deerhaven facilities. While staffing decisions are still to be determined, it is likely that cost-effective synergies can be achieved through more thoughtful and integrated staffing, maintenance and operations of the plants, taking advantage of economies of scale and scope.
5. Prior to the termination of the PPA, GREC LLC managed the fuel procurement process with its staff. GRU believed those contracts can be better managed with staff of GRU while eliminating the "margin" that GREC LLC applied to fuel procurement. Additionally, the PPA required a minimum fuel inventory of 15 days. GRU can manage the fuel inventory more opportunistically.
6. The PPA treated the property taxes on the GREC Biomass Plant as a reimbursable expense. Termination of the PPA and GRU's ownership eliminated the direct payment of property taxes.
7. GRU control of the DHR Biomass Plant's dispatch and the expected reduction in the 70 MW block size enables GRU to make more cost-effective market purchases of energy when market prices are below GRU's cost of delivering energy.

Baseline Landfill – The System entered into a fifteen-year contract for the entire output (3.68 MW) of electricity generated from landfill gas derived from the Baseline Landfill in Marion County, Florida, which was placed in service in December 2008. The Baseline Landfill is actively expanding and additional capacity is projected for the future. Power from the Baseline Landfill is wheeled to the System over Duke's transmission system.

<u>*Fuel Supply*</u>

The objectives of the System's fuel procurement and management strategy are: (1) diversification of fuel mix and fuel sources, (2) continuous improvement of delivered fuel cost through innovative contract procurement and the use of short-term suppliers, (3) optimization of the quality of fuel and market price to achieve environmental compliance in the most effective and competitive manner possible, (4) reduction in the impact of price volatility in fuel markets through physical and financial risk management of the fuel supply portfolio and (5) participation in joint procurement programs with other municipal systems to maximize the price benefits of volume purchasing. The flexibility afforded by these actions allows the System to take advantage of changes in relative fuel prices and strategically adjust its use of coal, natural gas or fuel oil to optimize its fuel costs. For fiscal year 2017, net energy for load ("NEL") was served as follows: coal 16.40%; biomass 15.00%; natural gas 66.00%; landfill gas 1.00%; solar 1.50%; oil 0.10%. The remainder of NEL was served by spot purchase power. The System, as both a buyer in the fuel markets and a producer of power, hedges risk and volatility by the use of futures and options. The System's hedging activities are primarily limited to natural gas futures and options. The System's exposure to financial market risk through hedging activity is limited by a written policy and procedure, oversight by a committee of senior division managers, financial control systems, and reporting systems to the General Manager for the System.

Coal -- The System currently owns a fleet of 111 aluminum rapid-discharge rail cars that are in continuous operation between the Deerhaven Generating Station ("DGS") and the coal supply regions. Coal inventory at the DGS is maintained at approximately 40-50 day supply, based on projected burn, anticipated disruptions in coal supply or rail transportation, or short-term market pricing fluctuations. The System's coal procurement considers both short-term and long-term fuel supply agreements with reputable coal producers. This strategy allows the System to reduce supply risk, decrease price volatility, insulate customers from short-term price swings, and exert better control over the quality of coal delivered. The strategy also retains opportunities for cost savings through spot purchases, the ability to evaluate new coal sources through test burns, or to take advantage of a producer's excess coal production capacity. Typically, the System maintains 70-75% of its coal supply under one to three year term contracts and the remainder under short-term contracts of one year or less. The System currently has two active contracts for the supply of coal. The System has a long-term transportation contract for coal with CSX Transportation that expires in 2019. A consultant that specializes in fuel transportation and logistics has been retained to explore additional transport options and finalize the rail renegotiation strategy. Effective October 2014, the City Commission instituted a policy prohibiting the procurement of coal from mountain top removal (MTR) sources unless a 5% savings over non-MTR mined coal is achieved by doing so. This policy has not had a material impact on the System to date.

See also "Ratings Triggers and Other Factors That Could Affect the System's Liquidity, Results of Operations or Financial Condition - Coal Supply Agreements" herein.

Natural Gas – Natural gas supply for both the electric system and the natural gas distribution system is transported to the System by Florida Gas Transmission ("FGT"). A portion of this gas is transported under long-term contracts for daily firm pipeline transport capacity. The contracts are priced under transportation tariffs filed with the Federal Energy Regulatory Commission ("FERC"). The System's natural gas supplies are transported from Gulf Coast producing regions in Texas, Louisiana, Mississippi and Alabama. Natural gas volumes greater than the System's firm transportation contract entitlements are supplied either through the use of excess delivered capacity from other suppliers on FGT or through interruptible transportation capacity, as arranged by TEA which has combined purchasing power to ensure capacity. For fiscal year 2017, the System consumed 10,555,946 million British thermal units ("MMBtu") of natural gas in electric generation and 1,940,697 MMBtu for the gas distribution system. The average cost of gas delivered to the System was $3.70/MMBtu. The System analyzes, investigates, and participates in opportunities to hedge its natural gas requirements as well as provide greater reliability of supply and transportation for customers. These opportunities include pipeline tariff discussions and negotiations, review of potential liquefied natural gas projects and supply offers, review of potential long-term purchases, natural gas supply baseload contracts, and the purchase and sale of financial NYMEX commodity contracts and options. TEA and consultant International FCStone, are market participants that provide comprehensive energy trading, analysis, strategies and recommendations to the System's Risk Oversight Committee ("ROC"). TEA is responsible for the procurement of daily physical volumes and management of pipeline transportation entitlements, as well as the execution of financial hedging transactions on the System's behalf. ROC provides direction and oversight on hedging to TEA. See "Energy Sales -- *The Energy Authority*" above.

Oil -- At current and projected price levels, the System's oil capable units are not projected to operate on fuel oil except in emergency backup modes. For fiscal year 2017, fuel oil accounted for approximately 0.10% of net generation. This level of contribution is not projected to change in the near term. When it does become necessary to replenish inventory for any unit, the System seeks to control the costs by purchasing forward supply at fixed prices and timing market entry points to take advantage of favorable pricing trends.

DHR Biomass Plant Fuel Supply – The DHR Biomass Plant is fueled by local and clean wood waste. This wood fuel includes forestry residues (such as slash and cull trees, pre-commercial thinnings, and whole-tree chips), urban wood residue (such as wood and brush from clearing activities, tree trimmings from right-of-way maintenance), wood processing residue (such as round-offs, end cuts, saw dust, shavings, reject lumber) and other wood waste (such as unusable wood pallets, storm/infested woody debris). It does not use any wood from construction or demolition waste. Rather than importing more fossil fuels, the DHR Biomass Plant's wood fuel is local and is harvested within a 75 mile radius of the plant in north central Florida. DHR requires approximately seven hundred and fifty thousand green tons of fuel annually. Before DHR began taking wood deliveries, much of this forestry waste wood was open burned, releasing smoke, ash, and soot into the air. Instead of being burned in the open or left on the forest floor to decompose, this material is being used to create renewable energy.

Transmission System, Interconnections and Interchange Agreements

The System's transmission system infrastructure consists of approximately 117.2 circuit miles operated at 138 kV and 2.5 circuit miles operated at 230 kV. There are four interconnections with the Florida transmission grid thereby connecting the System to Duke to the west and south as well as FPL to the east. Specifically, there are three (3) interconnections with Duke: one at their Archer Substation at 230 kV and two at their Idylwild Substation at 138 kV. There is also one interconnection to FPL's Hampton Substation at 138kV. The Hague transmission switching station was constructed to serve as the interconnection point to the DHR Biomass Plant. The transmission system has ample interconnection capacity to import sufficient power from the State grid system to serve native load under normal circumstances.

The System's 138 kV transmission system encircles its service area and connects three transmission switching stations, six loop-fed distribution substations, and four radial-fed distribution substations. This configuration provides a high degree of reliability to serve the System's retail load, delivering wholesale power to Alachua and providing transmission service to a portion of Clay's service territory.

The System is a member of the Florida Reliability Coordinating Council (the "FRCC"), which is a not-for-profit company incorporated in the State of Florida. The purpose of the FRCC is to ensure and enhance the reliability and adequacy of bulk electricity supply in Florida. As a member of FRCC, the System participates in sharing reserves for reliability purposes with other generating utilities in Florida, resulting in a substantial reduction in the amount of reserves required for proper operation and reliability.

FRCC serves as a regional entity with delegated authority from the North American Electric Reliability Corporation ("NERC") for the purposes of proposing and enforcing reliability standards within the FRCC Region. The area of the State of Florida that is within the FRCC Region is peninsular Florida east of the Apalachicola River, which area is under the direction of the FRCC Reliability Coordinator.

Electrical Distribution

All of the System's distribution substations are served from the 138 kV transmission system. The System is a 12.47 kV distribution system. If the transmission line supplying a radial-fed distribution substation should fault, the retail loads affected can be served by remote and field actuated switching to adjacent and unaffected distribution circuits. Additional substations have been planned near and within the northern and eastern quadrants of the System's service area to serve load growth in those areas and improve system reliability and resiliency.

The transmission and distribution facilities are fully modeled in a geographical information system ("GIS"). The GIS is integrated with the System's outage management system to enable the linkage of customer calls to specific devices. This integration promotes enhanced and expedited service restoration. Integrated software systems are also used extensively to assign loads to specific circuits, planning distribution and substation system improvements, and supporting restoration efforts resulting from extreme weather. In addition, greater than 60% of the distribution system's circuit miles are underground, which is among the highest percentages in Florida.

Capital Improvement Program

The System's current five-year electric capital improvement program requires approximately $400 million in capital expenditures between fiscal years ended September 30, 2018 through and including 2023 which includes the DHR Biomass Plant. A breakdown of the categories included in the six-year capital improvement program is outlined below and reflects the approved program from the fiscal year 2018 budget process. See "--Funding the Capital Improvement Program - Additional Financing Requirements" below for more information regarding funding.

Electric Capital Improvement Program

	Fiscal Years ended September 30,					
	2018	2019	2020	2021	2022	Total
Generation and Control	$11,073,913	$9,320,426	$6,191,721	$4,715,249	$5,794,981	$37,096,291
Transmission and Distribution	16,156,908	16,840,426	29,434,143	32,630,854	13,349,919	108,412,250
Miscellaneous and Contingency	10,899,838	8,576,449	4,422,826	8,519,511	954,544	41,373,167
Total	$38,130,659	$34,737,301	$40,048,690	$45,865,614	$28,099,444	$186,881,708

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Loads and Resources

A summary of the System's generating resources and firm interchange sales compared to historical and projected capacity requirements is provided below:

Fiscal Year	Net Summer System Capability (MW)[1]	Firm Interchange Sales (MW)	Peak Load (MW)[2]	Actual / Projected Planning Reserve Margin	
				MW	Percent
Historical					
2013	650	0	416	234	56%
2014	639	0	409	230	56%
2015	639	0	421	218	52%
2016	631	0	428	203	47%
2017	62626	3	418	211	51%
Projected					
2018	627	0	444	183	41%
2019	627	0	438	189	43%
2020	627	0	441	186	42%
2021	627	0	445	182	41%
2022	627	0	444	183	42%

(1) Based upon summer ratings. A purchase of 50 MW of firm baseload capacity ended December 31, 2013. Imported firm capacity has been adjusted for losses in the table above. The DHR Biomass Plant is 102.5 MW and is included in projected values. Does not include Solar FIT.

(2) Summer peak forecast historically incorporated the System's aggressive conservation and Demand-Side Management ("DSM") plan. In 2014, conservation planning was reduced significantly, which lessened the impact on peak loads. The plan continues to include conservation incentive retail rates and distributed renewable resources as with fewer incentive and information programs related to appliance and end use efficiency. The summer peak forecast presented here also includes Alachua all-requirements wholesale contract which is given the same precedence as native load.

Mutual Aid Agreement for Extended Generation Outages

The System has entered into a mutual aid agreement for extended generation outages with six other consumer-owned generating utilities in north central Florida and Georgia. Participating with the System in this agreement are FMPA, JEA, Lakeland Electric, Orlando Utilities Commission, the City of Tallahassee, and MEAG Power. Participants have committed to provide replacement power in the event of a long-term (two to twelve month) outage of one of the baseload generating units designated under the agreement. Each utility will provide a pro-rata share of the replacement power and will be reimbursed at an indexed price of coal assuming a heat rate of 11,000 BTU/kWh and an indexed price for gas assuming a heat rate of 9,250 BTU/kWh. The System has designated 100 MW of the capacity of DH 2 and 100 MW of the capacity at JRK Station to be covered under the agreement. The current agreement was renewed for an additional 5-year term beginning October 1, 2017. To date, the System has provided aid under this agreement, but has never requested aid pursuant to this agreement.

Future Power Supply

General

While the System's existing generating units can maintain a 15% reserve margin through at least 2022, if all generating units are available, the reserve margin can fall from 40+% to a generation deficit with the loss of the System's largest unit, DH 2. As such, power supply planning must address this first contingency event. The reliability of the System's generating sources and the availability of purchased power have been such that the System has never had to declare a generation deficiency. The next scheduled retirement of a generating facility is DH 1 in 2022. Management's strategy to maintain competitive power costs is to maintain the System's status as a self-generating electric utility with a diverse fuel supply that is hedged with a renewable PPA portfolio and meets all environmental standards and expectations of the local community. The ability to be self-generating has proven itself to be a powerful hedge against market volatility while maximizing reliability for native load. Important aspects of this strategy are the management of potentially stranded costs, maintenance of adequate transmission capacity, use of financial as well as physical techniques to hedge fuel costs, and long-term management of pipeline and rail transportation contracts and capacity. Upon purchase of the GREC Biomass Plant, GRU will continue to have sufficient generating capacity and will not need to acquire any additional capacity resources for several years. However, GRU has found it to be in its best economic interests to manage its power needs through the generation of power with its existing facilities and to acquire/utilize purchased energy supply, if there is a cost benefit.

The Planning Process

The primary factors currently affecting the utility industry include environmental regulations, restructuring of the wholesale energy markets, the formation of independent bulk power transmission systems, the formation of an Electric Reliability Organization ("ERO") under FERC jurisdiction, and the increasing strategic and price differences among various types of fuels. No state or federal legislation is pending or proposed at this time for retail competition in Florida. The purpose of the planning process is to develop a plan to best meet the System's obligation to the reliability and security of the bulk electric system ("BES") of the State of Florida and best serve the needs of the System's customers, the most significant of which being competitive pricing of services. The System's current coal transportation contract expires December 31, 2019. Although negotiation strategies and additional options are being explored, the as-delivered cost of coal is anticipated to significantly increase. The year 2020 characterizes a time frame and does not limit considerations of future events.

At last review, the Power 2020 plan raised questions that go beyond the current options being considered. As a result, TEA was chosen to create an Integrated Resource Plan ("IRP") to help model a better answer to some of the unknowns going forward. Using modeling algorithms, the IRP will take a look at the aspects of the system requirements and provide recommendations for the best path forward. That path may include, amongst other strategies, additional generation, import capability, and demand side management, to accomplish the needs of the System. Delivery of the final report was received in

September 2017 however, after GRU acquired the DHR Biomass Plant in November 2017, the System is working with TEA to revise the IRP.

In the fall of 2016, GRU applied for a Point-to-Point Transmission Service Request ("TSR") with Duke Energy Florida ("DEF") and Florida Power & Light ("FPL") with the intent of obtaining worst-case costs and facility upgrades necessary to provide GRU with 340 MW of firm power service from either provider. The amount of 340 MW was chosen as the "upper envelope" of import power needs in the event GRU retires all native generation with the exception of the DHR Biomass Plant. Based on the study results, DEF concluded that extensive projects work must be completed in the 10 year planning horizon and provided a non-binding estimate of $400 million to mitigate impacts on the DEF system. FPL, based on its own TSR results, provided a non-binding estimate of $75.5 million for its own required system upgrades and identified multiple third party impacts, confirming DEF's findings. Should GRU pursue large firm power purchases, third party impacts (such as the need to acquire right of way for transmission lines) shall be reassessed in a coordinated study with the FRCC TWG.

Solar FIT

The System became the first utility in the nation to adopt a European-style solar FIT in March 2009. The System purchases 100% of the electricity produced by a photovoltaic ("PV") solar system, which is delivered directly to the System's distribution system. What distinguishes a European-style FIT from any other FIT are the following three factors: (a) the price paid per kWh is designed to allow the owner/operator to earn a profit (the System applied a 5% internal rate of return after taxes to a reference system design); (b) the tariff is fixed over a sufficient period of time by a contract that is designed to promote investment (the System provides a twenty-year fixed price power purchase agreement); and (c) there are distinctions between different types of projects in terms of the price paid (in the case of the System, there are different rates for building/pavement mount and green field ground mount systems). FIT can be applied to any form of renewable energy, but the System chose to focus on solar. The System acquires all the environmental attributes of the solar energy purchased under the FIT, such as renewable energy credits and carbon offsets. The System stopped accepting new installations after 2013; however, approximately 23.3 MW of solar PV capacity was installed and continues to supply energy to the System.

Solar Net Metering

Net metering systems generally consist of solar panels, or other renewable energy generators, connected to a public utility power grid. The surplus power produced is transferred to the grid, allowing customers to offset the cost of power drawn from the utility. The net meter system includes both residential and commercial customers. To date, approximately 2.9 MW of solar PV capacity have been installed.

The Water System

The water system currently includes 1,170 miles of water transmission and distribution lines throughout the Gainesville urban area, 16 water supply wells located in a protected well field, and one treatment plant (the "Murphree Plant") possessing a rated peak day capacity of 54 Mgd. Treatment processes include lime-softening, recarbonation, filtration, chlorination and fluoridation. The Murphree Plant's design allows for expansion to at least 60 Mgd of capacity at the plant site without interruption of treatment or service. The System renewed its consumptive use permit ("CUP") in September 2014 which will expire on September 10, 2034. The water system also includes a total of 19.5 million gallons of water storage capacity, comprised of pumped ground storage and elevated tanks.

Service Area

The water system serves customers within the City limits and in the immediate surrounding unincorporated area. Comprehensive land use plans for the Gainesville urban area mandate connection of new construction to the water system for all but very low density residential developments. Much of the water system's growth is in areas served by Clay for electricity or redevelopment of areas with higher density development. The area presently served includes approximately 118 square miles and approximately 75% of the County's total population. The University of Florida and a small residential development in Alachua are the only wholesale water sales customers.

Customers

The System has experienced average customer growth of 0.8% per year over the last five years. The System has extension policies and connection fees for providing water supply services to new developments appropriately designed to assure that new customers do not impose rate pressure on existing customers. The following tabulation shows the average number of water customers for the fiscal years ended September 30, 2013 through and including 2017.

	Fiscal Years ended September 30,				
	2013	2014	2015	2016	2017
Customers (Average)	69,847	70,300	70,903	71,546	72,136

Most of the System's individual water customers are residential. Commercial and industrial customers comprised approximately 8.7% of the 72,136 average customers in the fiscal year ended September 30, 2017, and 62% of all water sales revenues were from residential customers.

Water Treatment and Supply

The System's water supply is groundwater obtained from a well field tapping into a confined portion of the Floridan aquifer. Groundwater is treated at the Murphree Plant prior to distribution and eventual use. Water treatment and supply facilities are planned based on the need to provide reserve capacity under extreme conditions of extended drought, with attendant maximum demands for water and lowered aquifer water levels. Under these design conditions, current water treatment and supply facilities are adequate through at least 2034. No limitation of supply imposed by the aquifer's sustained yield has been identified by groundwater studies to date.

Water treatment at the Murphree Plant consists of softening to protect the distribution system and improve customer satisfaction, fluoridation for improved cavity protection in young children, filtration, and chlorination for protection from microbial contamination. Specific treatment processes include sulfide oxidation, lime softening, pH stabilization, filtration, fluoridation, and chlorination. Treated water is collected in a clearwell for transfer to ground storage reservoirs prior to distribution. The filter system has been upgraded with two additional filter cells to provide additional treatment capacity. The System has been upgrading plant components that are outdated or at or near the end of the operating lives in order to ensure the reliability and longevity of the plant. One such upgrade is replacing the electrical system at the water plant. This project will replace the original large electrical equipment, generator, conductors, and construct a new electrical building at the plant. The original equipment which was installed in 1974 has reached the end of its serviceable life and requires replacement to ensure the continued reliable operation of the Murphree Plant. The cost of the project is approximately $11 million and is included in the System's 6 year capital budget.

Raw water requirements for the water system are supplied by sixteen deep wells drilled into the Floridan aquifer. Vertical turbine pumps raise the water and deliver it to the Murphree Plant for treatment. In 2000, the System, along with the local water management districts, purchased a conservation easement over 7,000 acres of silvicultural property immediately to the north and northwest of the Murphree Plant. The conservation easement provides protection to the System's sixteen existing wells and will accommodate the construction of additional wells. Existing and future wells within the conservation easement are anticipated to yield a minimum of 60 Mgd of water supply to match the long-term future treatment capacity of the Murphree Plant site.

The System's groundwater withdrawals are permitted through the St. Johns River Water Management District ("SJRWMD") and Suwannee River Water Management District ("SRWMD"). The SJRWMD and the SRWMD have adopted a 20-year water supply plan through 2035. The intent of the water supply planning process is to ensure adequate water supply on a long-term basis while protecting natural resources. Computer groundwater modeling performed to date by the water management districts indicates that there may be future constraints on groundwater supplies. One of the regulatory constraints used by the water management districts and the Florida Department of Environmental Protection ("FDEP") to protect water bodies is the "minimum flows and levels" ("MFL") program. The water management districts and the FDEP have developed and are continuing to develop MFL for individual springs, lakes and rivers to ensure that they are not adversely impacted by groundwater withdrawals. The water management districts are developing refined groundwater models to better define and evaluate potential constraints for both water supply planning and the MFL program. The System is participating in both the model development and MFL development efforts. The System is required to comply with existing and future MFLs and with water supply plans which may result in increased costs to the System. The System will comply with its consumptive use permit and meet the System's future water supply needs primarily through a combination of increased water conservation efforts and an increased use of reclaimed water.

The Cabot/Koppers Superfund site is located approximately 2 miles to the southwest of the Murphree Plant. The site includes two properties: The Cabot Carbon area, covering 50 acres on the eastern side of the site and The Koppers area, covering 90 acres on the western side of the site. The Cabot property was used primarily for producing charcoal and pine products. The Koppers property was used for wood treating. Both production facilities are owned by corporations unrelated to the System.

The EPA placed the site on the National Priorities List under the Superfund program in 1984 because of contaminated soil and groundwater resulting from facility operations. The EPA then issued a Record of Decision ("ROD") for the site in 1990 which described the plan for cleaning up the site. Actions were taken in the 1990's to contain and partially remove contamination at the site. The presence of protective geologic confining layers over the aquifer has greatly impeded the migration of contamination. However, additional investigations of the site since 2001, conducted at the urging of the System, the County and members of the community, have indicated that additional measures are needed to contain the contamination and clean up the site to ensure that the water supply is protected. Although the System is not a potentially responsible party ("PRP") for this site, it has been and intends to continue being highly proactive in protecting the City's water supply. The System has actively participated as a stakeholder working with the EPA and the PRPs for the site (Beazer East, Inc. and Cabot Corporation) to develop remediation plans. The System has assembled a team of experts in the groundwater contamination field to assist and advise the System, and to assist the System in interacting with the EPA and the PRPs to ensure that the appropriate steps are taken. The System regularly tests both the raw and finished water at the well field and there has been no trace of contamination. Based on the System's request, an extensive Floridan aquifer groundwater monitoring network has been constructed at the Koppers portion of the site and is routinely monitored.

In February 2011, the EPA issued a second ROD which described additional cleanup actions needed at the site. The ROD includes a multiple barrier approach for containing contamination at the Koppers portion of the site: (1) areas containing creosote will be treated with two different in situ treatment technologies to immobilize the creosote; (2) a slurry wall will be constructed around the most contaminated areas; and (3) contaminated groundwater from the Floridan aquifer below the site is being pumped and treated. The EPA and Beazer East, Inc., the PRP for the Koppers portion of the site, have entered into a consent decree which requires the PRP to implement the remediation described in the ROD. The consent decree has been approved by the federal district court. The consent decree has not had a material adverse effect on the System or its financial condition. Beazer is currently implementing the cleanup plan per the ROD and it is anticipated that the cleanup of the Koppers portion of the site will be completed by 2021. The System and its expert consultants are continuing to be highly engaged in the design and implementation of the cleanup site.

Additional cleanup measures will also be implemented for the Cabot portion of the site. These measures will include construction of subsurface slurry walls around contaminated areas and may include additional soil removal. It is anticipated that remediation of this site will also be completed by 2021.

The System performs routine monitoring of drinking water quality at the Murphree Plant and in the water distribution system in accordance with the EPA and state regulations including EPA Lead and Copper Rule. The System has been in compliance with the Lead and Copper Rule since its inception 26 years ago. The drinking water supply does not contain lead. Also, since the drinking water supply comes from a limestone aquifer, the water is naturally non-corrosive which protects against lead leaching into the water from plumbing fixtures.

Transmission and Distribution

The water transmission system consists primarily of cast and ductile iron water mains from 10 to 36 inches in diameter providing a hydraulically looped system. The Murphree Plant high service pumps and the Santa Fe Repump station and two elevated storage tanks provide water flow and pressure stabilization throughout the service area. The water distribution system consists primarily of cast iron, ductile iron, and polyvinyl chloride ("PVC") water mains from 2 to 8 inches in diameter and covers a service area of approximately 118 square miles. The System not only installs new water distribution system additions, but also approves plans for and inspects private developers' water distribution systems which ultimately are deeded over to the System to become an integral part of the System's overall distribution system. The System monitors pressure in several locations throughout the distribution system to ensure that adequate pressures are maintained. In addition, the System utilizes a computer model to assess future conditions and to ensure that system improvements are constructed to ensure adequate pressures in the future.

Capital Improvement Program

The System's current five-year water capital improvement program requires approximately $63.3 million in capital expenditures for the fiscal years of September 30, 2018 through and including 2023. A breakdown of the categories included in the six-year capital improvement program is outlined below and reflects the approved program from the fiscal year 2018 budget process. See "--Funding the Capital Improvement Program - Additional Financing Requirements" below for more information regarding funding.

Water Capital Improvement Program

	Fiscal Years ended September 30,					
	2018	2019	2020	2021	2022	Total
Plant Improvements	$9,256,879	$5,820,698	$2,051,367	$3,206,379	$2,689,503	$23,024,826
Transmission and Distribution	3,500,838	4,113,215	3,092,360	7,056,662	6,924,218	24,687,293
Miscellaneous and Contingency	4,445,110	4,252,865	2,170,775	2,855,517	3,708,507	17,432,774
Total	$17,202,827	$14,186,778	$7,314,502	$13,118,558	$13,322,228	$65,144,893

The Wastewater System

The wastewater system serves most of the Gainesville urban area and consists of 660 miles of gravity sewer collection system, 170 pump stations with 153 miles of associated force main, and two major wastewater treatment plants with a combined treatment capacity of 22.4 Mgd AADF.

All of the effluent from the plants is beneficially reused either for aquifer recharge through recharge wells or groundwater recharge systems, environmental restoration, irrigation, or industrial cooling. The System is continuing to expand its reuse systems at both of its treatment plants in order to conserve groundwater resources and provide additional effluent disposal capacity expansion.

Service Area

The wastewater system service area is essentially the same as the water system service area. Similar to the water system, extension policies and connection fees for providing wastewater facilities and service to new customers are appropriately designed to protect existing customers from rate pressure that would result from adding new customers to the wastewater system. Comprehensive land use plans for the Gainesville urban area mandate connection of new construction to the wastewater system for all but very low density residential developments. Much of the wastewater system's growth is in areas served by Clay for electricity or redevelopment of areas with higher density development. The System also provides wholesale wastewater service to the City of Waldo. The wastewater system does not serve the majority of the University of Florida campus. The wastewater system hauls and treats all the biosolids generated at the University of Florida.

Customers

The System has experienced average customer growth of 0.96% per year over the last five years. The following tabulation shows the average number of wastewater customers, including reclaimed water customers, for the fiscal years ended September 30, 2013 through and including 2017.

	Fiscal Years ended September 30,				
	2013	2014	2015	2016	2017
Customers (Average)	63,001	63,501	64,121	64,781	65,591

The composition of the System's wastewater customers is predominantly residential. Commercial and industrial customers comprised approximately 6.7% of the 65,591 average customers in the fiscal year ended September 30, 2017, and residential customers were the source of 68% of all the wastewater system's revenues in the fiscal year ended September 30, 2017.

In 2011, the System executed an agreement with the City of Waldo, Florida ("Waldo") to provide Waldo with wastewater service on a wholesale basis. Waldo currently provides wastewater service to approximately 850 of its residents. Waldo constructed a lift station and force main which collects Waldo's raw wastewater and discharges it to one of the System's existing lift stations. The facilities provide adequate capacity for Waldo to more than double its service population with future growth, which will in turn result in more revenue opportunities for the System.

Treatment

The wastewater system currently includes two major wastewater treatment facilities, the Main Street Water Reclamation Facility (the "MSWRF") and the Kanapaha Water Reclamation Facility (the "KWRF"). Currently, these facilities have a combined capacity of 22.4 Mgd AADF, which is sufficient capacity to meet projected demands through at least 2034. Although these facilities receive flow from adjacent but distinct collection areas, a pump station that allows wastewater to be routed to either the MSWRF or KWRF allows treatment capacity at both facilities to be fully utilized.

The MSWRF has a treatment capacity of 7.5 Mgd AADF and was upgraded in 1992 to include advanced tertiary activated sludge treatment process units. The new facilities include effluent filtration, gravity belt sludge thickeners, and major improvements to plant headworks to control odors and improve plant reliability. Existing sludge treatment facilities are adequate to meet current federal sludge regulations. Effluent from the MSWRF is discharged to the Sweetwater Branch and must meet requirements of the FDEP for discharge to Class III surface waters. The MSWRF is in compliance with its National Pollutant Discharge Elimination System ("NPDES") permit. The MSWRF NPDES permit is a 5-year permit that expires March 18, 2020.

In addition, the MSWRF includes a reclaimed water pumping station and distribution system. The reclaimed water distribution system currently includes a pipeline, which provides reclaimed water to the South Energy Center where it is then used for process cooling and irrigation. See "- The Electric System – Energy Supply System – *Generating Facilities – South Energy Center*" above. This pipeline also provides reclaimed water for pond augmentation and irrigation at the Depot Park Project (MGP remediation site) (see "- The Natural Gas System – Manufactured Gas Plant" below) and at the System's Innovation Energy Center chilled water facility (see " - Management's Discussion of System Operations – Competition" herein). The pipeline will also provide reclaimed water for other irrigation and cooling uses that develop near the pipeline corridor.

The MSWRF East Train rehabilitation and headworks projects are scheduled to be completed in or before fiscal year 2022 at an estimated cost of $13 million, and is part of the six-year capital improvements program. The east train is the oldest treatment train at the MSWRF, originally installed in the 1960's. The mechanical components in the east train have signs of deterioration and the aerators are nearly 40 years old. This rehabilitation project will replace the clarifier mechanism, electrical gears, control panels, PLC, aerators and rehabilitate the concrete basin structure. The existing headworks will remain operational until construction is completed and prepared for cutover. In addition, a transfer pump station will be constructed to assist in transferring wastewater flow between the two water reclamation facilities.

Under the FDEP Total Maximum Daily Load ("TMDL") regulations, FDEP assesses the water quality in water bodies and sets requirements for reduction in pollutant sources. FDEP adopted a TMDL in January 2006 which requires reductions in total nitrogen discharges from the MSWRF and other nitrogen sources. Florida's TMDL regulations allow the FDEP to negotiate basin management plans involving all of the parties affecting the water bodies. Subsequent to the adoption of this TMDL, the FDEP promulgated its Numeric Nutrient Criteria ("NNC") Rule effective September 17, 2014. The System will achieve its TMDL limits and comply with the NNC Rule by implementing a cooperative environmental restoration project known as the Paynes Prairie Sheetflow Restoration project. The combination of the project and the reclaimed water distribution (described above) will allow the System to beneficially reuse 100% of the MSWRF effluent.

The MSWRF NPDES permit requires the Paynes Prairie Sheetflow Restoration project be fully operational and comply with TMDL requirements by April 2019. Construction of the project was completed in 2016 and is in the start-up phase of operation, which is anticipated to last for five years. It is expected to be fully compliant with all criteria, as required, by April 2019. In conjunction with the project, the System is currently working with the FDEP to establish site specific criteria for the Sweetwater Branch Creek in accordance with the NNC Rule. The System is following established procedures for developing site specific criteria. However, the System also has a backup plan in the unlikely event that it was not able to obtain site specific criteria. The backup plan would consist of the construction of an $8 million pipeline which would meet numeric nutrient criteria.

Another regulatory change that the System has responded to is the reuse of biosolids generated from the wastewater treatment process. Prior to 2016, the System beneficially reused its biosolids through Class B land application in accordance with FDEP and EPA requirements. However, changes in local land use ordinances made it necessary to transition to a new program that includes biosolids dewatering and use of a contractor that will process the biosolids to produce a fertilizer product. The System has completed construction on the dewatering facilities and other plant improvements to facilitate dewatering at a cost of $17 million and is currently in full operation. In addition, enhanced screening facilities at the KWRF were replaced to reduce solids entering the plant and thereby reducing wear and tear on the new dewatering equipment.

The KWRF is permitted to discharge into a potable zone of the Floridan aquifer. Construction was completed in June 2004 to provide a capacity of 14.9 Mgd AADF. The KWRF has two distinct treatment processes incorporated into its design: a modified Ludzack-Ettinger Treatment process and a carrousel advanced wastewater treatment activated sludge system. The treatment processes conclude with filtration and disinfection prior to discharge into aquifer recharge wells and a reclaimed water distribution system. The disinfection system was recently modified to meet more stringent regulatory limits. The System consistently meets the required primary and secondary drinking water standards for discharge to recharge wells as set forth in its NPDES permit.

The Southwest Reuse Project distributes reclaimed water from the KWRF to commercial and residential customers for landscape irrigation and golf course irrigation. The System also has numerous "aesthetic water features," which provide a public amenity and wildlife habitat in addition to recharging the aquifer. All reclaimed water not reused directly recharges the Floridan aquifer through deep recharge wells that discharge to a depth of 1,000 feet.

In the fiscal years ended September 30, 2017 and 2016, the System delivered approximately 2.9 Mgd AADF and 2.8 Mgd AADF, respectively, of reclaimed water. The regional water management districts encourage the use of reclaimed water to reduce demands on groundwater. The FDEP encourages reuse as an environmentally appropriate means of effluent disposal.

Wastewater Collection

The wastewater gravity collection system consists of 15447 manholes with 660 miles of gravity sewer, 50% of which consists of vitrified clay pipe. New facilities are primarily constructed of PVC high density polyethylene ("HDPE") pipe. The System maintains three television sealing and inspection units which are routinely employed in inspecting new additions to the System to ensure they meet specifications of the System and in inspecting older lines. The television inspections allow the System to identify segments of piping which have high infiltration and inflow or structural concerns. These pipes are restored through a process known as slip-lining, in which a cured in place fiberglass sleeve is installed in the pipe. The System performs slip-lining using its own crews. In addition, the System routinely utilizes contractors to perform slip-lining of longer segments of piping. As a result of the use of slip-lining, infiltration and inflow to the System are not excessive.

The force main system which routes flow to the treatment plant consists of 170 pump stations and over 153 miles of pipe. Existing lines less than 12 inches in diameter are generally constructed of PVC pipe and existing lines 12 inches in diameter and over are generally constructed of ductile iron pipe. For new construction, force mains 16 inches and smaller are generally constructed of PVC or HDPE. The System has instituted a preventative maintenance program to assure long life and efficiency at all pumping stations.

Capital Improvement Program

The System's current five-year wastewater capital improvement program requires approximately $101.7 million in capital expenditures for the fiscal years ending September 30, 2018 through and including 2023. A breakdown of the categories included in the six-year capital improvement program is outlined below and reflects the approved program from the fiscal year 2018 budget process. See "--Funding the Capital Improvement Program - Additional Financing Requirements" below for more information regarding funding.

Wastewater Capital Improvement Program

	Fiscal Years ended September 30,					
	2018	2019	2020	2021	2022	Total
Plant Improvements	$7,032,487	$9,609,452	$6,602,751	$6,713,100	$5,894,425	$35,852,215
Reclaimed Water	1,166,552	860,065	726,134	260,703	331,561	3,345,015
Collection System	9,164,348	9,737,492	10,192,890	10,868,415	14,467,130	54,430,274
Miscellaneous and Contingency	5,366,142	5,315,593	2,699,641	3,551,353	4,621,598	21,554,328
Total	$22,729,529	$25,522,602	$20,221,416	$21,393,571	$25,314,714	$115,181,832

The Natural Gas System

The natural gas system was acquired in January 1990 and since then has met the System's customers' preferences for natural gas as a cooking and heating fuel as well as provided a cost-effective DSM program alternative. The natural gas system consists primarily of underground gas distribution and service lines, six points of delivery or interconnections with FGT, and metering and measuring equipment. Liquid propane ("LP") systems are utilized for new developments that are beyond the existing natural gas distribution network. As the natural gas system is expanded, the LP systems and customer appliances are converted from LP to natural gas.

Service Area

The natural gas system services customers within the City limits and in the surrounding unincorporated area. The natural gas system covers approximately 115 square miles and provides service to 30% of the County's population. In addition, the natural gas system serves customers within the city limits of Alachua and High Springs. The franchise agreement with Alachua expired on November 10, 2007. The terms and conditions of the expired franchise remain in effect and negotiations for an extended franchise are in process. Service has continued uninterrupted and the customer base continues to expand in that community. Service provided to Alachua represents approximately 6% of total retail gas sales of the System. The System has also entered into franchise agreements to provide natural gas to the City of Archer ("Archer") and Hawthorne and has ongoing negotiations to receive a franchise agreement in Newberry. To date, there are no budgeted funds or anticipated timelines for capital infrastructure developments into Archer or Hawthorne.

Customers

The following tabulation shows the average number of natural gas customers for the fiscal years ended September 30, 2013 through and including 2017. The majority of new single family developments in the Gainesville urban area have been connected to the System over this period.

	Fiscal Years ended September 30,				
	2013	2014	2015	2016	2017
Customers (Average)	33,465	33,780	34,152	34,496	34,942

The composition of the System's natural gas customers is predominantly residential. Commercial and industrial customers comprised approximately **[4.7%]** of the 34,942 average customers served in the fiscal year ended September 30, 2017, while approximately **[95.3%]** were residential customers.

Natural Gas Supply

Natural gas is procured and delivered in much the same manner as the System's electric generation operations. TEA purchases the commodity, optimizes pipeline capacity entitlements, and executes physical and financial hedging strategies on behalf of the System as it does for electric operations. The non-coincident occurrences of electric system and gas retail distribution ("LDC") system peak demands provide opportunities to switch electric fuels to free up pipeline capacity for the LDC and/or manage pipeline entitlements to enhance the reliability and cost performance of the gas system. The average cost of gas delivered to the System for the natural gas distribution system in the fiscal year ended September 30, 2017 was $3.70/MMBtu. Fuel costs for the natural gas system differ from those of the electric system only in that the gas system has no fuel switching capability and must carry sufficient pipeline reserve capacity to meet peak demands, resulting in higher delivered fuel costs.

Natural Gas Distribution

The natural gas system consists of 783 miles of gas distribution mains. The predominant and standard pipe materials in service are polyethylene (591 miles) and coated steel (186 miles). All coated steel pipelines are cathodically protected using magnesium anodes. The balance of the distribution system is comprised of uncoated steel and black plastic. The replacement of these two pipeline materials has been programmed within the immediate planning/construction horizon and will be completed by the end of fiscal year 2019.

Manufactured Gas Plant

The City's natural gas system originally distributed blue water gas, which was produced in town by gasification of coal using distillate oil. Although manufactured gas was replaced by pipeline gas around 1960, coal residuals and spilt fuel contaminated soils at and adjacent to the manufactured gas plant ("MGP") site. When the natural gas system was purchased, the System assumed responsibility for the investigation and remediation of environmental impacts related to the operation of the former MGP. The System has pursued recovery for the MGP from past insurance policies and, **[to date, has recovered $2.2 million from such policies]**. Site investigations on properties affected by MGP residuals have been completed and the System has completed limited removal actions. The System has received final approval of its proposed overall Remedial Action Plan which will entail the excavation and landfilling of impacted soils at a specially designed facility. This plan was implemented pursuant to a Brownfield Site Rehabilitation Agreement with the State. Following remediation, the property was redeveloped by the City as a park with stormwater ponds, nature trails, and recreational space, all of which were considered in the remediation plan's design. The duration of the groundwater monitoring program and that timeframe is open to the results of what the sampling data shows.

Based upon GRU's analysis of the cost to clean up this site, GRU has accrued a liability to reflect the costs associated with the cleanup effort. During fiscal years ended September 30, 2017 and 2016, expenditures which reduced the liability balance were approximately $1.1 million and $1.0 million, respectively. The reserve balance at September 30, 2017 and 2016 was approximately $814,000 and $629,000, respectively.

GRU is recovering the costs of this cleanup through customer charges. A regulatory asset was established for the recovery of remediation costs from customers. Through fiscal years ended

September 30, 2017 and 2016, customer billings were $1.1 million, consecutively and the regulatory asset balance was $12 million and $13 million, respectively.

Although some uncertainties associated with environmental assessment and remediation activities remain, GRU believes that the current provision for such costs is adequate and additional costs, if any, will not have an adverse material effect on GRU's financial position, results of operations, or liquidity.

Capital Improvement Program

The System's current five-year natural gas capital improvement program requires approximately $26.2 million in capital expenditures during the fiscal years ended September 30, 2018 through and including 2023. A breakdown of the categories included in the six-year capital improvement program is outlined below and reflects the approved program from the fiscal year 2018 budget process. See "--Funding the Capital Improvement Program - Additional Financing Requirements" below for more information regarding funding.

Gas Capital Improvement Program

	Fiscal Years ended September 30,					
	2018	2019	2020	2021	2022	Total
Distribution Mains	$920,537	$1,053,458	$1,050,368	$1,235,537	$1,844,857	$6,104,757
Meters, Services and Regulators	580,933	615,079	493,497	907,772	1,172,253	3,769,534
Miscellaneous and Contingency	1,392,727	1,379,207	847,336	1,122,255	1,470,120	6,211,645
Total	$2,894,197	$3,047,744	$2,391,201	$3,265,564	$4,487,230	$16,085,936

GRUCom

The System has been providing retail telecommunications services since 1995 under the brand "GRUCom." Services provided by GRUCom include Internet and data transport services to local businesses, government agencies, multiple dwelling units (MDU) housing communities, other Internet service providers, and other telecommunications carriers. Additional services provided by GRUCom include tower space leases for wireless personal communications (cellular telephone) providers, public safety radio services for all the major public safety agencies operating in the County and collocation services in the System's central office. GRUCom is licensed by the FPSC as an Alternative Access Vendor and as an Alternative Local Exchange Carrier.

Service Area

GRUCom provides telecommunications and related services to customers located primarily in the Gainesville urban area and holds telecommunications licenses that allow it to provide telecommunication services throughout the state. GRUCom operates network connections to interface with all major Interexchange Carriers ("IXC") who maintain facilities in the County, as well as interconnections with both of the County's two incumbent local exchange carriers. The System, through interlocal agreements, also provides public safety radio services across the entire County.

Services Provided

The services provided by GRUCom fall primarily into the following five major product lines: telecommunications services; Internet access services; communication tower antenna space leasing; public safety radio services; and collocation services.

The telecommunications services provided by GRUCom are primarily Private Line and Special Access transport circuits (both described below) delivered in whole, or in part, on the GRUCom fiber optic network. These high bandwidth circuits are capable of carrying voice, data or video communications. Private Line circuits are point-to-point, unswitched channels connecting two or more customer locations with a dedicated communication path. Special Access circuits are also unswitched and provide a dedicated communication path, but these circuits connect a customer location to the Point of Presence of another telecommunications company. GRUCom transport services are provided at various levels ranging from 1.5 megabits per second ("Mbps") to 10 gigabit per second ("Gbps"). Part of GRUCom's business strategy is to use unbundled network elements from the incumbent local exchange carrier, AT&T, in anticipation of fiber extensions to specific service locations.. GRUCom also uses the fiber optic network to provide high speed Internet access services. Business Internet and Dedicated Internet Access ("DIA") class service connections are offered at access speeds ranging from 10 Mbps up to 10 Gbps and bulk residential Internet access service is provided to participating MDU communities at speeds up to 1 Gbps under the brand name GATOR NET. In 2017, GRUCom upgraded its bulk GATORNET services to deliver Symmetrical bandwidth, a first in the Gainesville area. GRUCom operates eleven communications towers in the Gainesville area and leases antenna space on these towers as well as on two of the System's water towers, for a total of thirteen antenna attachment sites. Two of the five transmitter sites for the countywide public safety radio system are also located on these communications towers. Wireless communications service providers lease space on the towers and, in most cases, also purchase fiber transport services from GRUCom to receive and deliver traffic at the towers. GRUCom provides transport services that carry a substantial portion of cell phone traffic in the Gainesville urban area. The GRUCom public safety radio system began operation in 2000. These services are provided over Federal Communications Commission ("FCC")-licensed 800 MHz frequencies, utilizing a trunked radio system that is compliant with the current frequency allocations enacted by the FCC in 2010 to accommodate personal communication services ("PCS") providers. The trunked radio system meets current industry standards for interagency operability. The trunked radio system consists of 22 trunked voice frequencies. Antenna sites are linked to the network controller and various dispatch centers utilizing GRUCom's transport services.

Customers

GRUCom's customer base is growing as the fiber optic network is expanded and new product offerings are introduced. Customer types vary for each GRUCom business activity.

GRUCom's fiber transport customers include other land-line telecommunications companies, cellular telecommunications companies, private commercial and industrial businesses, federal, state and local governmental agencies, public and private schools, public libraries, Santa Fe College, the University of Florida, UF Health and the University of Florida Health Science Center. As of September 30, 2017, GRUCom had a total of 547 transport circuits in service.

Internet access services are provided to other Internet service providers, local businesses, government agencies, and participating MDU housing communities. As of September 30, 2017, GRUCom had 6,287 Business Internet access customer connections and bulk residential Internet agreements with 31 MDU communities. GRUCom tower space leasing services are used primarily by wireless providers, which include cellular telephone and PCS companies. As of September 30, 2017, GRUCom executed 32 tower leases, for space on eleven of its thirteen antenna attachment sites with eight different lessees, including national and regional cellular service providers.

Public safety radio system customers consist solely of government entities due to restrictions on the use of the frequencies allocated to the System under licenses issued by the FCC. The primary radio system users include: the System, the Gainesville Police Department, the Gainesville Fire Rescue Department, the Gainesville Regional Transit System, the City's Public Works Department, the University of Florida Police Department, the Santa Fe College Police Department, the City of Alachua Police Department, the City of High Springs Police Department, the County's Sheriff's Office, the County's Fire Rescue Operations and the County's Public Works Departments. These users have entered into service agreements which are valid through 2020, with minimum commitments for the number of users and monthly fees per user established for voice and dispatch subscriber units. The public safety radio system is operated by GRUCom on an enterprise basis, but an interagency Radio Management Board has been established to govern user protocols, monitor system service levels, and review system changes that could increase rates. As of September 30, 2017, the public safety radio system had 2,683 subscriber units in service.

GRUCom Projected Revenue and Customer Count

	2019	2020	2021	2022	2023	2024
Telecom and Data Service Sales	$8,678,576	$9,236,042	$9,910,564	$10,590,704	$11,271,774	$11,971,075
TRS Sales	1,736,814	1,718,776	1,700,924	1,683,258	1,665,776	1,648,475
Tower Leasing Sales	1,783,253	1,826,788	1,871,480	1,917,360	1,964,464	2,012,823
Non-Standard Sales (Non-Recurring)	35,000	35,000	35,000	35,000	35,000	35,000
Total Revenue	$12,233,643	$12,816,606	$13,517,968	$14,226,322	$14,937,014	$15,667,373
Projected Business Customer Count	277	328	429	528	627	726

<u>Description of Facilities</u>

As of September 30, 2017, GRUCom had 527 miles of fiber optic cable installed throughout Gainesville and the County. The fiber strand count included in the cable depends on service requirements for the particular area and ranges from 12 to 144 strands. The fiber is installed in a ringed topology consisting of a backbone loop and several subtending rings. Service is provisioned on the network in two ways: for services requiring transmission through Synchronous Optical Network standard protocol, GRUCom has deployed equipment manufactured by Ciena (primarily); and for services requiring transmission through Ethernet standard protocol, GRUCom uses equipment manufactured by Cisco and Telco System. GRUCom is in the process of retiring the Cisco Systems equipment and migrating all Ethernet to the Telco System's transmission platform. The Telco Systems equipment will enable GRUCom to provide multi-protocol line switching functionality and reduce network infrastructure equipment complexity. The Ethernet protocol provides GRUCom with increased flexibility for managing bandwidth delivered to the customer. The maximum transport speed currently utilized in the fiber optic network is 10 Gbps, which is enough bandwidth to deliver more than 125,000 simultaneous phone calls (as an illustration). Bandwidth on this network is a function of the electronic equipment utilized and, with technologies such as dense wave division multiplexing, expansion of the transport capability of the network is virtually unlimited. To exchange network traffic, GRUCom also is interconnected with other major telecommunications companies serving the Gainesville area.

The public radio system employs a Motorola 800 MHz simulcast system configured with six transmit and receive tower sites including 22 simulcast voice and two additional mutual aid channels. GRUCom has begun the process of migrating to the P25 protocol.

GRUCom maintains a point-of-presence at the Digital Realty Trust, Inc. collocation and interconnection facility located in Atlanta, Georgia (the "ATL1 data center"). The ATL1 data center provides access to hundreds of leading domestic and international carriers as well as physical connection points to the world's telecommunications networks and internet backbones. Atlanta, Georgia is a major fiber interconnection point from Florida to New York and the ATL1 data center sits on top of most of the fiber. GRUCom maintains an ultra-high bandwidth backbone transmission interconnection on diverse routes between Gainesville and the ATL1 data center to provide highly reliable Internet access to customers in Gainesville. GRUCom is also a member of the Digital Realty Internet Exchange (the "Internet Exchange"), a separate peering point in the ATL1 data center. The Internet Exchange allows GRUCom to quickly and easily exchange Internet protocol ("IP") traffic directly with over 60 of the world's largest Internet Service Providers ("ISPs"), Content Providers, Gaming Providers and Enterprises, including companies such as Google, Netflix, Apple, McAfee Akami, Hurricane Electric (a major Internet service), Sprint, Level 3 and several other Internet service providers. The Internet Exchange participants can route IP traffic efficiently, providing faster, more reliable and lower-latency internet or voice over Internet protocol ("VoIP") access to their customers, by bypassing intermediate router points so that Internet traffic may have direct access to destination networks.

GRUCom maintains a second point-of-presence at the Equinix, Inc. Network Access Point of the Americas ("NOTA") collocation and interconnection facility which is located in Miami, Florida. NOTA is one of the most significant telecommunications projects in the world. The Tier-IV facility was the first purpose-built, carrier-neutral Network Access Point and is the only facility of its kind specifically designed to link Latin America with the rest of the world. NOTA is located in downtown Miami in close proximity to numerous other telecommunications carrier facilities, fiber loops, international cable landings and multiple power grids. More than 160 global carriers exchange data at NOTA including seven Tier-1 world-wide Internet service providers. GRUCom maintains an ultra-high bandwidth backbone transmission interconnection between Gainesville and NOTA, separate from the ATL1 data center interconnection circuits, which allows GRUCom to maintain a second, fully diverse data gateway and exchange to further enhance the reliability of the Internet services provided to customers in Gainesville. In Miami, GRUCom is also connected to the FL-IX Peering facility to provide additional and duplicate peering points with various ISPs including Content Providers, Gaming Providers and enterprises similar to the Internet Exchange connection in Atlanta.

Capital Improvement Program

The System's current five-year GRUCom capital improvement program requires approximately \$19.5 million in capital expenditures for years ended September 30, 2018 through and including 2023. A breakdown of the categories included in the six-year capital improvement program is outlined below and reflects the approved program from the fiscal year 2018 budget process. See "--Funding the Capital Improvement Program - Additional Financing Requirements" below for more information regarding funding.

GRUCom Capital Improvement Program

	Fiscal Years ended September 30,					
	2018	2019	2020	2021	2022	Total
GRUCom Systems	$3,279,419	$797,585	$714,590	$947,019	$1,240,168	$6,978,781
Special Project	429,294	362,140	-	-	-	791,434
General Plant	80,156	41,978	37,610	49,806	65,131	274,681
Miscellaneous and Contingency	253,919	303,872	271,991	359,868	471,085	1,660,735
Total GRUCom	$4,042,788	$1,505,575	$1,024,191	$1,356,693	$1,776,384	$9,705,631

Rates

General

In general, the rates of municipal electric utilities in Florida are established by the governing bodies of such utilities. The governing bodies of municipal water, wastewater and natural gas utilities in Florida have exclusive jurisdiction over the setting of rates for said systems, subject only to certain statutory restrictions upon water and wastewater rates outside the municipal corporate limits. The City Commission's sole authority to set the level of the rates and charges of the System is constrained by the Resolution to set rates that comply with the rate covenant in the Resolution and takes into account recommendations of the Utilities Advisory Board regarding proposed changes in fees, rates, or charges for utility services. See "—Utilities Advisory Board" above and "SECURITY FOR THE BONDS – Rate Covenant" herein. Future projected revenue requirement changes provided in this Official Statement have been developed by the System's staff based on the most recent forecasts and operation projections available. Under Chapter 366, Florida Statutes, the FPSC has jurisdiction over municipal electric utilities only to prescribe uniform systems and classifications of accounts, to require electric power conservation and reliability, to regulate electric impact fees, to establish rules and regulations regarding cogeneration, to approve territorial agreements, to resolve territorial disputes, to prescribe rate structures, to prescribe and enforce safety standards for transmission and distribution facilities and to prescribe and require the periodic filing of reports and other data. Pursuant to the rules of the FPSC, rate structure is defined as ". . . the classification system used in justifying different rates and, more specifically the rate relationship between various customer classes, as well as the rate relationship between members of a customer class." However, the FPSC and the Florida Supreme Court have determined that, except as to rate structure, the FPSC does not have jurisdiction over municipal electric utility rates. The FPSC also has the authority to determine the need for certain new transmission and generation facilities.

Although the rates of the System are not subject to federal regulation, the National Energy Act of 1978 contains provisions which require the City to hold public proceedings to consider and determine the appropriateness of adopting certain enumerated federal standards in connection with the establishment of its retail electric rates. Such proceedings have been completed and the results currently are reflected in the System's policies and electric rate structure.

Electric System

Each of the System's various rates for electric service consists of a "base rate" component and a "fuel and purchased power adjustment" component. The base rates are evaluated annually and adjusted as required to fund projected revenue requirements for each fiscal year. The fuel and purchased power adjustment clause provides for increases or decreases in the charge for electric energy to cover increases or decreases in the cost of fuel and purchased power to the extent such cost varies from a predetermined base of 6.5 mills per kWh. The current fuel and purchased power adjustment formula is a one-month forward-looking projected formula which is based on a true-up calculation, from the second month preceding the billing month, based on actual fuel costs valued on a weighted average accounting basis, including purchased power, and the upcoming month's estimates of fuel and purchased power costs.

The table below presents electric system base rate revenue requirements, fuel and purchased power adjustment and total residential bill changes since 2013 and Management's most recent projections of future base rate revenue requirements, fuel and purchased power adjustment and total residential bill changes.

Electric System
Base Rate Revenue Requirements, Fuel and Purchased Power Adjustment and Total Bill Changes[4]

	Percentage Base Rate Revenue Requirements Increase/(Decrease)[1]	Percentage Fuel and Purchased Power Adjustment Increase/(Decrease)[2]	Total Residential Bill Percentage Increase/(Decrease)[3]
Historical (Fiscal Year Beginning):			
October 1, 2013	(5.60)%	37.20%	9.20%
October 1, 2014	(8.50)	17.00	2.70
October 1, 2015	0.00	(6.70)	(5.20)[3]
October 1, 2016	0.00	(3.70)	(2.00)
October 1, 2017	2.00	0.00	1.15
February 1, 2018[4]	31.40	(50.00)	(8.00)
Projected (Fiscal Year Beginning):[5]			
October 1, 2018	3.00%	2.00%	2.50%
October 1, 2019	4.00	2.00	2.90
October 1, 2020	2.00	2.00	2.00
October 1, 2021	1.00	2.00	1.50
October 1, 2022	1.00	2.00	1.50

(1) Change in overall system-wide non-fuel revenue requirement. Increases or decreases are applied to billing elements to reflect the most recent cost of service studies and to yield the overall revenue requirement.
(2) Historical change in weighted average retail fuel adjustment.
(3) Based on residential monthly bill at 1,000 kwh.
(4) Changes resulting from the acquisition of the DHR Biomass Plant.
(5) All changes in the System's revenue requirements are subject to approval by the City Commission, which usually occurs in conjunction with its approval of the System's annual budget.

The electric and natural gas systems use amounts on deposit in a reserve known as the "fuel adjustment levelization balance" that the System accumulates. The balance of the reserve as of

September 30, 2017, was negative $4,729,317 for both electric and natural gas combined. The balance of this fund is anticipated to carry a balance of approximately 5% of the annual fuel expense budget on an average year.

In 2014, the City Commission approved the addition of an Economic Development Rate for new and existing general service demand and large power commercial electric customers of the System in an effort to attract large, regionally competitive new commercial customers and incentivize local growth. Approval of the applicable changes to the City Code of Ordinances occurred in November 2014. The Economic Development rate allows for a 5-year, 20% discount to the base rate portion of the electric bill of a new customer who adds a load of at least 100,000 kWh per month or a 15% discount to the base rate portion of the electric bill of an existing customer who increases its baseline usage by a minimum of 20%. There is no discount on the fuel adjustment portion of the bill under this program, but the addition of load will distribute the fixed costs of the DHR Biomass Plant across a greater number of kWh, lowering the fuel adjustment for all customers. This program is base revenue neutral during the five year discount period, with additional base revenues after the discount ends. The System does not have any customers currently participating in this program.

Public roadways in Gainesville and in portions of the unincorporated areas of the County within the System's service territory are served by streetlights operated and maintained by the System, which bills the appropriate jurisdiction for payment. Currently, the City of Gainesville General Fund (the "General Fund") pays for streetlights in Gainesville. Pursuant to a 1990 agreement, the General Fund reimburses the Board of County Commissioners of the County to, in effect, pay for the streetlights in such portions of the unincorporated areas served by the System.

Rates and Charges for Electric Service

The electric rates, effective October 1, 2017, are provided below by class of service. Though the rates are functionally unbundled, they are commonly presented in a bundled format.

Residential Standard Rate

Customer charge, per month	$14.25
First 850 kWh, Total charge per kWh	$0.044
All kWh per month over 850, Total charge per kWh	$0.066

Non-Residential General Service Non-Demand Rates

Customers in this class have not established a demand of 50 kW. Charges for electric service are:

Customer charge, per month	$29.50
First 1,500 kWh per month, Total charge per kWh	$0.070
All kWh per month over 1,500, Total charge per kWh	$0.103

Non-Residential General Service Demand Rates

Customers in this class have established a demand of between 50 and 1,000 kW. Charges for electric service are:

Customer charge, per month	$100.00
Total Demand charge, per kW	$8.50

Total Energy charge, per kWh $0.0412

Non-Residential Large Power Rates

Customers in this class have established a demand of 1,000 kW or greater. Charges for electric service are:

Customer charge, per month $350.00
Total Demand charge, per kW $8.50
Total Energy charge, per kWh $0.037

Customers in all classes are charged a fuel and purchased power adjustment. Chapter 203, Florida Statutes, imposes a tax at the rate of 2.5% on the gross receipts received by a distribution company for utility services that it delivers to retail consumers in the state of Florida and requires that the distribution company report and remit its Florida Gross Receipts tax to the Florida Department of Revenue on a monthly basis. All non-exempt customers residing within the City's corporate limits pay a utility tax (public service tax) of 10% on portions of their bill. All non-exempt customers not residing within the City's corporate limits are assessed a surcharge of 10% and also pay a County utility tax of 10% on portions of their bill. All non-residential taxable customers pay a State sales tax of 6.95% on portions of their bill. The minimum bill is the customer charge plus any applicable demand charge. The billing demand is defined as the highest demand (integrated for 30 minutes) established during the billing month. The City's codified rate ordinances include clauses providing for primary service metering discounts and facilities leasing adjustment.

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Comparison with Other Utilities

The table below shows the average monthly bills for electric service for certain selected Florida electric utilities, including the System. Residential bills are commonly compared at 1,000 kWh in Florida, however GRU's customers typically average closer to 800 kWh per month.

Comparison of Monthly Electric Bills[1]

		General Service		
	Residential 1,000 kWh	Non-Demand 1,500 kWh	Demand 30,000 kWh 75 kW	Large Power 430,000 kWh 1,000 kW
Kissimmee Utility Authority	$96.51	$157.3	$2,662.99	$36,439.02
Lakeland Electric	$101.21	$148.11	$2,408.30	$33,765.56
Orlando Utilities Commission	$106.00	$165.22	$2,574.60	$35,172.40
Florida Power & Light Company	$106.16	$159.34	$2,549.28	$35,765.56
JEA	$108.50	$155.64	$2,715.10	$37,886.50
Tampa Electric Company	$109.55	$171.92	$2,650.15	$36,301.30
City of Tallahassee	$112.81	$146.16	$2,779.47	$37,827.16
Clay Electric Cooperative, Inc.	$112.90	$171.05	$2,728.25	$35,806.00
Ft. Pierce Utilities Authority	$116.84	$184.43	3,170.85	$47,367.20
Ocala Electric Authority	$117.64	$174.42	$3,011.51	$43,274.63
Gainesville Regional Utilities	**$121.00**	**$215.50**	**$3,665.50**	**$49,359.00**
City of Vero Beach	$122.95	$191.41	$3,428.15	$48,398.40
Duke (Energy Florida)	$128.03	$195.55	$3,004.91	$42,029.02
Gulf Power Company	$142.24	$204.55	$3,058.63	$43,000.38

(1) Rates in effect for February 2018 applied to noted billing units, ranked by residential bills. Includes 6% franchise fees for investor-owned utilities FPL, Gulf, Tampa Electric Company and Duke. Excludes utility taxes, sales taxes and surcharges. The System's bills in the table assume participation in the Business Partners Program.

Source: Prepared by the Finance Department of the System based upon published base rates and charges for the time period given with fuel costs provided by personal contact with utility representatives unless otherwise published.

Water and Wastewater System

The table below presents water system revenue requirements and total residential bill changes since 2013 and Management's most recent projections of future revenue requirements and total bill changes. The percentage increases shown represent the aggregate amount required to fund increases in projected revenue requirements for the water system.

Water System
Revenue Requirement and Total Bill Changes

	Percentage Revenue Requirement Increase[1]	Total Bill Increase[2]
Historical		
October 1, 2013	3.85	10.20
October 1, 2014	3.75	1.90
October 1, 2015	3.75	10.40
October 1, 2016	3.00	2.20
October 1, 2017	0.00%	0.00%
Projected[3]		
October 1, 2018	0.00	0.00
October 1, 2019	0.00	0.00
October 1, 2020	0.00	0.00
October 1, 2021	0.00	0.00
October 1, 2022	0.00	0.00

(1) Change in overall revenue requirements collected from all retail customer classes from billing elements, including monthly customer service charges and water usage charges. Increases are applied to billing elements to reflect the most recent cost of service study and to yield the overall revenue requirement.

(2) Based on monthly bill at 5 Kgal.

(3) All changes in the System's revenue requirements are subject to approval by the City Commission, which usually occurs in conjunction with its approval of the System's annual budget.

The table below presents wastewater system revenue requirements and total residential bill changes since fiscal year 2013 and Management's most recent projections of future revenue requirement and total bill changes. The percentage increases shown represent the aggregate amount required to fund increases in projected revenue requirements for the wastewater system.

Wastewater System
Revenue Requirement and Total Bill Changes

	Percentage Revenue Requirement Increase[1]	Total Bill Increase[2]
Historical		
October 1, 2013	2.40	1.70
October 1, 2014	4.85	4.00
October 1, 2015	4.85	3.30
October 1, 2016	3.00	1.50
October 1, 2017	0.00%	0.00%
Projected[3]		
October 1, 2018	0.00	0.00
October 1, 2019	0.00	0.00
October 1, 2020	4.00	4.00
October 1, 2021	4.00	4.00
October 1, 2022	4.00	4.00

(1) Change in overall revenue requirements collected from all retail customer classes from billing elements, including monthly customer service charges and wastewater usage charges (as a function of water usage). Increases are applied to billing elements to reflect the most recent cost of service study and to yield the overall revenue requirement.

(2) Based on monthly bill at 5 Kgal.

(3) All changes in the System's rates are subject to approval by the City Commission, which usually occurs in conjunction with its approval of the System's annual budget.

Rates and Charges for Water and Wastewater Services

Total water and wastewater system revenues are derived from two basic types of charges which reflect costs: (a) monthly service charges and (b) connection charges. The current schedule of fees, rates and charges, combined with other revenues for the water and wastewater systems, provides sufficient funds to meet all operation and maintenance expenses, prorated debt service, and internally generated capital expense. The connection charges are designed to provide for the capital costs associated with the water and wastewater system expansion. Growth in retail revenues due to projected customer growth provides for all other increased costs.

Residential customers are subject to inverted block rates. As of October 1, 2015, the first tier pricing is applied to the first 4,000 gallons used, the second tier pricing is applied to usage between 5,000 and 16,000 gallons, and the third tier pricing is applied to usage above 16,000 gallons. A three tier billing structure has been in place since 2001. Over time the thresholds for quantities of water billed in each block has been lowered to current break points.

The City Commission also adopted a new Multi-Family water rate as part of the fiscal year 2015 budget. The pricing for the usage charge is the same as the second tier of the three tier residential rate.

The University of Florida is charged different rates than other customers because of the City's commitment not to receive General Fund transfers from sales to the University of Florida and because the University of Florida owns and maintains its own on-campus water distribution system. The General Fund transfer policy reflects a historical commitment which enticed the University of Florida to locate in the City of Gainesville in the early 1900's. In October 1999, the University of Florida water rates were indexed to non-residential water rates. Specifically, the off-campus price was established at 89% of the published System price. The on-campus price was 78% of the off-campus price. In 2004, the University of Florida rates became cost-of-service based.

Monthly Service Charges

Monthly customer charges are levied for the actual units of service rendered to individual customers. Customers pay a rate per thousand gallons of water consumed or wastewater treated, and all customers pay a monthly customer charge, as shown on Table 1 below. All wastewater customers are subject to rate surcharges for wastewater discharges which exceed normal domestic strength. Commercial customers are billed 95% of their water usage as wastewater while residential customers are billed the lesser of actual water usage or winter maximum usage, in order to better identify water used for domestic purposes for wastewater billing. Table 2 below lists the charges for water and wastewater service that will become effective October 1, 2017. These rates are unchanged from fiscal year 2017.

Table 1. Monthly Water Customer Charge by Meter Size

Meter Size	Monthly Customer Charge
5/8" and ¾"	$ 9.45
1"	9.65
1.5"	12.50
2"	20.00
3"	74.00
4"	100.00
6"	140.00
8"	200.00
10"	275.00

Table 2. Current Monthly Charges For Water and Wastewater Services

Water Rates:	
Residential	
Customer Billing Charge	Based on meter size
Consumption Rate:	
1,000 to 4,000 gallons	$2.45 per 1,000 gallons
5,000 to 16,000 gallons	$3.75 per 1,000 gallons
17,000 or more gallons	$6.00 per 1,000 gallons
Commercial	
Customer Billing Charge	Based on meter size
Consumption Rate	$3.85 per 1,000 gallons
University of Florida	
Customer Billing Charge	Based on meter size
Consumption Rate:	
On-campus facilities	$2.29 per 1,000 gallons
Off-campus facilities	$2.83 per 1,000 gallons
City of Alachua[1]	
Customer Billing Charge	Based on meter size
Consumption Rate	$1.62 per 1,000 gallons
Wastewater Rates:	
Residential and Commercial	
Customer Billing Charge	$9.10 per month
All Usage[2]	$6.30 per 1,000 gallons

(1) The System provides wholesale water service to Alachua for resale to four locations.

(2) Wastewater rates apply to all metered water consumption up to a specified maximum. The residential maximum is established for each customer based upon its winter (December or January) maximum water consumption. The non-residential maximum is 95% of metered water use.

Comparison with Other Cities

The System's average water and wastewater charges in effect for the month of October 2017 are compared to those for thirteen other Florida cities (based on rates in effect for February 2018) in the table below.

Comparison of Monthly Residential Water and Wastewater[1]

	Water	Wastewater	Total
Gainesville Regional Utilities	**$30.50**	**$53.20**	**$83.70**
Ocala	$16.64	$44.57	$61.21
Lakeland	$23.53	$46.54	$70.07
Orlando	$14.43	$50.37	$64.48
Tampa	$21.04	$44.08	$65.12
Jacksonville	$23.37	$46.33	$69.70
Pensacola (ECUA)	$29.02	$50.64	$79.66
Tallahassee	$24.57	$59.77	$84.34
Ft. Pierce	$38.73	$53.73	$92.46

(1) Comparisons are based on 7,000 gallons of metered water and 7,000 gallons of wastewater treated and rates in effect for February 2018. Excludes all taxes, surcharges, and franchise fees. Sorted in ascending order by total charges. GRU's rates are as of October 2017 and other utility rates are as of February 2018.

Source: Prepared by the Finance Department of the System based upon published rates and charges and/or personal contact with utility representatives of the applicable system.

Surcharge

Non-exempt water customers residing within the City's corporate limits are assessed a 10% utility tax. Non-exempt water customers residing outside the City's corporate limits are assessed a 25% surcharge and pay a 10% County utility tax. There is no utility tax on wastewater. However, non-exempt wastewater customers residing outside the City's corporate limits are assessed a 25% surcharge. Effective October 1, 2001, water and wastewater connection charges were subject to the 25% surcharge imposed on non-exempt customers not residing within the City's corporate limits. This surcharge on connection fees was suspended for fiscal year 2015 and was re-implemented in fiscal year 2016.

Connection Charge Methodology

Beginning October 1, 2016 GRU made a change in its assessment of connection charges to more equitably distribute the costs of demand on the System to each customer based on their anticipated demand on the System. The change is intended to be revenue neutral for the System. New single family connections and small non-residential connections will continue to pay a Minimum Connection Charge, which is similar to how GRU currently charges for these small connections. Larger non-residential connections, with an estimated use greater than 280 gallons per day, will pay a flow-based connection charge. Multi-family connections will continue to pay flow-based connection charges and are not affected by these changes.

Calculation of the estimated average water use for a non-residential customer is based on the total square footage of the business multiplied by the water use coefficient to obtain gallons per day. If the average water use is estimated to be 280 gpd or less the Minimum Connection Charge will be assessed. If the water use is estimated to be greater than 280 gpd the customer will pay a flow-based connection charge.

Effective October 1, 2017, transmission and distribution/collection system connection charges for individual lots are $448 to connect to the water system and $744 to connect to the wastewater system. Water and wastewater plant connection charges for individual lots are $675 and $2,554, respectively. The water meter installation charge is $677 for a typical single family dwelling (requiring 3/4 inch meter). The total water system connection charges for a typical single family dwelling (requiring 3/4 inch meter) are $1,800 for new water service and the total wastewater connection charges are $3,298 for new wastewater service. Total water and wastewater connection charges for a typical single family dwelling are $5,098. Also, there is a 25% surcharge applied to new connections located outside of the incorporated area of the City.

Infrastructure Improvement Area

The System's water and wastewater extension policy requires that new development projects pay the cost for the infrastructure improvements needed to serve them. Under this policy, developers typically design and install most of these improvements, with the System's review and approval, as part of the design and construction for their development projects. In some cases, the System may construct these improvements, with the developer reimbursing the System for the cost.

The City Commission, by adoption of Ordinance No. 110541 on April 7, 2016, established the "Innovation District Infrastructure Improvement Area." Within the designated area, the System developed a master plan for major water distribution and wastewater collection capacity improvements needed to facilitate current and anticipated future development. The System is constructing these improvements according to the master plan. **[The System has constructed $1.26 million in water system improvements and $1.02 million in wastewater collection system improvements as of the date of this Official Statement.]** The cost for these improvements will be recovered through "infrastructure improvement area user fees" which new development projects pay at the time of connection to the System. These user fees are calculated for each development project based on the size of the project and type of project. The user fees are set based on recovering the System's expenditures with interest over a 20 year period. The City Commission enacted Ordinance No. 160725 on March 16, 2017 increasing the fees for the improvement area.

Natural Gas System

Each of the System's various rates for natural gas service consists of a "base rate" component and a "purchased gas adjustment" component. The base rates are evaluated annually and adjusted as required to fund projected revenue requirements for each fiscal year. The purchased gas adjustment clause provides for increases or decreases in the charge for natural gas to cover increases or decreases in the cost of gas delivered to the System. The current purchased gas adjustment is calculated with a formula using a one-month forward-looking projection and a true-up of the second month preceding the actual fuel cost in the billing month.

The table below presents natural gas system base rate revenue requirements, purchased gas adjustment and total residential bill changes since 2013 and Management's most recent projections of future base rate revenue requirements, purchased gas adjustment and total residential bill changes. The percentage changes shown represent the aggregate amount required to fund changes in projected non-fuel and purchased gas revenue requirements for the natural gas system.

Natural Gas System
Base Rate Revenue
Purchased Gas Adjustment and Total Bill Changes

	Percentage Base Rate Revenue Increase/(Decrease)[1]	Percentage Purchased Gas Adjustment Revenue Increase/(Decrease)[2]	**Total Bill Increase/(Decrease)[3]**
Historical			
October 1, 2013	0.85	0.00	(0.60)
October 1, 2014	4.25[4]	4.10	3.90
October 1, 2015	4.75	(36.40)	8.30
October 1, 2016	9.00	(13.10)	4.40
October 1, 2017	0.00%	0.00%[5]	0.00%[5]
Projected[4]			
October 1, 2018	0.00	2.00	0.40
October 1, 2019	0.00	2.00	0.50
October 1, 2020	0.00	2.00	0.50
October 1, 2021	0.00	2.00	0.50
October 1, 2022	0.00	2.00	0.50

(1) Change in overall non-fuel revenues collected from all retail customer classes from billing elements, including monthly service charges and energy usage charges ("therms"). Fuel revenue requirements are collected as a uniform charge on all therms of energy used. Increases or decreases are applied to billing elements to reflect the most recent cost of service studies and to yield the overall revenue requirement. A separate charge for remediation of the MGP site was implemented in 2002. For additional information on the MGP site, see "-- The Natural Gas System – Manufactured Gas Plant" above.

(2) Historical purchased gas adjustment revenue increase represents the change in weighted average purchased gas adjustment.

(3) Based on monthly residential bill at 25 therms.

(4) All changes in the System's revenue requirements are subject to approval by the City Commission, which usually occurs in conjunction with its approval of the System's annual budget.

(5) Includes purchase gas adjustment increase equal to $0.23 per therm.

Rates and Charges for Natural Gas Service

The current natural gas rates, effective October 1, 2017, are provided below by class of service:

Residential Service Rate	
Customer Charge	$9.75 per month
Non-Fuel Energy Charge	$0.63 per therm
Small Commercial Rate	
Customer Charge	$20.00 per month
Non-Fuel Energy Charge	$0.62 per therm
General Firm Service Rate	
Customer Charge	$45.00 per month
Non-Fuel Energy Charge	$0.44 per therm
Large Volume Interruptible Rate	
Customer Charge	$400.00 per month
Non-Fuel Energy Charge	$0.27 per therm
Manufactured Gas Plant Cost Recovery Factor (Applied to All Rate Classes)	$0.0556 per therm

Customers in all classes are charged a purchased gas adjustment and the Manufactured Gas Plant Cost Recovery Factor. Chapter 203, Florida Statutes, imposes a 2.5% tax based on an index price applied to the quantity of gas billed. All non-exempt customers residing within the City's corporate limits pay a City utility tax of 10% on portions of their bill. All non-exempt customers not residing within the City's corporate limits pay a 10% County utility tax on portions of their bill and a 10% surcharge on portions of their bill. All non-residential taxable customers pay a State sales tax of 6% on portions of their bill. For firm customers, the minimum bill equals the customer charge.

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Comparison with Other Utilities

The System's average natural gas charges in effect for the month of October 2017 are compared to those for eleven other municipal and private natural gas companies (based on rates effective February 2018) in the following table. The System's gas rates are among the lowest in the State.

Comparison of Monthly Natural Gas Bills[1]

	Residential 25 therms	General Firm 300 therms	Large Volume 30,000 therms
Gainesville Regional Utilities	**$32.64**	**$262.68**	**$17,068.00**
Okaloosa Gas District	$38.42	$313.30	$21,895.84
Tallahassee	$39.98	$395.71	$22,241.79
Clearwater	$44.50	$409.00	$30,250.00
City of Sunrise	$44.74	$378.60	$19,218.65
Ft. Pierce	$47.33	$334.72	$23,989.19
Kissimmee[2]	$47.89	$348.96	$27,675.70
Lakeland[2]	$47.89	$348.96	$27,675.70
Orlando[2]	$47.89	$348.96	$27,675.70
Tampa[2]	$47.89	$348.96	$27,675.70
Central Florida Gas	$55.07	$448.37	$30,374.70
Pensacola	$60.30	$584.88	$30,397.07

(1) Rates in effect for February 2017 applied to noted billing volume (excludes all taxes). GRU's rates are as of October 2017 and other utility rates are as of February 2017.

(2) Service provided by People's Gas.

Source: Prepared by the Finance Department of the System based upon published base rates and charges for the time period given with fuel costs provided by personal contact with utility representatives unless otherwise published.

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Comparison of Total Monthly Cost of Electric, Gas, Water and Wastewater Services for Residential Customers in Selected Florida Locales

The following table shows comparisons of the total monthly cost for a "basket" of electric, gas, water and wastewater services for residential customers in selected Florida locales for the month of October 2017, based upon (a) typical average usage by the System's residential customers by category of service and (b) standard industry benchmarks for average usage by residential customers.

Comparison of Monthly Utility Costs[(1)]

	Based Upon Typical Average Usage by Residential Customers of the System[(2)]	Based Upon Standard Industry Usage Benchmarks[(3)]
Tampa	$173.21	$222.56
Kissimmee	$175.38	$214.48
Orlando	$177.74	$226.74
Lakeland	$178.99	$219.17
Gainesville Regional Utilities	**$182.01**	**$237.34**
Jacksonville	$184.65	$226.09
Tallahassee	$187.98	$237.14
Ocala	$188.39	$226.74
Clay County	$190.13	$228.02
Vero Beach	$194.34	$239.17
Ft. Pierce	$202.49	$256.63
Pensacola	$220.62	$282.21

(1) Based upon rates in effect for February 2018 by the actual providers of the specified services in the indicated locales, applied to the noted billing units. Excludes public utility taxes, sales taxes, surcharges, and franchise fees. GRU rates are as of October 2017.

(2) Monthly costs of service have been calculated based upon typical average annual usage by residential customers of the System during the fiscal year ended September 30, 2017, as follows: for electric service: 800 kWh; for natural gas service: 20 therms; for water service: 5,000 gallons of metered water; and for wastewater service: 4,000 gallons of wastewater treated.

(3) Monthly costs of service have been calculated based upon standard industry benchmarks for average annual usage by residential customers, as follows: for electric service: 1,000 kWh; for natural gas service: 25 therms; for water service: 7,000 gallons of metered water; and for wastewater service: 7,000 gallons of wastewater treated.

Source: Prepared by the Finance Department of the System based upon (a) in the case of electric and gas service, published base rates and charges for the time period given, with fuel costs provided by personal contact with utility representatives of the applicable system unless otherwise published and (b) in the case of water and wastewater service, published rates and charges and/or personal contact with utility representatives.

Since the System's rates for electric, water and wastewater service are designed to encourage conservation, average usage of those utility services by residential customers of the System are lower than the standard industry benchmarks for average usage by residential customers that typically are used for rate comparison purposes. As a result, the total monthly cost of electric, gas, water and wastewater service for residential customers of the System, calculated based upon average usage by such customers, compares favorably to what the total monthly cost of such services would have been, calculated based upon such standard industry benchmarks.

Summary of Combined Net Revenues

The following table sets forth a summary of combined net revenues for the fiscal years 2013, 2014, 2015 and 2016, along with combined net revenue information for the nine-month period ended June 30, 2017. The information is derived from the audited financial statements of the City for the System. Such information should be read in conjunction with the City's audited financial statements for the System and the notes thereto for the fiscal years ended September 30, 2013, 2014, 2015, 2016 and 2017, referenced in APPENDIX B-1 attached hereto or in prior audited financial statements.

	Fiscal Years Ended September 30, (in thousands)				
	2013	2014	2015	2016	2017
Revenues:					
Electric	$249,410	$280,482	$298,914	$308,071	$317,644
Water	32,368	31,827	32,524	33,818	35,091
Wastewater	37,667	36,052	38,261	42,346	44,185
Gas	24,241	25,801	24,111	24,325	21,925
GRUCom	12,206	10,694	12,600	11,744	11,450
Total Revenues	$355,892	$384,856	$406,410	$420,304	$430,295
Operation and Maintenance Expenses[1]:					
Electric	$167,524	$203,506	$217,082	$225,290	$235,525
Water	13,132	13,321	13,559	14,827	15,463
Wastewater	13,584	13,968	14,334	17,388	19,052
Gas	14,779	16,726	15,318	14,577	12,902
GRUCom	5,374	6,492	8,460	7,422	7,109
Total Operation and Maintenance Expenses	$214,393	$254,013	$268,753	$279,504	$290,051
Net Revenues:					
Electric	$81,886	$76,976	$81,832	$82,781	$82,119
Water	19,236	18,506	18,965	18,991	19,627
Wastewater	24,083	22,084	23,927	24,958	25,133
Gas	9,462	9,075	8,793	9,748	9,023
GRUCom	6,832	4,202	4,140	4,322	4,341
Total Net Revenues	$141,499	$130,843	$137,657	$140,800	$140,243
Aggregate Debt Service on Bonds	$56,101	$54,860	$55,461	$55,822	$55,989
Debt Service Coverage Ratio for Bonds	2.52	2.39	2.48	2.52	2.50
Debt Service on Subordinated Indebtedness[2]	$11,789	$5,182	$6,178	$6,205	6,583
Total Debt Service on Bonds and Subordinated Indebtedness	$67,890	$60,042	$61,639	$62,027	$62,572
Debt Service Coverage Ratio for Bonds and Subordinated Indebtedness[3]	2.08[3]	2.18[3]	2.23[3]	2.27[3]	2.24[3]

[Footnotes appear on following page]

(1) Includes administrative expenses. Excludes depreciation and amortization.

(2) Excludes principal of maturing commercial paper notes which were paid from newly-issued commercial paper notes.

(3) The historical debt service coverage calculation described above is based on the rate covenant described in "SECURITY FOR THE BONDS-Rate Covenant" herein. At the end of 2017 the DHR Biomass Plant was acquired using proceeds of the 2017 Series A Bonds, the 2017 Series B Bonds and the 2017 Series C Bonds. Therefore, historical debt service coverage levels shown in the table above would not necessarily be indicative of anticipated future debt service coverage levels in effect after the acquisition of the DHR Biomass Plant, in part, because of the debt which was necessary to finance the costs of such acquisition. The City anticipates that such coverage levels will drop significantly in future fiscal years. For the fiscal year ended September 30, 2018 for example, it is anticipated that such debt service coverage ratio for Bonds and Subordinated Indebtedness calculated this way will decrease approximately 1.80 times. Such acquisition is not expected to adversely affect the City's ability to pay debt service on the Outstanding Bonds, or to otherwise comply with any of its obligations under the Resolution, including the rate covenant. On the contrary, such acquisition is expected to improve financial results. In particular, the City expects to realize future annual cash flow savings from elimination of payments pursuant to the PPA, taking into account new annual debt service on the 2017 Bonds. When debt service coverage gets calculated on a cash flow basis rather than pursuant to the Resolution, the coverage level is expected to increase.

Source: Prepared by the Finance Department of the System.

The operating results of the System reflect the results of past operations and are not necessarily indicative of results of operations for any future period. Future operations will be affected by factors relating to changes in rates, fuel and purchased power and other operating costs, environmental regulation, increased competition in the electric utility industry, economic growth of the community, labor contracts, population, weather, and other matters, the nature and effect of which cannot at present be determined. Net Revenues take into account amounts transferred to or from the Rate Stabilization Fund.

See also "Management's Discussion and Analysis" in the audited financial statements of the System referenced in APPENDIX B-1 attached hereto. In addition, for a discussion of derivative transactions entered into by the System, see Note 9 to the audited financial statements of the System in APPENDIX B-1 attached hereto.

Management's Discussion of System Operations

<u>Results of Operations</u>

The operating results of the System reflect the results of past operations and are not necessarily indicative of results of operations for any future period. Future operations will be affected by factors relating to changes in rates, fuel and other operating costs, environmental regulation, increased competition in the electric utility industry, economic growth of the community, labor contracts, population, weather, and other matters, the nature and effect of which cannot at present be determined.

For the electric system, base rate revenue requirements for the fiscal year ended September 30, 2015 increased by 8.5%. For the fiscal year ended September 30, 2016, requirements were unchanged and remained unchanged through the fiscal year ended September 30, 2017. While the System has experienced upward rate pressure due to sales growth, increased efficiencies and cost controls have kept the overall customer bill increases, including fuel, in line with inflation. For the fiscal year ended September 30, 2015, the electric system deposited $2.3 million, to the Rate Stabilization Fund. For the fiscal years ended September 30, 2016 and 2017, the electric system withdrew $1.0 million and $15.5 million, respectively, from the Rate Stabilization Fund. For the fiscal year ended September 30, 2018, the electric system is projected to withdraw approximately $7.5 from the Rate Stabilization Fund.

Energy sales (in MWh) to retail customers increased 1.8% per year from the fiscal year ended September 30, 2013 to the fiscal year ended September 30, 2017. The number of electric customers increased at an average annual rate of 0.89% for the fiscal years ended September 30, 2013 through 2017. Native load fuel costs for the electric system between the fiscal years ended September 30, 2015 and 2016, the electric fuel cost decreased by approximately $1.0 million (1%). Between the fiscal years ended September 30, 2016 and 2017 fuel costs increased approximately $6.67 million (4.3%). From the fiscal year ended September 30, 2015 to the fiscal year ended September 30, 2016 fuel revenues decreased by approximately $10.2 million (7%).

For the fiscal years ended September 30, 2013 through 2017, natural gas sales decreased by .11% per year. The number of gas customers increased at an annual rate of approximately 1.09% between fiscal years ended September 30, 2013 and 2017.

Natural gas fuel cost decreased by approximately $2.6 million (28%) between the fiscal years ended September 30, 2015 and 2016, and increased by approximately $273 thousand (4%) between the fiscal years ended September 30, 2016 and 2017. This fluctuation in gas cost is reflective of the natural gas commodity market prices during the same timeframe. Since these costs are passed along to customers as part of the purchased gas adjustment charge each month, any natural gas cost increases or decreases are offset by purchased gas adjustment revenues. The base rate revenue requirement for the natural gas system remained unchanged for the fiscal year ended September 30, 2013, with a nominal increase of 0.85% for the fiscal year ended September 30, 2014. For the fiscal year ended September 30, 2015 base rate revenue requirement for the gas system was increased by 4.75% For the fiscal years ended September 30, 2016 and 2017 the base rate revenue requirements were increased by 4.25% and 9.0%, respectively. For the fiscal year ended September 30, 2014, the natural gas system withdrew approximately $1.0 million from the Rate Stabilization Fund. For the fiscal year ended September 30, 2015, the natural gas system deposited approximately $1.6 million to the Rate Stabilization Fund. For the fiscal year ended September 30, 2016, the natural gas system withdrew approximately $2.0 million from the Rate Stabilization Fund. For the fiscal year ended September 30, 2017, the natural gas system deposited approximately $1.1 million to the Rate Stabilization Fund. In order to recover costs associated with the remediation of soil contamination caused by the operation of an MGP, the City established a per therm charge as part of the gas system's customer rate in the fiscal year ended September 30, 2003. The estimated remaining cost to be recovered is approximately $17.0 million. See "-- The Natural Gas System – Manufactured Gas Plant" above. The MGP has billed at a rate of $0.0556 per therm since October 1, 2014.

Water system sales are impacted by seasonal rainfall. For the fiscal year ended September 30, 2013 through 2017, sales decreased by an average annual rate of .88% and customers grew 1.01%. Revenues from water sales increased by approximately $5,791,015 for the fiscal year ended September 30, 2013 through 2017. The water revenue increases were primarily the result of rate increases, kept moderate by low customer growth and slow sales growth due to price sensitivity and conservation efforts.

Water base rate revenue requirements were increased by 3.5% in the fiscal year ended September 30, 2013, 3.85% in the fiscal year ended September 30, 2014, 3.75% in each of the fiscal years ended September 30, 2015 and 2016, and for the fiscal year ending September 30, 2017, the base rate revenue requirement was increased by 3.0%. For the fiscal years ended September 30, 2015, 2016 and 2017, the water system contributed approximately $2.4 million, $3.3 million, and $2.5 million, respectively, to the Rate Stabilization Fund.

Wastewater system billings generally track water system sales. From the fiscal year ended September 30, 2013 to 2017, the wastewater system billing volumes increased .29% per year. Revenues during this same period increased 13.6% due to base rate revenue requirement increases. Approximately 3.2% more wastewater was billed for the fiscal year ended September 30, 2017, as compared to fiscal year ended September 30, 2016, while revenues increased by 5.0% during the period, also due to base rate revenue requirement increases.

Wastewater base rate revenue requirements were increased by 3.00% in the fiscal year ended September 30, 2013, 2.4% in the fiscal year ended September 30, 2014, 4.85% in each fiscal years ended September 30, 2015 and 2016, and for the fiscal year ending September 30, 2017 the base rate revenue requirement remained unchanged.

For the fiscal years ended September 30, 2015, 2016 and 2017, the wastewater system deposited approximately $2.9 million, $2.1 million and $850 thousand, respectively, to the Rate Stabilization Fund. GRUCom's sales have increased from $10.5 million in fiscal year ended September 30, 2013 to $11.2 million in fiscal year ended September 30, 2017. This is a 6.7% increase over this 4 year time period. Sales were $11.2 million, $10.9 million and $11.7 million in fiscal years ended September 30, 2014, 2015 and 2016, respectively. For the fiscal year ended September 30, 2015, GRUCom withdrew approximately $1.4 million from the Rate Stabilization Fund, GRUCom deposited approximately $7,400 from the Rate Stabilization fund, for the fiscal year ended September 30, 2016 and for the fiscal year ended September 30, 2017, GRUCom withdrew approximately $585 thousand from the Rate Stabilization Fund.

The debt service coverage ratio ("DSCR") is a financial ratio that measures a company's ability to service its current debts by comparing its net operating income with its total debt service obligations. See "SUMMARY OF COMBINED NET REVENUES" above which shows GRU's DSCR for year's fiscal year 2013 through and including fiscal year 2017.

The operating results of the System reflect the results of past operations and are not necessarily indicative of results of operations for any future period. Future operations will be affected by factors relating to changes in rates, fuel and purchased power and other operating costs, environmental regulation, increased competition in the electric utility industry, economic growth of the community, labor contracts, population, weather, and other matters, the nature and effect of which cannot at present be determined. Net Revenues take into account amounts transferred to or from the Rate Stabilization Fund.

<u>Liquidity Position</u>

GRU periodically updates its liquidity targets based on an internal analysis of market, operating and other risk factors in order to determine an appropriate liquidity target for the System. The following table identifies this target as well as the sources of funds and accounts, to include available capacity in GRU's commercial paper program, that can be used to meet this liquidity target:

	2018	2019	2020	2021	2022
Liquidity Targets:	$61,721,696	$62,861,136	$$64,053,679	$65,863,464	$67,271,957
Operating Cash[1]	8,413,557	8,413,557	8,413,557	8,413,557	8,413,557
Rate Stabilization Fund	62,346,835	57,688,602	57,103,291	56,655,493	57,566,522
Utilities Plant Improvement Fund for Reserves[2]	23,381,159	25,439,366	29,289,961	24,284,692	28,155,560
Total Reserves:	**$94,141,551**	**$91,541,525**	**$94,806,809**	**$89,353,742**	**$94,135,639**
Tax-Exempt CP/ Taxable CP Lines[3]	40,000,000	40,000,000	40,000,000	40,000,000	40,000,000
Total Liquidity and Lines	$134,141,551	$131,541,525	$134,806,809	$129,353,742	$134,135,639
Over/Under Target	**$72,419,855**	**$68,680,389**	**$70,753,130**	**$63,490,278**	**$66,863,682**

(1) Includes 60 days of operating cash. For the Fiscal Year ended September 30, 2017, GRU maintained approximately 195 days of liquidity on hand.

(2) Consists of total Utilities Plant Improvement Fund balances less Utilities Plant Improvement Fund funds restricted for debt service and construction.

(3) GRU currently expects additional capacity in the calendar year 2018.

Source: Prepared by the Finance Department of the System.

Transfers to General Fund

The City Commission established a General Fund transfer formula for the System for fiscal year 2015 through fiscal year 2019 pursuant to Resolution Number 140166, adopted on July 23, 2014. The General Fund transfer formula will be up for renewal beginning with the fiscal year ending September 30, 2020. The transfer formula established the base amount of the fiscal year 2015 transfer, less the amount of ad valorem revenue received each year by the City from the DHR Biomass Plant. The fiscal year 2015 base transfer amount increases each fiscal year over the period between fiscal year 2016 through fiscal year 2019 by 1.5%.

This transfer formula is to be reviewed at least every other year by the System's staff and the City's General Government staff. The transfer amount may be paid from any part of the System's revenue or a combination thereof. The City Commission may modify the transfer amount or the transfer formula at any time. As disclosed in "-Legislative Matters Affecting the City", there is a voter referendum scheduled for November 2018. If approved by the voters, a new utility board will replace the City Commission as the governing body of the System and the new utility board is given the authority to reduce the transfer amount by up to 3% each year thereafter.

The transfers to the General Fund made in the fiscal years ended September 30, 2012 through and including 2017 were as follows:

	Transfers to General Fund	
Fiscal Years ended September 30,	Amount	% Increase/(Decrease)
2012	$36,004,958	2.2%
2013	36,656,458	1.8%
2014	37,316,841[1]	1.5%
2015	34,892,425	(7.1)%
2016	34,994,591	0.03%
2017	35,814,010	2.3%

(1) Year ended September 30, 2014 was the last year of a four year agreement regarding General Fund transfer calculation methodology, where the agreed upon value was compared to prior formulaic calculation and a gain/loss sharing was applied.

Source: Prepared by the Finance Department of the System.

The projected transfers to the General Fund made in the fiscal years ended September 30, 2018 through and including 2020 are as follows:

	Projected Transfers to General Fund	
Fiscal Years ended September 30,	Amount	% Increase/(Decrease)
2018	$36,351,220	1.5%
2019	36,896,488	1.5%
2020	37,449,935	1.5%

Source: Prepared by the Finance Department of the System.

Investment Policies

The System's investment policy provides for investment of its funds. The primary goals of the investment policy are (1) preservation of capital, (2) providing sufficient liquidity to meet expected cash flow requirements, and (3) providing returns commensurate with the risk limitations of the program. The System's funds are invested only in securities of the type and maturity as permitted by the Resolution, Florida Statutes and its internal investment policy. The System does not presently have, nor does it intend to acquire in the future, derivative or leveraged investments or investments in mortgage-backed securities. The System does not invest its funds through any governmental or private investment pool (including, without limitation, the Florida PRIME or the former Local Government Surplus Funds Trust Fund administered by the State's Board of Administration).

Debt Management Policy

The System's debt management policy applies to all current and future debt and related hedging instruments issued by the System and approved by the City Commission. The purpose of the policy is to provide guidance for issuing and managing debt. The System debt is required to be managed with an overall philosophy of taking a long term approach in borrowing funds at the lowest possible interest cost. To achieve this goal, the System will continuously work towards developing an optimal capital structure, including the types of variable rate exposure, in view of the System's risk tolerance to market fluctuations, capital market outlook, future capital funding needs, rating agency considerations, and counterparty credit profiles.

Competition

In recent years, energy-related enterprises have become more influenced by the competitive pressures of an increasingly deregulated industry, especially the wholesale power market. The Florida retail electric system is under no immediate threat of market loss due to the current laws and regulations governing the supply of electricity in Florida, which presently prohibit any form of retail competition. The System's other enterprises currently are operating in competitive environments of one form or another. These competitive environments include the natural gas system by-pass and competition against other LP distributors and alternative fuel types, private wells, septic tanks and privately owned water and wastewater systems, and the entire telecommunications arena for GRUCom.

Management's response to the increasing competition in the wholesale power market (including interchange and economy sales), and the corollary open access changes in the electric transmission network has been to stay involved and form strategic alliances. These alliances fall into two categories, joint ventures and industry associations. The most significant joint venture the System is currently involved in is TEA, a Georgia nonprofit corporation established for power marketing, fuels procurement, and financial hedging and risk management (see "-- The Electric System -- Energy Sales -- *The Energy Authority*" above). The System's staff is very involved with the American Public Power Association, the Florida Municipal Electric Association ("FMEA"), and FMPA. These industry associations have proven to be a powerful way to stay informed, plan, and help shape federal and state policies to protect customer interests and assure the fair treatment of municipal systems.

The natural gas system has been subjected to competition due to the deregulation that has occurred in that industry since the early 1990's. A consequence of this deregulation for municipal gas utilities in Florida is that "end-users" are allowed to secure and purchase their gas requirements directly from gas producers, thereby "bypassing" the monopoly producer/pipeline systems. The System's rate structures largely avoid this concern. The System passes fuel costs directly through its purchased gas adjustment, and rates applicable for transportation of system by-pass are allowed to earn a return on distribution infrastructure, which is the sole basis for the System's revenue requirements. Thus, a customer electing to bypass the System simply substitutes its ability to buy gas for the System's ability to buy gas. The sole example of bypass experienced by the System to date was in the case of service to Duke's cogeneration plant at the University of Florida where the amount of non-fuel revenue realized from the customer was virtually unchanged by its decision to contract for its own gas supply. Several strategies are being implemented to gain a competitive advantage for the System in natural gas sales growth. Two very significant competitive advantages are the System's position of having among the lowest gas rates in the State, and the environmental benefits of natural gas for certain appliance end uses. Appliance rebates and distribution system construction credits are employed to encourage and stimulate customer growth. In addition, temporary LP distribution systems may be constructed to encourage and rapidly accommodate the acquisition of a customer base that is just beyond an economic expansion of the natural gas distribution system. These LP systems and customer appliances are converted to natural gas when gas pipeline extensions become feasible. Rebates are also used to assist customers in overcoming the short-term economic obstacles of converting existing electric appliances to natural gas in order to allow them to obtain long-term financial, convenience, and environmental benefits, both inside and outside the System's electrical service territory. The System has franchises to provide retail natural gas services to several nearby cities in the County. See "- The Natural Gas System – Service Area" herein for a discussion of the status of the System's franchise agreement to provide natural gas service in the County.

Private wells, septic tanks, and privately owned water utilities are the traditional alternatives for water and wastewater utility services and serve small populations where service from centralized facilities is less practical or desirable. Comprehensive planning in the City and the surrounding unincorporated areas strongly discourages urban sprawl, and the System's incumbent status, competitive rates and environmental record have resulted in a very favorable competitive position, with sustained high levels of market capture from population growth.

GRUCom operates in a fully deregulated and competitive telecommunications environment. Management has taken a targeted approach to this enterprise, seeking opportunities that maximize use of System assets, which include widely deployed fiber optic communication facilities and existing elevated antenna structures (communications towers and water tanks), while also taking advantage of its professional employee expertise in areas of utility and public safety operations, information technology and its close working relationships within the local businesses community and the commercial property development industry. GRUCom primarily engages its customer markets as a business-to-business enterprise taking a consultative sales approach to solicit its services to private companies, governments, telecommunications carriers, major institutions and other similar commercial users of high volume voice, data and Internet bandwidth applications.

GRUCom also provides data center co-location services within its telecommunications central office building providing leased access to conditioned space, redundant power and building systems and highly available communications facilities. Tenants include private businesses and government agencies co-located for the purpose of off-site data back-up and storage, on-line hosting service providers co-located for the purpose of accessing reliable high-capacity Internet connectivity, and other Internet and telecommunications service providers who gain access to GRUCom's excellent local fiber transmission services at preferential rates available only to co-located resellers.

The System currently is pursuing opportunities related to several large development projects occurring in the service territory to diversify revenues while investing in energy efficient systems, as was successfully pursued in the South Energy Center. Due to the existing knowledge, experience, infrastructure and resources within the System's core utilities, it has a competitive advantage as it focuses on chilled water services, and emergency backup power opportunities.

Chilled water provides an additional revenue source, while providing a more efficient, cost effective cooling system that is consistent with environmental stewardship. The System's strategy for chilled water service does not depend on extensive distribution systems. Instead, each chilled water and generation facility is located near the premises of the development. Additionally, the chilled water systems are modular and can be expanded incrementally as the customer base grows. This strategy will limit the System's exposure for stranded assets or investing in infrastructure without having full subscription to the available service, especially at a time when development has slowed significantly.

The Innovation District is an area of approximately 80 acres between the University of Florida's campus and downtown Gainesville that has been master planned and is being transformed into an area of high urban density to house and support scientific research and development and technology based businesses as well as residential, retail, and hospitality development. The Innovation District is currently a mixture of low density office, commercial and residential uses, and includes the former Shands at

Alachua General Hospital ("AGH") site. The former Shands at AGH was demolished and the entire site is now called Innovation Square. The University of Florida has constructed a three-story building known as Innovation Hub on the site and has another building known as Innovation Hub Phase II under construction. Innovation Square is a research oriented development that forms the nucleus of the Innovation District. The Innovation District is projected to be comprised of approximately 3.7 million square feet of lab, business, residential, commercial, and institutional space. The System will have the opportunity to provide commercial power, emergency power, natural gas, water, wastewater, reclaimed water, chilled water, and telecommunication services to the Innovation District. The Innovation District is projected to constitute significant utility loads, including an electric load of more than 10 MW.

Redevelopment of the Innovation District is an ambitious undertaking and has required that basic utility infrastructure be upgraded to support the dense urban development that is envisioned. Redevelopment in and around downtown Gainesville, particularly when coupled with the University of Florida's international reputation as a premier scientific research institution, presents tremendous opportunities for economic growth.

In order to help facilitate development in the Innovation District the System has designated an Innovation District "Infrastructure Improvement Area" within which the System is constructing water distribution system and wastewater collection system capacity improvements according to a master plan. The System is charging an additional fee to new development projects within the area to recover its costs. This mechanism allows critical capacity improvements to be constructed as efficiently as possible. For more information, see "-- Rates—Water and Wastewater System—*Infrastructure Improvement Area*" above.

The System owns and operates a recently constructed facility, known as the Innovation Energy Center, dedicated to serve Innovation Square. The facility provides chilled water and emergency power for the Innovation Hub building and future buildings being planned for the Innovation Square development, under an exclusive provider contract with the University of Florida Development Corporation. The modular facility has a current capacity of 870 tons of chilled water with planned expansion to 7,000 tons as additional customers are connected to the facility.

Currently, there is no initiative and little indication of interest in pursuing retail electric deregulation either in Florida or nationwide. Management has a renewed focus on maintaining and improving the projected levels of Net Revenues, debt service coverage, and the overall financial strength of the System. To be successful at this, the System will require many of the same goals and targets necessary to be prepared for retail competition. These goals and targets relate to enhancing customer loyalty and satisfaction by providing safe and reliable utility services at competitive prices.

<u>Ratings Triggers and Other Factors That Could Affect the System's Liquidity, Results of Operations or Financial Condition</u>

The System has entered into certain agreements that contain provisions giving counterparties certain rights and options in the event of a downgrade in the System's credit ratings below specified levels and/or the occurrence of certain other events or circumstances. Given its current levels of ratings, Management does not believe that the rating and other credit-related triggers contained in any of its existing agreements will have a material adverse effect on the System's liquidity, results of operations or financial condition. However, the System's ratings reflect the views of the rating agencies and not of the System, and therefore, the System cannot give any assurance that its ratings will be maintained at current levels for any period of time.

Liquidity Support for the System's Variable Rate Bonds

The System has entered into separate standby bond purchase agreements with certain commercial banks in order to provide liquidity support in connection with tenders for purchase of the 2005 Series C Bonds, the 2006 Series A Bonds, the 2007 Series A Bonds, the 2008 Series B Bonds and the 2012 Series B Bonds (collectively the "Liquidity Supported Bonds"). The following details the Liquidity Supported Bonds, the bank providing the liquidity support and the termination date of the current facility:

Series	Bank	Expiration
2005C	Landesbank Hessen Thüringen Girozentrale	November 24, 2020
2006A	Landesbank Hessen Thüringen Girozentrale	November 24, 2020
2007A	State Street Bank and Trust Company	March 1, 2018
2008B	Barclays Bank PLC	June 29, 2020
2012B	Citibank, N.A.	June 29, 2020

The standby bond purchase agreements relating to the Liquidity Supported Bonds provide that any Liquidity Supported Bond that is purchased by the applicable bank pursuant to its standby bond purchase agreement may be tendered or deemed tendered to the System for payment upon the occurrence of certain "events of default" with respect to the System under such standby bond purchase agreement. Upon any such tender or deemed tender, the Liquidity Supported Bond so tendered or deemed tendered will be due and payable immediately.

The standby bond purchase agreements relating to the 2005 Series C Bonds and the 2006 Series A Bonds, provides that it is an "event of default" on the part of the System thereunder if any of the ratings fall below "A2" (or its equivalent) by Moody's and below "A" (or its equivalent) by S&P, or below "A" (or its equivalent) by Fitch or is withdrawn or suspended. The standby bond purchase agreement relating to the 2007 Series A Bonds provides that it is an "event of default" on the part of the System thereunder if the ratings on the 2007 Series A Bonds, without taking into account third-party credit enhancement, fall below "Baa3" by Moody's and "BBB-" by S&P or are withdrawn or suspended. The standby bond purchase agreement relating to the 2008 Series B Bonds provides that it is an "event of default" on the part of the System thereunder if any rating on the 2008 Series B Bonds or any Parity Debt, without taking into account third-party credit enhancement, falls below "Baa3" by Moody's, "BBB-" by S&P or "BBB-" by Fitch or is withdrawn or suspended (other than any withdrawal or suspension that is taken for non-credit related reasons). The standby bond purchase agreement relating to the 2012 Series B Bonds provides that it is an "event of default" on the part of the System thereunder if the ratings on the 2012 Series B Bonds, without giving effect to any third-party credit enhancement, fall below "Baa3" by Moody's, "BBB-" by S&P or "BBB-" by Fitch or is withdrawn or suspended (other than any withdrawal or suspension that is taken for non-credit related reasons). Any Liquidity Supported Bond purchased by the applicable bank under a standby bond purchase agreement will bear interest at the rate per annum set forth in such standby bond purchase agreement, which rate may be significantly higher than market rates of interest borne by such Bonds when held by investors.

Liquidity Support for the System's Commercial Paper Program

The System also has entered into separate credit agreements with certain commercial banks in order to provide liquidity support for the CP Notes. The CP Notes constitute Subordinated Indebtedness under the Resolution. If, on any date on which a CP Note of a particular series matures, the System is not able to issue additional CP Notes of such series to pay such maturing CP Note, subject to the satisfaction of certain conditions, the applicable bank is obligated to honor a drawing under its credit agreement in an amount sufficient to pay the principal of such maturing CP Note. The credit agreements for the Series C Notes and the Series D Notes currently have stated termination dates of November 30, 2018 and August 28, 2020, respectively, which dates are subject to extension in the sole discretion of the respective banks.

The credit agreements provide that, upon the occurrence and continuation of certain "tender events" on the part of the System thereunder, the banks may, among other things, (a) issue "No-Issuance Instructions" to the issuing agent for the CP Notes of the applicable series, instructing such paying agent not to issue any additional CP Notes of such series thereafter, (b) terminate the commitment and the applicable bank's obligation to make loans or (c) require immediate payment from the System for any outstanding principal and accrued interest due under the respective credit agreement.

With respect to the Series C Notes, among others, it is an immediate termination event under the related credit agreement if the ratings assigned to any of the System's Bonds fall below "Baa3" by Moody's, "BBB-" by S&P or "BBB-" by Fitch or are suspended or withdrawn for credit-related reasons.

With respect to the Series D Notes, among others, it is an immediate termination event under the related credit agreement if the ratings assigned to any of the System's Bonds fall below "Baa" by Moody's, "BBB-" by S&P or "BBB-" by Fitch or are suspended or withdrawn for credit-related reasons.

Any drawing made under a credit agreement bears interest at the rate per annum set forth in such credit agreement, which rate may be significantly higher than market rates of interest borne by the related CP Notes.

Direct Placement Transactions

The City has entered into direct placement transactions with two different counterparties under CCA agreements with respect to the 2017 Series B Bonds and 2017 Series C Bonds. The current counterparties are Wells Fargo Bank, N.A., for 2017 Series B Bonds, and Bank of America, N.A., for the 2017 Series C Bonds.

For the 2017 Series B Bonds, the City has entered into a direct placement transaction with Wells Fargo, N.A, for a three year term, expiring on ________, ______. During the term of the transaction, the City will pay to the counterparty, a rate equal to 70% of the one-month LIBOR rate and an applicable spread of 35 basis points. Should the City's credit rating fall below "Aa3" from Moody's and/or 'AA-"from S&P, and/or "AA-"from Fitch, then the applicable spread will be increased by **[10 bps]** with each notch drop.

For the 2017 Series C Bonds, the City has entered into a direct placement transaction with Bank of America, N.A, for a three year term, expiring on _______, ______. During the term of the transaction, the City will pay to the counterparty, a rate equal to 70% of the one-month LIBOR rate and an applicable spread of 41 basis points. Should the City's credit rating fall below "Aa3" from Moody's and/or 'AA-"from S&P, and/or "AA-"from Fitch, then the applicable spread will be increased by 10 basis points with each notch drop.

Interest Rate Swap Transactions

The City has entered into interest rate swap transactions with four different counterparties under interest rate swap master agreements with respect to the 2005 Series B Bonds, the 2005 Series C Bonds, the 2006 Series A Bonds, the 2007 Series A Bonds, the 2008 Series B Bonds and the 2017 Series B Bonds. The current counterparties are Goldman Sachs Mitsui Marine Derivative Products, L.P. and JP Morgan Chase Bank, National Association, Goldman Sachs Bank, USA and Citibank, N.A.

For the 2005 Series B Bonds, the City has entered into a floating-to-floating rate interest rate swap transaction (the "2005 Series B Swap Transaction") for a pro rata portion of each of the maturities of the 2005 Series B Bonds. During the term of the 2005 Series B Swap Transaction, the City will pay to the counterparty a rate equal to the SIFMA Municipal Swap Index and will receive from the counterparty a rate equal to 77.14% of the one-month LIBOR rate. GRU notes that the United Kingdom's Financial Conduct Authority ("FCA"), a regulator of financial services firms and financial markets in the U.K., has stated that they will plan for a phase out of LIBOR with a target end to the indices in 2021. The FCA has indicated they will no longer require the LIBOR indices be used after 2021, however LIBOR indices will not be prohibited from being used after 2021. GRU also notes that the International Swaps and Derivatives Association ("ISDA") has not issued formal directives addressing the planned phase-out of LIBOR. As of the date of this publication, it is unclear what the overall impact will be on the expected phase out of the LIBOR indices and the resulting change due to the potential alternative reference rate. The initial notional amount of the 2005 Series B Swap Transaction was $45,000,000, which corresponded to approximately 73.1% of the principal amount of each maturity of the 2005 Series B Bonds. The effect of the 2005 Series B Swap Transaction was to synthetically convert the interest rate on such pro rata portion of the 2005 Series B Bonds from a taxable rate to a tax-exempt rate. The City has designated the 2005 Series B Swap Transaction as a "Qualified Hedging Transaction" within the meaning of the Resolution. The counterparty to the 2005 Series B Swap transaction (Goldman Sachs Mitsui Marine Derivatives Products L.P.) currently has a counterparty risk rating of "Aa2" from Moody's and a counterparty credit rating of "AA-" from S&P. When entered into, the term of the 2005 Series B Swap Transaction was identical to the term of the 2005 Series B Bonds, and the notional amount of the 2005 Series B Swap Transaction was scheduled to amortize at the same times and in the same amounts as the pro rata portion of the 2005 Series B Bonds. On August 2, 2012, $31,560,000 of the 2005 Series B Bonds were redeemed with proceeds from the issuance of the City's 2012 Series B Bonds. As a result, the 2005 Series B Swap Transaction no longer served as a hedge against the 2005 Series B Bonds. However, since the City had other taxable Bonds Outstanding, the City left the 2005 Series B Swap Transaction outstanding following the issuance of the 2012 Series B Bonds, as a partial hedge against the interest rate movements. The 2005 Series B Swap Transaction is subject to early termination by the City or the counterparty at certain times and under certain conditions. The currently scheduled termination of the 2005 Series B Swap Transaction is October 1, 2021.

The City entered into a floating-to-fixed rate interest rate swap transaction (the "2005 Series C Swap Transaction"). During the term of the 2005 Series C Swap Transaction, the City will pay to the counterparty a fixed rate of 3.20% per annum and will receive from the counterparty a rate equal to 60.36% of the ten-year LIBOR swap rate. Initially, the term of the 2005 Series C Swap Transaction was identical to the term of the 2005 Series C Bonds, and the notional amount of the 2005 Series C Swap Transaction was scheduled to amortize at the same times and in the same amounts as the 2005 Series C Bonds. The effect of the 2005 Series C Swap Transaction was to synthetically fix the interest rate on the 2005 Series C Bonds at a rate of approximately 3.20% per annum, although the City bears basis risk which could result in a realized rate over time that may be lower or higher than the 3.20% rate. The counterparty (JPMorgan Chase Bank) currently has a counterparty credit rating of "Aa3" from Moody's and a counterparty credit rating of "A+" from S&P. The City has designated the 2005 Series C Swap Transaction as a "Qualified Hedging Transaction". On August 2, 2012, $17,570,000 of the 2005 Series C Bonds were redeemed with proceeds from the issuance of the 2012 Series B Bonds. The City left the 2005 Series C Swap Transaction outstanding following the issuance of the 2012 Series B Bonds, as a partial hedge against the interest rate movements. The 2005 Series C Swap Transaction is subject to early termination by the City or the counterparty at certain times and under certain conditions. The currently scheduled termination of the 2005 Series C Swap Transaction is October 1, 2026.

In September 2005, the City entered into a forward-starting floating-to-fixed rate interest rate swap transaction (as amended, the "2006 Series A Swap Transaction"). During the term of the 2006 Series A Swap Transaction, the City will pay to the counterparty a fixed rate of 3.224% per annum and will receive from the counterparty a rate equal to 68% of the ten-year LIBOR swap rate minus 36.5 basis points. The effect of the 2006 Series A Swap Transaction was to synthetically fix the interest rate on the 2006 Series A Bonds at a rate of approximately 3.224% per annum, although the City bears basis risk, which could result in a realized rate over time that may be lower or higher than the 3.224% rate. Initially, the term of the 2006 Series A Swap Transaction was identical to the term of the 2006 Series A Bonds, and the notional amount of the 2006 Series A Swap Transaction was scheduled to amortize at the same times and in the same amounts as the 2006 Series A Bonds. The counterparty to the 2006 Series A Swap Transaction (Goldman Sachs Mitsui Marine Derivatives Products L.P.) currently has a counterparty risk rating of "Aa2" from Moody's and a counterparty credit rating of "AA-" from S&P. The City has designated the 2006 Series A Swap Transaction as a "Qualified Hedging Transaction". On August 2, 2012, $25,930,000 of the 2006 Series A Bonds were redeemed with proceeds from the issuance of the 2012 Series B Bonds. The City left that portion of the 2006 Series A Swap Transaction outstanding as a partial hedge against the interest rate movements. The 2006 Series A Swap Transaction is subject to early termination by the City or the counterparty at certain times and under certain conditions. The currently scheduled termination of the 2006 Series A Swap Transaction is October 1, 2026.

The City has entered into a floating-to-fixed rate interest rate swap transaction (the "2007 Series A Swap Transaction") with respect to the 2007 Series A Bonds. The term of the 2007 Series A Swap Transaction is identical to the term of the 2007 Series A Bonds, and the notional amount of the 2007 Series A Swap Transaction will amortize at the same times and in the same amounts as the 2007 Series A Bonds. During the term of the 2007 Series A Swap Transaction, the City will pay to the counterparty a fixed rate of 3.944% per annum and will receive from the counterparty a rate equal to the SIFMA Municipal Swap Index. The effect of the 2007 Series A Swap Transaction is to synthetically fix the interest rate on the 2007 Series A Bonds at a rate of approximately 3.944% per annum. The counterparty to the 2007 Series A Swap Transaction (Goldman Sachs Mitsui Marine Derivatives Products L.P.) currently has a counterparty risk rating of "Aa2" from Moody's and a financial program rating of "AA-" from S&P. The City has designated the 2007 Series A Swap Transaction as a "Qualified Hedging Transaction" within the meaning of the Resolution. The 2007 Series A Swap Transaction is subject to early termination by the City or the counterparty at certain times and under certain conditions. The currently scheduled termination of the 2007 Series A Swap Transaction is October 1, 2036.

The City has entered into two floating-to-fixed rate interest rate swap transactions (the "2008 Series B Swap Transactions") with respect to the 2008 Series B Bonds. The terms of the 2008 Series B Swap Transactions are identical to the term of the 2008 Series B Bonds, and the notional amount of the 2008 Series B Swap Transactions will amortize at the same times and in the same amounts as the 2008 Series B Bonds. During the terms of the 2008 Series B Swap Transactions, the City will pay to the counterparty a fixed rate of 4.229% per annum and will receive from the counterparty a rate equal to the SIFMA Municipal Swap Index. The effect of the 2008 Series B Swap Transactions is to synthetically fix the interest rate on the 2008 Series B Bonds at a rate of approximately 4.229% per annum. The counterparty to the 2008 Series B Swap Transactions (JPMorgan Chase Bank) currently has a counterparty risk rating of "Aa3" from Moody's and a financial program rating of "A+" from S&P. The City has designated each of the 2008 Series B Swap Transactions as a "Qualified Hedging Transaction" within the meaning of the Resolution. The 2008 Series B Swap Transactions are subject to early termination by the City or the counterparty at certain times and under certain conditions. The currently scheduled termination of the 2008 Series B Swap Transaction is October 1, 2038.

As detailed above, the interest rates on the 2012 Series B Bonds are hedged, in part, by the 2005 Series B and C Swap Transaction as well as the 2006 Series A Swap Transaction.

The City has entered into a cancellable floating-to-fixed rate interest rate swap transaction (the "2017 Series B Swap Transaction") with respect to the 2017B Bonds. The two counterparties for this swap transaction are Citigroup, N.A. and Goldman Sachs Bank USA. In the aggregate, terms of the 2017 Series B Swap Transactions are identical to the term of the 2017B Bonds, and the notional amounts of the 2017 Series B Swap Transactions will amortize at the same times and in the same amounts as the 2017B Bonds. Where Goldman Sachs Bank, USA is the counterparty, during the term of this 2017 Series B Swap Transaction, the City will pay a fixed rate per annum of 2.119% and GRU will receive from the counterparty a rate equal to 70% of 1 month LIBOR. The current notional amount with respect to Goldman Sachs Bank, USA is $105,000,000. Where Citibank N.A. is the counterparty, during the term of this 2017 Series B Swap Transaction, the City will pay to Citibank, N.A., a fixed rate per annum of 2.11% and GRU will receive from the counterparty a rate equal to 70% of 1 month LIBOR. The effect of the 2017 Series B Swap Transaction is to synthetically fix the interest rate on the 2017B Bonds. The City has designated the 2017 Series B Swap Transaction as a "Qualified Hedging Transaction" within the meaning of the Resolution. The 2017 Series B Swap Transaction is subject to early termination by the City or the counterparty or counterparties at certain times and under certain conditions. The currently scheduled termination of the 2017 Series B Swap Transaction is October 1, 2044. However, the City has an optional early terminate date of October 1, 2027 and semiannually thereafter, subject to early termination terms. The parties entered into a bilateral Credit Support Annex to which eligible collateral includes cash or Treasury securities having a remaining maturity on such date of one year or less, Treasury securities having a remaining maturity on such date greater than one up to and including five years or Treasury securities having a remaining maturity on such date of greater than five years up to and including ten years. The threshold amount for posting collateral is based upon the counterparty's or counterparties' long term unsecured and unenhanced debt ratings from S&P and Moody's and the City's credit ratings on senior lien Bonds. If the credit ratings drop below BBB- by S&P and Baa3 by Moody's, the threshold shall be $0.

In December of 2017, the President signed the Tax Cuts and Jobs Act into law. One provision of this law was to change the maximum corporate tax rate from 35% to 21%. Based on the Agreements underlying the 2017 Series B Bonds, there was an adjustment to the percent of LIBOR that GRU pays on the bonds. The effect was to change the index associated with the 2017 Series B Bonds from 70% of 1 Month LIBOR to 85% of 1 Month LIBOR. Due to this change, the underlying index for the bonds no longer matches the underlying index for the 2017 Series B Swap Transaction. GRU does not believe these changes are material in nature.