2018 ANNUAL REPORT

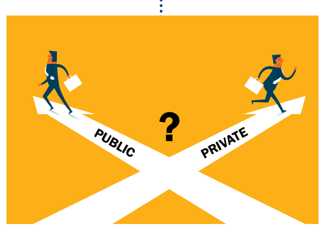
JEA

Building Community®

JEA'S FOCUS AND FORTITUDE BRING YOU LIFE'S MOMENTS

JEA FISCAL YEAR 2018 TIMELINE

October–November 2017
JEA sent 85 electric personnel to Puerto Rico to help rebuild the island's electric infrastructure following Hurricane Maria.

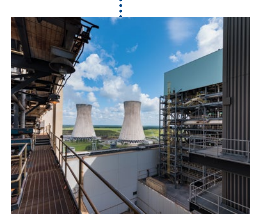


November 2017
JEA and community initiated discussion about merits of privatization.

November 2017
JEA created the "Light it Forward" Award for employees at local agencies who help low-income customers seeking utility bill assistance.

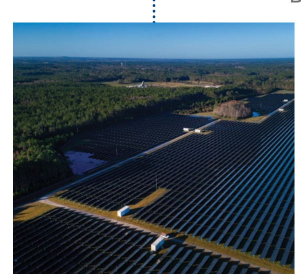
December 2017
JEA Electric Systems conducts an electric reliability study at Jacksonville International Airport after a fire in Atlanta's Hartsfield Airport caused an 11 hour outage.

December 2017
JEA refinanced $821 million in revenue bonds to generate $89 million in debt service savings.



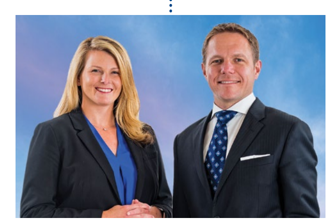
January 2018
JEA decommissioned St. Johns River Power Park, a 1,267-MW coal-fired plant.

January 2018
JEA Ambassadors partnered with Junior Achievement to teach elementary and high school students about business, economics and entrepreneurship.

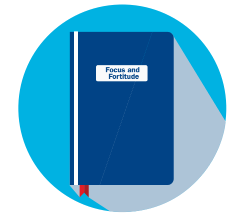


February 2018
JEA earnd the Sunriser Award for planned solar growth from the Southern Alliance for Clean Energy.

March 2018
JEA partnered with Greenscape of Jacksonville to give away thousands of trees at Jacksonville's official Arbor Day Festival.



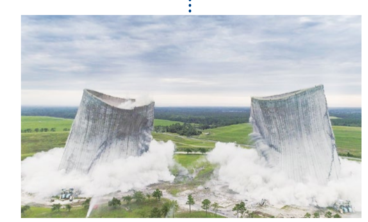
April 2018
Aaron Zahn became Interim Managing Director and CEO. Melissa Dykes became President and COO. In November 2018, Zahn became permanent Managing Director and CEO.



May 2018
Board adopts formal transition plan to create "Focus and Fortitude" within JEA.

May 2018
JEA's Board formally ended privatization discussion in favor of transition plan and focus on business strategy.

May 2018
JEA successfully completed construction on two new water treatment facilities.

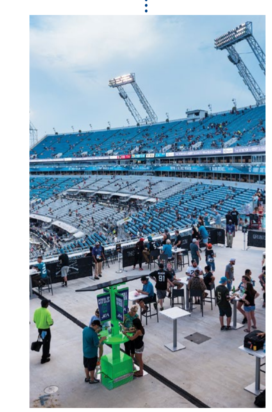


June 2018
Cooling towers at SJRPP retired.

July 2018
JEA closed on $18.5 million divestiture of former Southside Generating Station real estate.

July 2018
JEA initiated formal process to select a new site for JEA's headquarters.

August 2018
JEA's Board approved a final Strategic Framework for the company.



August 2018
JEA installed 16 phone charging stations, including four solar, at TIAA Bank Field.

August 2018
JEA's Board approved one-time $15 million contribution to City of Jacksonville for septic tank phase-out and an extension of JEA's charter to 2023.

September 2018
JEA awarded bid for 250 MW of solar at +20% discount to fuel rate.

September 2018
JEA's Board completed three-year renewal of Economic Development Program for electric customers.

JEA CUSTOMERS THRIVE AND SURVIVE THANKS TO THE RELIABLE AND AFFORDABLE UTILITY SERVICES THE COMPANY DELIVERS EVERY DAY. JEA EMPLOYEES DEMONSTRATE FOCUS AND FORTITUDE TO DELIVER ESSENTIAL SERVICES TO OUR COMMUNITY EVERY DAY—NO MATTER THE CHALLENGE. STILL, JEA KNOWS IT'S PERFORMED WELL WHEN CUSTOMERS ENJOY EACH AND EVERY MOMENT OF THEIR LIVES WHILE JEA OPERATES AS THEIR TRUSTED ADVISOR, ALMOST UNSEEN IN THE BACKGROUND.

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LETTER FROM BOARD CHAIRMAIN AND MANAGING DIRECTOR & CEO

In reflecting upon fiscal year 2018 (FY 2018), all JEA stakeholders should feel a sense of pride over the dedication of our Board, our management team and, most importantly, our frontline employees.

Aaron Zahn,
JEA Managing Director & CEO

G. Alan Howard,
JEA Board Chairman

October 17, 2018 marked the 125th anniversary of Jacksonville voter approval for the City's first electric light plant. Therefore, it is serendipitous that JEA spent the last fiscal year dedicated to discussing the changing landscape in which our organization exists. In addition, JEA and its stakeholders contemplated the organization's fundamental purpose and its role in Northeast Florida as a community asset. As part of both the landscape and purpose conversations, we acknowledged the challenges and opportunities JEA faces. On October 5, at the JAX Infrastructure Innovation Summit, JEA leadership discussed the trends in our industry and the importance of becoming the center of our customers' energy and water experience. Now, 125 years after its birth, JEA is focused and has the fortitude to successfully position itself to deliver reliable and valuable essential services to our customers.

At the start of 2018, the JEA Board of Directors established a deliberate transition plan intended to create the foundation for a next-generation utility and elevate JEA to the next level. **The transition plan had five basic steps: listen, engage, align, plan, and execute. These five steps were intended to instill JEA with the "Focus & Fortitude" necessary to drive value for our community.** In April, the Board appointed Aaron Zahn as Interim Managing Director and Chief Executive Officer to help guide a corporate transition. Melissa Dykes, the former Chief Financial Officer, was promoted to President and Chief Operating Officer to maintain JEA's steadfast commitment to operational excellence.

Listen: In June 2018, Mr. Zahn initiated a management listening tour aimed at understanding perceptions of the company through the eyes of employees and external stakeholders. Mr. Zahn and the management team collected feedback from customers, employees, union leaders, civic leaders, the mayor, the City Council and board members. The input collected is being aggregated as part of a bold plan for a "year of innovation" in fiscal year 2019. We feel confident the input of our stakeholders will be incorporated as JEA establishes its corporate strategy for the next decade.

Engage: JEA's leadership engaged in a number of difficult conversations over the entire year. We talked openly about privatization, Plant Vogtle*, corporate culture and change. It is our belief that progress will only occur if we confront difficult topics with transparency and good intentions. Fifty years ago, at the beginning of Jacksonville's consolidated government, JEA was built on a foundation of core values that continue to be the bedrock of who we are: Safety, Service, Growth[2], Accountability and Integrity. New to the list, but not to our culture, is "Ideas." This addition to our core values is intended to signal that we value the voice of every person. JEA's culture embodies that of an "Idea Meritocracy." It's the reason why JEA is now a leader in planned solar growth in the Southeast. It's the reason why JEA has partnered with the State of Florida to conduct a purified water pilot. It's the reason why JEA is forging ahead to build innovative partnerships to drive value and economic development in Northeast Florida around telecom, data, smart cities, electrification and transportation. The only constant for JEA going forward will be change. Our core values will ensure we remain true to our principles and engage in the right way to maintain pace.

Align: In August 2018, the Board adopted a Strategic Framework as a means of guiding and measuring JEA's corporate strategy. Most important, the strategic framework established four basic Corporate Measures of value. We will use these Corporate Measures to communicate JEA's current position and our progress: Customer Value, Financial Value, Environmental Value, and Community Impact Value. In short, the Corporate Measures will be a gauge of our success. JEA's focus will be derived from its commitment to maximize these Corporate Measures of value both now and in the future. We believe the Strategic Framework provides governance for JEA in alignment with the conclusions of the City Council's Special Committee on the Future of JEA.

**For the very latest on Plant Vogtle, please visit the JEA website at: jea.com/about/investor_relations/ and on the Municipal Securities Rulemaking Board's Electronic Municipal Market Access ("EMMA") website at emma.msrb.org.*

Focus (noun) \ fō-kəs \: adjustment for distinct vision.

Fortitude (noun) \ fȯr-tə-tüd \: strength of mind that enables one to overcome adversity.

125 Years Ago, Jacksonville Residents Displayed the Focus and Fortitude to Create a Municipal Electric Company

In 1885 there were three ways to illuminate streetlights in America: gas, arc lights, and with a new product invented by Thomas Edison called the incandescent bulb. These bulbs— along with the arc lights— needed generators in order to make light.

In Jacksonville, Sam Hubbard, a businessman, owned a monopoly on light in a city eager to brighten the night. He owned both the gas company and the electric company and he charged a premium for the electricity he generated. City leaders accused him of slowing progress with his high electric rates. That is, until they figured out a way around him.

The Board of Public Works came up with an idea to build its own municipal electric system for $75,000. On October 17, 1893, they asked voters to approve a $1 million bond issue for city improvements, which included an electric light plant. The voters said yes by a whopping 3-to-1 margin and Jacksonville has been a municipal utility town ever since.

Plan: In October 2018, JEA completed the Transition Plan set forth by the Board and interim CEO. In November 2018, after a nationwide search, the Board voted unanimously to make Mr. Zahn the permanent Managing Director and CEO. In December 2018, the Board launched a Strategic Planning Process to determine the strategies and tactics that will best drive value in accordance with our Strategic Framework. We look forward to working together with the City and community on designing the JEA of the future.

Execute: JEA will execute on its new strategy in FY 2019. However, just because we're planning for the future doesn't mean we've stopped being focused on our customers. Under Ms. Dykes, JEA elevated its operational excellence in FY 2018. Throughout the year, JEA employees demonstrated their commitment to safety and customer satisfaction by delivering industry-leading metrics in both segments. Operations teams, focused on harnessing data to improve system reliability, help customers proactively find water leaks, help with fraud prevention and reduce inefficient operations. JEA also embarked on a project called "The Data Lab" to conduct research and development on "best-in-class" technologies to improve our energy and water operations.

Lastly, JEA's financial metrics continue to strengthen. In FY 2018, we assumed no new debt and we proactively refinanced $821 million in revenue bonds to generate $89 million in debt service savings. We set a plan to invest $2 billion-plus into energy and water systems over the next five years. Just after the end of FY 2018, our management team proposed a plan to drive our financial metrics to areas of strength not seen since the 1980s.

The business of providing essential energy and water services is transforming. JEA intends to accelerate innovation in order to improve the lives of each and every customer in the community we serve. With a fresh perspective derived from the FY 2018 transition and new leadership, JEA has emerged a stronger utility, one with focus and fortitude like never before.

G. Alan Howard,
JEA Board Chairman

Aaron Zahn,
JEA Managing Director & CEO

BOARD OF DIRECTORS

G. Alan Howard, JEA Board Chairman, Shareholder, Milam Howard Nicandri Gillam & Renner, P.A.

Frederick Newbill, JEA Board Secretary, Pastor, First Timothy Baptist Church

Kelly Flanagan
Senior VP and CFO, Jacksonville Jaguars

Husein Cumber
Executive Vice President, Corporate Development, Florida East Coast Industries, LLC

John Campion
Co-Founder and Chair, APR Energy

April Green
CFO/COO, Bethel Baptist Institutional Church

Camille Lee-Johnson
COO, Lee Wesley & Associates

JEA SENIOR LEADERSHIP TEAM
FOCUSED ON THE FUTURE

Left to right, **Deryle Calhoun**, Vice President & General Manager, Water/Wastewater Systems; **Ted Hobson**, Vice President & Chief Compliance Officer; **Paul Cosgrave**, Vice President & Chief Information Officer; **Angelia Hiers**, Vice President & Chief Human Resources Officer; **Paul Steinbrecher**, Vice President & Chief Environmental Services Officer; **Melissa Dykes**, President & Chief Operating Officer; **Aaron Zahn**, Managing Director & Chief Executive Officer; **Michael R. Hightower**, Chief Public & Shareholder Affairs Officer; **Ryan Wannemacher**, Chief Financial Officer; **Kerri Stewart**, Vice President & Chief Customer Officer; **Mike Brost**, Vice President & General Manager, Electric Systems; **Jody Brooks**, Vice President & Chief Legal Officer; **John McCarthy**, Vice President & Chief Supply Chain Officer

INFRASTRUCTURE IMPROVEMENTS ARE HELPING TO BUILD A BETTER COMMUNITY IN WHICH TO LIVE, WORK AND PLAY

In 2018, JEA continued to build on its strengths. It addressed the challenge of aging water and wastewater infrastructure in some parts of the city, while at the same time constructing major new assets in other high-growth areas of town. It also led the way in green energy by making significant advances in solar power in Jacksonville.

The water that JEA customers use at home for drinking, bathing, cooking and even swimming, is central to their quality of life. That's why JEA invested $199 million in water and wastewater infrastructure improvements and in the expansion of our reclaimed water supply in FY 2018. It's also why JEA announced plans in September to invest $1 billion in water and wastewater construction projects over the next five years.

JEA opened a new $10 million water treatment plant near Jacksonville International Airport in FY 2018 capable of providing 6 million gallons of drinking water a day. In addition, JEA expanded a water reclamation facility in St. Johns County, now capable of treating 6 million gallons of wastewater a day and turning it into reclaimed water for irrigation. Finally, JEA purchased land near its Greenland Energy Center to construct a 12th wastewater reclamation facility that's set to open in 2022.

The utility also made significant progress on two solar initiatives. It added 27 MWac of solar through purchase power agreements (PPAs). This as the Board approved a second solar expansion consisting of five 50 MWac solar facilities to be constructed as PPAs on several JEA-owned properties.

Both solar initiatives, along with a large existing solar facility, add up to just under 300 MWac of total utility-scale solar. This, in addition to a large and growing base of customer-owned rooftop solar systems, helped JEA earn the Sunriser Award in February 2018 from the Southern Alliance for Clean Energy. The nonprofit designated JEA one of the top seven utilities in the Southeast with the highest forecast solar watts of growth per customer.

JEA opened a new $10 million water treatment plant near Jacksonville International Airport in FY 2018 capable of providing 6 million gallons of drinking water a day to customers.

As JEA expanded its use of renewables, it decommissioned the St. Johns River Power Park, a 1,276-MW coal plant co-owned with FPL, and it demolished the plant's cooling towers in June. It also sold 32 acres of land along the St. Johns River, site of the former Southside Generating Station, to developers for $18.5 million.

JEA continued to lease the excess capacity of its telecommunications infrastructure in 2018 for about $1.8 million in revenue. By leasing this capacity, as well as space on its existing communication towers, JEA helps the City and earns a better return on investment for these assets, which benefits the utility and its customers.

Two recent storms in the 2017 fiscal year, Matthew and Irma, directly impacted JEA's Water and Wastewater System and highlighted the need for a system resiliency assessment. As a result, JEA launched a five-year resiliency study in May to better understand system vulnerabilities to extreme weather events. The study's output will improve system reliability and operational continuity.

All over the world, growing cities are supplementing shrinking water supplies by treating reclaimed water to drinking water standards. In Jacksonville, JEA took the first step toward exploring this concept through a partnership with the St. Johns River Water Management District. JEA pilot-tested two leading water purification technologies at two of its wastewater treatment facilities. The aim of the pilot study was to understand the technology and its performance on JEA wastewater.


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SUBMIT YOUR PICTURES!
#DUUUVAL
3RD AND 8
1:54
STORM SEASON IS HERE.
Update your contact info at jea.com
JEA
BONO'S
PIT BAR-B-Q
BUD LIGHT
XBOX ONE
RAMSEY
FOURNETTE
27
JAGUARS

INNOVATIVE ELECTRIC, WATER AND WASTEWATER SERVICES THAT A MILLION LIVES DEPEND ON

Power quality and reliability are of the utmost importance to JEA. That's why JEA is focused on making its outages as short as possible. In order to do that, the JEA Electric System began implementing a four-year, multi-million dollar program to utilize smart grid devices such as customer meters, fault current indicators, automatic switches and reclosers and trip savers (smart fuses) in an effort to reduce customer outage duration.

The Electric System is also implementing significant control system upgrades to its Energy Management System (EMS). The EMS monitors and controls generation, transmission, and distribution assets, while a new Distribution Management System and future Outage Management System will improve outage restoration activities. Finally, Restoration 1-2-3, JEA's newly developed storm restoration plan, will improve communications during massive outage events.

JEA business customers, large and small, enjoy JEA rebates to help purchase electric-powered equipment to replace diesel and propane-fueled equipment such as forklifts and refrigerated delivery vehicles. In FY 2018, JEA commercial customers used 26,000 megawatt hours of additional electricity because of electrification. Additionally, JEA is training these customers to recharge their equipment during off-peak hours, so they don't increase demand overall. In the years ahead, JEA will work to significantly grow business electrification.

Work like this demonstrates JEA's strong commitment to its customers, a commitment that landed JEA squarely in the first quartile of the J.D. Power 2018 Electric Utility Customer Satisfaction Survey for Business Electric Service in the South among Midsize Utilities.

Business customers have also begun to embrace JEA's Economic Development Incentive Program, which provides incentives to some of the largest companies in the country if they set up shop in Jacksonville (or if existing companies grow jobs and electric usage). As a result, companies like Ikea, Sysco and Dresser-Rand have brought more than 7,000 jobs to Jacksonville over the last five years. That's a wage impact close to $300 million a year. The program has proved so positive for economic growth, the Board extended it for another three years.

In FY 2018, JEA commercial customers used 26,000 megawatt hours of additional electricity because of electrification.

JEA EMPLOYEES PROUDLY DEDICATE TIME, TREASURE AND TALENT TO HELPING OTHERS IN THE COMMUNITY

JEA started the fiscal year by making headlines. On October 7, 2017, the utility began sending what would become a total of 85 linemen and their bucket trucks to Puerto Rico to help restore power after Hurricane Maria. Puerto Ricans cheered when the utility's crews arrived because JEA was one of the first utilities to respond to mutual aid requests. Puerto Ricans from as far away as New York City called JEA's call center in Jacksonville to thank JEA for helping their friends and family members back home. The focus and fortitude crews displayed working in devastating conditions went a long way toward helping Puerto Rico recover from a catastrophic storm.

Needless to say, JEA is focused on its own community, as well. At the start of each fiscal year, the utility gives each of its nearly 2,000 employees eight hours of work time to help area nonprofits by participating in volunteer activities. Many employees quickly use all eight company-offered hours and volunteer further on their own time.

Employees can also participate in Ambassador activities such as taking small groups on tours of JEA facilities and teaching electric safety to first-graders in elementary schools. By the end of the fiscal year, JEA employees had spent nearly 13,000 hours participating in Ambassador and volunteer events at more than 200 area nonprofits. And that's not all. Every year, JEA employees also raise money to give to two area nonprofits: United Way of Northeast Florida and Community Health Charities. This year, employees raised more money than ever before: a combined total of $428,500.

JEA employees know that part of what makes their utility a premier ervice provider, valued asset and vital partner in advancing our community is their stellar job performance. And it's why there were high fives across the company when a JEA Lineman team won First Place Overall at the 2018 Florida Lineman Rodeo in Kissimmee. Not to be outdone, competition teams for the Water and Wastewater System also took home top honors in state competitions in FY 2018.

Of all the awards JEA garnered this fiscal year, there's one that makes many in the utility especially proud. It's the TreeLine USA Award, given by the national Arbor Day Foundation in Lincoln, Nebraska. The award honors many things, especially JEA's dedication to quality tree trimming practices. It's the sixth straight year JEA has been honored for its commitment to trees.

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JEA
a Better

JEA AT A GLANCE

Electric System
- 466,000 customers
- 900 square miles of service area
- 6,920 miles of distribution
- 744 circuit miles of transmission

Electric Generation
- Northside Generating Station (NGS)
- Plant Scherer Unit 4
- Brandy Branch (BB)
- Kennedy Station (KS)
- Greenland Energy Center (GEC)
- Solar Photovoltaic Power Purchase Agreements:
  - Jax Solar
  - NW Jax Solar Partners
  - Old Plank Road Solar Farm
  - Blair Road Solar
  - Simmons Road Solar
  - Starratt Solar
  - Old Kings Solar

Generation Technologies
- 1 pulverized coal (PC) unit (Scherer 4)
- 2 circulating fluidized bed (CFB) units (NGS 1 and 2)
- 5 gas/oil-fired combustion turbines (2 at GEC, 1 at BB, 2 at KS)
- 4 oil-fired combustion turbines (NGS)
- 1 combined cycle (CC) unit (BB)
- 7 Solar Photovoltaic Projects
- 1 gas/oil-fired turbine-generator unit (NGS 3)

Electric Generation Mix
- Natural Gas–48%
- Solid Fuel–34%
- Other–18 %

Water System
- 348,000 customers
- 100% groundwater supply
- 37 active WTPs
  - 19 major, 18 minor
- 2 re-pump facilities
- 134 permitted wells
- 1 major grid (with 2 river crossing interconnections), 4 minor grids
- 4-county service area
- 298 MGD permitted capacity in major grid
- 310 MGD total system permitted capacity
- 81 MGal storage capacity (77 MGal at the water plants, 4 MGal at the two re-pump facilities, Bartram and River Oaks)
- 112 MGD AADF well production
- 116 MGD AADF water plant production
- 152 MGD Max Day Flow, MDF (12 Month)
- 4,755 mile delivery system

Wastewater System
- 271,000 customers
- 11 treatment facilities
  - 7 regional, 4 non-regional
- 1,422 pump stations
- 4-county service area
- 120 MGD AADF treatment capacity
- 241 MGD peak treatment capacity
- 80 MGD AADF wastewater treated
- 143 MGD MDF non-coincidental (12 Month)
- 4,027 mile collection system

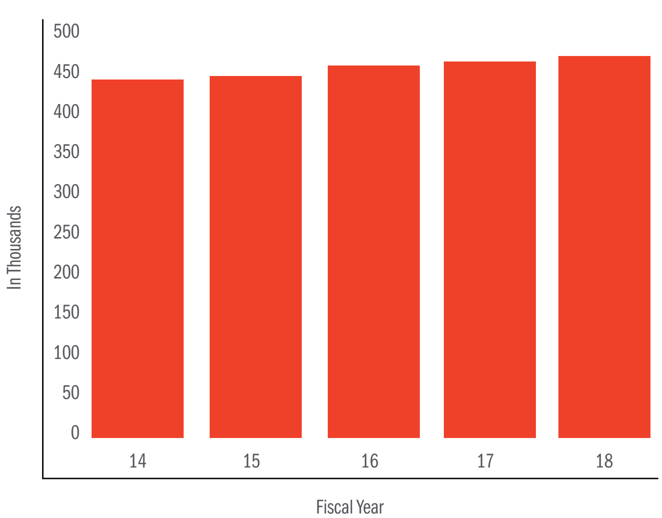
Reclaimed Water System
- 11,000 customers
- 10 reclaimed water production facilities
  - Arlington East, Mandarin, Blacks Ford, JCP, Ponte Vedra, Nassau Buckman, District 2, Southwest, Ponce de Leon
- 33 MGD AADF production capacity
- 19 MGD AADF reclaimed water production
- 2 storage and re-pump facilities (Bartram and Nocatee)
- 3 production and storage facilities (Blacks Ford, JCP and Ponte Vedra)
- 361 miles of pipe

District Energy Systems
- 4 chilled water plants
- Total capacity: 20,700 tons

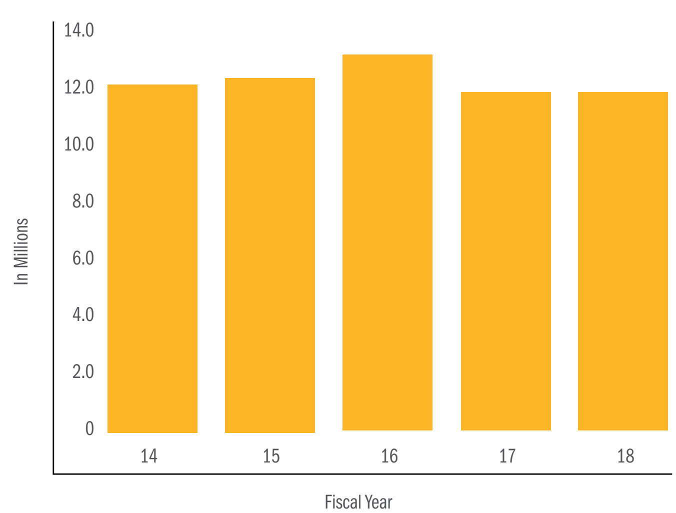
ELECTRIC FINANCIAL AND OPERATING HIGHLIGHTS

	Years Ended September 30					
	2018	2017	2016	2015	2014	% Change 2018–2017
FINANCIAL HIGHLIGHTS						
Total operating revenues (thousands)	$1,366,111	$1,428,329	$1,364,242	$1,370,212	$1,479,483	-4.36%
Fuel and purchased power expenses (thousands)	$530,246	$536,250	$485,874	$517,239	$585,021	-1.12%
Total operating expenses (thousands)	$1,102,133	$1,088,386	$1,032,774	$1,061,853	$1,196,160	1.26%
Debt service coverage:						
Senior and subordinated - Electric	2.30 x	2.53 x	2.89 x	2.63 x	2.41 x	-9.09%
Senior - Electric	6.55 x	7.53 x	6.59 x	5.80 x	5.40 x	-13.01%
Bulk Power Supply System	3.47 x	1.75 x	1.81 x	1.24 x	2.24 x	98.29%
St. Johns River Power Park 2nd Resolution	1.60 x	1.18 x	1.17 x	1.16 x	2.21 x	35.59%
OPERATING HIGHLIGHTS						
Sales (megawatt hours)	12,732,236	13,893,852	14,586,486	14,379,697	14,312,013	-8.36%
Peak demand - megawatts 60 minute net	3,080	2,682	2,674	2,863	2,823	14.84%
Total accounts - average number	466,411	458,953	451,788	443,705	434,917	1.63%
Sales per residential account (kilowatt hours)	13,205	12,672	13,433	13,468	13,301	4.21%
Average residential revenue per kilowatt hour	$11.42	$11.44	$11.24	$11.82	$11.97	-0.17%
Power supply:						
Natural gas	48%	39%	32%	32%	27%	23.08%
Coal	22%	43%	42%	50%	57%	-48.84%
Purchases	18%	12%	11%	8%	5%	50.00%
Petroleum coke	12%	6%	15%	10%	10%	100.00%
Oil	0%	0%	0%	0%	1%	0.00%

Average Number of Electric Retail Accounts



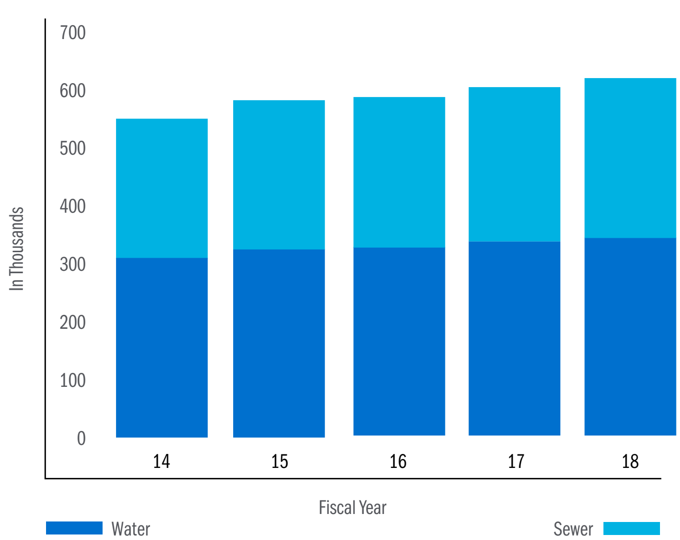
Retail Megawatt Hour Sales



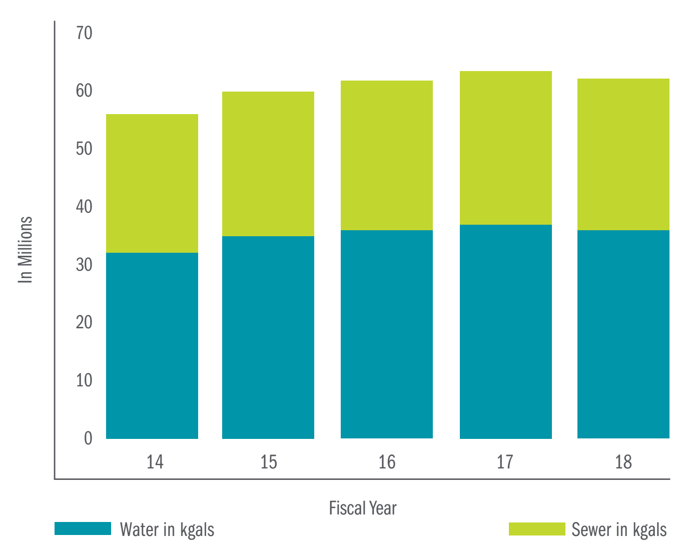
WATER AND SEWER FINANCIAL AND OPERATING HIGHLIGHTS

	Years Ended September 30					% Change
	2018	**2017**	**2016**	**2015**	**2014**	**2018–2017**
FINANCIAL HIGHLIGHTS						
Total operating revenues (thousands)	$435,682	$457,908	$427,750	$389,733	$393,355	-4.85%
Operating expenses (thousands)	$310,435	$305,131	$297,325	$269,509	$263,275	1.74%
Debt service coverage:						
Senior and subordinated	2.79 x	2.99 x	3.28 x	2.75 x	2.46 x	-6.69%
Senior	3.33 x	3.54 x	3.78 x	3.13 x	2.71 x	-5.93%
OPERATING HIGHLIGHTS						
WATER						
Total sales (kgals)	36,186,559	37,245,188	36,357,919	34,558,284	32,468,336	-2.84%
Total accounts - average number	348,159	341,016	333,139	325,352	318,708	2.09%
Average sales per residential account (kgals)	59.33	63.21	62.78	61.32	59.84	-6.14%
Average residential revenue per kgal	$5.43	$5.48	$5.26	$5.30	$5.35	-0.91%
SEWER						
Total sales (kgals)	26,340,622	26,712,770	25,817,658	24,922,141	23,526,976	-1.39%
Total accounts - average number	270,871	264,336	257,719	250,974	244,836	2.47%
Average sales per residential account (kgals)	57.91	61.84	60.96	59.75	58.40	-6.36%
Average residential revenue per kgal	$9.52	$9.46	$9.26	$9.33	$9.46	0.63%
REUSE						
Total sales (kgals)	3,119,739	3,290,311	2,644,046	1,783,730	1,300,838	-5.18%
Total accounts - average number	11,498	9,391	7,498	5,891	4,501	22.44%

Average Number of Water and Sewer Accounts



Water and Sewer Sales Volume

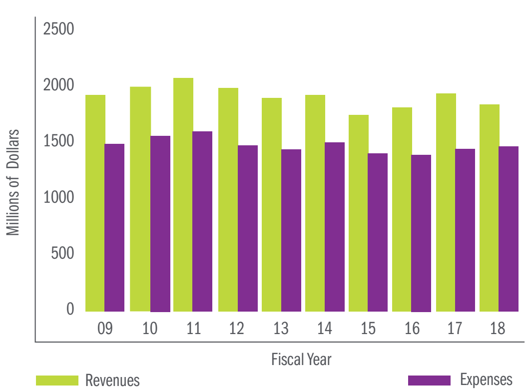


FINANCIAL SUMMARY

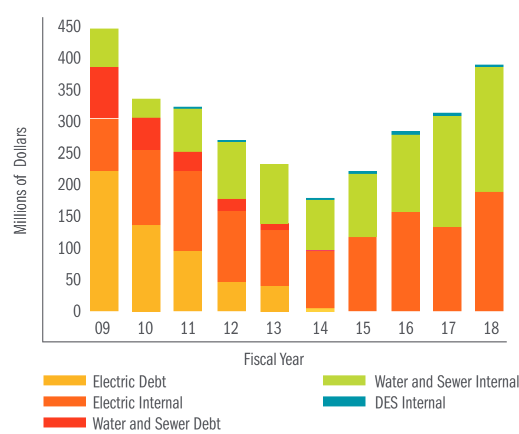
Combined Electric System, Bulk Power Supply System, St Johns River Power Park System, Water and Sewer and District Energy System (in thousands of dollars)

	2018-17	2017-16	2016-15	2015-14	2014-13
Operating revenues:					
Electric	$1,267,202	$1,382,206	$1,321,713	$1,324,883	$1,431,167
Water and sewer	423,480	448,057	417,404	379,789	383,643
District energy system	8,348	8,185	8,337	8,778	8,682
Other, net	90,952	36,729	34,298	35,930	38,389
Total operating revenues	1,789,982	1,875,177	1,781,752	1,749,380	1,861,881
Operating expenses:					
Fuel and purchased power	530,246	536,250	485,874	517,239	585,021
Maintenance and other operating expense	429,989	392,142	380,219	374,166	364,764
Depreciation	360,609	386,699	382,432	366,486	375,505
State utility and franchise taxes	71,307	69,683	71,244	72,510	72,221
Recognition of deferred costs and revenues, net	6,856	(4,075)	(1,527)	(11,168)	49,271
Total operating expenses	1,399,007	1,380,699	1,318,242	1,319,233	1,446,782
Operating income	390,975	494,478	463,510	430,147	415,099
Nonoperating revenues (expenses):					
Interest on debt	(166,508)	(182,992)	(184,457)	(198,199)	(223,736)
Investment income	11,826	10,576	14,225	12,904	20,546
Allowance for funds used during construction	11,764	11,774	9,407	5,723	3,894
Other nonoperating income, net	9,857	5,918	8,765	11,833	7,280
Earnings from The Energy Authority	4,074	6,335	6,136	1,461	3,567
Loss on sale of asset	-	-	-	(199)	-
Other interest, net	(1,825)	(451)	(403)	(68)	(38)
Total nonoperating expenses, net	(130,812)	(148,840)	(146,327)	(166,545)	(188,487)
Income before contributions and special item	260,163	345,638	317,183	263,602	226,612
Contributions (to) from:					
General fund, City of Jacksonville	(116,620)	(115,823)	(129,187)	(111,688)	(109,188)
Capital contributions:					
Developers and other	82,157	66,875	53,652	52,709	38,845
Reduction of plant cost through contributions	(54,114)	(42,069)	(31,632)	(33,105)	-
Total contributions	(88,577)	(91,017)	(107,167)	(92,084)	(70,343)
Special item	(45,099)	-	-	151,490	-
Change in net position	126,487	254,621	210,016	323,008	156,269
Net position - beginning of year, originally reported	2,628,822	2,376,925	2,166,909	1,843,901	2,039,737
Effect of change in accounting	-	(2,724)	-	-	(352,105)
Net position - beginning of year, as restated	2,628,822	2,374,201	2,166,909	1,843,901	1,687,632
Net position - end of year	$2,755,309	$2,628,822	$2,376,925	$2,166,909	$1,843,901

Total Operating Revenues and Expenses



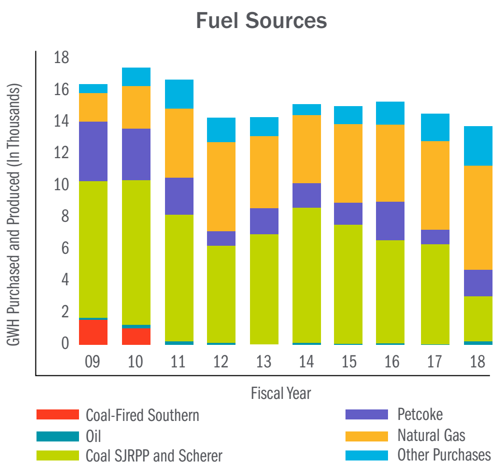
Sources of Capital Project Funding

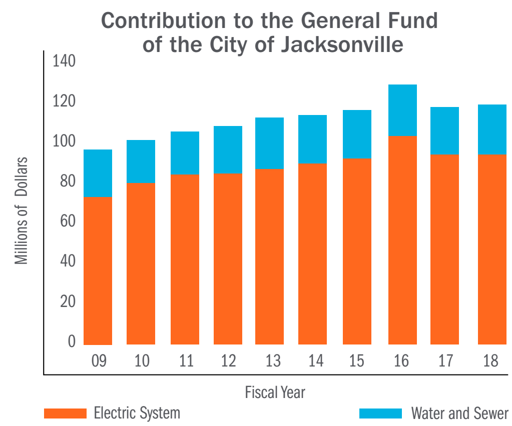


FINANCIAL SUMMARY, CONTINUED

Combined Electric System, Bulk Power Supply System, St Johns River Power Park System, Water and Sewer and District Energy System (in thousands of dollars)

	2013-12	2012-11	2011-10	2010-09	2009-08
Operating revenues:					
Electric	$1,383,696	$1,473,134	$1,624,473	$1,548,248	$1,525,966
Water and sewer	381,677	385,631	358,176	303,241	249,813
District energy system	8,471	8,571	8,067	7,595	6,914
Other, net	38,975	41,046	48,842	50,692	48,687
Total operating revenues	1,812,819	1,908,382	2,039,558	1,909,776	1,831,380
Operating expenses:					
Fuel and purchased power	539,646	548,030	733,296	741,374	719,296
Maintenance and other operating expense	371,041	366,751	334,066	322,672	295,480
Depreciation	378,067	379,570	351,931	353,606	344,158
State utility and franchise taxes	70,237	72,925	78,787	73,120	72,127
Recognition of deferred costs and revenues, net	64,305	59,153	27,014	22,149	33,108
Total operating expenses	1,423,296	1,426,429	1,525,094	1,512,921	1,464,169
Operating income	389,523	481,953	514,464	396,855	367,211
Nonoperating revenues (expenses):					
Interest on debt	(235,228)	(248,681)	(289,320)	(285,669)	(264,701)
Investment income (loss)	(13,240)	8,804	11,908	(3,604)	23,463
Allowance for funds used during construction	3,986	3,365	5,387	9,713	12,708
Other nonoperating income, net	7,530	16,420	7,698	3,832	-
Earnings from The Energy Authority	4,325	6,328	12,265	6,103	4,088
Water & Sewer Expansion Authority	-	-	(485)	(719)	(864)
Loss on sale of asset	-	-	-	-	(986)
Other interest, net	(134)	(23)	(109)	(54)	(72)
Total nonoperating expenses, net	(232,761)	(213,787)	(252,656)	(270,398)	(226,364)
Income before contributions and special item	156,762	268,166	261,808	126,457	140,847
Contributions (to) from:					
General fund, City of Jacksonville	(106,687)	(104,188)	(101,688)	(99,187)	(96,687)
Capital contributions:					
Developers and other	29,292	18,774	23,539	19,883	38,071
Water & Sewer Expansion Authority	-	-	11,465	-	-
City of Jacksonville Better Jacksonville Plan	-	-	-	-	1,516
Total contributions	(77,395)	(85,414)	(66,684)	(79,304)	(57,100)
Change in net position	79,367	182,752	195,124	47,153	83,747
Net position - beginning of year, originally reported	1,991,311	1,808,559	1,613,435	1,566,282	1,482,535
Effect of change in accounting	(30,941)	-	-	-	-
Net position - beginning of year, as restated	1,960,370	1,808,559	1,613,435	1,566,282	1,482,535
Net position - end of year	$2,039,737	$1,991,311	$1,808,559	$1,613,435	$1,566,282





OPERATING SUMMARY: ELECTRIC SYSTEM

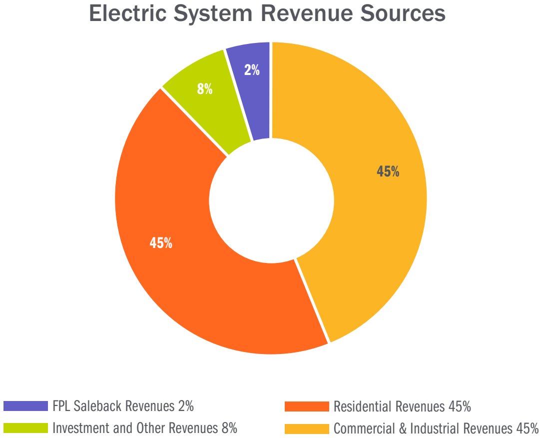
Electric System, Bulk Power System and St Johns River Power Park

	2018-17	2017-16	2016-15	2015-14	2014-13
Electric revenues (000's omitted):					
Residential	$618,171	$584,663	$599,009	$619,897	$608,983
Commercial and industrial	594,395	587,972	597,796	627,547	632,121
Public street lighting	12,873	13,069	13,488	11,982	13,943
Sales for resale	5,474	21,813	31,210	32,424	34,700
Florida Power & Light saleback	30,767	128,737	130,053	128,475	159,747
Total	1,261,680	1,336,254	1,371,556	1,420,325	1,449,494
Sales (megawatt hours):					
Residential	5,414,721	5,108,945	5,328,245	5,243,002	5,086,866
Commercial and industrial	6,851,803	6,725,201	6,847,583	6,767,836	6,636,445
Public street lighting	59,176	65,721	80,108	89,376	111,325
Sales for resale					
Territorial	38,640	150,268	305,315	333,994	337,353
Off-system	35,429	150,635	169,037	83,367	136,342
Florida Power & Light saleback	332,467	1,693,082	1,856,198	1,862,122	2,003,682
Total	12,732,236	13,893,852	14,586,486	14,379,697	14,312,013
Average number of accounts:					
Residential	410,060	403,164	396,664	389,287	382,438
Commercial and industrial	52,573	52,060	51,472	50,867	48,999
Public street lighting	3,777	3,727	3,649	3,549	3,477
Sales for resale (1)	1	2	3	2	3
Total	466,411	458,953	451,788	443,705	434,917
System installed capacity - MW (2)	3,084	3,722	3,722	3,759	3,759
Peak demand - MW (60 minute net)	3,080	2,682	2,674	2,863	2,823
System load factor - %	48%	53%	56%	51%	51%
Residential averages - annual:					
Revenue per account - $	1,507.51	1,450.19	1,510.12	1,592.39	1,592.37
kWh per account	13,205	12,672	13,433	13,468	13,301
Revenue per kWh - ¢	11.42	11.44	11.24	11.82	11.97
All other retail - annual:					
Revenue per account - $	10,776.72	10,773.85	11,089.86	11,752.59	12,311.61
kWh per account	122,644	121,729	125,682	126,015	128,588
Revenue per kWh - ¢	8.79	8.85	8.82	9.33	9.57
Heating-cooling degree days	4,256	3,737	4,117	4,159	3,998

(1) Includes Florida Power and Light, but does not include the average number of off-system non-firm sales customers.

(2) Includes JEA's 50% share of the SJRPP's two coal-fired generating units (638 net megawatts each) and JEA's 23.64% share of Scherer's 846 net megawatt coal-fired generating Unit 4. System installed capacity is reported based on winter capacity.

Electric System Revenue Sources



OPERATING SUMMARY: ELECTRIC SYSTEM, CONTINUED

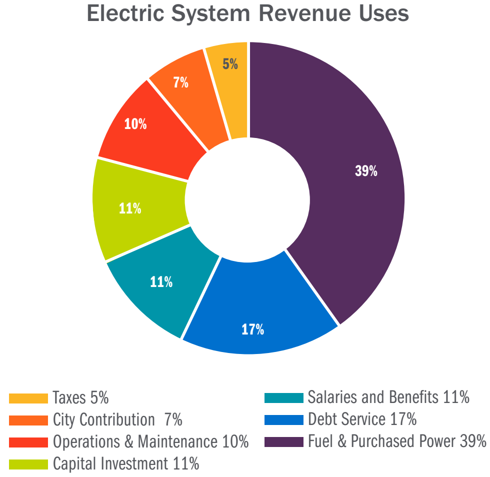
Electric System, Bulk Power System and St Johns River Power Park

	2013-12	2012-11	2011-10	2010-09	2009-08
Electric revenues (000's omitted):					
Residential	$580,893	$601,581	$686,706	$659,829	$645,725
Commercial and industrial	617,962	670,983	704,976	647,316	678,218
Public street lighting	14,661	15,311	15,347	14,203	14,440
Sales for resale	29,989	37,153	41,155	53,990	52,941
Florida Power & Light saleback	158,031	166,873	196,353	190,293	157,898
Total	1,401,536	1,491,901	1,644,537	1,565,631	1,549,222
Sales (megawatt hours):					
Residential	4,877,264	4,806,144	5,444,926	5,707,670	5,300,203
Commercial and industrial	6,599,249	6,670,200	6,908,240	6,932,123	6,849,291
Public street lighting	123,177	122,614	122,402	121,413	120,191
Sales for resale					
Territorial	329,922	374,116	394,548	418,867	406,051
Off-system	42,286	74,852	99,953	391,559	579,730
Florida Power & Light saleback	1,810,651	1,806,781	2,492,559	2,950,244	2,659,565
Total	13,782,549	13,854,707	15,462,628	16,521,876	15,915,031
Average number of accounts:					
Residential	375,600	371,658	369,566	368,682	367,864
Commercial and industrial	47,709	47,230	46,710	46,325	45,810
Public street lighting	3,460	3,424	3,424	3,495	3,550
Sales for resale (1)	3	3	3	3	3
Total	426,772	422,315	419,703	418,505	417,227
System installed capacity - MW (2)	3,759	3,759	3,759	3,376	3,376
Peak demand - MW (60 minute net)	2,596	2,665	3,062	3,224	3,064
System load factor - %	54%	53%	50%	49%	49%
Residential averages - annual:					
Revenue per account - $	1,546.57	1,618.64	1,858.14	1,789.70	1,755.34
kWh per account	12,985	12,932	14,733	15,481	14,408
Revenue per kWh - ¢	11.91	12.52	12.61	11.56	12.42
All other retail - annual:					
Revenue per account - $	12,363.40	13,548.66	14,367.95	13,278.18	14,032.78
kWh per account	131,377	134,102	140,237	141,580	141,197
Revenue per kWh - ¢	9.41	10.10	10.25	9.38	9.94
Heating-cooling degree days	3,830	3,618	4,345	4,705	4,094

(1) Includes Florida Power and Light, but does not include the average number of off-system non-firm sales customers.

(2) Includes JEA's 50% share of the SJRPP's two coal-fired generating units (638 net megawatts each) and JEA's 23.64% share of Scherer's 846 net megawatt coal-fired generating Unit 4. System installed capacity is reported based on winter capacity.

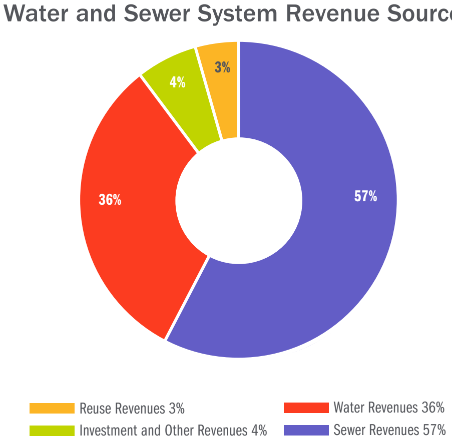
Electric System Revenue Uses



OPERATING SUMMARY: WATER AND SEWER SYSTEM

		2018-17	2017-16	2016-15	2015-14	2014-13
WATER	**Water revenues (000's omitted):**					
	Residential	$91,954	$96,615	$89,946	$86,215	$83,014
	Commercial and industrial	47,494	47,969	46,212	45,078	43,647
	Irrigation	32,004	36,836	34,846	32,681	30,088
	Total	171,452	181,420	171,004	163,974	156,749
	Water sales (kgals):					
	Residential	16,932,812	17,624,952	17,086,586	16,271,698	15,507,752
	Commercial and industrial	14,023,130	13,402,094	13,343,376	12,870,984	12,131,400
	Irrigation	5,230,617	6,218,142	5,927,957	5,415,602	4,829,184
	Total	36,186,559	37,245,188	36,357,919	34,558,284	32,468,336
	Average number of accounts:					
	Residential	285,404	278,838	272,157	265,373	259,159
	Commercial and industrial	25,702	25,423	24,698	23,951	23,722
	Irrigation	37,053	36,755	36,284	36,028	35,827
	Total	348,159	341,016	333,139	325,352	318,708
	Residential averages - annual:					
	Revenue per account - $	322.19	346.49	330.49	324.88	320.32
	kgals per account	59.33	63.21	62.78	61.32	59.84
	Revenue per kgal - $	5.43	5.48	5.26	5.30	5.35
SEWER	**Sewer revenues (000's omitted):**					
	Residential	$139,174	$143,967	$135,288	$129,976	$125,526
	Commercial and industrial	108,126	107,446	103,731	101,910	97,339
	Total	247,300	251,413	239,019	231,886	222,865
	Volume (kgals):					
	Residential	14,623,682	15,225,124	14,614,026	13,934,981	13,269,638
	Commercial and industrial	11,716,940	11,487,646	11,203,632	10,987,160	10,257,338
	Total	26,340,622	26,712,770	25,817,658	24,922,141	23,526,976
	Average number of accounts:					
	Residential	252,531	246,187	239,738	233,203	227,216
	Commercial and industrial	18,340	18,149	17,981	17,771	17,620
	Total	270,871	264,336	257,719	250,974	244,836
	Residential averages - annual:					
	Revenue per account - $	551.12	584.79	564.32	557.35	552.45
	kgals per account	57.91	61.84	60.96	59.75	58.40
	Revenue per kgal - $	9.52	9.46	9.26	9.33	9.46
REUSE	**Reuse revenues (000's omitted):**	$13,659	$13,216	$10,267	$7,378	$5,533
	Reuse sales (kgals):	3,119,739	3,290,311	2,644,046	1,783,730	1,300,838
	Average number of accounts:	11,498	9,391	7,498	5,891	4,501
RAINFALL	**Inches**	57.41	72.89	31.38	49.43	51.17
	Days	120	98	98	114	114

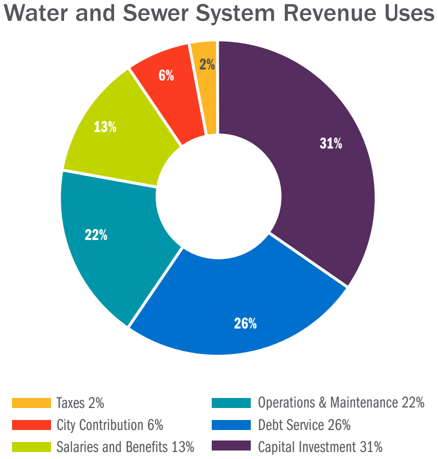
Water and Sewer System Revenue Sources



OPERATING SUMMARY: WATER AND SEWER SYSTEM, CONTINUED

		2013-12	2012-11	2011-10	2010-09	2009-08
WATER	**Water revenues (000's omitted):**					
	Residential	$81,832	$83,390	$81,859	$70,396	$59,441
	Commercial and industrial	42,809	43,629	40,299	34,872	27,591
	Irrigation	32,796	34,802	35,932	26,876	19,080
	Total	157,437	161,821	158,090	132,144	106,112
	Water sales (kgals):					
	Residential	15,741,904	16,589,517	18,485,853	17,609,301	17,572,032
	Commercial and industrial	11,777,128	12,134,488	12,271,645	12,091,091	12,184,482
	Irrigation	5,568,772	6,621,039	8,225,409	7,049,874	7,089,431
	Total	33,087,804	35,345,044	38,982,907	36,750,266	36,845,945
	Average number of accounts:					
	Residential	253,662	250,204	248,605	247,609	246,276
	Commercial and industrial	23,487	23,365	23,221	22,996	23,460
	Irrigation	35,765	35,652	35,559	35,441	35,340
	Total	312,914	309,221	307,385	306,046	305,076
	Residential averages - annual:					
	Revenue per account - $	322.60	333.29	329.27	284.30	241.36
	kgals per account	62.06	66.30	74.36	71.12	71.35
	Revenue per kgal - $	5.20	5.03	4.43	4.00	3.38
SEWER	**Sewer revenues (000's omitted):**					
	Residential	$124,642	$126,722	$116,024	$99,327	$84,961
	Commercial and industrial	96,009	94,232	81,633	70,831	59,017
	Total	220,651	220,954	197,657	170,158	143,978
	Volume (kgals):					
	Residential	13,439,781	14,091,702	15,597,512	14,847,431	14,353,777
	Commercial and industrial	10,184,193	10,398,369	10,321,967	10,279,241	10,413,889
	Total	23,623,974	24,490,071	25,919,479	25,126,672	24,767,666
	Average number of accounts:					
	Residential	221,821	218,264	216,323	214,506	212,741
	Commercial and industrial	17,462	17,351	17,269	17,229	17,617
	Total	239,283	235,615	233,592	231,735	230,358
	Residential averages - annual:					
	Revenue per account - $	561.90	580.59	536.35	463.05	399.36
	kgals per account	60.59	64.56	72.10	69.22	67.47
	Revenue per kgal - $	9.27	8.99	7.44	6.69	5.92
REUSE	**Reuse revenues (000's omitted):**	$4,551	$3,936	$3,622	$2,093	$1,156
	Reuse sales (kgals):	1,109,653	1,330,359	1,551,175	989,010	805,925
	Average number of accounts:	3,143	2,241	1,666	1,201	837
RAINFALL	**Inches**	45.54	55.24	42.18	40.53	53.67
	Days	121	N/A	N/A	N/A	N/A

Water and Sewer System Revenue Uses



FINANCIAL REPORT

Financial Statements, Supplementary Information, and Bond Compliance Information

JEA

Years Ended September 30, 2018 and 2017
With Report of Independent Auditors

Ernst & Young LLP

Building a better working world

JEA

Financial Statements, Supplementary Information, and Bond Compliance Information

Years Ended September 30, 2018 and 2017

Contents

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Report of Independent Auditors

The Board of Directors
JEA
Jacksonville, Florida

Report on the Financial Statements

We have audited the accompanying financial statements of JEA, a component unit of the City of Jacksonville, as of and for the years ended September 30, 2018 and 2017, and the related notes to the financial statements, which collectively comprise JEA's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in conformity with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free of material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States and the standards applicable to financial audits contained in *Government Auditing Standards,* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of JEA as of September 30, 2018 and 2017, and the respective changes in its financial position and cash flows thereof for the years then ended in conformity with U.S. generally accepted accounting principles.

A member firm of Ernst & Young Global Limited

Adoption of GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions and GASB Statement No. 83, Certain Asset Retirement Obligations

As discussed in Footnote 1 to the financial statements, JEA changed its method of accounting for postemployment benefits other than pensions and certain asset retirement obligations as a result of the adoption of Governmental Accounting Standards Board (GASB) Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions,* effective October 1, 2016 and GASB Statement No. 83, *Certain Asset Retirement Obligations*, effective October 1, 2017, respectively. Our opinion is not modified with respect to these matters.

Other Matters

Required Supplementary Information

U.S. generally accepted accounting principles require that the Management's Discussion and Analysis, the Schedule of JEA's Proportionate Share of the Net Pension Liability and Schedule of JEA Contributions, SJRPP Plan – Schedule of Changes in Net Pension Liability and Related Ratios, SJRPP Pension Plan – Schedule of Contributions, OPEB Plan – Schedule of Changes in Net OPEB Liability and Related Ratios and OPEB Plan – Schedule of Contributions, as listed in the table of contents be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board which considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements as a whole. The combining statements of net position, revenues, expenses and changes in net position and cash flows, as listed in the table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements.

Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States. In our opinion, the combining statements of net position, revenues, expenses and changes in net position and cash flows, as listed in the table of contents are fairly stated, in all material respects, in relation to the financial statements as a whole.

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Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we also have issued our report dated December 3, 2018 on our consideration of JEA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of JEA's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering JEA's internal control over financial reporting and compliance.

Ernst & Young LLP

December 3, 2018

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Management's Discussion and Analysis

Introduction

JEA is a municipal utility operating in Jacksonville, Florida (Duval County) and parts of three adjacent counties. The operation is composed of three enterprise funds – the Electric Enterprise Fund, the Water and Sewer Fund, and the District Energy System (DES). The Electric Enterprise Fund is comprised of the JEA Electric System, Bulk Power Supply System (Scherer), and St. Johns River Power Park System (SJRPP). The Electric Enterprise Fund, Water and Sewer Fund, and DES are presented on a combined basis in the accompanying statements of net position, statements of revenues, expenses and changes in net position, and statements of cash flows.

Overview of the Combined Financial Statements

This discussion and analysis serves as an introduction to JEA's basic financial statements. The information presented here should be read in conjunction with the financial statements and accompanying notes.

The basic financial statements are presented on a comparative basis for the fiscal years ended September 30, 2018 and 2017. The statements of net position present JEA's assets, deferred outflows of resources, liabilities, and deferred inflows of resources, with the residual reported as net position. Revenue and expense information is presented in the accompanying statements of revenues, expenses, and changes in net position. The accompanying statements of cash flows present JEA's sources and uses of cash and cash equivalents and are presented using the direct method. This method provides broad categories of cash receipts and cash disbursements pertaining to cash provided by or used in operations, investing, and financing activities.

The notes to the financial statements are an integral part of JEA's basic financial statements and contain information on accounting principles and additional information on certain components of these statements.

The following tables summarize the financial condition and operations of JEA for the 2018 and 2017 fiscal years:

Condensed Statements of Net Position

	2018	2017*	2016
		(In millions)	
Assets and deferred outflows of resources			
Current assets	**$ 874**	$ 902	$ 917
Other noncurrent assets	**1,677**	1,624	1,552
Net capital assets	**5,380**	5,814	5,875
Deferred outflows of resources	**435**	438	462
Total assets and deferred outflows of resources	**$ 8,366**	$ 8,778	$ 8,806
Liabilities and deferred inflows of resources			
Current liabilities	**$ 207**	$ 189	$ 168
Current liabilities payable from restricted assets	**367**	449	389
Net pension liability	**544**	554	493
Other noncurrent liabilities	**91**	90	47
Long-term debt	**4,053**	4,410	4,791
Deferred inflows of resources	**348**	457	541
Net position			
Net investment in capital assets	**1,857**	1,622	1,420
Restricted	**542**	614	612
Unrestricted	**357**	393	345
Total liabilities, deferred inflows of resources, and net position	**$ 8,366**	$ 8,778	$ 8,806

Condensed Statements of Revenues, Expenses, and Changes in Net Position

	2018	2017*	2016
		(In millions)	
Operating revenues	**$ 1,790**	$ 1,875	$ 1,782
Operating expenses	**(1,399)**	(1,380)	(1,319)
Operating income	**391**	495	463
Nonoperating expenses, net	**(131)**	(149)	(146)
Contributions	**(89)**	(91)	(107)
Special Item	**(45)**	–	–
Change in net position	**126**	255	210
Net position – beginning of the year	**2,629**	2,377	2,167
Effect of adoption of GASB Statement No. 75	**–**	(3)	–
Net position – beginning of the year, restated	**2,629**	2,374	2,167
Net position – end of the year	**$ 2,755**	$ 2,629	$ 2,377

*Restated for implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*

Financial Analysis of JEA for fiscal years 2018 and 2017

Operating Revenues

2018 Compared to 2017

Electric Enterprise

Total operating revenues decreased approximately $62 million (4.4%) compared to fiscal year 2017. Electric revenues decreased $114 million and other operating revenues increased by $52 million. The $114 million decrease in electric revenues was due to a $97 million decrease in sales to FPL as a result of the shutdown of SJRPP in January 2018, and a $40 million decrease in transfers from stabilization funds. See note 2, Regulatory Deferrals, for additional information. The decrease was partially offset by $23 million increase in territorial sales. Territorial MWh sales were up 314,205 megawatt hours (MWh) (2.6%), resulting in a 1.0% increase in average MWhs per customer, driven by a 13.9% increase in degree days. SJRPP Sales to FPL decreased by 1,360,616 MWh and off-system sales decreased by 115,206 MWh, which brought the change to a net decrease in MWh sales of 1,161,617 MWh (8.4%). The increase in other operating revenues was driven by the FPL shutdown payment. See note 3, St. Johns River Power Park Decommissioning, for further details.

Water and Sewer

Total operating revenues decreased approximately $22 million (4.9%) compared to fiscal year 2017. Water revenues decreased $10 million (5.5%) due to a 2.8% decrease in consumption, which was partially offset by a 2.1% increase in customer accounts. Water consumption decreased 1,058,629 kgals to 36,186,559 kgals. Sewer revenues decreased approximately $4 million (1.6%) primarily related to a 1.4% decrease in sales, which was partially offset by a 2.5% increase in sewer accounts. Sewer sales decreased 372,148 kgals to 26,340,622 kgals. The water and sewer revenue decreases were driven by a 22.4% increase in rain days. Reuse revenues increased approximately $1 million (3.4%), primarily related to a 22.4% increase in reuse accounts, which was partially offset by a 5.2% decrease in sales. Reuse sales decreased 170,572 kgals to 3,119,739 kgals. Water and sewer revenues were impacted by an $11 million net decrease in transfers from stabilization funds. See note 2, Regulatory Deferrals, for additional information. Other operating revenues increased by $2 million due to additional waste disposal revenues.

District Energy System

Operating revenues remained flat when compared to fiscal year 2017 at $9 million.

2017 Compared to 2016

Electric Enterprise

Total operating revenues increased approximately $64 million (4.7%) compared to fiscal year 2016. Electric revenues increased $61 million and other operating revenues increased by $3 million. The increase in electric revenues was due to an increase in transfers from stabilization funds related to fuel and debt management of $96 million, which was partially offset by a $35 million decrease in sales. See note 2, Regulatory Deferrals, for additional information. Territorial MWh sales were down 511,116 megawatt hours (MWh) (4.1%), resulting in a 5.6% decrease in average MWhs per customer. SJRPP Sales to FPL decreased by 163,116 MWh and off-system sales decreased by 18,402 MWh, which brought the total decrease in MWh sales to 692,634 MWh (4.7%).

Water and Sewer

Total operating revenues increased approximately $30 million (7.1%) compared to fiscal year 2016. Water revenues increased $10 million (6.1%) due to a 2.4% increase in consumption and a 2.4% increase in customer accounts. Water consumption increased 887,269 kgals to 37,245,188 kgals. Sewer revenues increased approximately $12 million (5.2%) primarily related to a 3.5% increase in sales and a 2.6% increase in sewer accounts. Sewer sales increased 895,112 kgals to 26,712,770 kgals. Reuse revenues increased approximately $3 million (28.7%), primarily related to a 24.4% increase in sales and a 25.2% increase in reuse accounts. Reuse sales increased 646,265 kgals to 3,290,311 kgals. Water and sewer revenues were impacted by a $5 million net increase in transfers, primarily related to a withdrawal from the debt management stabilization fund for a debt defeasance. See note 2, Regulatory Deferrals, for additional information.

District Energy System

DES operating revenues remained flat when compared to fiscal year 2016 at $9 million.

Operating Expenses

2018 Compared to 2017

Electric Enterprise

Total operating expenses increased approximately $14 million (1.3%), compared to fiscal year 2017.

Fuel and purchased power expense decreased approximately $6 million (1.1%), compared to fiscal year 2017. Costs decreased by $19 million while MWh generated and purchased increased by $13 million. As commodity prices have fluctuated over these periods, the mix between generation and purchased power has shifted as JEA has taken advantage of the most economical sources of power. In addition, the shutdown of the SJRPP power plant has decreased power production sourced by coal significantly. Total MWh power volumes increased 1.6% compared to fiscal year 2017 to 12,874,102 MWh, with an increase of 41.6% for MWh purchased and a decrease of 4.5% for MWh generated. Detailed below is JEA's power supply mix.

	FY 2018	**FY 2017**
Natural gas	**48%**	39%
Coal	**22%**	43%
Purchases	**18%**	12%
Petroleum coke	**12%**	6%
Total	**100%**	100%

Operating expenses, other than fuel and purchased power, increased approximately $20 million, compared to fiscal year 2017.

Maintenance and other operating expenses increased $30 million. The drivers for the increase were a $19 million increase in Scherer capital improvements and operating costs, $14 million in SJRPP renewal and replacement expenses, and $5 million increase in maintenance costs. These increases were offset by an $8 million reduction in SJRPP operating expenses due to the plant shutdown.

Depreciation expense decreased $28 million due to a decrease in the depreciable base, driven by the impairment of the SJRPP capital assets due to the shutdown of the SJRPP plant. State utility and franchise taxes increased $2 million due to higher electric revenue taxable sales. Recognition of deferred costs and revenues, net increased $16 million as a result of higher deferred cost amortization, primarily related to the reduced depreciation for SJRPP capital assets subsequent to the impairment. See note 3, St. Johns River Power Park Decommissioning, for additional details.

Water and Sewer

Operating expenses increased $5 million (1.7%), compared to fiscal year 2017. Maintenance and other expenses increased $8 million due to a $5 million increase in professional services, industrial services, and compensation and a $3 million increase in interfund charges. Depreciation expense increased $2 million due to an increase in the depreciable base. Recognition of deferred costs and revenues, net decreased $5 million due to a decrease in environmental projects paid from the rate stabilization fund.

District Energy System

Operating expenses remained flat when compared to fiscal year 2017 at $7 million.

2017 Compared to 2016

Electric Enterprise

Total operating expenses increased approximately $56 million (5.4%), compared to fiscal year 2016.

Fuel and purchased power expense increased approximately $51 million (10.4%), compared to fiscal year 2016, primarily due to higher solid fuels, natural gas and purchased power costs. The increase in commodity costs was partially offset by a decrease in total MWH generated and purchased. Generation cost increased by $62 million, purchased power cost increased by $12 million, while MWh generated and purchased decreased by $23 million. As commodity prices have fluctuated over these periods, the mix between generation and purchased power has shifted as JEA has taken advantage of the most economical sources of power. Total MWh power volumes decreased 4.4% compared to fiscal year 2016 to 12,667,351 MWh, with a decrease of 5.6% for MWh generated and an increase of 3.7% for MWh purchased. Detailed below is JEA's power supply mix.

	FY 2017	**FY 2016**
Coal	**43%**	42%
Natural gas	**39%**	32%
Petroleum coke	**6%**	15%
Purchases	**12%**	11%
Total	**100%**	100%

Operating expenses, other than fuel and purchased power, increased approximately $5 million, compared to fiscal year 2016. Maintenance and other operating expenses increased $3 million. The drivers for the increase were a $9 million increase in compensation and benefits costs and a $3 million increase related to insurance costs. These increases were offset by a decrease of $9 million in maintenance expenses due to a prior year major outage at Brandy Branch not repeated in the current year and reduced maintenance expenses at SJRPP and Scherer. Depreciation expense increased $5 million due to an increase in the depreciable base. State utility and franchise taxes decreased $2 million due to lower electric revenue sales. Recognition of deferred costs and revenues, net decreased $1 million as a result of lower deferred cost amortization.

Water and Sewer

Operating expenses increased $8 million (2.6%), compared to fiscal year 2016. Maintenance and other expenses increased $10 million due to a $5 million increase in compensation and benefits costs, $4 million increase in interfund charges, and a $1 million net increase in miscellaneous other operating expenses. Recognition of deferred costs and revenues, net decreased $2 million due to a decrease in environmental projects paid from the rate stabilization fund.

District Energy System

DES operating expenses remained flat when compared to fiscal year 2016 at $7 million.

Nonoperating Revenues and Expenses

2018 Compared to 2017

There was a decrease of approximately $18 million (12.1%) in total nonoperating expenses, net over the prior year. Detailed below are the drivers.

	FY 2018 *(in millions)*
Changes in nonoperating expenses, net	
Decrease in interest on debt	$ 16
Investment gains – fair value adjustments	4
Decrease in investment income	(3)
Decrease in The Energy Authority earnings	(2)
Gain on sale of assets	2
Decrease in other nonoperating expenses - timber	2
Increase in other interest expense	(1)
Total change in nonoperating expenses, net	$ 18

2017 Compared to 2016

There was an increase of approximately $3 million (1.7%) in total nonoperating expenses, net over the prior year. Detailed below are the drivers.

	FY 2017 *(in millions)*
Changes in nonoperating expenses, net	
Investment losses – fair value adjustments	$ (9)
Increase in investment income	5
Decrease in other nonoperating income – timber	(3)
Increase in allowance for funds used during construction	2
Decrease in interest on debt	2
Total change in nonoperating expenses, net	$ (3)

Capital Assets and Debt Administration for Fiscal Years 2018 and 2017

Capital Assets

As of September 30, 2018, JEA had approximately $5,380 million in capital assets, net of accumulated depreciation. This included $2,662 million in electric plant, $2,683 million in water and sewer plant, and $35 million in chilled water plant. During fiscal year 2018, capital additions were $387 million, which included $183 million in electric plant, $203 million in water and sewer plant, and $1 million in chilled water plant. Also during fiscal year 2018, a $451 million write down was recorded to the Electric Enterprise capital accounts due to the shutdown of the SJRPP power plant. More detailed information is presented in note 3, St. Johns River Power Park Decommissioning, to the financial statements. As of September 30, 2017, JEA had approximately $5,814 million in capital assets, net of accumulated depreciation. This included $3,162 million in electric plant, $2,616 million in water and sewer plant, and $36 million in chilled water plant. During fiscal year 2017, capital additions were $327 million, which included $145 million in electric plant, $180 million in water and sewer plant, and $2 million in chilled water plant. More detailed information about JEA's capital asset activity is presented in note 6, Capital Assets, to the financial statements.

With the adoption of the depreciation ratemaking policy in 2014, the depreciation of contributed assets are not included in rates charged to customers, because it has already been recovered with the contribution. In accordance with GASB 62, the contributed assets will be expensed in capital contributions as a reduction of plant cost through contributions. During fiscal year 2018, $2 million of contributed capital related to the Electric System and $52 million related to Water and Sewer System was recorded as a reduction of plant cost through contributions. During fiscal year 2017, $1 million of contributed capital related to the Electric System and $41 million related to Water and Sewer System was recorded as a reduction of plant cost through contributions.

JEA has ongoing capital improvement programs for the Electric Enterprise Fund and the Water and Sewer Fund. The capital programs consist of: (a) the Electric Enterprise Fund capital requirements for improvements to existing generating facilities that are determined to be necessary as a result of JEA's annual resource planning process; (b) the Electric Enterprise Fund's capital requirements for transmission and distribution facilities and other capital items; and (c) the Water and Sewer Fund capital requirements that are determined to be necessary as a result of the annual resource planning process. The cost of the capital improvement program is planned to be provided from revenues generated from operations and existing construction fund balances.

Scherer is subject to a joint ownership agreement. JEA's share of the estimated capital expenditures relating to this plant is $10 million and is included in the Electric Enterprise Fund amount above.

Debt Administration

Debt outstanding at September 30, 2018, was $3,999 million, a decrease of approximately $402 million from the prior fiscal year. This decrease was due to defeasance of principal of $994 million and regular principal payments of $229 million, being partially offset by new debt issued of $821 million.

Debt outstanding at September 30, 2017, was $4,401 million, a decrease of approximately $251 million from the prior fiscal year. This decrease was due to regular principal payments of $182 million and defeasance of principal of $159 million, being partially offset by new debt issued of $90 million.

JEA's debt ratings on its long-term debt per Fitch and Moody's Investors Service remained unchanged from fiscal year 2017. On September 28, 2018, Standard & Poor's downgraded its long-term ratings on the Electric System senior, SJRPP, and Scherer bonds from AA- to A+ and the Electric System subordinated bonds from A+ to A. All ratings as of September 2018 and 2017 are as follows:

	2018					**2017**				
	Electric System	**Water and Sewer System**	**SJRPP**	**Scherer**	**District Energy System**	**Electric System**	**Water and Sewer System**	**SJRPP**	**Scherer**	**District Energy System**
Senior debt:										
Moody's Investors Service	**Aa2**	**Aa2**	**Aa2**	**Aa2**	**Aa3**	Aa2	Aa2	Aa2	Aa2	Aa3
Standard & Poor's	**A+**	**AAA**	**A+**	**A+**	**AA+**	AA-	AAA	AA-	AA-	AA+
Fitch	**AA**	**AA**	**AA**	**AA**	**AA**	AA	AA	AA	AA	AA
Subordinated debt:										
Moody's Investors Service	**Aa3**	**Aa2**	*	*	*	Aa3	Aa2	*	*	*
Standard & Poor's	**A**	**AA+**	*	*	*	A+	AA+	*	*	*
Fitch	**AA**	**AA**	*	*	*	AA	AA	*	*	*

* There are no subordinated bonds related to this system.

Currently Known Facts Expected to have a Significant Effect on Financial Position and/or Changes in Operations

Setting of Rates

The setting of rates is the responsibility of the Board. Base rate changes are implemented after a public rate hearing and Board approval. Fuel rate changes are implemented solely with Board approval.

In October 2017, the Board approved a new rate rider called SolarMax for customers purchasing a minimum of 7,000,000 kWh of annual solar purchase power, effective November 1, 2017. The Board also approved a wastewater rate for Leachate waste disposed at a JEA sewage treatment plant at a charge of $5.16 per 100 gallons.

JEA has an ongoing plan to review, update and, where possible, expand its rate options to provide customers more rate choices for their utility services. As part of this initiative, the Board approved, at its August 2018 meeting, an extension of the Economic Stimulus Rider from September 30, 2018 to September 30, 2021 that provides a financial incentive for new commercial or industrial customers to locate within the JEA service area.

Bond Ratings

Moody's Investors Services lowered certain JEA bond ratings subsequent to the end of fiscal year 2018. As a result of the ratings change, commitment fees related to Electric System variable rate demand obligations and the interest rate related to the variable rate direct purchased bonds changed. For further details, see note 18, Subsequent Events.

Requests for Information

The financial report is designed to provide a general overview of JEA's finances for all those with an interest in JEA's finances. Questions concerning any of the information provided in this report or requests for additional information should be addressed to the Controller, JEA, 21 West Church Street, Jacksonville, Florida, 32202.

Audited Financial Statements

JEA

Statements of Net Position

(In Thousands)

	September 2018	September 2017*
Assets		
Current assets:		
Cash and cash equivalents	**$ 441,206**	$ 489,559
Investments	**85,310**	25,122
Accounts and interest receivable, net of allowance ($1,830 for 2018 and $2,101 for 2017)	**251,148**	245,444
Inventories:		
Fuel	**36,871**	72,772
Materials and supplies	**59,204**	69,721
Total current assets	**873,739**	902,618
Noncurrent assets:		
Restricted assets:		
Cash and cash equivalents	**114,576**	124,475
Investments	**731,627**	936,708
Accounts and interest receivable	**62**	984
Total restricted assets	**846,265**	1,062,167
Costs to be recovered from future revenues	**808,096**	541,021
Investment in The Energy Authority	**6,811**	6,283
Other assets	**15,875**	14,511
Total noncurrent assets	**1,677,047**	1,623,982
Net capital assets	**5,380,259**	5,813,799
Total assets	**7,931,045**	8,340,399
Deferred outflows of resources		
Unrealized pension contributions and losses	**171,367**	173,578
Unamortized deferred losses on refundings	**143,722**	133,356
Accumulated decrease in fair value of hedging derivatives	**86,356**	125,269
Unrealized asset retirement obligation	**29,173**	–
Unrealized OPEB contributions and losses	**4,078**	5,240
Total deferred outflows of resources	**434,696**	437,443
Total assets and deferred outflows of resources	**$ 8,365,741**	$ 8,777,842

See accompanying notes to financial statements.

*Restated for implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*

JEA

Statements of Net Position (continued)

(In Thousands)

	September	
	2018	**2017***
Liabilities		
Current liabilities:		
Accounts and accrued expenses payable	**$ 147,361**	$ 131,892
Customer deposits	**59,883**	57,278
Total current liabilities	**207,244**	189,170
Current liabilities payable from restricted assets:		
Debt due within one year	**185,790**	229,095
Renewal and replacement reserve	**54,370**	82,577
Interest payable	**73,737**	82,221
Construction contracts and accounts payable	**53,369**	54,961
Total current liabilities payable from restricted assets	**367,266**	448,854
Noncurrent liabilities:		
Net pension liability	**544,203**	554,337
Asset retirement obligation	**22,526**	–
Net OPEB liability	**18,835**	39,508
Other liabilities	**49,227**	50,022
Total other noncurrent liabilities	**634,791**	643,867
Long-term debt:		
Debt payable, less current portion	**3,813,680**	4,172,160
Unamortized premium, net	**152,891**	112,475
Fair value of debt management strategy instruments	**86,356**	125,269
Total long-term debt	**4,052,927**	4,409,904
Total liabilities	**5,262,228**	5,691,795
Deferred inflows of resources		
Revenues to be used for future costs	**286,832**	444,606
Unrealized pension gains	**50,124**	11,960
Unrealized OPEB gains	**8,712**	659
Accumulated increase in fair value of hedging derivatives	**2,536**	–
Total deferred inflows of resources	**348,204**	457,225
Net position		
Net investment in capital assets	**1,856,725**	1,622,160
Restricted for:		
Debt service	**187,374**	234,268
Other purposes	**354,663**	379,186
Unrestricted	**356,547**	393,208
Total net position	**2,755,309**	2,628,822
Total liabilities, deferred inflows of resources, and net position	**$ 8,365,741**	$ 8,777,842

See accompanying notes to financial statements.

*Restated for implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*

JEA

Statements of Revenues, Expenses, and Changes in Net Position
(In Thousands)

	September	
	2018	**2017***
Operating revenues		
Electric	**$ 1,267,202**	$ 1,382,206
Water and sewer	**423,480**	448,057
District energy system	**8,348**	8,185
Other	**90,952**	36,729
Total operating revenues	**1,789,982**	1,875,177
Operating expenses		
Operations and maintenance:		
Fuel	**421,052**	458,794
Purchased power	**109,194**	77,456
Maintenance and other operating expenses	**429,989**	392,142
Depreciation	**360,609**	386,699
State utility and franchise taxes	**71,307**	69,683
Recognition of deferred costs and revenues, net	**6,856**	(4,075)
Total operating expenses	**1,399,007**	1,380,699
Operating income	**390,975**	494,478
Nonoperating revenues (expenses)		
Interest on debt	**(166,508)**	(182,992)
Investment income	**11,826**	10,576
Allowance for funds used during construction	**11,764**	11,774
Other nonoperating income, net	**9,857**	5,918
Earnings from The Energy Authority	**4,074**	6,335
Other interest, net	**(1,825)**	(451)
Total nonoperating expenses, net	**(130,812)**	(148,840)
Income before contributions	**260,163**	345,638
Contributions (to) from		
General Fund, City of Jacksonville, Florida	**(116,620)**	(115,823)
Developers and other	**82,157**	66,875
Reduction of plant cost through contributions	**(54,114)**	(42,069)
Total contributions, net	**(88,577)**	(91,017)
Special items	**(45,099)**	-
Change in net position	**126,487**	254,621
Net position, beginning of year	**2,628,822**	2,376,925
Effect of adoption of GASB Statement No. 75	**-**	(2,724)
Net position, beginning of year, as restated	**2,628,822**	2,374,201
Net position, end of year	**$ 2,755,309**	$ 2,628,822

See accompanying notes to financial statements.

*Restated for implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*

JEA

Statements of Cash Flows
(In Thousands)

	September			
		2018		2017
Operating activities				
Receipts from customers	**$**	**1,740,598**	$	1,758,515
Payments to suppliers		**(790,962)**		(738,231)
Payments to employees		**(267,569)**		(249,193)
Other operating activities		**93,902**		4,541
Net cash provided by operating activities		**775,969**		775,632
Noncapital and related financing activities				
Contribution to General Fund, City of Jacksonville, Florida		**(116,569)**		(115,694)
Net cash used in noncapital and related financing activities		**(116,569)**		(115,694)
Capital and related financing activities				
Defeasance of debt		**(993,690)**		(159,345)
Proceeds from issuance of debt		**821,000**		90,405
Acquisition and construction of capital assets		**(384,577)**		(308,133)
Repayment of debt principal		**(229,095)**		(181,525)
Interest paid on debt		**(182,849)**		(193,483)
Capital contributions		**28,043**		24,805
Other capital financing activities		**63,197**		2,528
Net cash used in capital and related financing activities		**(877,971)**		(724,748)
Investing activities				
Purchase of investments		**(1,037,966)**		(1,803,447)
Proceeds from sale and maturity of investments		**1,179,471**		1,861,596
Investment income		**15,301**		17,593
Distributions from The Energy Authority		**3,513**		6,182
Net cash provided by investing activities		**160,319**		81,924
Net change in cash and cash equivalents		**(58,252)**		17,114
Cash and cash equivalents at beginning of year		**614,034**		596,920
Cash and cash equivalents at end of year	**$**	**555,782**	$	614,034
Reconciliation of operating income to net cash provided by operating activities				
Operating income	**$**	**390,975**	$	494,478
Adjustments:				
Depreciation and amortization		**361,889**		388,040
Recognition of deferred costs and revenues, net		**6,856**		(4,075)
Other nonoperating income, net		**1,073**		(1,072)
Changes in noncash assets and noncash liabilities:				
Accounts receivable		**26,486**		(14,185)
Accounts receivable, restricted		**16**		32
Inventories		**46,419**		(24,692)
Other assets		**6,421**		(27,625)
Accounts and accrued expenses payable		**979**		23,262
Current liabilities payable from restricted assets		**(49,998)**		4,409
Other noncurrent liabilities and deferred inflows		**(15,147)**		(62,940)
Net cash provided by operating activities	**$**	**775,969**	$	775,632
Noncash activity				
Contribution of capital assets from developers	**$**	**54,114**	$	42,069
Unrealized losses on fair value of investments, net	**$**	**(3,386)**	$	(7,710)

See accompanying notes to financial statements.

(Dollars in Thousands)

1. Summary of Significant Accounting Policies and Practices

(a) Reporting Entity

JEA is currently organized into three enterprise funds – the Electric Enterprise Fund, the Water and Sewer Fund, and the District Energy System (DES). The Electric Enterprise Fund is comprised of the Electric System; the Bulk Power Supply System (Scherer), which consists of Scherer Unit 4, a coal-fired, 846-megawatt generating unit operated by Georgia Power Company (Georgia Power) and owned by JEA (23.64% ownership interest) and Florida Power & Light Company (FPL) (76.36% ownership interest); and St. Johns River Power Park System (SJRPP), which is jointly owned and operated by JEA (80% ownership interest) and FPL (20% ownership interest). The Water and Sewer Fund consists of water and sewer system activities. The DES consists of chilled water activities. These financial statements include JEA's ownership interests in Scherer and SJRPP. Separate accounting records are currently maintained for each system. The following information relates to JEA's ownership interests in respective plants as of September 30, 2018 and 2017:

	2018	2017
Bulk Power Supply System:		
Inventories	$ **7,463**	$ 7,042
Costs to be recovered from future revenues	**6,155**	11,686
Capital assets, net	**135,595**	143,981
Debt due within one year	**5,710**	5,205
Long-term debt	**94,602**	100,465
Revenues to be used for future costs	**37,560**	41,438
SJRPP:		
Inventories	**1,680**	53,977
Other current assets	**68,672**	63,040
Capital assets, net	**10,144**	474,437
Restricted assets	**97,490**	272,823
Costs to be recovered from future revenues	**261,277**	4,042
Long-term debt	**281,359**	420,060
Other liabilities	**110,152**	184,464

The Electric Enterprise Fund, Water and Sewer Fund, and the DES are governed by the JEA Board of Directors (Board). The Board is responsible for setting rates based on operating and maintenance expenses and depreciation of the respective operations. The operations of the Bulk Power Supply System and SJRPP are subject to joint ownership agreements, and rates are established on a cost-of-service basis, including operating and maintenance expenses and debt service. See note 1(s), Setting of rates.

1. Summary of Significant Accounting Policies and Practices (continued)

(b) Basis of Accounting

JEA is presenting financial statements combined for the Electric Enterprise Fund, the Water and Sewer Fund, and the District Energy System. JEA uses the accrual basis of accounting for its operations and the uniform system of accounts prescribed by the Federal Energy Regulatory Commission for the Electric Enterprise Fund and the National Association of Regulatory Utility Commissioners for the Water and Sewer Fund.

The financial statements have been prepared in conformity with the Governmental Accounting Standards Board (GASB) codification, which defines JEA as a component unit of the City of Jacksonville, Florida (City). Accordingly, the financial statements of JEA are included in the Comprehensive Annual Financial Report of the City.

JEA presents its financial statements in accordance with the GASB pronouncements that establish standards for external financial reporting for all state and local governmental entities that include a statement of net position, a statement of revenues, expenses, and changes in net position, and a statement of cash flows. It requires the classification of net position into three components – net investment in capital assets, restricted, and unrestricted. These classifications are defined as follows:

- Net investment in capital assets consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances of any debt that is attributable to those assets and increased/reduced by costs to be recovered from future revenues or revenues to be used for future costs.
- Restricted consists of assets that have constraints placed upon their use through external constraints imposed either by creditors (such as through debt covenants) or through laws, regulations, or constraints imposed by law through constitutional provisions or enabling legislation, reduced by any liabilities to be paid from these assets.
- Unrestricted consists of net position that does not meet the definition of restricted or net investment in capital assets.

JEA's bond resolutions specify the flow of funds from revenues and specify the requirements for the use of certain restricted and unrestricted assets.

(c) Revenues

Operating revenues are defined as revenues generated from the sale of primary products or services through normal business operations. Nonoperating revenues include investment income and earnings from investments recorded on the equity method.

(Dollars in Thousands)

1. Summary of Significant Accounting Policies and Practices (continued)

Operating revenues reported in the accompanying statements of revenues, expenses, and changes in net position are shown net of discounts, estimated allowances for bad debts, and amounts transferred to stabilization funds. Discounts and allowances totaled $32,441 in fiscal year 2018 and $31,664 in 2017. JEA withdrew the net amount of $15,813 in fiscal year 2018 and $65,791 in 2017 from stabilization funds. Electric Enterprise and Water and Sewer Fund revenues are recorded as earned. JEA earned 7.1% of its electric revenue from electricity sold to FPL in fiscal year 2018 and 9.2% in 2017. Operating revenues include amounts estimated for unbilled services provided during the reporting period of $82,576 in 2018 and $73,244 in 2017.

(d) Capital Assets

Utility plant represents four classes of capital assets – real property, tangible property, tangible personal property, and intangible property. All capital assets are recorded at historical cost and must have a useful life greater than one year. The costs of capital asset additions and replacements are capitalized. The costs of capital projects include direct labor and benefits of JEA employees working on capital projects and an allocation of overhead from certain JEA departments. Maintenance and replacements of minor items are charged to operating expenses. The cost of depreciable plant retired is removed from the capital asset accounts, and such cost plus removal expense less salvage value is charged to accumulated depreciation.

SJRPP and Scherer are required by its bond resolutions to deposit certain amounts in a renewal and replacement fund. These amounts are then required to be expended on capital expenditures to maintain and improve the system or applied to other designated uses as specifically allowed under the bond resolutions. The Electric Fund records the amounts deposited in the fund as a purchased power expense when deposited. The purchase of capital assets funded from the renewal and replacement fund is not capitalized by SJRPP or Scherer.

(e) Allowance for Funds Used During Construction

An allowance for funds used during construction (AFUDC) is included in construction work-in-progress and as a reduction of interest expense. JEA capitalizes interest on construction projects financed with revenue bonds and renewal and replacement funds. The average AFUDC rate for the debt of each system is listed in the table below.

Average AFUDC Rate (%)	**2018**	**2017**
Electric Enterprise Fund	**4.3%**	4.2%
Water and Sewer Fund	**4.3%**	4.2%
District Energy System	**3.7%**	3.6%

The amount capitalized is the interest cost of the debt less any interest earned on investment of debt proceeds from the date of the borrowing until the assets are placed in service. Total interest incurred was $166,508 for fiscal year 2018 and $182,992 for 2017, of which $11,764 was capitalized in fiscal year 2018 and $11,774 in 2017. There was no investment income on bond proceeds in either year that reduced the amount of interest expense.

(Dollars in Thousands)

1. Summary of Significant Accounting Policies and Practices (continued)

(f) Depreciation

Depreciation of capital assets is computed on a straight-line basis at rates based upon the estimated service lives of the various property classes. Depreciation begins on the date the assets are placed in service. Generally, recurring renewal and replacement capital additions are placed in service at the end of each fiscal year. The depreciation rates are based on depreciation studies performed by an outside consultant that are updated periodically, most recently in fiscal year 2011. The effective rate of depreciation based upon the average depreciable plant in service balance was 3.2% and 3.5% for fiscal years 2018 and 2017, respectively. The average depreciable life in years of the depreciable capital assets for each system is listed in the table below.

Average Depreciable Life *(Years)*	**2018**	**2017**
Electric Enterprise Fund	**23.9**	24.1
Water and Sewer Fund	**27.6**	27.7
District Energy System	**23.7**	24.0

(g) Amortization

Amortization of bond discounts and premiums is computed on a straight-line basis, which approximates the effective-interest method over the remaining term of the outstanding bonds.

(h) Losses on Refundings

Losses on refundings of JEA revenue bonds are deferred and amortized as a component of interest on debt using the straight-line method over the remaining life of the old debt or the new debt, whichever is shorter. Unamortized deferred losses on refundings are reported as deferred outflows of resources on the accompanying statements of net position. Whereas JEA has incurred accounting losses on refundings, calculated as the difference between the net carrying value of the refunded and the refunding bonds, JEA has over time realized economic gains calculated as the present value difference in the future debt service on the refunded and refunding bonds.

(i) Investments

Investments are presented at fair value or cost, which is further explained in note 14, *Fair Value Measurements*. Realized and unrealized gains and losses for all investments are included in investment income on the statements of revenues, expenses, and changes in net position. The investment in The Energy Authority (TEA) is recorded on the equity method (see note 7, Investment in The Energy Authority, for additional information).

1. Summary of Significant Accounting Policies and Practices (continued)

(j) Cash and Cash Equivalents

For purposes of reporting cash flows, cash and cash equivalents include cash on hand, bank demand accounts, money market mutual funds, and short-term liquid investments purchased with an original maturity of 90 days or less.

(k) Interest Rate Swap Agreements

JEA's risk management policies allow for the use of interest rate swaps to manage financial exposures, but prohibit the use of these instruments for speculative or trading purposes. JEA utilizes interest rate swaps to manage the interest rate risk associated with various assets and liabilities. Interest rate swaps are used in the area of debt management to take advantage of favorable market interest rates. Interest rate swaps are authorized under the policy to be used in the area of investment management to increase the yield on revolving short-term investments.

JEA applies GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*, where applicable for effective hedging instruments. For effective hedging instruments, the changes in fair value are recorded on the statements of net position as deferred outflows and inflows of resources. For ineffective hedging instruments or investment derivatives, the changes in fair value are recorded on the statements of revenues, expenses, and changes in net position as an adjustment to investment income.

Under JEA's interest rate swap programs, JEA either pays a variable rate of interest, which is based on various indices, and receives a fixed rate of interest for a specified period of time (unless earlier terminated) or JEA pays a fixed rate of interest and receives a variable rate of interest, which is based on various indices for a specified period of time (unless earlier terminated). These indices are affected by changes in the market. The net amounts received or paid under the swap agreements are recorded as either an adjustment to investment income (asset management) or interest on debt (debt management) in the statements of revenues, expenses, and changes in net position. No money is initially exchanged when JEA enters into a new interest rate swap transaction.

During fiscal years 2018 and 2017, JEA did not have any interest rate swaps outstanding under JEA's asset management interest rate swap program. See the Debt Management Strategy section in note 8, Long-Term Debt, for more information on JEA's debt management interest rate swap program.

(l) Inventory

Inventories are maintained for fuel and materials and supplies. Fuel inventories are maintained at levels sufficient to meet generation requirements. Inventories are valued at average cost, with obsolete items being expensed when identified.

1. Summary of Significant Accounting Policies and Practices (continued)

(m) Energy Market Risk Management Program

The energy market risk management program is intended to help manage the risk of changes in the market prices of fuel consumed by JEA for electric generation. JEA executes over-the-counter forward purchase and sale contracts and swaps. For effective derivative transactions, hedge accounting is applied in accordance with GASB Statement No. 53 and the fair market value changes are recorded on the accompanying statements of net position as either a deferred outflow of resources or a deferred inflow of resources until such time that the transactions end. The related settled gains and losses from these transactions are recognized as fuel expenses on the accompanying statements of revenues, expenses, and changes in net position.

(n) Capital Contributions

Capital contributions represent contributions of cash and capital assets from the City, developers, customers, and other third parties. Capital contributions are recorded in the accompanying statement of revenues, expenses, and changes in net position at the time of receipt. Assets received are recorded as contributions from developers and others at acquisition cost. Corresponding expenses of $54,114 and $42,069 were recorded in fiscal years 2018 and 2017 to recognize the costs of the assets since it will not be included in revenue requirements charged to customers in the future.

(o) Pension

For purposes of measuring the net liability, deferred outflows of resources and deferred inflows of resources related to pensions, pension expense and fiduciary net position; JEA's portion of the City of Jacksonville General Employees' Retirement Plan (GERP) and St. Johns River Power Park System Employees' Retirement Plan (SJRPP Plan) have been determined on the same basis as reported in the GERP and SJRPP Plan financial statements. Employer contributions made subsequent to the measurement date and before the fiscal year end are recorded as a deferred outflow of resources.

Basis of Accounting – The pension trust financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which the contributions are due. Employer contribution, benefit payments and refunds are recognized when due and payable in accordance with the terms of the plans. Florida law and the Florida Division of Retirement require plan contributions be made annually in amounts determined by an actuarial valuation stated as a percent of covered payroll or in dollars. The Florida Division of Retirement reviews and approves the GERP actuarial report to ensure compliance with actuarial standards. The SJRPP Plan is governed by a five-member Pension Committee to ensure compliance with actuarial standards.

1. Summary of Significant Accounting Policies and Practices (continued)

Method Used to Value Investments – Investments are reported at fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. The fair value of real estate investments in GERP is based on independent appraisals or estimates of fair value as provided by third-party fund managers. Investments that do not have an established market are reported at estimated fair value as provided by third-party fund managers. Investments are managed by third-party money managers while cash and securities are generally held by the independent custodians.

(p) Compensated Absences

JEA employees accumulate earned personal leave benefits (compensated absences) at various rates within limits specified in collective bargaining agreements and other employment plans. Accrued leave may be taken at any time when authorized. In addition, employees may elect to sell back any leave accrued during the fiscal year. Leave accrued over the maximum allowed leave balances is paid to the employee after the end of the fiscal year.

Upon termination from employment, employees are paid for their unused leave balances. In accordance with GASB Statement No. 16, *Accounting for Compensated Absences* (GASB No. 16), the amount reflected as the current portion is estimated based upon historical trends of retirements and attrition.

This liability reflects amounts attributable to employee services already rendered, cumulative, probable for payment, and reasonably estimated in conformity with GASB No. 16.

Compensated absences liabilities are accrued when incurred in the financial statements in conformity with generally accepted accounting principles (GAAP). The compensated absences liability is determined based on current rates of pay.

The compensated absence liability as of September 30, 2018, was $30,854. Of this amount, $1,423 was included in accounts and accrued expenses payable on the accompanying statements of net position. The remaining balance of $29,431 was included in other liabilities on the accompanying statements of net position. During fiscal year 2018, annual leave earned totaled $21,983 and annual leave taken totaled $22,788. The compensated absence liability as of September 30, 2017, was $31,798. Of this amount, $3,527 was included in accounts and accrued expenses payable on the accompanying statements of net position. The remaining balance of $28,271 was included in other liabilities on the accompanying statements of net position. During fiscal year 2017, annual leave earned totaled $21,856 and annual leave taken totaled $19,757.

(q) Pollution Remediation Obligations

JEA applies GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations*. See note 15, Commitments and Contingent Liabilities, for further discussion.

1. Summary of Significant Accounting Policies and Practices (continued)

(r) Asset Retirement Obligations

JEA applies GASB Statement No. 83, *Certain Asset Retirement Obligations*. See note 3, St. Johns River Power Park Decommissioning, for further discussion.

(s) Costs to Be Recovered from Future Revenues/Revenues to Be Used for Future Costs

JEA records certain assets and liabilities (or deferred inflows) that result from the effects of the ratemaking process that would not be recorded under GAAP for nonregulated entities. Currently, the electric utility industry is predominantly regulated on a basis designed to recover the cost of providing electric power to its customers. If cost-based regulation were to be discontinued in the electric industry for any reason, market prices for electricity could be reduced or increased and utilities might be required to reduce their statements of net position amounts to reflect market conditions.

Discontinuance of cost-based regulation could also require affected utilities to write off their associated regulatory assets and liabilities. Management cannot predict the potential impact, if any, of the change in the regulatory environment on JEA's future financial position and results of operations.

(t) Setting of Rates

The setting of rates is the responsibility of the Board. Base rate changes are implemented after a public rate hearing and Board approval. Fuel rate changes are implemented solely with Board approval.

In October 2017, the Board approved a new rate rider called SolarMax for customers purchasing a minimum of 7,000,000 kWh of annual solar purchase power, effective November 1, 2017. The Board also approved a wastewater rate for Leachate waste disposed at a JEA sewage treatment plant at a charge of $5.16 per 100 gallons.

JEA has an ongoing plan to review, update and, where possible, expand its rate options to provide customers more rate choices for their utility services. As part of this initiative, the Board approved, at its August 2018 meeting, an extension of the Economic Stimulus Rider from September 30, 2018 to September 30, 2021 that provides a financial incentive for new commercial or industrial customers to locate within the JEA service area.

(u) Reclassifications

Certain 2017 amounts have been reclassified to conform to the 2018 presentation.

(Dollars in Thousands)

1. Summary of Significant Accounting Policies and Practices (continued)

(v) Pervasiveness of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and deferred outflows of resources, liabilities and deferred inflows of resources, and disclosure of contingent assets at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

(w) Newly Adopted Standards for Fiscal Year 2018

In June 2015, GASB issued Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pension (OPEB)*. This statement replaces the requirements of Statements No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions, as amended* and No. 57, *OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans*, for OPEB. This statement establishes standards for measuring and recognizing liabilities, deferred outflows and deferred inflows of resources and expenses for governments that provide OPEB benefits. Note disclosure and required supplementary information requirements are also addressed. For comparative purposes, the statement of net position and statement of revenues, expenses, and changes in net position for the year ended September 30, 2017 were restated for this change. See the chart below for details of the restatement.

	Originally Reported October 1, 2016	GASB 75	As Restated October 1, 2016
Statement of Net Position			
Assets			
Costs to be recovered from future revenues	$ 463,610	$ 39,337	$ 502,947
Other assets	17,931	(2,724)	15,207
Deferred outflows of resources			
Unrealized OPEB contributions	–	5,061	5,061
Noncurrent liabilities			
Net OPEB liability	–	44,398	44,398
Net position	2,376,925	(2,724)	2,374,201
Statement of Revenues, Expenses, and Change in Net Position			
Adjustment to beginning net position			
Effect of adoption of GASB Statement No. 75	–	(2,724)	(2,724)

1. Summary of Significant Accounting Policies and Practices (continued)

In March 2016, GASB issued Statement 81, *Irrevocable Split-Interest Agreements*. This statement requires that a government that receives resources related to an irrevocable split-interest agreement recognize assets, liabilities, and deferred inflows of resources at the inception of the agreement. In addition, this statement requires a government recognize assets representing its beneficial interest in irrevocable split-interest agreements that are administered by a third party, if the government controls the beneficial interests. The implementation of this statement did not have an impact on JEA's financial statements.

In November 2016, GASB issued Statement No. 83, *Certain Asset Retirement Obligations*. This statement addresses accounting and financial reporting for certain asset retirement obligations (AROs). An ARO is a legally enforceable liability associated with the retirement of a tangible capital asset. This statement is effective for JEA in fiscal year 2019. However, JEA early adopted this statement in fiscal year 2018 in association with its accounting for the shutdown and dismantlement of St. Johns River Power Park. See note 3, SJRPP for details.

In March 2017, GASB issued Statement No. 85, *Omnibus 2017*. The objective of this statement is to address practice issues that have been identified during implementation and application of certain GASB statements. It addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and pensions and other postemployment benefits. The implementation of this statement did not have an impact on JEA's financial statements.

In May 2017, GASB issued Statement No. 86, *Certain Debt Extinguishment Issues*. The primary objective of this statement is to improve consistency in accounting and financial reporting for in-substance defeasance of debt by providing guidance for transactions in which cash and other monetary assets acquired with only existing resources—resources other than the proceeds of refunding debt—are placed in an irrevocable trust for the sole purpose of extinguishing debt. This statement also improves accounting and financial reporting for prepaid insurance on debt that is extinguished and notes to financial statements for debt that is defeased in substance. The implementation of this statement did not have an impact on JEA's financial statements.

(x) Recently Issued Accounting Pronouncements Not Yet Effective

In January 2017, GASB issued Statement No. 84, *Fiduciary Activities*. This statement establishes criteria for identifying fiduciary activities of all state and local governments. The focus of the criteria generally is on (1) whether a government is controlling the assets of the fiduciary activity and (2) the beneficiaries with whom a fiduciary relationship exists. Separate criteria are included to identify fiduciary component units and postemployment benefit arrangements that are fiduciary activities. This statement is effective for JEA in fiscal year 2020. The impact on JEA's financial reporting will be the reporting of its pension and other postemployment benefit plans in fiduciary fund financial statements.

1. Summary of Significant Accounting Policies and Practices (continued)

In June 2017, GASB issued Statement No. 87, *Leases*. The objective of this statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. This statement increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. This statement is effective for JEA in fiscal year 2021. The impact on JEA's financial reporting has not been determined.

In April 2018, GASB issued Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*. The objective of this Statement is to improve the information that is disclosed in notes to government financial statements related to debt, including direct borrowings and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt. This Statement requires that additional essential information related to debt be disclosed in notes to financial statements, including unused lines of credit; assets pledged as collateral for the debt; and terms specified in debt agreements related to significant events of default with finance-related consequences, significant termination events with finance-related consequences, and significant subjective acceleration clauses. For notes to financial statements related to debt, this Statement also requires that existing and additional information be provided for direct borrowings and direct placements of debt separately from other debt. This statement is effective for JEA in fiscal year 2019. The impact on JEA's financial statements will be additional disclosures within the financial statement footnotes.

In June 2018, GASB issued Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*. The objectives of this Statement are (1) to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and (2) to simplify accounting for interest cost incurred before the end of a construction period. This Statement requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. However, GASB allows those entities meeting the criteria for regulated operations, and electing to apply the related provisions of Statement 62, to continue to capitalize qualifying interest cost as a regulatory asset. This statement is effective for JEA in fiscal year 2021. The impact on JEA's financial reporting has not been determined.

In August 2018, GASB issues Statement No. 90, *Majority Equity Interests—an amendment of GASB Statements No. 14 and No. 61*. The objectives of this Statement are to improve the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and to improve the relevance of financial statement information for certain component units. This statement is effective for JEA in fiscal year 2020. The implementation of this statement is not expected to have an impact on JEA's financial statements.

(Dollars in Thousands)

2. Regulatory Deferrals

Based on regulatory action taken by the Board and in accordance with the Regulated Operations section within GASB Statement 62, JEA has recorded the following regulatory assets and liabilities that will be included in the ratemaking process and recognized as expenses and revenues, respectively, in future periods. These amounts are shown under other noncurrent assets or deferred inflows of resources on the accompanying statements of net position.

Regulatory Assets

The following is a summary of JEA's regulatory assets at September 30:

Regulatory Asset	2018	2017 Restated
Unfunded pension costs	**$ 433,583**	$ 392,719
SJRPP and Bulk Power cost to be recovered	**267,432**	14,940
Water environmental projects	**59,859**	68,409
Unfunded OPEB costs	**23,469**	34,927
Storm costs to be recovered	**18,966**	27,999
Debt issue cost	**4,787**	2,027
Total regulatory assets	**$ 808,096**	$ 541,021

Unfunded Pension Costs – Accrued pension represents a regulatory asset related to unrecognized actuarial gains and losses, unrecognized prior service cost, and unrecognized transition obligation. In fiscal year 2018, the asset consisted of amounts attributable to JEA's portion of the GERP. For the SJRPP pension plan, JEA made excess contributions during fiscal year 2018 that resulted in a regulatory liability. See excess pension contributions in the Regulatory Liabilities section of this footnote. In fiscal year 2017, the balance includes amounts attributable to JEA's portion of the GERP and amounts related to the SJRPP Plan. The regulatory asset is amortized with the recognition of actuarial gains and losses, prior service cost, and transition obligations to net periodic benefit costs for pension.

2. Regulatory Deferrals (continued)

SJRPP and Bulk Power costs to be recovered – SJRPP deferred debt-related costs of $261,277 at September 30, 2018 and $3,254 at September 30, 2017 are the result of differences between expenses in determining rates and those used in financial reporting. During fiscal year 2018, operations of SJRPP, as generating facility, ceased and the majority of the assets are being dismantled. A write down of $451,037 of undepreciated book value of the assets was recognized during fiscal year 2018 and $128,280 of bonds were defeased as a result of the shutdown of SJRPP. After shutdown, SJRPP has remaining plant in service assets of $3,484 and outstanding debt of $280,605. The details relating to the shutdown of SJRPP are further discussed in note 3, St. Johns River Power Park Decommissioning. The JEA board approved the deferral of this regulatory asset. SJRPP has a contract with the JEA Electric System to recover these costs from future revenues that will coincide with retirement of long-term debt. The amount recovered each year will be the difference between debt principal maturities (adjusted for the effects of premiums, discounts, and amortization of gains and losses) and straight-line depreciation and results in recognition of deferred costs on the accompanying statements of revenues, expenses, and changes in net position. The Bulk Power Supply System deferred debt-related costs were $6,155 at September 30, 2018 and $11,686 at September 30, 2017. The amount recovered each year will be the difference between debt principal maturities (adjusted for the effects of premiums, discounts, and amortization of gains and losses) and straight-line depreciation. The Bulk Power Supply System will recover these costs from future revenues that will coincide with the retirement of long-term debt.

Water Environmental Projects – In August 2015, the Board approved the recovery of previously approved environmental capital projects that had not been collected through the environmental surcharge over a ten-year period beginning October 1, 2015. The amount approved for recovery and transferred out of capital assets was $101,277 of which $59,859 remained unrecovered as of September 30, 2018 and $68,409 remained unrecovered as of September 30, 2017. This deferral is being amortized over ten years.

Unfunded OPEB Costs – Accrued OPEB represents a regulatory asset related to unrecognized actuarial gains and losses, unrecognized prior service cost, and unrecognized transition obligation attributable to JEA's other postemployment benefit plan. The regulatory asset is amortized with the recognition of actuarial gains and losses, prior service cost, and transition obligations to net periodic benefit costs for OPEB. The Board approved the recovery of the unfunded amounts in future revenue requirements with the adoption of GASB 75 in fiscal year 2018. In addition, the Board approved the deferral of the difference between the annual contributions (funding) and OPEB expense.

Storm costs to be recovered – This amount represents storm costs that are expected to be recovered from insurance and the Federal Emergency Management Agency (FEMA). See note 16, Storm Costs, for further details.

Debt issue costs – With the application of regulatory accounting in fiscal year 2015, the Board approved deferral of the issue costs on all new debt issues with the amounts being amortized over the life of the bonds, as they are included in revenue requirements. These costs are incurred in connection with the issuance of debt obligations and are mainly underwriter fees and legal costs. Unrecovered costs remaining at the end of the fiscal year were $4,787 in fiscal year 2018 and $2,027 in 2017.

(Dollars in Thousands)

2. Regulatory Deferrals (continued)

Regulatory Liabilities

The following is a summary of JEA's regulatory liabilities at September 30:

Regulatory Liabilities	2018	2017
Fuel stabilization	**$ 74,376**	$ 131,715
Environmental	**55,077**	41,630
Nonfuel purchase power	**53,493**	25,189
Debt management stabilization	**44,093**	44,093
SJRPP and Bulk Power revenues to be used for future costs	**37,560**	189,070
Excess pension contributions	**10,624**	–
Self-insurance medical reserve	**8,139**	9,214
Customer benefit stabilization	**3,470**	3,695
Total regulatory liabilities	**$ 286,832**	$ 444,606

Fuel stabilization – This account represents the difference between the fuel costs incurred and fuel charge revenues collected from customers, inclusive of accrued utility revenue and fuel costs. During fiscal year 2018, a net of $57,339 of costs were incurred in excess of the revenues collected and was recognized as a reduction of the regulatory liability. During fiscal year 2017, a net of $48,400 of costs were incurred in excess of the revenues collected and was recognized as a reduction of the regulatory liability.

Environmental – The Board has authorized an environmental surcharge that is applied to all electric customer kilowatt-hour and water customer kilogallon sales. Electric costs included in the surcharge include all costs of environmental remediation and compliance with new and existing environmental regulations, excluding the amount already collected in the Environmental Liability Reserve. Water costs included in the surcharge include operating and capital costs of environmentally driven or regulatory required projects approved by the Board to be included in the surcharge. Any amounts under or over-collected are recorded as a regulatory asset or liability. During fiscal year 2018, $31,401 was collected through the surcharge with $8,551 of recovery of previously approved environmental capital projects, $6,169 of capital projects, and $3,234 of operations and maintenance costs being incurred with the remaining $13,447 recognized as a regulatory liability. During fiscal year 2017, $31,659 was collected through the surcharge with $11,286 of capital projects, $8,551 of recovery of previously approved environmental capital projects, and $1,866 of operations and maintenance costs being incurred with the remaining $9,956 recognized as a regulatory liability.

Nonfuel purchased power – JEA entered into a power purchase agreement related to the Alvin W. Vogtle Nuclear Plant in Burke County, Georgia (Plant Vogtle). This agreement is discussed in further detail in note 10, Fuel Purchase and Purchased Power Commitments. Related to that agreement, the JEA Board approved a nonfuel purchased power stabilization fund to balance the timing of the payments for Plant Vogtle's debt service with the anticipated in service date. It may be used for other purposes with the Board's approval. The amounts included in the fund are to be used for Plant Vogtle or refunded to customers if not needed. During fiscal year 2018, $40,000 was deposited into the stabilization fund to fund the additional debt service payments as a result of the new anticipated in service dates.

2. Regulatory Deferrals (continued)

Debt management stabilization – The Board has authorized the use of a debt management stabilization fund. Amounts are included in the fund based on differences between budgeted and actual debt cost up to an established maximum reserve fund. The reserve is available to support JEA during times of financial market crisis. Withdrawals from the debt management stabilization fund for debt management strategy can be made for expenses related to market disruption in the capital markets, disruption in availability of credit, or unanticipated credit expenses. The reserve can also be used to reduce short-term variable interest expense in excess of the amounts included in the budget. The Board evaluates during the budget approval process and periodically throughout the year the amounts in the reserve that will be included in JEA's annual revenue requirements. As a result, $44,093 collected in the past for the debt management stabilization fund was recorded as a regulatory liability at September 30, 2018 and 2017, respectively. During fiscal year 2018, no additional amounts were deposited or withdrawn from the stabilization fund. During fiscal year 2017, $18,323 was withdrawn and used to defease bonds.

SJRPP and Bulk Power revenues to be used for future costs – As a result of the shutdown of SJRPP, the deferred debt-related revenues of $144,933 at the shutdown date in January 2018 was adjusted. Through the regulatory approval by the board, a regulatory asset was recorded. See SJRPP and Bulk Power costs to be recovered in this note for further details. SJRPP had deferred debt-related revenues of $147,632 at September 30, 2017 as the result of differences between revenues in determining rates and those used in financial reporting. Bulk Power Supply System early debt principal in excess of straight-line depreciation of $37,560 at September 30, 2018 and $41,438 at September 30, 2017 is included in deferred inflows of resources on the accompanying statements of net position.

Excess pension contributions – Excess pensions contributions represents a regulatory liability related to unrecognized actuarial gains and losses, unrecognized prior service cost, and unrecognized transition obligation attributable to the SJRPP Plan. The regulatory liability is amortized with the recognition of actuarial gains and losses, prior service cost, and transition obligations to net periodic benefit costs for pension.

Self-insurance medical reserve – The Board has established, from operating revenues, an internally designated "Health Self-Insurance Fund" to cover reserve requirements for its self-insurance health program over medical and prescription benefits. The Board, as part of the budget process, will approve amounts to be collected in rates that include both the current anticipated cost less amounts approved to be contributed by employees as well as amounts to maintain an adequate reserve for future costs.

Under the self-insurance program, JEA is liable for all claims. JEA retains an additional stop-loss policy for claims in excess of $250 per employee, with an aggregate limit of 125.0% of claims. There have been no significant reductions in coverage from the prior year. The health insurance benefits program is administered through a third-party insurance company and, as such, the administrator is responsible for processing the claims in accordance with the benefit specifications with JEA reimbursing the insurance company for its payouts. Liabilities associated with the health care program are determined based on an actuarial study and include claims that have been incurred but not reported.

(Dollars in Thousands)

2. Regulatory Deferrals (continued)

The changes in the self-insurance medical reserve for the years ended September 30, 2018 and 2017 are as follows:

	2018	2017
Beginning balance	**$ 9,214**	$ 11,178
Contributions	**29,561**	29,615
Incurred claims	**(30,636)**	(31,579)
Ending balance	**$ 8,139**	$ 9,214

Customer benefit stabilization – The pricing policy adopted by the Board includes a demand side management surcharge. The costs approved for recovery through the surcharge included programs for the electrification, direct load control, demand side management, residential low-income efficiency programs, and customer utility optimization education programs.

3. St. Johns River Power Park Decommissioning

JEA and FPL entered into an Agreement for Joint Ownership, Construction and Operation of SJRPP Coal Units #1 and #2 (JOA) dated as of April 2, 1982. JEA owns 80% and FPL owns 20% of SJRPP. A Purchased Power Agreement (PPA) in the JOA assigned 37.5% of JEA's 80% generation to FPL, which effectively provided 50% of the generation to both owners of SJRPP. The JOA ends on April 2, 2022. JEA and FPL reached an agreement to close SJRPP, including early termination of the PPA. On May 16, 2017, JEA's board of directors approved the Asset Transfer and Contract Termination Agreement, which outlined the terms of the retirement, decommissioning, and dismantling of the plant. The week following, FPL approved the contract and filed a petition with the Florida Public Service Commission (FPSC) for approval to shut down SJRPP. The final order was approved by FPSC in October 2017.

Shutdown occurred on January 5, 2018. On that date, FPL paid JEA $90,400, made up of FPL's cash reserves at SJRPP and a shutdown cash payment of $51,869 as a result of the early termination of the PPA. The payment was recorded as other operating revenue and the expenses related to the shutdown were charged to maintenance and other operating expenses on the statement of revenues, expenses, and changes in net position.

In addition, on that date, FPL paid JEA the FPL Debt Service Reserves, which JEA then paid to an escrow account to consummate the bond defeasance of $128,280 of Issue Two debt. On January 5, 2018, JEA defeased all of the SJRPP System Revenue Issue Two debt and, on March 21, 2018, JEA satisfied and discharged the First Power Park Resolution.

As part of the agreement, JEA assumed all payment obligations and other liabilities related to separation benefits for the qualifying SJRPP employees and any amounts required to be deposited into the SJRPP Pension Fund. JEA paid a total of $8,974 in separation benefits for SJRPP employees.

3. St. Johns River Power Park Decommissioning (continued)

FPL conveyed their 20% interest in SJRPP's fuel inventory to JEA. The fuel inventory received, totaling $4,595, was recorded at fair value. The remaining coal at SJRPP was transferred and consumed at JEA Northside Units 1 and 2. These transactions were recorded at the book value of the coal as the coal was transferred. Based on a physical inventory, the book balance of coal inventory at September 30, 2018 was written down by $11,484 to reflect the remaining coal at SJRPP of $1,015.

FPL received a credit for their estimated share of the material and supplies inventory balance at shutdown, pending sale of the inventory. After the sales period passed, FPL paid a shutdown payment adjustment for their share of 20% of the loss on the remaining materials and supplies inventory. JEA is in the process of liquidating the material and supplies inventory. However, the remaining materials and supplies was written down to fair value. As a result, an adjustment of $22,444 was recorded to adjust the remaining balance down to $665.

As part of the agreement, the parties agreed that all operation of SJRPP as a generating facility would cease at shutdown. As such, the majority of the plant assets will be dismantled. As a result of the shutdown of SJRPP and in accordance with GASB 42, *Accounting and Financial Reporting for Impairment of Capital Assets*, an impairment loss of $451,037 was recorded, as a special item, on the un-depreciated book value of the assets that are being dismantled. In conjunction with the recording of the impairment loss related to SJRPP decommissioning, it was determined that there were certain items included in the regulatory asset balance that were longer going to be recovered through the ratemaking process, primarily those costs deferred related to debt issues that were defeased. As a result, an additional adjustment of $45,099 to regulatory balances was included in the statement of revenues, expenses and changes in net position in the current period, as a special item. The remaining regulatory balance will be amortized over the life of the remaining debt outstanding related to Issue Three debt. See note 2, Regulatory Deferrals, for additional information related to SJRPP's regulatory deferrals.

FPL conveyed their 20% undivided ownership of plant in service assets to JEA. The retained plant in service assets were recorded at fair value. At the end of fiscal year 2018, JEA had remaining plant in service assets of $3,484. In addition, FPL will convey their 20% undivided ownership interest in the SJRPP site to JEA upon completion of dismantlement and environmental remediation.

(Dollars in Thousands)

3. St. Johns River Power Park Decommissioning (continued)

Under a service management agreement, FPL will pay 20% of the dismantlement and remediation costs incurred. Dismantlement and remediation is expected to be complete by April 2020. Monitoring of the site will continue for ten years subsequent to the completion date. JEA's share of the estimated cost for dismantlement and remediation is approximately $43,204. As discussed in note 1, Summary of Significant Accounting Policies and Practices, JEA early adopted Statement No. 83, *Certain Retirement Obligations* in association with its accounting for the asset retirement obligations (ARO) related to dismantlement and remediation at SJRPP. The current portion of the remaining liability, $6,647, is recorded in accounts and accrued expenses payable and the long-term portion, $22,526, is a separate line item, asset retirement obligation, on the statement of net position. These amounts are offset by the separate line item, unrealized asset retirement obligation, in deferred outflows of resources, totaling $29,173. Currently, JEA does not possess sufficient information to reasonably estimate the amounts of additional liabilities, if any, on the site until completion of future environmental studies. In addition, conditions that are currently unknown could result in additional exposure, the amount and materiality of which cannot presently be reasonably estimated. Based upon information currently available, however, JEA believes its ARO accurately reflects the estimated cost of remedial actions currently required.

4. Restricted Assets

Restricted assets were held in the following funds at September 30, 2018 and 2017:

	September 30, 2018				
	Electric	SJRPP	Water and Sewer	DES	Total
Renewal and Replacement Fund	**$ 189,929**	**$ 52,610**	**$ 141,423**	**$ 1,078**	**$ 385,040**
Sinking Fund	**167,483**	**7,446**	**81,242**	**2,340**	**258,511**
Debt Service Reserve Fund	**65,433**	**11,354**	**102,850**	**–**	**179,637**
Revenue Fund	**–**	**26,014**	**–**	**–**	**26,014**
Adjustment to fair value of investments	**(3,302)**	**66**	**(1,347)**	**–**	**(4,583)**
Environmental Fund	**–**	**–**	**1,159**	**–**	**1,159**
Construction Fund	**203**	**–**	**284**	**–**	**487**
Total	**$ 419,746**	**$ 97,490**	**$ 325,611**	**$ 3,418**	**$ 846,265**

	September 30, 2017				
	Electric	SJRPP	Water and Sewer	DES	Total
Renewal and Replacement Fund	$ 201,388	$ 82,577	$ 150,331	$ 899	$ 435,195
Sinking Fund	174,529	51,280	82,208	2,331	310,348
Debt Service Reserve Fund	65,433	141,145	107,488	–	314,066
Revenue Fund	–	1,903	–	–	1,903
Adjustment to fair value of investments	750	(4,082)	2,133	–	(1,199)
Environmental Fund	–	–	1,839	–	1,839
Construction Fund	–	–	15	–	15
Total	$ 442,100	$ 272,823	$ 344,014	$ 3,230	$ 1,062,167

The Electric System, SJRPP System, Bulk Power Supply, Water and Sewer System, and the DES are permitted to invest restricted funds in specified types of investments in accordance with their bond resolutions and the investment policy.

(Dollars in Thousands)

4. Restricted Assets (continued)

The requirements of the respective bond resolutions for contributions to the respective systems' renewal and replacement funds are as follows:

Electric System:	An amount equal to the greater of 10% of the prior year defined net revenues or 5% of the prior year defined gross revenues.
SJRPP System:	An amount equal to 12.5% of aggregate debt service, as defined, on bonds issued under the First SJRPP Bond Resolution. An amount equal to 12.5% of aggregate debt service, as defined, on bonds issued under the Second SJRPP Bond Resolution. However, no such deposit is required under the Second SJRPP Bond Resolution as long as the First SJRPP Bond Resolution has not been discharged. On January 5, 2018, JEA defeased all the SJRPP System Revenue Issue Two bonds in their entirety and on March 21, 2018, JEA satisfied and discharged the First Power Park Resolution; therefore, the deposits required under the Second SJRPP Bond Resolution began in fiscal year 2018.
Bulk Power Supply System:	An amount equal to 12.5% of aggregate debt service, as defined.
Water and Sewer System:	An amount equal to the greater of 10% of the prior year defined annual net revenues or 5% of the prior year defined gross revenues.
DES:	An amount equal to the greater of 10% of the prior year defined annual net revenues or 5% of the prior year defined revenues.

5. Cash and Investments

JEA maintains cash and investment pools that are utilized by all funds except for the bond funds. Included in the JEA cash balances are amounts on deposit with JEA's commercial bank, as well as amounts held in various money market funds as authorized in the JEA Investment Policy. The commercial bank balances are covered by federal depository insurance or collateralized subject to the Florida Security for Public Deposits Act of Chapter 280, Florida Statutes. Amounts subject to Chapter 280, Florida Statutes, are collateralized by securities deposited by JEA's commercial bank under certain pledging formulas with the State Treasurer or other qualified custodians.

JEA follows GASB Statement No. 31, *Accounting and Financial Reporting for Certain Investments and for External Investment Pools*, which requires the adjustments of the carrying value of investments to fair value to be presented as a component of investment income. Investments are presented at fair value or cost, which is further explained in note 14, Fair Value Measurements.

(Dollars in Thousands)

5. Cash and Investments (continued)

At September 30, 2018 and 2017, the fair value of all securities, regardless of statement of net position classification as cash equivalent or investment, was as follows:

	2018	2017
Securities:		
U.S. Treasury and government agency securities	**$ 462,897**	$ 538,887
State and local government securities	**223,845**	323,507
Commercial paper	**133,074**	170,829
Local government investment pool	**194,786**	138,207
Money market mutual funds	**23,208**	51,460
Total securities, at fair value	**$ 1,037,810**	$ 1,222,890

These securities are held in the following accounts:

	2018	2017
Current assets:		
Cash and cash equivalents	**$ 441,206**	$ 489,559
Investments	**85,310**	25,122
Restricted assets:		
Cash and cash equivalents	**114,576**	124,475
Investments	**731,627**	936,708
Total cash and investments	**1,372,719**	1,575,864
Plus: interest due on securities	**2,878**	2,967
Less: cash on deposit	**(337,787)**	(355,941)
Total securities, at fair value	**$ 1,037,810**	$ 1,222,890

JEA is authorized to invest in securities as described in its investment policy and in each bond resolution. As of September 30, 2018, JEA's investments in securities and their maturities are categorized below in accordance with GASB Statement No. 40, *Deposit and Investment Risk Disclosures – an amendment of GASB Statement No. 3*. It is assumed that callable investments will not be called. Puttable securities are presented as investments with a maturity of less than one year.

(Dollars in Thousands)

5. Cash and Investments (continued)

The maturity distribution of the investments held at September 30, 2018 is listed below.

Type of Investments	Less than One Year	One to Five Years	Five to Ten Years	Ten to Twenty Years	Total
U.S. Treasury and government agency securities	$ 245,490	$ 193,550	$ 12,956	$ 10,901	$ 462,897
State and local government securities	48,852	86,537	8,821	79,635	223,845
Commercial paper	133,074	–	–	–	133,074
Local government investment pools	194,786	–	–	–	194,786
Money market mutual funds	23,208	–	–	–	23,208
Total securities, at fair value	$ 645,410	$ 280,087	$ 21,777	$ 90,536	$ 1,037,810

Interest Rate Risk – As a means of limiting its exposure to fair value losses arising from rising interest rates, JEA's investment policy requires the investment portfolio to be structured in such a manner as to provide sufficient liquidity to pay obligations as they come due. To the extent possible, investment maturities are matched with known cash needs and anticipated cash flow requirements. Additionally, maturity limitations for investments related to the issuance of debt are outlined in the bond resolution relating to those bond issues. JEA's investment policy also limits investments in commercial paper to maturities of less than nine months.

Credit Risk – JEA's investment policy is consistent with the requirements for investments of state and local governments contained in the Florida Statutes and its objectives are to seek reasonable income, preserve capital, and avoid speculative investments. Consistent with JEA's investment policy and bond resolutions: (1) the U.S. government agency securities held in the portfolio are issued or guaranteed by agencies created pursuant to an Act of Congress as an agency or instrumentality of the United States of America; (2) the state and local government securities are rated by two nationally recognized rating agencies and are rated at least AA- by Standard & Poor's, Aa3 by Moody's Investors Services, or AA- by Fitch Ratings; and (3) the money market mutual funds are rated AAA by Standard & Poor's or Aaa by Moody's Investors Services. JEA's investment policy limits investments in commercial paper to the highest whole rating category issued by at least two nationally recognized rating agencies, and the issuer must be a Fortune 500 company, a Fortune Global 500 company with significant operations in the U.S., or the governments of Canada or Canadian provinces and the ratings outlook must be positive or stable at the time of the investment. As of September 30, 2018, JEA's investments in commercial paper are rated at least A-1 by Standard & Poor's and P-1 by Moody's Investors Services. In addition, JEA's investment policy limits the commercial paper investment in any one issuer to $12,500. Additionally, JEA's investment policy limits investments in commercial paper to 25% of the total cash and investment portfolio regardless of statement of net position classification as cash equivalent or investment. As of September 30, 2018, JEA had 12.8% of its investments in commercial paper.

5. Cash and Investments (continued)

Custodial Credit Risk – For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, JEA will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. All of JEA's investments are held by JEA or by an agent in JEA's name.

Concentration of Credit Risk – As of September 30, 2018, investments in any one issuer representing 5% or more of JEA's investments included $235,878 (22.7%) invested in issues of the Federal Home Loan Bank, $170,424 (16.4%) held in U.S. Treasury securities, and $56,595 (5.5%) invested in issues of the Federal Farm Credit Bank. JEA's investment policy limits the maximum holding of any one U.S. government agency issuer to 35% of total cash and investments regardless of statement of net position classification as cash equivalent or investment. Other than investments in U.S. Treasury securities or U.S. Treasury money market funds, JEA's investment policy limits the percentage of the total cash and investment portfolio (regardless of statement of net position classification as cash equivalent or investment) that may be held in various security types. As of September 30, 2018, investments in all security types were within the allowable policy limits.

(Dollars in Thousands)

6. Capital Assets

Capital asset activity for the year ended September 30, 2018 is as follows:

	Balance September 30, 2017	Additions	Retirements	Transfers/ Adjustments	Balance September 30, 2018
Electric Enterprise Fund:					
Generation assets	$ 3,685,363	$ –	$ (5,686)	$ 20,237	$ 3,699,914
Transmission assets	571,810	–	(175)	22,223	593,858
Distribution assets	1,927,058	–	(5,881)	78,899	2,000,076
Other assets	459,240	–	(1,754)	(8,609)	448,877
Total capital assets	6,643,471	–	(13,496)	112,750	6,742,725
Less: accumulated depreciation and amortization	(3,718,060)	(680,606)	13,496	–	(4,385,170)
Land	130,246	–	(197)	237	130,286
Construction work-in-process	106,012	183,278	–	(114,763)	174,527
Net capital assets	3,161,669	(497,328)	(197)	(1,776)	2,662,368
Water and Sewer Fund:					
Pumping assets	509,490	–	(9,533)	25,691	525,648
Treatment assets	627,165	–	(7,037)	26,141	646,269
Transmission and distribution assets	1,182,420	–	(312)	24,772	1,206,880
Collection assets	1,485,168	–	(427)	23,857	1,508,598
Reclaimed water assets	138,535	–	(730)	(271)	137,534
General and other assets	397,765	–	(1,512)	10,812	407,065
Total capital assets	4,340,543	–	(19,551)	111,002	4,431,994
Less: accumulated depreciation	(1,991,742)	(140,025)	19,551	4,189	(2,108,027)
Land	61,259	–	(11)	(33)	61,215
Construction work-in-process	205,890	202,761	–	(110,969)	297,682
Net capital assets	2,615,950	62,736	(11)	4,189	2,682,864
District Energy System:					
Chilled water plant assets	55,240	–	(940)	2,076	56,376
Total capital assets	55,240	–	(940)	2,076	56,376
Less: accumulated depreciation	(24,091)	(2,403)	940	–	(25,554)
Land	3,051	–	–	–	3,051
Construction work-in process	1,980	1,250	–	(2,076)	1,154
Net capital assets	36,180	(1,153)	–	–	35,027
Total	$ 5,813,799	$ (435,745)	$ (208)	$ 2,413	$ 5,380,259

(Dollars in Thousands)

6. Capital Assets (continued)

Capital asset activity for the year ended September 30, 2017 is as follows:

	Balance September 30, 2016	Additions	Retirements	Transfers/ Adjustments	Balance September 30, 2017
Electric Enterprise Fund:					
Generation assets	$ 3,679,557	$ –	$ (41,299)	$ 47,105	$ 3,685,363
Transmission assets	547,705	–	(1,563)	25,668	571,810
Distribution assets	1,822,944	–	(5,011)	109,125	1,927,058
Other assets	436,508	–	(3,238)	25,970	459,240
Total capital assets	6,486,714	–	(51,111)	207,868	6,643,471
Less: accumulated depreciation and amortization	(3,525,733)	(243,438)	51,111	–	(3,718,060)
Land	127,895	–	(30)	2,381	130,246
Construction work-in-process	181,247	144,855	–	(220,090)	106,012
Net capital assets	3,270,123	(98,583)	(30)	(9,841)	3,161,669
Water and Sewer Fund:					
Pumping assets	501,502	–	(9,152)	17,140	509,490
Treatment assets	606,217	–	(6,434)	27,382	627,165
Transmission and distribution assets	1,161,588	–	(314)	21,146	1,182,420
Collection assets	1,468,752	–	(530)	16,946	1,485,168
Reclaimed water assets	131,557	–	(91)	7,069	138,535
General and other assets	382,964	–	(3,408)	18,209	397,765
Total capital assets	4,252,580	–	(19,929)	107,892	4,340,543
Less: accumulated depreciation	(1,879,932)	(135,928)	19,929	4,189	(1,991,742)
Land	59,714	–	(830)	2,375	61,259
Construction work-in-process	135,881	180,276	–	(110,267)	205,890
Net capital assets	2,568,243	44,348	(830)	4,189	2,615,950
District Energy System:					
Chilled water plant assets	53,648	–	(88)	1,680	55,240
Total capital assets	53,648	–	(88)	1,680	55,240
Less: accumulated depreciation	(21,815)	(2,364)	88	–	(24,091)
Land	3,051	–	–	–	3,051
Construction work-in process	1,675	1,985	–	(1,680)	1,980
Net capital assets	36,559	(379)	–	–	36,180
Total	$ 5,874,925	$ (54,614)	$ (860)	$ (5,652)	$ 5,813,799

(Dollars in Thousands)

7. Investment in The Energy Authority

JEA is a member of TEA, a municipal power marketing and risk management joint venture, headquartered in Jacksonville, Florida. TEA currently has eight members, and JEA's ownership interest in TEA is 16.7%. TEA provides wholesale power marketing and resource management services to members (including JEA) and nonmembers and allocates transaction savings and operating expenses pursuant to a settlement agreement. TEA also assists members (including JEA) and nonmembers with natural gas procurement and related gas hedging activities. JEA's earnings from TEA were $4,074 in fiscal year 2018 and $6,335 in 2017 for all power marketing activities. JEA's distributions from TEA were $3,513 in fiscal year 2018 and $6,182 in 2017. The investment in TEA was $6,811 at September 30, 2018 and $6,283 at September 30, 2017 and is included in noncurrent assets on the accompanying statement of net position.

The following is a summary of the unaudited financial information of TEA for the nine months ended September 30, 2018 and 2017. TEA issues separate audited financial statements on a calendar-year basis.

	Unaudited			
		2018		**2017**
Condensed statement of net position:				
Current assets	**$**	**165,904**	$	177,777
Noncurrent assets		**21,510**		15,622
Total assets	**$**	**187,414**	$	193,399
Current liabilities	**$**	**146,768**	$	155,313
Noncurrent liabilities		**15**		394
Members' capital		**40,631**		37,692
Total liabilities and members' capital	**$**	**187,414**	$	193,399
Condensed statement of operations:				
Operating revenues	**$**	**1,334,738**	$	1,153,933
Operating expenses		**1,252,868**		1,092,748
Operating income	**$**	**81,870**	$	61,185
Net income	**$**	**81,975**	$	61,223

As of September 30, 2018, JEA is obligated to guaranty, directly or indirectly, TEA's electric trading activities in an amount up to $28,929 and TEA's natural gas procurement and trading activities up to $31,000, in either case, plus attorney's fees that any party claiming and prevailing under the guaranty might incur and be entitled to recover under its contract with TEA. JEA has approved up to $60,000 (plus attorney fees) for TEA's natural gas procurement and trading activities.

7. Investment in The Energy Authority (continued)

Generally, JEA's guaranty obligations for electric trading would arise if TEA did not make the contractually required payment for energy, capacity, or transmission that was delivered or made available, or if TEA failed to deliver or provide energy, capacity, or transmission as required under a contract. Generally, JEA's guaranty obligations for natural gas procurement and trading would arise if TEA did not make the contractually required payment for natural gas or transportation that was delivered or purchased or if TEA failed to deliver natural gas or transportation as required under a contract.

Upon JEA's making any payments under its electric guaranty, it has certain contribution rights with the other members of TEA in order that payments made under the TEA member guaranties would be equalized ratably, based upon each member's equity ownership interest in TEA. Upon JEA's making any payments under its natural gas guaranty, it has certain contribution rights with the other members of TEA in order that payments under the TEA member guaranties would be equalized ratably in proportion to their respective amounts of guaranties, as adjusted by the actual natural gas member volumes and prices for the calendar year. After such contributions have been effected, JEA would only have recourse against TEA to recover amounts paid under the guaranty.

The term of these guaranties is generally indefinite, but JEA has the ability to terminate its guaranty obligations by causing to be provided advance notice to the beneficiaries thereof. Such termination of its guaranty obligations only applies to TEA transactions not yet entered into at the time the termination takes effect. Such termination would be because of JEA's withdrawal from membership in TEA, or such termination could cause JEA's membership in TEA to be terminated.

Under a separate agreement, TEA contracted with Southern Power Company ("Southern"), on JEA's behalf, for the purchase and sale of capacity and energy from Southern's Wansley plant located in Heard County, GA, covering the term from January 1, 2018 to December 31, 2019. In turn, JEA has guaranteed the payment obligations in the agreement up to $9,000 as well as all reasonable fees and expenses of Southern's counsel in any way relating to the enforcement of Southern's rights under the agreement.

8. Long-Term Debt

The Electric System, Bulk Power Supply System, SJRPP System, Water and Sewer System, and DES revenue bonds (JEA Revenue Bonds) are each governed by one or more bond resolutions. The Electric System bonds are governed by both a senior and a subordinated bond resolution; the Bulk Power Supply System bonds are governed by a single bond resolution; the Water and Sewer System bonds are governed by both a senior and a subordinated bond resolution; the SJRPP System bonds are governed by the First and Second Power Park Resolutions; and the DES bonds are governed by a single bond resolution. In accordance with the bond resolutions of each system, principal and interest on the bonds are payable from and secured by a pledge of the net revenues of the respective system. In general, the bond resolutions require JEA to make monthly deposits into the separate debt service sinking funds for each System in an amount equal to approximately one-twelfth of the aggregate amount of principal and interest due and payable on the bonds within the bond year. Interest on the fixed rate bonds is payable semiannually on April 1 and October 1, and principal is payable on October 1.

In accordance with the requirements of the SJRPP First Power Park Resolution and the Agreement for Joint Ownership and Construction and Operation of SJRPP Coal Units #1 and #2 between JEA and FPL, FPL is responsible for paying its share of the debt service on bonds issued under the First Power Park Resolution. The various bond resolutions provide for certain other covenants, the most significant of which (1) requires JEA to establish rates for each system such that net revenues with respect to that system are sufficient to exceed (by a certain percentage) the debt service for that system during the fiscal year and any additional amount required to make all reserve or other payments required to be made in such fiscal year by the resolution of that system and (2) restricts JEA from issuing additional parity bonds unless certain conditions are met.

On January 5, 2018, JEA defeased all the SJRPP System Revenue Issue Two bonds in their entirety and on March 21, 2018, JEA satisfied and discharged the First Power Park Resolution.

(Dollars in Thousands)

8. Long-Term Debt (continued)

Below is the schedule of outstanding indebtedness for the fiscal years 2018 and 2017.

Long-Term Debt	Interest Rates[1]	Payment Dates	September 30 2018	September 30 2017
Electric System Senior Revenue Bonds:				
Series Three 2004A	5.000%	2039	**$ 5**	$ 5
Series Three 2005B	4.750%	2033	**100**	100
Series Three 2008A[2]	Variable	2027–2036	**51,680**	51,680
Series Three 2008B-1[3]	Variable	2018–2040	**60,020**	60,395
Series Three 2008B-2[2]	Variable	2025–2040	**41,900**	41,900
Series Three 2008B-3[2]	Variable	2024–2036	**37,000**	37,000
Series Three 2008B-4[3]	Variable	2018–2036	**49,410**	49,810
Series Three 2008C-1[2]	Variable	2024–2034	**44,145**	44,145
Series Three 2008C-2[2]	Variable	2024–2034	**43,900**	43,900
Series Three 2008C-3[2]	Variable	2030–2038	**25,000**	25,000
Series Three 2008D-1[3]	Variable	2018–2036	**108,900**	111,420
Series Three 2009C	N/A	N/A	**–**	3,355
Series Three 2009D[6]	6.056%	2033–2044	**45,955**	45,955
Series Three 2010A	4.000%	2018–2019	**10,065**	14,980
Series Three 2010C	4.125–4.500%	2026–2031	**1,950**	8,975
Series Three 2010D	4.250–5.000%	2018–2038	**7,210**	79,470
Series Three 2010E[6]	5.350–5.482%	2028–2040	**34,255**	34,255
Series Three 2012A	4.000–4.500%	2023–2033	**16,995**	60,750
Series Three 2012B	2.000–5.000%	2019–2039	**85,615**	128,250
Series Three 2013A	3.000–5.000%	2018–2026	**74,865**	93,815
Series Three 2013B	3.000–5.000%	2026–2038	**7,500**	7,500
Series Three 2013C	4.000–5.000%	2018–2030	**19,335**	28,685
Series Three 2014A	3.400–5.000%	2018–2034	**12,870**	32,305
Series Three 2015A	2.750–5.000%	2018–2041	**69,975**	79,495
Series Three 2015B	3.375–5.000%	2018–2031	**23,900**	36,005
Series Three 2017A	5.000%	2019	**18,670**	18,670
Series Three 2017B	3.375–5.000%	2026–2039	**198,095**	–
Total Electric System Senior Revenue Bonds			**1,089,315**	1,137,820

Notes to Financial Statements (continued)
(Dollars in Thousands)

8. Long-Term Debt (continued)

Long-Term Debt	Interest Rates[1]	Payment Dates	September 30 2018	September 30 2017
Electric System Subordinated Revenue Bonds:				
2000 Series A[2]	Variable	2021-2035	**$ 30,965**	$ 30,965
2000 Series F-1[2]	Variable	2026-2030	**37,200**	37,200
2000 Series F-2[2]	Variable	2026-2030	**24,800**	24,800
2008 Series D[2]	Variable	2024-2038	**39,455**	39,455
2009 Series A	N/A	N/A	**–**	21,140
2009 Series D	5.000%	2018	**11,660**	23,925
2009 Series E	4.000%	2018	**295**	2,215
2009 Series F[6]	4.800-6.406%	2018-2034	**63,670**	64,670
2009 Series G	4.000-5.000%	2018-2019	**16,090**	16,090
2010 Series A	N/A	N/A	**–**	710
2010 Series B	4.000-5.000%	2018-2024	**4,605**	7,535
2010 Series C	N/A	N/A	**–**	4,385
2010 Series D[6]	4.000-5.582%	2018-2027	**44,125**	45,575
2012 Series A	3.250-5.000%	2018-2033	**62,440**	88,500
2012 Series B	3.250-5.000%	2018-2037	**52,995**	93,750
2013 Series A	3.000-5.000%	2018-2030	**44,585**	54,110
2013 Series B	3.000-5.000%	2018-2026	**21,275**	25,385
2013 Series C	1.375-5.000%	2018-2038	**78,330**	80,390
2013 Series D	4.000-5.250%	2018-2035	**88,660**	124,025
2014 Series A	4.000-5.000%	2018-2039	**121,320**	206,105
2017 Series A	3.000-5.000%	2018-2019	**31,790**	71,735
2017 Series B	3.375-5.000%	2018-2034	**185,745**	–
Total Electric System Subordinated Revenue Bonds			**960,005**	1,062,665

(Dollars in Thousands)

8. Long-Term Debt (continued)

Long-Term Debt	Interest Rates[1]	Payment Dates	September 30 2018	September 30 2017
Bulk Power Supply System Revenue Bonds:				
Series 2010A[6]	4.600–5.920%	2018–2030	**$ 37,400**	$ 39,875
Series 2014A	2.000–5.000%	2018–2038	**63,320**	66,050
Total Bulk Power System Revenue Bonds			**100,720**	105,925
SJRPP System Revenue Bonds:				
Issue Two, Series Seventeen	N/A	N/A	**–**	100
Issue Two, Series Eighteen	N/A	N/A	**–**	50
Issue Two, Series Nineteen	N/A	N/A	**–**	100
Issue Two, Series Twenty	N/A	N/A	**–**	100
Issue Two, Series Twenty-One	N/A	N/A	**–**	5
Issue Two, Series Twenty-Two	N/A	N/A	**–**	5
Issue Two, Series Twenty-Three	N/A	N/A	**–**	64,910
Issue Two, Series Twenty-Four	N/A	N/A	**–**	29,625
Issue Two, Series Twenty-Five	N/A	N/A	**–**	45
Issue Two, Series Twenty-Six	N/A	N/A	**–**	65,970
Issue Two, Series Twenty-Seven	N/A	N/A	**–**	7,025
Issue Three, Series One[5]	4.500%	2037	**100**	100
Issue Three, Series Two[5]	5.000%	2034–2037	**29,370**	29,370
Issue Three, Series Four[5][6]	4.500–5.450%	2018–2028	**22,410**	24,085
Issue Three, Series Six[5]	2.375–5.000%	2019–2037	**91,330**	91,330
Issue Three, Series Seven[5]	2.000–5.000%	2019–2033	**79,500**	79,500
Issue Three, Series Eight[5]	2.000–5.000%	2019–2039	**57,895**	57,895
Total SJRPP System Revenue Bonds			**280,605**	450,215

(Dollars in Thousands)

8. Long-Term Debt (continued)

Long-Term Debt	Interest Rates[1]	Payment Dates	September 30 2018	September 30 2017
Water and Sewer System Senior Revenue Bonds:				
2006 Series B[4]	Variable	2018-2022	**$ 30,370**	$ 34,625
2008 Series A-2[2]	Variable	2028-2042	**51,820**	51,820
2008 Series B[2]	Variable	2023-2041	**85,290**	85,290
2009 Series B	3.750-5.000%	2018-2019	**18,295**	25,565
2010 Series A[6]	6.210-6.310%	2026-2044	**83,115**	83,115
2010 Series B	4.700-5.700%	2018-2025	**13,840**	15,570
2010 Series C	5.000%	2020	**3,000**	9,545
2010 Series D	4.000-5.000%	2018-2039	**42,525**	101,850
2010 Series E	4.000-5.000%	2021-2039	**11,865**	60,990
2010 Series F[6]	3.750-5.887%	2018-2040	**44,275**	45,520
2012 Series A	3.000-5.000%	2019-2041	**162,430**	317,935
2012 Series B	2.000-5.000%	2018-2037	**76,380**	130,085
2013 Series A	4.500-5.000%	2018-2027	**63,660**	89,740
2013 Series B	N/A	N/A	**–**	3,830
2014 Series A	2.000-5.000%	2018-2040	**217,790**	284,595
2017 Series A	3.125-5.000%	2020-2041	**378,220**	–
Total Water and Sewer System Senior Revenue Bonds			**1,282,875**	1,340,075
Water and Sewer System Subordinated Revenue Bonds:				
Subordinated 2008 Series A-1[2]	Variable	2018–2038	**50,950**	52,950
Subordinated 2008 Series A-2[2]	Variable	2030–2038	**25,600**	25,600
Subordinated 2008 Series B-1[2]	Variable	2030–2036	**30,885**	30,885
Subordinated 2010 Series A	5.000%	2018–2022	**8,275**	13,150
Subordinated 2010 Series B	3.000–5.000%	2020–2025	**3,255**	12,770
Subordinated 2012 Series A	3.000%	2021	**1,440**	20,320
Subordinated 2012 Series B	3.250–5.000%	2030–2043	**29,685**	35,505
Subordinated 2013 Series A	2.125–5.000%	2018–2029	**37,435**	72,250
Subordinated 2017 Series A	2.750–5.000%	2021–2034	**58,940**	–
Total Water and Sewer System Subordinated Revenue Bonds			**246,465**	263,430

(Dollars in Thousands)

8. Long-Term Debt (continued)

Long-Term Debt	Interest Rates[1]	Payment Dates	September 30 2018	September 30 2017
Water and Sewer System Other Subordinated Debt:				
Revolving Credit Agreement[7]	Variable	2021	**$ 3,000**	$ 3,000
Total Water and Sewer System Other Subordinated Debt			**3,000**	3,000
District Energy System:				
2013 Series A	1.725–4.538%	2018–2034	**36,485**	38,125
Total District Energy System			**36,485**	38,125
Total Debt Principal Outstanding			**3,999,470**	4,401,255
Less: Debt Due Within One Year			**(185,790)**	(229,095)
Total Long-Term Debt			**$ 3,813,680**	$ 4,172,160

(1) Interest rates apply only to bonds outstanding at September 30, 2018. Interest on the outstanding variable rate debt is based on either the daily mode, weekly mode, or the flexible mode, which resets in time increments ranging from 1 to 270 days. In addition, JEA has executed fixed-payer weekly mode interest rate swaps to effectively fix a portion of its net payments relative to certain variable rate bonds. The terms of the interest rate swaps are approximately equal to that of the fixed-payer bonds. See the Debt Management Strategy section of this note for more information related to the interest rate swap agreements outstanding at September 30, 2018 and 2017.

(2) Variable rate demand obligations – interest rates ranged from 1.53% to 1.68% at September 30, 2018.

(3) Variable rate direct purchased bonds indexed to SIFMA – interest rates were 1.96% at September 30, 2018.

(4) Variable rate bonds indexed to the Consumer Price Index (CPI bonds) – interest rates ranged from 3.02% to 3.07% at September 30, 2018.

(5) SJRPP System Issue Three Bonds were issued under the Second Power Park Resolution, whereby JEA is responsible for 100% of the related debt service payments. Whereas the SJRPP System Issue Two Bonds issued under the First Power Park Resolution, JEA is responsible for approximately 62.5% of the related debt service payments and FPL the remainder. On January 5, 2018, JEA defeased all the SJRPP System Issue Two Bonds in their entirety and on March 21, 2018, JEA satisfied and discharged the First Power Park Resolution.

(6) Federally Taxable – Issuer Subsidy – Build America Bonds where JEA expects to receive a cash subsidy payment from the United States Department of the Treasury for an amount up to 35% of the related interest.

(7) Revolving Credit Agreement – interest rates were 3.39% at September 30, 2018.

Notes to Financial Statements (continued)

(Dollars in Thousands)

8. Long-Term Debt (continued)

Long-term debt activity (excluding short-term bank borrowings) for the year ended September 30, 2018 was as follows:

System	Debt Payable September 30, 2017	Par Amount of Debt Issued	Par Amount of Debt Refunded or Defeased	Scheduled Debt Principal Payments	Debt Payable September 30, 2018	Current Portion of Debt Payable September 30, 2018
Electric	**$ 2,200,485**	**$ 383,840**	**$ (405,105)**	**$ (129,900)**	**$ 2,049,320**	**$ 124,980**
Bulk Power Supply	**105,925**	**–**	**–**	**(5,205)**	**100,720**	**5,710**
SJRPP	**450,215**	**–**	**(128,280)**	**(41,330)**	**280,605**	**1,720**
Water and Sewer	**1,603,505**	**437,160**	**(460,305)**	**(51,020)**	**1,529,340**	**51,720**
DES	**38,125**	**–**	**–**	**(1,640)**	**36,485**	**1,660**
Total	**$ 4,398,255**	**$ 821,000**	**$ (993,690)**	**$ (229,095)**	**$ 3,996,470**	**$ 185,790**

Long-term debt activity (excluding short-term bank borrowings) for the year ended September 30, 2017 was as follows:

System	Debt Payable September 30, 2016	Par Amount of Debt Issued	Par Amount of Debt Refunded or Defeased	Scheduled Debt Principal Payments	Debt Payable September 30, 2017	Current Portion of Debt Payable September 30, 2017
Electric	$ 2,359,485	$ 90,405	$ (153,210)	$ (96,195)	$ 2,200,485	$ 129,900
Bulk Power Supply	111,970	–	–	(6,045)	105,925	5,205
SJRPP	494,000	–	–	(43,785)	450,215	41,330
Water and Sewer	1,643,515	–	(6,135)	(33,875)	1,603,505	51,020
DES	39,750	–	–	(1,625)	38,125	1,640
Total	$ 4,648,720	$ 90,405	$ (159,345)	$ (181,525)	$ 4,398,255	$ 229,095

(Dollars in Thousands)

8. Long-Term Debt (continued)

The debt service to maturity on the outstanding debt (excluding short-term bank borrowings) as of September 30, 2018 is summarized as follows:

Fiscal Year Ending	Electric System		Bulk Power Supply System		SJRPP	
September 30	Principal	Interest	Principal	Interest	Principal	Interest
2018	$ 124,980	$ 34,676	$ 5,710	$ 2,116	$ 1,720	$ 5,603
2019	116,230	72,122	6,150	3,959	13,780	11,128
2020	60,790	66,757	6,975	3,716	13,340	10,444
2021	59,140	63,939	7,080	3,498	14,175	9,894
2022	58,135	61,381	7,270	3,274	15,285	9,310
2023–2027	412,705	267,922	24,955	12,689	85,040	37,109
2028–2032	527,685	180,414	22,750	6,749	77,645	21,324
2033–2037	535,695	86,762	15,305	2,895	52,060	8,990
2038–2042	144,750	14,698	4,525	187	7,560	456
2043–2047	9,210	842	–	–	–	–
Total	$ 2,049,320	$ 849,513	$ 100,720	$ 39,083	$ 280,605	$ 114,258

Fiscal Year Ending	Water and Sewer System		District Energy System		Total Debt
September 30	Principal	Interest	Principal	Interest	Service(1)(2)(3)
2018	$ 51,720	$ 29,521	$ 1,660	$ 680	$ 258,386
2019	54,705	59,741	1,690	1,330	340,835
2020	56,340	57,535	1,725	1,296	278,918
2021	58,950	55,404	1,770	1,254	275,104
2022	59,550	52,973	1,815	1,206	270,199
2023–2027	294,405	225,940	10,005	5,102	1,375,872
2028–2032	295,730	159,214	12,165	2,943	1,306,619
2033–2037	356,835	96,163	5,655	388	1,160,748
2038–2042	285,850	30,530	–	–	488,556
2043–2047	15,255	1,274	–	–	26,581
Total	$ 1,529,340	$ 768,295	$ 36,485	$ 14,199	$ 5,781,818

(1) Includes debt service accrued from October 1 through September 30 of the corresponding fiscal year, except for fiscal year 2018, which excludes payments made during the fiscal year.

(2) Interest requirement for the variable rate debt was determined by using the interest rates that were in effect at the financial statement date of September 30, 2018.

(3) Interest in the above table reflects total interest on the Federally Taxable – Issuer Subsidy – Build America Bonds and does not reflect the impact of the 35% cash subsidy payments that JEA expects to receive in the future from the United States Department of the Treasury.

(Dollars in Thousands)

8. Long-Term Debt (continued)

JEA, at its option, may redeem specific outstanding fixed rate JEA Revenue Bonds prior to maturity, as discussed in the official statements covering their issuance. A summary of the redemption provisions is as follows:

	Electric System	Bulk Power Supply System	SJRPP	Water and Sewer System	District Energy System
Earliest fiscal year for redemption	2019	2019	2019	2019	2023
Redemption price	100%	100%	100%	100%	100%

JEA debt issued during fiscal year 2018 is summarized as follows:

System	Debt Issued	Purpose	Priority of Lien	Month of Issue	Par Amount Issued	Par Amount Refunded	Accounting Gain/(Loss)
Electric	Series Three 2017B	Refunding[1]	Senior	Dec 2017	$ 198,095	$ 210,030	$ (6,413)
Electric	2017 Series B	Refunding[2]	Subordinated	Dec 2017	185,745	195,075	(8,407)
Water and Sewer	2017 Series A	Refunding[3]	Senior	Dec 2017	378,220	394,335	(11,076)
Water and Sewer	2017 Series A	Refunding[4]	Subordinated	Dec 2017	58,940	65,970	(1,915)
					$ 821,000	$ 865,410	$ (27,811)

(1) Fixed rate bonds issued to refund fixed rate bonds with new debt service of $324,904 compared to prior debt service of $346,747 and $17,425 of net present value economic savings.

(2) Fixed rate bonds issued to refund fixed rate bonds with new debt service of $291,178 compared to prior debt service of $304,128 and $12,314 of net present value economic savings.

(3) Fixed rate bonds issued to refund fixed rate bonds with new debt service of $588,806 compared to prior debt service of $635,880 and $33,648 of net present value economic savings.

(4) Fixed rate bonds issued to refund fixed rate bonds with new debt service of $86,518 compared to prior debt service of $93,337 and $5,283 of net present value economic savings.

The JEA Board has authorized the issuance of additional refunding bonds within certain parameters for the Electric System, SJRPP, and Water and Sewer System. The following table summarizes the maximum amounts that could be issued:

	Authorization		
System	Senior	Subordinated	Expiration
Electric	$ 672,905	$ 447,255	December 31, 2018
SJRPP Issue Three	80,000	–	December 31, 2018
Water and Sewer	424,780	206,060	December 31, 2018

8. Long-Term Debt (continued)

Variable Rate Demand Obligations (VRDOs) – Liquidity Support

For the Electric System and the Water and Sewer System VRDOs appearing in the schedule of outstanding indebtedness, and except for the obligations noted in the following paragraphs, liquidity support is provided in connection with tenders for purchase with various liquidity providers pursuant to standby bond purchase agreements (SBPA) relating to that series of obligation. The purchase price of the obligations tendered or deemed tendered for purchase is payable from the proceeds of the remarketing thereof and moneys drawn under the applicable SBPA. At September 30, 2018, there were no outstanding draws under the SBPA. In the event of the expiration or termination of the SBPA that results in a mandatory tender of the VRDOs and the purchase of the obligations by the bank, then beginning on April 1 or October 1, whichever date is at least six months subsequent to the purchase of the obligations, JEA shall begin to make equal semiannual installments over an approximate five-year period. Commitment fees range from 0.38% to 0.42% with stated termination dates ranging from May 8, 2020 to August 22, 2022, unless otherwise extended. See note 18, Subsequent Events, for further details.

JEA entered into irrevocable direct-pay letter of credit and reimbursement agreement to support the payment of principal and interest on the Water and Sewer System 2008 Series A-2 VRDOs. The letter of credit agreement constitutes both a credit facility and a liquidity facility. As of September 30, 2018, there were no draws outstanding under the letter of credit agreement. Repayment of any draws outstanding at the expiration date are payable in equal semiannual installments over an approximate five-year period. The commitment fee is 0.48% with a stated expiration date of December 2, 2018, unless otherwise extended. Subsequent to the end of the fiscal year, the letter of credit and reimbursement agreement was renewed. See note 18, Subsequent Events, for further details.

JEA has entered into continuing covenant agreements for the Variable Rate Electric System Revenue Bonds, Series Three 2008B-1, Series Three 2008B-4 and Series Three 2008D-1 (collectively, the Direct Purchased Bonds). Except as described below, the bank does not have the option to tender the respective Direct Purchased Bonds for purchase for a period specified in the respective continuing covenant agreements, which period would be subject to renewal under certain conditions. Any Direct Purchased Bond that was not purchased from such bank on the scheduled mandatory tender date that occurred upon the expiration of such period would be required to be repaid as to principal in equal semiannual installments over a period of approximately five years from such scheduled mandatory tender date. Upon any such tender for payment, the Direct Purchased Bond so tendered would be due and payable immediately. The current expiration date of the continuing covenant agreements is December 12, 2018, unless otherwise extended. The interest rate is variable and set weekly based upon SIFMA plus 40 basis points. Subsequent to the end of the fiscal year, the continuing covenant agreements were renewed. See note 18, Subsequent Events, for further details.

8. Long-Term Debt (continued)

Short-Term Bank Borrowings

As of September 30, 2018, JEA has a revolving credit agreement with a commercial bank for an unsecured amount of $300,000. This agreement became effective on December 17, 2015, when JEA terminated the prior two revolving credit agreements with a total available amount of $300,000 with two commercial banks. The revolving credit agreement may be used with respect to the Electric System, the Bulk Power Supply System, the SJRPP System, the Water and Sewer System, or the DES, and for operating expenditures or for capital expenditures.

During fiscal year 2016, the revolving credit agreement was drawn upon by the Water and Sewer System for $3,000 and remains outstanding as of September 30, 2018, with $297,000 available to be drawn.

The revolving credit agreement is scheduled to expire on May 24, 2021. Subsequent to the end of the fiscal year, the revolving credit agreement was amended. See note 18, Subsequent Events, for further details.

Debt Management Strategy

JEA has entered into various interest rate swap agreements executed in conjunction with debt financings for initial terms up to 35 years (unless earlier terminated). JEA utilizes floating to fixed interest rate swaps as part of its debt management strategy. For purposes of this note, the term floating to fixed interest rate swaps refers to swaps in which JEA receives a floating rate and pays a fixed rate.

The fair value of the interest rate swap agreements and related hedging instruments is reported in the long-term debt section in the accompanying statements of net position; however, the notional amounts of the interest rate swaps are not reflected in the accompanying financial statements. JEA follows GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*; therefore, hedge accounting is applied where fair market value changes are recorded in the accompanying statements of net position as either deferred outflow or deferred inflow resources.

The earnings from the debt management strategy interest rate swaps are recorded to interest on debt in the accompanying statements of revenues, expenses, and changes in net position.

(Dollars in Thousands)

8. Long-Term Debt (continued)

JEA entered into all outstanding floating to fixed interest rate swap agreements during prior fiscal years. The terms of the floating to fixed interest rate swap agreements outstanding at September 30, 2018, are as follows:

System	Hedged Bonds	Initial Notional Amount	Notional Amount Outstanding	Fixed Rate of Interest	Effective Date	Termination Date	Variable Rate Index
Electric	Series Three 2008C	**$ 174,000**	**$ 84,800**	3.7%	Sep 2003	Sep 2033	68% of one month LIBOR
Electric	Series Three 2008B	**117,825**	**82,575**	4.4%	Aug 2008	Oct 2039	SIFMA
Electric	Series Three 2008B	**116,425**	**85,600**	3.7%	Sep 2008	Oct 2035	68% of one month LIBOR
Electric	2008 Series D	**40,875**	**39,175**	3.7%	Mar 2009	Oct 2037	68% of one month LIBOR
Electric	Series Three 2008D-1	**98,375**	**62,980**	3.9%	May 2008	Oct 2031	SIFMA
Electric	Series Three 2008A	**100,000**	**51,680**	3.8%	Jan 2008	Oct 2036	SIFMA
Water and Sewer	2006 Series B	**38,730**	**30,370**	4.0-4.1%	Oct 2006	Oct 2018-2022	CPI
Water and Sewer	2008 Series B	**85,290**	**85,290**	3.9%	Mar 2007	Oct 2041	SIFMA
		$ 771,520	**$ 522,470**				

The terms of the floating to fixed interest rate swap agreements outstanding at September 30, 2017, are as follows:

System	Hedged Bonds	Initial Notional Amount	Notional Amount Outstanding	Fixed Rate of Interest	Effective Date	Termination Date	Variable Rate Index
Electric	Series Three 2008C	$ 174,000	$ 84,800	3.7%	Sep 2003	Sep 2033	68% of one month LIBOR
Electric	Series Three 2008B	117,825	82,575	4.4%	Aug 2008	Oct 2039	SIFMA
Electric	Series Three 2008B	116,425	86,000	3.7%	Sep 2008	Oct 2035	68% of one month LIBOR
Electric	2008 Series D	40,875	39,175	3.7%	Mar 2009	Oct 2037	68% of one month LIBOR
Electric	Series Three 2008D-1	98,375	62,980	3.9%	May 2008	Oct 2031	SIFMA
Electric	Series Three 2008A	100,000	51,680	3.8%	Jan 2008	Oct 2036	SIFMA
Water and Sewer	2006 Series B	38,730	34,625	3.9-4.1%	Oct 2006	Oct 2017-2022	CPI
Water and Sewer	2008 Series B	85,290	85,290	3.9%	Mar 2007	Oct 2041	SIFMA
		$ 771,520	$ 527,125				

(Dollars in Thousands)

8. Long-Term Debt (continued)

The following table includes fiscal year 2018 and 2017 summary information for JEA's effective cash flow hedges related to the outstanding floating to fixed interest rate swap agreements.

	Changes in Fair Value		Fair Value at September 30, 2018		
System	**Classification**	**Amount**	**Classification**	**Amount[(1)]**	**Notional**
Electric	Deferred outflows	**$ (31,247)**	Fair value of debt management strategy instruments	**$ (70,103)**	**$ 406,810**
Water and Sewer	Deferred outflows	**(7,666)**	Fair value of debt management strategy instruments	**(16,253)**	**115,660**
Total		**$ (38,913)**		**$ (86,356)**	**$ 522,470**

	Changes in Fair Value		Fair Value at September 30, 2017		
System	**Classification**	**Amount**	**Classification**	**Amount[(1)]**	**Notional**
Electric	Deferred outflows	$ (44,458)	Fair value of debt management strategy instruments	$ (101,350)	$ 407,210
Water and Sewer	Deferred outflows	(12,067)	Fair value of debt management strategy instruments	(23,919)	119,915
Total		$ (56,525)		$ (125,269)	$ 527,125

(1) Fair value amounts were calculated using market rates and standard cash flow present valuing techniques.

(Dollars in Thousands)

8. Long-Term Debt (continued)

For fiscal years ended September 30, 2018 and 2017, the weighted-average rates of interest for each index type of floating to fixed interest rate swap agreement and the total net swap earnings were as follows:

		2018		2017
68% of LIBOR Index:				
Notional amount outstanding	**$**	**209,575**	$	209,975
Variable rate received (weighted average)		**1.17%**		0.60%
Fixed rate paid (weighted average)		**3.69%**		3.70%
SIFMA Index (formerly BMA Index):				
Notional amount outstanding	**$**	**282,525**	$	282,525
Variable rate received (weighted average)		**1.27%**		0.80%
Fixed rate paid (weighted average)		**4.02%**		4.00%
CPI Index:				
Notional amount outstanding	**$**	**30,370**	$	34,625
Variable rate received (weighted average)		**2.87%**		2.60%
Fixed rate paid (weighted average)		**4.02%**		4.00%
Net debt management swap loss	**$**	**(13,395)**	$	(16,181)

(Dollars in Thousands)

8. Long-Term Debt (continued)

The following two tables summarize the anticipated net cash flows of JEA's outstanding hedged variable rate debt and related floating to fixed interest rate swap agreements at September 30, 2018:

Electric System[(1)]

Bond Year Ending October 1	Principal	Interest	Net Swap Interest	Total
2018	$ 400	$ 501	$ 820	$ 1,721
2019	425	6,031	9,794	16,250
2020	3,200	6,024	9,784	19,008
2021	3,275	5,970	9,713	18,958
2022	3,375	5,914	9,640	18,929
2023–2027	91,100	27,219	44,951	163,270
2028–2032	172,605	16,714	28,162	217,481
2033–2037	114,180	6,745	11,464	132,389
2038–2042	18,250	466	780	19,496
Total	$ 406,810	$ 75,584	$ 125,108	$ 607,502

Water and Sewer System[(1)]

Bond Year Ending October 1	Principal	Interest	Net Swap Interest	Total
2018	$ 5,520	$ 558	$ 320	$ 6,398
2019	5,740	2,036	2,278	10,054
2020	9,195	1,861	2,222	13,278
2021	4,860	1,581	2,132	8,573
2022	5,055	1,433	2,084	8,572
2023–2027	17,595	5,751	9,147	32,493
2028–2032	4,540	5,010	7,971	17,521
2033–2037	21,430	4,239	6,741	32,410
2038–2042	41,725	1,597	2,540	45,862
Total	$ 115,660	$ 24,066	$ 35,435	$ 175,161

(1) Interest requirement for the variable rate debt and the variable portion of the interest rate swaps was determined by using the interest rates that were in effect at the financial statement date of September 30, 2018. The fixed portion of the interest rate swaps was determined based on the actual fixed rates of the outstanding interest rate swaps at September 30, 2018.

(Dollars in Thousands)

8. Long-Term Debt (continued)

Credit Risk – JEA is exposed to credit risk on hedging derivative instruments that are in asset positions. To minimize its exposure to loss related to credit risk, the Board has established limits on the notional amount of JEA's interest rate swap transactions and standards for the qualification of financial institutions with which JEA may enter into interest rate swap transactions. The counterparties with which JEA may deal must be rated (i) "AAA" by one or more nationally recognized rating agencies at the time of execution, (ii) "AA/Aa3" or better by at least two of such credit rating agencies at the time of execution, or (iii) if such counterparty is not rated "AA/Aa3" or better at the time of execution, provide for a guarantee by an affiliate of such counterparty rated at least "A/A2" or better at the time of execution where such affiliate agrees to unconditionally guarantee the payment obligations of such counterparty under the swap agreement. In addition, each swap agreement will require the counterparty to enter into a collateral agreement to provide collateral when the ratings of such counterparty (or its guarantor) fall below "AA/Aa3" and a payment is owed to JEA. All outstanding interest rate swaps at September 30, 2018, were in a liability position. Therefore, if counterparties failed to perform as contracted, JEA would not be subject to any credit risk exposure at September 30, 2018.

JEA's floating to fixed interest rate swap counterparty credit ratings at September 30, 2018, are as follows:

Counterparty	Counterparty Credit Ratings S&P/Moody's/Fitch	Outstanding Notional Amount
Morgan Stanley Capital Service Inc.	BBB+/A3/A	$ 175,925
Goldman Sachs Mitsui Marine Derivative Products L.P.	AA-/Aa2/not rated	136,480
JPMorgan Chase Bank, N.A.	A+/Aa3/AA	124,775
Merrill Lynch Derivative Products AG	A-/A3/A+	85,290
Total		$ 522,470

Interest Rate Risk – JEA is exposed to interest rate risk where changes in interest rates could affect the related net cash flows and fair values of outstanding interest rate swaps. On a pay-fixed, receive-variable interest rate swap, as the floating swap index decreases, JEA's net payment on the swap increases, and as the fixed rate swap market declines as compared to the fixed rate on the swap, the fair value declines.

Basis Risk – JEA is exposed to basis risk on certain pay-fixed interest rate swap hedging derivative instruments because the variable-rate payments received on certain hedging derivative instruments are based on a rate or index other than interest rates that JEA pays on its hedged variable-rate debt, which is reset every one or seven days. As of September 30, 2018, the weighted-average interest rate on JEA's hedged variable-rate debt (excluding variable rate CPI bonds) is 1.71%, while the SIFMA swap index rate is 1.56% and 68% of LIBOR is 1.43%.

Termination Risk – JEA or its counterparties may terminate a derivative instrument if the other party fails to perform under the terms of the contract. If at the time of termination, a hedging derivative instrument were in a liability position, JEA would be liable to the counterparty for a payment equal to the liability.

(Dollars in Thousands)

8. Long-Term Debt (continued)

Market Access Risk – JEA is exposed to market access risk due to potential market disruptions in the municipal credit markets that could inhibit the issuing or remarketing of bonds and related hedging instruments. JEA maintains strong credit ratings (see Debt Administration section of the Management Discussion and Analysis) and, to date, has not encountered any barriers to the credit markets.

9. Transactions with City of Jacksonville

Utility and Administrative Services

JEA is a separately governed authority and considered a discretely presented component unit of the City. JEA provides electric, water, and sewer service to the City and its agencies and bills for such service using established rate schedules. JEA utilizes various services provided by departments of the City including insurance, legal, and motor pool. JEA is billed on a proportionate cost basis with other user departments and agencies. The revenues for services provided and expenses for services received by JEA for these related-party transactions with the City were as follows:

	2018	**2017**
Revenues	**$ 35,708**	$ 36,842
Expenses	**$ 6,031**	$ 5,433

City Contribution

On March 22, 2016, the City and JEA entered into a five-year agreement, which established the contribution formula for the fiscal years 2017 through 2021.

Although the calculation for the annual transfer of available revenue from JEA to the City is based upon formulas that are applied specifically to each utility system operated by JEA, JEA, at its sole discretion, may utilize any of its available revenues, regardless of source, to satisfy its total annual obligation to the City.

The contributions from the JEA Electric Enterprise Fund and JEA Water and Sewer Fund for fiscal years 2018 and 2017 were as follows:

	2018	**2017**
Electric	**$ 91,472**	$ 92,271
Water and Sewer	**$ 25,148**	$ 23,552

(Dollars in Thousands)

9. Transactions with City of Jacksonville (continued)

The JEA Electric Enterprise Fund is required to contribute annually to the General Fund of the City an amount equal to 7.468 mills per kilowatt hour delivered by JEA to retail users in JEA's service area and to wholesale customers under firm contracts having an original term of more than one year, other than sales of energy to FPL from JEA's SJRPP System. The JEA Water and Sewer Fund is required to contribute annually to the General Fund of the City an amount equal to 389.2 mills per thousand gallons of potable water and sewer service provided, excluding reclaimed water service. These calculations are subject to a minimum increase of 1% per year through 2021, using 2016 as the base year for the combined assessment for the Electric Enterprise Fund and Water and Sewer Fund. There is no maximum annual assessment.

Franchise Fees

In 2008, the City enacted a 3.0% franchise fee from designated revenues of the Electric and Water and Sewer systems. The ordinance authorizes JEA to pass through these fees to its electric and water and sewer funds. These amounts are included in operating revenues and expenses and were as follows:

	2018	2017
Electric	**$ 28,496**	$ 27,704
Water and Sewer	**$ 10,476**	$ 10,562

Insurance Risk Pool

JEA is exposed to various risks of loss related to torts, theft and destruction of assets, errors and omissions, and natural disasters. In addition, JEA is exposed to risks of loss due to injuries and illness of its employees. These risks are managed through the Risk Management Division of the City, which administers the public liability (general liability and automobile liability) and workers' compensation self-insurance program covering the activities of the City general government, JEA, Jacksonville Housing Authority, Jacksonville Port Authority, and the Jacksonville Aviation Authority. The general objectives are to formulate, develop, and administer, on behalf of the members, a program of insurance to obtain lower costs for that coverage and to develop a comprehensive loss control program.

(Dollars in Thousands)

9. Transactions with City of Jacksonville (continued)

JEA has excess coverage for individual workers' compensation claims above $1,200. Liability for claims incurred is the responsibility of, and is recorded in, the City's self-insurance plan. The premiums are calculated on a retrospective or prospective basis, depending on the claims experience of JEA and other participants in the City's self-insurance program. The liabilities are based on the estimated ultimate cost of settling the claim including the effects of inflation and other societal and economic factors. The JEA workers' compensation expense is the premium charged by the City's self-insurance plan. JEA is also a participant in the City's general liability insurance program. As part of JEA's risk management program, certain commercial insurance policies are purchased to cover designated exposures and potential loss programs. These amounts are included in operating expenses and were as follows:

	2018	2017
General liability	**$ 2,240**	$ 1,511
Workers' compensation	**$ 1,613**	$ 1,435

The following table shows the estimated workers' compensation and general liability loss accruals for the City and JEA's portion for the fiscal years ended September 30, 2018 and 2017. The amounts are recorded by the City at present value using a 4% discount rate for the fiscal years ended September 30, 2018 and September 30, 2017.

	Workers' Compensation		General Liability	
	City of Jacksonville	JEA Portion	City of Jacksonville	JEA Portion
Beginning balance	$ 94,300	$ 3,156	$ 15,531	$ 2,308
Change in provision	32,394	468	5,939	1,245
Payments	(23,052)	(1,032)	(6,170)	(997)
Ending balance	$ 103,642	$ 2,592	$ 15,300	$ 2,556

10. Fuel Purchase and Purchased Power Commitments

JEA has made purchase commitments for Scherer Unit 4 through calendar year 2022. Northside coal and petroleum coke commitments concluded at the end of September 2018. Contract terms specify minimum annual purchase commitments at fixed prices or at prices that are subject to market adjustments. JEA has remarketing rights under the coal contracts. The majority of JEA's coal and petroleum coke supply is purchased with transportation included.

In addition, JEA participates in Georgia Power agreements with rail carriers for the delivery of coal to Scherer Unit 4. Georgia Power Company, acting for itself and as agent for JEA and the other Scherer co-owners, has entered into an agreement with Burlington Northern Santa Fe Railway Company (BNSF) that extends the rail contract through calendar year 2028. Georgia Power has also entered into an agreement with the Norfolk Southern Railway Company (NS) that extends through December 31, 2019.

(Dollars in Thousands)

10. Fuel Purchase and Purchased Power Commitments (continued)

JEA has commitments to purchase natural gas delivered to Jacksonville under a long-term contract with Shell Energy North America L.P. (Shell Energy) that expire in 2021. Contract terms for the natural gas supply specify minimum annual purchase commitments at market prices. JEA has the option to remarket any excess natural gas purchases. In addition to the gas delivered by Shell Energy, JEA has long-term contracts with Peoples Gas system, Florida Gas Transmission, Southern Natural Gas and SeaCoast Gas Transmission for firm gas transportation to allow the delivery of natural gas through those pipeline systems. There is no purchase commitment of natural gas associated with those transportation contracts.

In the unlikely event that JEA would not be in a position to fulfill its obligations to receive fuel and purchased power under the terms of its existing fuel and purchased power contracts, JEA would nonetheless be obligated to make certain future payments. If the conditions necessitating the future payments occurred, JEA would mitigate the financial impact of those conditions by remarketing the fuel and purchased power at then-current market prices. The aggregate amount of future payments that JEA does not expect to be able to mitigate appears in the table below:

Fiscal Year Ending	Coal and Pet Coke Fuel	Natural Gas Transportation	Transmission	Total
2019	2,049	7,236	6,091	15,376
2020	1,165	7,256	7,212	15,633
2021	553	4,817	7,493	12,863
2022	247	–	7,776	8,023
2023	49	–	8,009	8,058
2024-2042	–	–	175,653	175,653

Vogtle Units Purchased Power Agreement

Overview

As a result of an earlier 2008 Board policy establishing a 10% of total energy from nuclear energy goal, JEA entered into a power purchase agreement (as amended, the Additional Vogtle Units PPA) with the Municipal Electric Authority of Georgia (MEAG) for 206 megawatts (MW) of capacity and related energy from MEAG's interest in two additional nuclear generating units (the Additional Vogtle Units or Plant Vogtle Units 3 and 4) under construction at the Alvin W. Vogtle Nuclear Plant in Burke County, Georgia. The owners of the Additional Vogtle Units include Georgia Power Company (Georgia Power), Oglethorpe Power Corporation (Oglethorpe), MEAG and the City of Dalton, Georgia (collectively, the Owners or Vogtle Co-Owners). The energy received under the Additional Vogtle Units PPA is projected to represent approximately 13% of JEA's total energy requirements in the year 2023.

10. Fuel Purchase and Purchased Power Commitments (continued)

The Additional Vogtle Units PPA requires JEA to pay MEAG for the capacity and energy at the full cost of production (including debt service on the bonds issued and to be issued by MEAG and on the loans made and to be made by the Project J Entity referred to below, in each case, to finance the portion of the capacity to be sold to JEA from the Additional Vogtle Units) plus a margin over the term of the Additional Vogtle Units PPA. Under the Additional Vogtle Units PPA, JEA is entitled to 103 MW of capacity and related energy from each of the Additional Vogtle Units for a 20-year term commencing on each Additional Vogtle Unit's commercial operation date and is required to pay for such capacity and energy on a "take-or-pay" basis (that is, whether or not either Additional Vogtle Unit is completed or is operating or operable, and whether or not its output is suspended, reduced or the like or terminated in whole or in part), except that JEA is not obligated to pay the "margin" referred to above during such periods in which the output of either Additional Vogtle Unit is suspended or terminated.

On September 11, 2018, MEAG filed a complaint in the United States District Court for the Northern District of Georgia seeking a declaratory judgement that the Additional Vogtle Units PPA is lawful and enforceable and ordering specific performance from JEA with the terms of the Additional Vogtle Units PPA. On the same day, JEA and the City, as co-plaintiffs, filed a complaint in the Fourth Judicial Circuit Court of Florida seeking a declaratory judgment that the Additional Vogtle Units PPA violates the Florida Constitution and laws and public policy of the state of Florida and is therefore ultra vires, void ab initio, and unenforceable. For additional information about such litigation, see the Litigation and Regulatory Proceedings section in this note.

Financing and In-Service Costs

MEAG created three separate "projects" (Vogtle Units 3 and 4 Project Entities) for the purpose of owning and financing its 22.7% undivided ownership interest in the Additional Vogtle Units (representing approximately 500.308 MW of capacity and related energy based upon the nominal rating of the Units). The project corresponding to the portion of MEAG's ownership interest, which will provide the capacity and energy to be purchased by JEA under the Additional Vogtle Units PPA, is referred to herein as "Project J." MEAG currently estimates that the total in-service cost for its entire undivided ownership interest in the Additional Vogtle Units will be approximately $6,485,000, including construction costs, financing costs through the estimated in-service dates, contingencies, initial fuel load costs, and switchyard and transmission costs. MEAG has additionally provided that its total financing needs for its share of the Additional Vogtle Units, including reserve funds and other fund deposits required under the financing documents, are approximately $6,975,000. Based on information provided by MEAG, (i) the portion of the total in-service cost for Plant Vogtle Units 3 and 4 allocable to Project J is approximately $2,715,000 and (ii) the portion of additional in-service costs relating to reserve funds and other fund deposits is approximately $203,000 resulting in total financing needs of approximately $2,918,000.

10. Fuel Purchase and Purchased Power Commitments (continued)

Financing for Project J – In order to finance a portion of its acquisition and construction of Project J and to refund bond anticipation notes previously issued by MEAG, MEAG issued approximately $1,248,435 of its Plant Vogtle Units 3 and 4 Project J Bonds (the 2010 PPA Bonds) on March 11, 2010. Of the total 2010 PPA Bonds, approximately $1,224,265 were issued as Federally Taxable – Issuer Subsidy – Build America Bonds where MEAG expects to receive a cash subsidy payment from the United States Treasury for 35% of the related interest, subject to reduction due to sequestration. At this time, a portion of the interest subsidy payments with respect to the Build America Bonds is not being paid as a result of the federal government sequestration process and the Bipartisan Budget Act of 2018 for the current fiscal year through fiscal year 2027. The exact amount of such reduction is determined on or about the beginning of the federal government's fiscal year, or October 1, and is subject to adjustment thereafter. The current reduction amount of 6.2% became effective on October 1, 2018. MEAG issued approximately $185,180 of additional Project J tax-exempt bonds on September 9, 2015.

On June 24, 2015, in order to obtain certain loan guarantees from the United States Department of Energy (DOE) for further funding of Plant Vogtle Units 3 and 4, MEAG divided its undivided ownership interest in Plant Vogtle Units 3 and 4 into three separate undivided interests and transferred such interests to the Vogtle Units 3 and 4 Project Entities. MEAG transferred approximately 41.175% of its ownership interest, representing 206 MW of nominally rated generating capacity (which is the portion of MEAG's ownership interest attributable to Project J), to MEAG Power SPVJ, LLC (the Project J Entity).

The Project J Entity entered into a loan guarantee agreement with the DOE in 2015, subsequently amended in 2016 and 2017, under which the Project J Entity is permitted to borrow from the Federal Financing Bank (FFB) an aggregate amount of approximately $577,743. To date, the Project J Entity has received proceeds from borrowings under the loan guarantee agreement in an aggregate principal amount of approximately $341,446. There is additional borrowing capacity of approximately $236,297 under the Project J Entity's existing DOE-guaranteed loan. On September 28, 2017, DOE, MEAG, and the Vogtle Units 3 and 4 Project Entities entered into a conditional commitment for additional DOE loan guarantees in the aggregate amount of $414,700. On September 17, 2018, the DOE extended the expiration date of such conditional commitment to March 31, 2019. Subject to satisfaction of the conditions contained in such conditional commitment, it is expected that the Project J Entity will obtain from FFB such additional lending commitment in the amount of $111,541. While MEAG expects that the total financing needs for Project J will exceed the aggregate of the Project J Entity's FFB lending commitments and the balance will be financed in the capital markets, in the event that the JEA litigation challenging its obligations under the Additional Vogtle Units PPA materially impedes access to capital markets for MEAG, Georgia Power has agreed to provide certain funding as described below under "Description of Construction Contracts and Status of Construction".

(Dollars in Thousands)

10. Fuel Purchase and Purchased Power Commitments (continued)

Summary of financing associated with Project J:

	Borrowings to Date	Additional Capacity	Total Projected Borrowings
2010A Build America Bonds	$ 1,224,265	$ –	$ 1,224,265
2010B tax-exempt bonds	24,170	–	24,170
2015A tax-exempt bonds	185,180	–	185,180
DOE loan guarantee	341,446	236,297	577,743
Additional conditional DOE loan guarantee	–	111,541	111,541
Additional public markets bonds	–	666,290	666,290
Other sources of funds	–	129,198	129,198
Total	$ 1,775,061	$ 1,143,326	$ 2,918,387

(Dollars in Thousands)

10. Fuel Purchase and Purchased Power Commitments (continued)

Based on information provided by MEAG, JEA's portion of the debt service on the outstanding Project J debt as of September 30, 2018 is summarized as follows:

Fiscal Year Ending September 30	Principal	Interest	Annual Debt Service	Build America Bonds Subsidy	Capitalized Interest	Net Debt Service
2019	$ 12,750	$ 98,800	$ 111,550	$ (27,612)	$ (71,188)	$ 12,750
2020	16,183	97,995	114,178	(27,392)	(70,603)	16,183
2021	19,952	97,058	117,010	(27,100)	(69,958)	19,952
2022	20,706	95,983	116,689	(26,790)	(33,262)	56,637
2023	22,100	94,842	116,942	(26,466)	(4,207)	86,269
2024	22,967	93,642	116,609	(26,129)	–	90,480
2025	23,819	92,385	116,204	(25,776)	–	90,428
2026	24,685	91,079	115,764	(25,409)	–	90,355
2027	25,570	89,721	115,291	(25,026)	–	90,265
2028	26,538	88,311	114,849	(24,626)	–	90,223
2029	27,511	86,844	114,355	(24,209)	–	90,146
2030	28,528	85,318	113,846	(23,774)	–	90,072
2031	29,586	83,733	113,319	(23,320)	–	89,999
2032	30,661	82,084	112,745	(22,847)	–	89,898
2033	31,842	80,370	112,212	(22,353)	–	89,859
2034	33,035	78,587	111,622	(21,838)	–	89,784
2035	34,272	76,733	111,005	(21,301)	–	89,704
2036	28,275	74,805	103,080	(20,740)	–	82,340
2037	16,223	72,799	89,022	(20,155)	–	68,867
2038	10,905	70,713	81,618	(19,545)	–	62,073
2039	6,973	68,543	75,516	(18,909)	–	56,607
2040	1,424	66,250	67,674	(18,246)	–	49,428
2041	–	63,866	63,866	(17,553)	–	46,313
2042	–	31,076	31,076	(9,217)	–	21,859
2043	–	4,058	4,058	(1,249)	–	2,809
Total	$ 494,505	$ 1,965,595	$ 2,460,100	$ (547,582)	$ (249,218)	$ 1,663,300

10. Fuel Purchase and Purchased Power Commitments (continued)

Description of Construction Contracts and Status of Construction

In 2008, Georgia Power, acting for itself and as agent for the other Vogtle Co-Owners, entered into a contract (EPC Contract) pursuant to which the Contractor agreed to design, engineer, procure, construct, and test the Additional Vogtle Units. The entities that constituted the Contractor prior to June 9, 2017 were Westinghouse Electric Company LLC (Westinghouse) and WECTEC Global Project Services Inc. (WECTEC, and together with Westinghouse, the Contractor).

On March 29, 2017, Westinghouse and WECTEC each filed for bankruptcy protection under Chapter 11 of the United States Bankruptcy Code.

On June 9, 2017, Georgia Power (for itself and as agent for the other Vogtle Co-Owners) and the Contractor entered into a services agreement (Services Agreement) for the Contractor to transition construction management of Plant Vogtle Units 3 and 4 to Southern Nuclear Operating Company, an affiliate of Georgia Power (SNC or Southern Nuclear), and to provide ongoing design, engineering, and procurement services to SNC. The Services Agreement has taken effect and provides that the Contractor will generally be compensated on a time and materials basis for services rendered. The Services Agreement will continue until the start-up and testing of Plant Vogtle Units 3 and 4 is complete and electricity is generated and sold from both units. Facility design and engineering remains the responsibility of Westinghouse under the Services Agreement. The Services Agreement is terminable by the Vogtle Co-Owners upon 30 days' written notice.

As a result of the Westinghouse and WECTEC bankruptcy, Georgia Power, along with SNC acting as the project manager, will manage the remaining bulk construction phase of the Additional Vogtle Units on behalf of the Owners pursuant to a revised Ownership Participation Agreement. Effective October 23, 2017, Bechtel Power Corporation (Bechtel) will serve as the prime construction contractor for the remaining construction activities for Plant Vogtle Units 3 and 4 under a Construction Agreement entered into between Bechtel and Georgia Power, acting for itself and as agent for the other Vogtle Co-Owners (Construction Agreement).

Unlike the EPC Contract, which required the Contractor to absorb most of the construction cost overruns for the Additional Vogtle Units, the Construction Agreement is a cost reimbursable plus fee arrangement, whereby Bechtel will be reimbursed by the Vogtle Co-Owners for actual costs plus a base fee and an at-risk fee, which is subject to adjustment based on Bechtel's performance against cost and schedule targets. Each Vogtle Co-Owner is severally (not jointly) liable for its proportionate share, based on its ownership interest, of all amounts owed to Bechtel under the Construction Agreement.

The Vogtle Co-Owners may terminate the Construction Agreement at any time for their convenience, provided that the Vogtle Co-Owners will be required to pay amounts related to work performed prior to the termination (including the applicable portion of the base fee), certain termination-related costs, and, at certain stages of the work, the at-risk fee. Bechtel may terminate the Construction Agreement under certain circumstances, including certain Vogtle Co-Owner suspensions of work, certain breaches of the Construction Agreement by the Vogtle Co-Owners, Vogtle Co-Owner insolvency, and certain other events.

10. Fuel Purchase and Purchased Power Commitments (continued)

Georgia Power recommended in the 17th Vogtle Construction Monitoring report (the VCM 17 Report, filed with the Georgia Public Service Commission ("GPSC") on August 31, 2017), that the construction of the Additional Vogtle Units be continued. The Vogtle Co-Owners recommended that the Additional Vogtle Units be completed on the condition that any of the Owners have the right to abandon the construction of the Plant Vogtle Units 3 and 4 if the revised cost estimate or the revised construction schedule is not approved by the GPSC or if there is a determination by the GPSC that any of Georgia Power's share of the total investment in Plant Vogtle Units 3 and 4 or Georgia Power's associated financing costs will not be recovered in Georgia Power's retail rates, because they are deemed by the GPSC to be unreasonable or imprudent.

The Vogtle Co-Owners entered into an amendment, dated as of November 2, 2017, to their joint ownership agreements for Plant Vogtle Units 3 and 4 (as amended, the "Joint Ownership Agreements") to provide for, among other conditions, additional Vogtle Co-Owner approval requirements. Pursuant to the Joint Ownership Agreements, the holders of at least 90% of the ownership interests in Plant Vogtle Units 3 and 4 must vote to continue construction if certain adverse events occur including: (1) termination or rejection in bankruptcy of certain agreements, including the Services Agreement or the Construction Agreement; (2) the GPSC or Georgia Power determines that any of Georgia Power's costs relating to the construction of Plant Vogtle Units 3 and 4 will not be recovered in retail rates because such costs are deemed unreasonable or imprudent; or (3) an increase in the construction budget contained in the Vogtle Construction Monitoring 17 Report of more than $1,000,000 or extension of the project schedule contained in the VCM 17 Report of more than one year. In addition, pursuant to the Joint Ownership Agreements, the required approval of holders of ownership interests in Plant Vogtle Units 3 and 4 is at least (1) 90% for a change of the primary construction contractor and (2) 67% for material amendments to the Services Agreement or agreements with Southern Nuclear or the primary construction contractor, including the Construction Agreement.

The Joint Ownership Agreements also provide that the Vogtle Co-Owners' sole recourse against Georgia Power or Southern Nuclear for any action or inaction in connection with their performance as agent for the Vogtle Co-Owners is limited to removal of Georgia Power and/or Southern Nuclear as agent, except in cases of willful misconduct.

On December 21, 2017, the GPSC took a series of actions related to the construction of Plant Vogtle Units 3 and 4 and issued its related order on January 11, 2018. Among other actions, the GPSC (i) accepted Georgia Power's recommendation to continue construction of Plant Vogtle Units 3 and 4, with Southern Nuclear serving as construction manager and Bechtel as primary contractor and (ii) approved the revised schedule placing Vogtle Unit 3 in service in November 2021 and Vogtle Unit 4 in service in November 2022. In its January 11, 2018 order, the GPSC stated if certain conditions change and assumptions upon which Georgia Power's VCM 17 Report are based do not materialize, the GPSC reserved the right to reconsider the decision to continue construction.

10. Fuel Purchase and Purchased Power Commitments (continued)

During the latter part of the second quarter through the early part of the third quarter of 2018, Georgia Power advised the other Vogtle co-owners that it had become aware that certain estimated future Vogtle project costs were projected to exceed the corresponding budgeted amounts. The base capital costs estimated to complete construction were expected to increase by approximately $1,400,000 (the aggregate 22.7% shares of the Vogtle Units 3 and 4 Project Entities were estimated at $317,800). Georgia Power stated that although it believed these increased costs to be reasonable and necessary to complete the project, Georgia Power did not intend to seek rate recovery for these cost increases included in the current base capital cost forecast (or any related financing costs). As a result of the increase in the total project capital cost forecast and Georgia Power's decision not to seek rate recovery of its allocation of the increase in the costs as described above, the holders of at least 90% of the ownership interests in Plant Vogtle Units 3 and 4 were required to vote to continue construction. MEAG, and the other Vogtle Co-Owners, are evaluating these increased capital costs along with a project-level contingency estimated by Georgia Power in a preliminary amount of $800,000 (the aggregate 22.7% shares of the Vogtle Units 3 & 4 Project Entities estimated at $182,000). In connection with future Vogtle Construction Monitoring filings, Georgia Power may request the GPSC to evaluate costs currently included in the construction contingency estimate for rate recovery as and when they are appropriately included in the base capital cost forecast.

On September 26, 2018, the co-owners received the required vote to continue construction of Plant Vogtle Units 3 and 4. In connection with the vote to continue construction, Georgia Power entered into (i) a binding term sheet (the Vogtle Owner Term Sheet) with the other co-owners to take certain actions which partially mitigate potential financial exposure for the other co-owners, including amendments to the Vogtle Joint Ownership Agreements and the purchase of production tax credits (PTCs) from the other co-owners, and (ii) a binding term sheet (the MEAG Term Sheet and, together with the Vogtle Owner Term Sheet, the "Term Sheets") with MEAG and the Project J Entity to provide funding with respect to the Project J Entity's ownership interest in Plant Vogtle Units 3 and 4 under certain circumstances.

Under the Vogtle Owner Term Sheet, among other amendments to the Vogtle Joint Ownership Agreements, provisions of the Vogtle Joint Ownership Agreements requiring that co-owners holding 90% of the ownership interests in Plant Vogtle Units 3 and 4 vote to continue construction following certain adverse events would be amended. In particular, an increase in the construction cost estimate for Plant Vogtle Units 3 and 4 would no longer constitute an adverse event and thus would no longer require a vote. In addition, the adverse event relating to disallowances of cost recovery by Georgia Power would be amended to exclude any additional amounts paid by Georgia Power on behalf of the other co-owners pursuant to certain Vogtle Owner Term Sheet provisions and the first 6% of costs during any six-month VCM reporting period that are disallowed by the GPSC for recovery, or for which Georgia Power elects not to seek cost recovery, through retail rates. In addition, the Vogtle Owner Term Sheet provides that the Vogtle Joint Ownership Agreements would be revised to provide that Georgia Power may cancel the project at any time in its sole discretion.

10. Fuel Purchase and Purchased Power Commitments (continued)

Pursuant to the MEAG Term Sheet[1], if the Project J Entity is unable to make its payments due under the Vogtle Joint Ownership Agreements solely because (i) the conduct of JEA, such as JEA's continuation of its litigation challenging its obligations under the Additional Vogtle Units PPA, materially impedes access to capital markets for MEAG for Project J, or (ii) the Additional Vogtle Units PPA is declared void by a court of competent jurisdiction or rejected by JEA under the applicable provisions of the United States Bankruptcy Code (each of (i) and (ii), a JEA Default), Georgia Power will purchase from the Project J Entity the rights to PTCs attributable to the Project J Entity's share of Plant Vogtle Units 3 and 4 (approximately 206 MW) at varying prices dependent upon the stage of construction of Plant Vogtle Units 3 and 4.

At the option of MEAG, as an alternative or supplement to Georgia Power's purchase of PTCs as described above, Georgia Power has agreed to provide up to $250,000 in funding to MEAG for Project J in the form of loans (either advances under the Vogtle Joint Ownership Agreements or the purchase of Project J Bonds), subject to any required approvals of the GPSC and the DOE.

In the event the Project J Entity certifies to Georgia Power that it is unable to fund its obligations under the Vogtle Joint Ownership Agreements as a result of a JEA Default and Georgia Power becomes obligated to provide funding as described above, MEAG is required to (i) assign to Georgia Power its right to vote on any future adverse event and (ii) diligently pursue JEA for its breach of the Project J PPA.

Under the terms of the MEAG Term Sheet, Georgia Power may decline to provide any funding in the form of loans, including in the event of a failure to receive any required GPSC or DOE approvals, and cancel the project in lieu of providing such loan funding.

Litigation and Regulatory Proceedings

Litigation – As noted in the Overview section, on September 11, 2018, both MEAG and JEA filed court actions seeking declaratory judgment on the enforceability of the Additional Vogtle Units PPA. MEAG filed its action in the United States District Court for the Northern District of Georgia, Civil Action No.: 1:18-CV-04295-MHC and JEA and the City filed their action in the Circuit Court, Fourth Judicial Circuit, Duval County, Florida, Case No.: 16-2018-CA-006197-XXXX-CV-G, removed to the United States District Court for the Middle District of Florida, Case No.: 3:18-cv-174-J-39JRK. Both cases are engaged in extensive procedural litigation over the forum in which the substantive issues will be tried. JEA will vigorously defend and prosecute these actions, but provides no assurances regarding the outcome or consequences of the litigation.

[1] Information provided regarding the MEAG Term Sheet is based on information filed by MEAG with the Municipal Securities Rulemaking Board (the "MSRB"), through the MSRB's Electronic Municipal Market Access ("EMMA") website currently located at http://emma.msrb.org. JEA has not been able to independently review the MEAG Term Sheet.

10. Fuel Purchase and Purchased Power Commitments (continued)

Regulatory Proceedings – On September 17, 2018, JEA filed a petition with the Federal Energy Regulatory Commission (FERC) seeking a determination that FERC has exclusive jurisdiction pursuant to the Federal Power Act (FPA) over the Additional Vogtle Units PPA (FERC Petition). If FERC grants jurisdiction over the Additional Vogtle Units PPA, FERC will determine the validity of the Additional Vogtle Units PPA terms and conditions under the "just and reasonable" standard set forth in the FPA. Numerous entities, including MEAG, public utilities, municipalities, and trade groups, have filed comments with FERC challenging the theories of law and arguments raised in the FERC Petition. There is no deadline for FERC to render a decision on the FERC Petition.

Option to Purchase Interest in Lee Nuclear Station

On February 1, 2011, JEA entered into an option agreement with Duke Energy Carolinas, LLC (Duke Carolinas), a wholly owned subsidiary of Duke Energy Corporation, pursuant to which JEA has the option (but not the obligation) to purchase an undivided ownership interest of not less than 5% and not more than 20% of the proposed two-unit nuclear station currently known as William States Lee III Nuclear Station, Units 1 and 2 to be constructed at a site in Cherokee County, South Carolina (the Lee Project). The Lee Project planned to have 2,234 MW of electric generating capacity with a projected on-line date of 2026 with respect to Unit 1 and 2028 with respect to Unit 2. The total cost of the option was $7,500, payment of which has been completed. JEA obtained this option in furtherance of its 2010 policy target to acquire up to 30% of JEA's energy requirements from nuclear sources by 2030.

The option agreement requires that JEA and Duke Carolinas complete negotiation of an ownership agreement and an operation and maintenance agreement for the Lee Project prior to JEA exercising the option. The option exercise period will be opened by Duke Carolinas after it (i) receives NRC approval of the COL for the Lee Project and (ii) executes an engineering, procurement, and construction agreement for the Lee Project. The Lee Project COL was received from the NRC in December 2016. In August 2017, Duke Carolinas filed with the North Carolina Utilities Commission and the South Carolina Public Service Commission to cancel the plant. This cancellation allows Duke Carolinas to seek cost recovery for the expenditures on licensing the plant, however, the NRC license remains active and the cancellation is not permanent. There is currently no schedule for negotiating an EPC agreement.

Once the exercise period is opened, JEA will have 90 days within which to exercise the option, and, if it does exercise the option, it must specify the percentage undivided ownership interest in the Lee Project that it will acquire.

After JEA exercises the option (should it elect to do so) and various regulatory approvals are obtained, JEA must pay Duke Carolinas the exercise price for the option. Such price is generally JEA's pro rata share, based on its percentage ownership interest in the Lee Project, of the development and pre construction cost for the Lee Project incurred by Duke Carolinas from the beginning of the Lee Project through the closing date of the option exercise. JEA is undecided as to the financing structure it would employ to finance its interest in the Lee Project, should it elect to exercise its option.

Under certain circumstances, should the Lee Project be terminated by Duke Carolinas, Duke may be obligated to provide JEA with options for alternative resources (but not necessarily from nuclear resources) to replace JEA's optionable portion of the projected Lee Project capacity.

10. Fuel Purchase and Purchased Power Commitments (continued)

Such alternative resources are to be available to JEA within two years of the projected online date for the Lee Project, once such date is set. No alternative resource for the Lee Project has yet been proposed by Duke Carolinas.

Solar Projects

In 2009, JEA entered into a 30-year purchased power agreement with Jacksonville Solar, LLC for the produced energy, as well as the associated environmental attributes from a solar farm, Jacksonville Solar, which has been constructed in JEA's service territory. The facility, which consists of 200,000 photovoltaic panels on a JEA-leased 100-acre site, is owned by PSEG Solar Source, LLC and generated approximately 18,391 MWh of electricity in 2018 and 20,074 MWh of electricity in 2017. JEA pays only for the energy produced. Purchases of energy were $3,592 for fiscal year 2018 and $3,819 in 2017.

As part of JEA's continued commitment to the environment, and to increase JEA's level of carbon-free renewable energy generation, in December 2014, the Board established a solar policy to add up to 38 MWac of solar photovoltaic capacity. To support this policy, JEA issued Requests for Proposals for Power Purchase Agreements (PPAs) in December 2014 and April 2015. Seven PPAs, representing 27 MWac, have been finalized. One other PPA, which had been finalized, was terminated due to the failure of the awardee (SunEdison) to establish site control within the time allowed by the contract. The solar PPAs are distributed around JEA's service territory.

The projects for this 2014 initiative are scheduled for completion in 2018. As of the end of fiscal year 2018, five of the seven projects had been completed: NW Jacksonville Solar, Old Plank Road Solar, Starratt Solar, Simmons Solar, and Blair Road Solar. JEA entered into 20-25 year purchased power agreements for the energy and the associate environmental attributes from each solar farm. The solar facilities generated approximately 36,755 MWh in 2018 and 5,394 MWh in 2017. JEA pays only for the energy produced. Purchases of energy were $2,703 for fiscal year 2018 and $354 in 2017.

The JEA Board approved a further solar expansion consisting of five 50 MWac solar facilities to be constructed on JEA owned property. These projects, totaling 250 MWac, will be structured as PPAs. EDF-DS was selected as the vendor for the sites and contract negotiations are currently underway. It is expected the facilities will be phased into service with all sites completed by 2022.

Trail Ridge Landfill

JEA purchases energy from two landfill gas-to-energy facilities through PPA agreements with Landfill Energy Systems (LES). Each agreement is for 9.6 MWs. Currently, JEA purchases 9.6 MW from Trail Ridge Landfill in Jacksonville, FL and 6.4 MW from Sarasota Landfill in Sarasota, FL. LES can supply the remaining 3.2 MW from Sarasota if it is expanded and becomes available. JEA pays only for the energy produced. LES pays all transmission and ancillary charges associated with transmitting the energy from Sarasota to Jacksonville, which came online in January 2015. Purchases of landfill energy were 76,821 MWh for $4,554 in fiscal year 2018 and 89,682 MWh for $3,671 in 2017.

11. Energy Market Risk Management Program

The energy market risk management program is intended to help manage the risk of changes in the market prices of fuel consumed by JEA for electric generation. In December 2017, JEA entered into a financial swap that locked in the monthly commodity price of natural gas for calendar year 2018 for approximately 40% of its expected annual natural gas requirements. In August and September 2018, JEA entered into financial swaps that locked in the monthly commodity price of natural gas for December 2019 through December 2021 for approximately 45% of its expected annual natural gas requirements in those years. There was no additional activity in the program during fiscal year 2017.

JEA executes over-the-counter forward purchase and sale contracts and swaps. For effective derivative transactions, hedge accounting is applied in accordance with GASB Statement No. 53 and the fair market value changes are recorded on the accompanying statements of net position as either a deferred charge or a deferred credit until such time that the transactions end. Deferred charges of $1,851 were included in deferred inflows of resources on the statements of net position at September 30, 2018 and $0 at 2017. The related settled gains and losses from these transactions are recognized as fuel expenses on the accompanying statements of revenues, expenses, and changes in net position. For the year ended September 30, 2018, there was a realized gain included in fuel expense of $4,191 and a realized loss of $323 in 2017.

12. Pension Plans

Substantially all employees of the Electric System and Water and Sewer System participate in and contribute to the City of Jacksonville General Employee Retirement Plan (GERP), as amended. The GERP is a cost-sharing, multiple-employer contributory defined benefit pension plan with a defined contribution alternative. GERP, based on laws outlined in the City of Jacksonville Ordinance Code and applicable Florida statutes, provides for retirement, survivor, death, and disability benefits. Its latest financial statements and required supplementary information are included in the 2017 Comprehensive Annual Financial Report of the City of Jacksonville, Florida. This report may be obtained at: http://www.coj.net/departments/finance/docs/accounting/city-of-jacksonville-2017-cafr-secure.aspx or by writing to the City of Jacksonville, Florida, Department of Administration and Finance, Room 300, City Hall, 117 West Duval Street, Jacksonville, Florida 32202-3418.

The first phase of pension reform was approved by the City of Jacksonville in April 2017. The reform provides for a dedicated funding source for the GERP, Corrections Officers Plan, and Police and Fire Pension Plan through the extension of the Better Jacksonville Plan half-cent sales tax. The surtax will remain in effect until the earlier of December 31, 2060 or when it is determined by the actuarial report to the Florida Department of Management Services that the funding level of each of the City’s three defined benefit retirement plans, which are funded by surtax, is expected to reach or exceed 100%.

In order for the plan to benefit from the sales tax revenue, the GERP was closed to new members and employees as of September 30, 2017.

12. Pension Plans (continued)

Plan Benefits Provided – Participation in the GERP is mandatory for all full-time employees of JEA, Jacksonville Housing Authority, North Florida Transportation Planning Authority, and the City of Jacksonville, other than police officers and firefighters. Appointed officials and permanent employees not in the civil service system may opt to become members of GERP. Elected officials are members of the Florida Retirement System Elected Officer Class. Members of the GERP are eligible to retire with a normal pension benefit upon achieving one of the following: (a) completing 30 years of credited service, regardless of age; (b) attaining age 55 with 20 years of credited service; or (c) attaining age 65 with five years of credited service. There is no mandatory retirement age.

Upon reaching one of the three conditions for retirement described above, a member is entitled to a retirement benefit of 2.5% of final average compensation, multiplied by the number of years of credited service, up to a maximum benefit of 80% of final monthly compensation. A time service retirement benefit is payable bi-weekly, to commence upon the first payday coincident with or next payday following the member's actual retirement, and will continue until death.

Each member and survivor is entitled to a cost of living adjustment (COLA). The COLA consists of a 3% increase of the retiree's or survivor's pension benefits, which compounds annually. The COLA commences in the first full pay period of April occurring at least 4.5 years (and no more than 5.5 years) after retirement. In addition, there is a supplemental benefit. The supplemental benefit is equal to five dollars ($5) multiplied by the number of years of credited service. This benefit may not exceed $150 per month.

Contributions – Florida law requires plan contributions be made annually in amounts determined by an actuarial valuation in either dollars or as a percentage of payroll. The Florida Division of Retirement reviews and approves the City's actuarial report to ensure compliance with actuarial standards and appropriateness for funding purposes. In fiscal year 2018, JEA plan members were required to contribute 10% of their annual covered salary. In fiscal year 2017, JEA plan members were required to contribute 8% of their annual covered salary. JEA's contribution of the covered payroll for the JEA plan members was $35,459 (21.09%) in fiscal year 2018 and $48,942 (38.27%) in 2017. Contributions were made in accordance with contribution requirements determined through an actuarial valuation.

Defined Contribution Plan

The City has, by ordinance, a defined contribution (DC) plan within the Jacksonville Retirement System for GERP participants as an employee choice alternative to the defined benefit (DB) plans. Beginning in fiscal year 2011, employees had the option to participate in a DC plan. Employees vest in the employer contributions to the plan at 25% after two years, and 25% per year thereafter until fully vested after five years of service. Employees hired prior to September 30, 2017 can electively change from the DC plan to the DB plan, or vice versa, up to three times within their first five years of participation. All employees hired after September 30, 2017 now enter this plan.

In fiscal years 2018 and 2017, JEA plan members of the defined contribution plan were required to contribute 8% of their annual covered salary. JEA's contribution for the members of the defined contribution plan was $1,886 (11.31%) in fiscal year 2018 and $982 (8%) in 2017. Any contribution forfeitures were used to offset plan expenses.

12. Pension Plans (continued)

Disability Program Fund

All contributions for both the defined contribution and defined benefit plans of the City of Jacksonville were separated between the pension contribution and a disability program fund. Due to this change, a physical exam is not required to participate in the plans.

Pension Liabilities, Pension Expense, Deferred Outflows of Resources, and Deferred Inflow of Resources Related to Pensions

Net Pension Liability – JEA's net pension liability at September 30, 2018 and September 30, 2017 was measured based on an actuarial valuation as of September 30, 2017 and September 30, 2016, respectively. JEA's allocated share of the net pension liability is $527,680 (51.68%) as of September 30, 2018, based on an allocation proportional to the actual contributions paid during the year ended September 30, 2017. JEA's allocated share of the net pension liability as of September 30, 2017 was $541,025 (50.37%), based on an allocation proportional to the actual contributions paid during the year ended September 30, 2016.

For the year ended September 30, 2018 and 2017, JEA's recognized pension expense is $77,111 and $74,849, respectively. As JEA has implemented regulatory accounting for pensions, the difference between the recognized pension expense and the cash contributions paid has been deferred as a regulatory asset. See note 2, Regulatory Deferrals, for additional details.

(Dollars in Thousands)

12. Pension Plans (continued)

JEA reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	September 30	
	2018	**2017**
Deferred outflows of resources		
Changes in assumptions	**$ 59,741**	$ 49,859
Contributions subsequent to the measurement date	**35,459**	48,942
Differences between expected and actual experience	**25,477**	24,354
Net difference between projected and actual earnings on pension investments	**–**	24,319
Changes in proportion	**16,452**	9,599
Total	**$ 137,129**	$ 157,073
Deferred inflows of resources		
Net difference between projected and actual earnings on pension investments	**$ (37,760)**	$ –
Changes in assumptions	**(3,730)**	(5,454)
Differences between expected and actual experience	**(1,543)**	(2,525)
Total	**$ (43,033)**	$ (7,979)

Contributions of $35,459 were reported as deferred outflows of resources related to pensions resulting from JEA contributions subsequent to the September 30, 2017 measurement date and will be recognized as a reduction of the net pension liability in the year ended September 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year Ended September 30	**Recognition of Deferred Outflows (Inflows)**
2019	$ 28,251
2020	24,888
2021	8,622
2022	(3,124)
Total	$ 58,637

(Dollars in Thousands)

12. Pension Plans (continued)

Actuarial Assumptions – The total pension liability was determined by an actuarial valuation as of September 30, 2017, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.75%
Salary increases assumption	3.00%-6.00%, of which 2.75% is the Plan's long-term payroll inflation
Investment rate of return	7.20%, net of pension plan investment expense, including inflation
Healthy pre-retirement mortality rates	50% RP2000 Combined Healthy White Collar and 50% RP2000 Combined Healthy Blue Collar, set forward 2.5 years, projected generationally with Scale BB for males; RP2000 Combined Healthy White Collar, set forward 2.5 years, projected generationally with Scale BB for females.
Healthy post-retirement mortality rates	50% RP2000 White Collar Annuitant and 50% RP2000 Blue Collar Annuitant, set forward 2.5 years, projected generationally with Scale BB for males; RP2000 White Collar Annuitant, set forward 2.5 years, projected generationally with Scale BB for females.
Disabled mortality rates	RP-2000 Disabled Retiree Mortality Table, setback four years for males and set forward two years for females

The actuarial assumptions used in the valuations were based on the results of an experience study for the period October 1, 2007 to September 30, 2012. Data from the experience study is reviewed in conjunction with each annual valuation, and updates to the mortality improvement scale and discount rate have been made as of September 30, 2017.

(Dollars in Thousands)

12. Pension Plans (continued)

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentages and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of September 30, 2017, are summarized in the following table. The long-term expected real rates of return are based on 20-year projections of capital market assumptions provided by Segal Marco Advisors.

Asset Class	Target Allocation	Long-term Expected Real Rate of Return
Domestic equity	35%	6.40%
International equity	20%	7.40%
Real estate	25%	5.10%
Fixed income	19%	1.75%
Cash	1%	1.10%
Total	100%	

Discount Rate – The discount rate used to measure the total pension liability is 7.20%. The projection of cash flows used to determine the discount rate assumed plan member contributions would be made at their applicable contribution rates and that City contributions would be made at rates equal to the actuarially determined contribution rates. Based on these assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on the Plan's investments was applied to all periods of projected benefit payments to determine the total pension liability. Cash flow projections were run for a 120-year period.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate – The following presents the net pension liability of the Jacksonville GERP, calculated using the discount rate of 7.20% for 2018 and 7.40% for 2017, as well as what the Jacksonville GERP's net pension liability would be if it were calculated using a discount rate that is 1% lower or 1% higher than the discount rate used:

	Net Pension Liability	
	2018	**2017**
1% decrease	**$ 713,777**	$ 713,190
Current discount	**527,680**	541,025
1% increase	**372,518**	397,385

Pension Plan Fiduciary Net Position – Detailed information about the pension plan's fiduciary net position is included in the 2017 Comprehensive Annual Financial Report of the City of Jacksonville, Florida.

12. Pension Plans (continued)

St. Johns River Power Park Plan Description

Plan Description – The SJRPP Plan is a single employer contributory defined benefit plan that covers employees of SJRPP. The SJRPP Plan provides for pension, death, and disability benefits. Participation in the SJRPP Plan is required as a condition of employment. The SJRPP Plan is subject to provisions of Chapter 112 of the State of Florida Statutes and the oversight of the Florida Division of Retirement. The SJRPP Plan is governed by a five-member pension committee (Pension Committee). As part of the Asset Transfer Agreement with FPL related to the shutdown of SJRPP, JEA assumed all payment obligations and other liabilities related to separation benefits for the qualifying SJRPP employees and any amounts required to be deposited in SJRPP Pension Fund.

The SJRPP Plan periodically issues stand-alone financial statements, with the most recent report issued for the year ended September 30, 2017. This report may be obtained at https://www.jea.com/About/Investor_Relations/Financial_Reports/SJRPP_Pension.

Pursuant to the February 25, 2013 amendment, the SJRPP Plan consists of two tiers: Tier One is the Defined Benefits Tier and Tier Two is the Cash Balance Tier. Tier One participants will remain in the traditional defined benefit plan, and Tier Two employees (defined as employees with less than 20 years of experience) will participate in a modified defined benefit plan, or “cash balance” plan, with an employer match provided for any Tier Two employee who contributes to the 457 Plan. Participants hired after February 25, 2013 are only eligible to accrue Tier Two benefits.

Plan Benefits Provided – Members of the SJRPP Plan are eligible to retire with a normal pension benefit upon achieving one of the following: (a) completing 30 years of credited service, regardless of age; (b) attaining age 55 with 20 years of credited service; or (c) attaining age 65 with five years of credited service. There is no mandatory retirement age.

Upon reaching one of the three conditions for retirement described above, a member in Tier One is entitled to a retirement benefit of:

- 2.0% of final average earnings (FAE) multiplied by the number of years of credited service, not to exceed 15 years

- plus 2.4% of FAE multiplied by the number of years of credited service in excess of 15 years, but not to exceed 30 years

- plus .65% of the excess FAE over the Social Security Average Wages multiplied by years of credited service, not to exceed 35 years

FAE is the annual average of a participant’s earnings over the highest 36 consecutive complete months out of the last 120 months of participation immediately preceding retirement or termination. Retirement benefits are payable bi-weekly beginning on the first day of the month following or coincident with the participant’s Earliest Retirement Age.

(Dollars in Thousands)

12. Pension Plans (continued)

As of February 25, 2013, the accrued benefits in Tier One of newly classified Tier Two participants were frozen. Distribution of frozen Tier One Benefits is governed by the provisions applicable to Tier One. Tier Two Benefits employees receive annual pay credits to their Cash Balance accounts in the amount of 6.0% of earnings between February 25, 2013 and September 30, 2015 and 8.5% of earnings on or after October 1, 2015. Cash Balance Accounts are credited with interest at the rate of 4% per year. Benefits may be distributed as a lump sum, by rollover in accordance with the Internal Revenue Service Code or as an annuity, at the election of the participant.

For participants retired on or after October 1, 2003, each member and survivor of Tier One is entitled to a COLA. The COLA consists of a 1% increase of the retiree's or survivor's pension benefits, which compounds annually. The COLA commences each October 1 following the fifth anniversary of payment commencement.

Employees Covered by Benefit Terms – At September 30, 2018 and September 30, 2017, the following employees were covered by the benefit terms:

	2018	**2017**
Inactive Plan Members or Beneficiaries Currently Receiving Benefits	**309**	299
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	**54**	49
Active Plan Members	**159**	209
Total Plan Members	**522**	557

Contributions – The SJRPP Plan's funding policy provides for biweekly employer contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are sufficient to accumulate assets to pay benefits when due. In fiscal years 2018 and 2017, SJRPP plan members were required to contribute 4% of their annual covered salary, and SJRPP employer's contribution to the SJRPP Plan was $26,409 (454.62%) in 2018 and $8,039 (51.47%) in 2017.

Net Pension Liability – SJRPP's net pension liability at September 30, 2018 and September 30, 2017 was measured based on an actuarial valuation as of September 30, 2017 and September 30, 2016, respectively.

(Dollars in Thousands)

12. Pension Plans (continued)

Actuarial Assumptions –The total pension liability in the October 1, 2017 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.50%
Salary increases	2.5%–12.5% per year, including inflation
Investment rate of return	7.00%
Mortality rates	Mortality Rates used by the Florida Retirement System for classes other than Special Risk, described as follows:

Healthy Mortality (Pre-Retirement and Post-Retirement) rates used:

Females: RP2000 Healthy Annuitant rates with 100% White Collar adjustment, generationally projected from year 2000 using Scale BB.

Males: RP2000 Healthy Annuitant rates with 50% White Collar/50% Blue Collar adjustment, generationally projected from year 2000 using Scale BB.

The actuarial assumptions used in the October 1, 2017 valuation were based on the demographic experience from 2004 through 2012 and economic forecasts available at the time the report was issued. Mortality rates were developed by the Florida Retirement System in a recent experience study and are mandated by the State Statutes for funding valuations.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation at the measurement date of September 30, 2017, are summarized in the following table.

(Dollars in Thousands)

12. Pension Plans (continued)

The target allocation and the best estimates of the rate of return for each major asset class are summarized in the following table:

Asset Class	Target Allocation	Long-term Expected Real Rate of Return
Domestic equity	47%	6.56%
Fixed income	45%	2.20%
International equity	8%	5.50%
Total	100%	

Discount Rate – The discount rate used to measure the total pension liability is 7.0%. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at their applicable contribution rates and that the employer's contributions will be made at rates equal to the actuarially determined contribution rates. Based on these assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on the Plan's investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate – The following presents the net pension liability of SJRPP, calculated using a discount rate of 7.0%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1% lower or 1% higher than the current rate:

	2018	2017
1% decrease	**$ 33,976**	$ 33,650
Current discount rate	**16,523**	16,640
1% increase	**1,896**	2,206

(Dollars in Thousands)

12. Pension Plans (continued)

Changes in the net pension liability are detailed below.

	2017	2016
Total pension liability		
Beginning balance	**$ 158,926**	$ 155,143
Service cost	**1,032**	1,210
Interest on the total pension liability	**10,768**	10,514
Changes in benefit terms	**–**	(59)
Difference between expected and actual experience	**10,826**	4,444
Changes in assumptions	**26**	–
Benefit payments	**(12,257)**	(12,326)
Ending balance	**169,321**	158,926
Plan fiduciary net postion		
Beginning balance	**142,286**	138,902
Employer contributions	**8,039**	2,142
Employee contributions	**625**	629
Pension plan net investment income (loss)	**14,571**	13,379
Benefit payments	**(12,257)**	(12,326)
Administrative expense	**(466)**	(440)
Ending balance	**152,798**	142,286
Net pension liability	**$ 16,523**	$ 16,640

Plan Assets – Cash balances are amounts on deposit with the SJRPP Plan's trust bank, as well as amounts held in various money market funds as authorized in the Investment Policy Statement (Policy). All investments shall comply with the Policy as approved by the Pension Committee, and with the fiduciary standards set forth by the Employee Retirement Income Security Act and requirements set forth by the Florida Statutes. The trust bank balances are collateralized and subject to the Florida Security for Public Deposits Act of Chapter 280, Florida Statutes.

The Plan follows GASB Statement No. 31, *Accounting and Financial Reporting for Certain Investments and for External Investment Pools*. Investments are presented at fair value, which is based on available or equivalent market values. The money market mutual fund is a 2a-7 fund registered with the SEC and, therefore is presented at actual pooled share price, which approximates fair value.

(Dollars in Thousands)

12. Pension Plans (continued)

At September 30, 2017, the SJRPP Plan's cash and cash equivalents consist of the following:

Cash on hand	$	1
Cash equivalents:		
Wells Fargo Treasury Plus Money Market Account		3,365
Total cash and cash equivalents	$	3,366

The Policy specifies investment objectives and guidelines for the SJRPP Plan's investment portfolio and provides asset allocation targets for various asset classes.

At September 30, 2017, investments controlled by the SJRPP Plan that represent 5% or more of the SJRPP Plan's net position were the Alliance Domestic Passive Collective Trust with a basis of $17,581 and a fair market value of $44,328. This investment represent 29% of the fiduciary net position available for benefits.

Risk

In accordance with GASB Statement No. 40, investments also require certain disclosures regarding policies and practices with respect to the risks associated with them (see discussion in the following paragraphs).

Interest Rate Risk

Interest rate risk is the risk that changes in the market interest rates will adversely affect the fair value of an investment. Generally speaking, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. As a means of limiting its exposure to interest rate risk, the SJRPP Plan's fixed income portfolio manager monitors the duration of the fixed maturity securities portfolio as part of the strategy to manage interest rate risk. As of September 30, 2017, the average modified duration of the managed fixed securities portfolio was 4.8 years.

Credit risk

Credit risk is the risk that a security or a portfolio will lose some or all of its value due to real or perceived changes in the ability of the issuer to repay its debt. The SJRPP Plan's rated debt instruments as of September 30, 2017 were rated by Standard & Poor's and/or an equivalent nationally recognized statistical rating organization.

The fixed income managers limit their investments to securities with an investment grade rating (BBB or equivalent) and the overall weighted average composite quality rating of the managed fixed income portfolio was Aa3.

(Dollars in Thousands)

12. Pension Plans (continued)

Custodial Credit Risk

Custodial credit risk is the risk that, in the event of the failure of the counterparty, the SJRPP Plan will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. All the SJRPP Plan's investments are held by the SJRPP Plan's directed trustee and custodian in the SJRPP Plan's name, or by an agent in the SJRPP Plan's name.

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investments in a single issuer. The Policy specifies an overall target allocation of 55% equities and 45% fixed income, including cash. The Policy further specifies target allocations for the equity investments among several asset classes.

The fair value of the asset classes and portfolio as of September 30, 2017, and specific target allocations are as follows:

	Fair Value	Actual Percent	Target Percent
U.S. Government Securities and Agencies	$ 28,258	19%	N/A
Corporate bonds – non-convertible	30,658	20%	N/A
Money Market/Cash	3,366	2%	N/A
Total fixed income	62,282	41%	45%
S&P 500 Index Fund	44,328	29%	28%
S&P 400 Mid-Cap Index Fund	18,428	12%	15%
Small and Mid-Cap Value Fund	13,652	9%	4%
International equities	13,920	9%	8%
Total equities	$ 90,328	59%	55%
Total	$ 152,610		

The Policy allows the percentage allocation to each asset class to vary by plus or minus 5% depending upon market conditions.

For the year ended September 30, 2017, the annual money-weighted rate of return on pension plan investments was 10.39%. This reflects the changing amounts actually invested.

(Dollars in Thousands)

12. Pension Plans (continued)

Foreign Currency Risk

Foreign currency risk is the risk that changes in the exchange rates will adversely affect the fair market value of the investment or a deposit. The Plan is exposed to foreign currency risk through its investments in an international equity mutual fund. Investments in international equities are limited by the Policy's target asset allocation for that asset class. The target for international equities is 8% of the total portfolio. The international fund comprised 9% of total investments as of September 30, 2017.

Fair Value Disclosures

GASB Statement No. 72, *Fair Value Measurement and Application*, addresses accounting and financial reporting issues related to fair value measurements. It provides guidance for applying fair value to certain investments and disclosures related to all fair value measurements.

The SJRPP Plan categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset or liability.

- Level 1 – quoted prices (unadjusted) for identical assets or liabilities in active markets that are accessible at the measurement date
- Level 2 – Inputs – other than quoted prices included within Level 1 – that are observable for an asset or liability, either directly or indirectly
- Level 3 – unobservable inputs for an asset or liability

The table below summarizes the SJRPP Plan's investments. Level 1 investments are valued using prices quoted in active markets for those securities. Level 2 investments are valued using direct market observations combined with quantitative pricing models to generate prices.

	Level 1	Level 2	Total
U.S. Government Securities and Agencies	$ 16,662	$ 11,596	$ 28,258
Corporate bonds - non-convertible	–	30,658	30,658
Money Market/Cash	3,366	–	3,366
Total fixed income	20,028	42,254	62,282
S&P 500 Index Fund	44,328	–	44,328
S&P 400 Mid-Cap Index Fund	17,852	576	18,428
Small and Mid-Cap Value Fund	12,430	1,222	13,652
International equities	–	13,920	13,920
Total equities	74,610	15,718	90,328
Total	$ 94,638	$ 57,972	$ 152,610

(Dollars in Thousands)

12. Pension Plans (continued)

Pension Plan Fiduciary Net Position – Detailed information about the pension plan's fiduciary net position is available in the separately issued SJRPP Pension Plan financial report.

Pension Liabilities, Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to the Pension

Net Pension Liability – SJRPP's net pension liability at September 30, 2018 and September 30, 2017 was measured based on an actuarial valuation as of September 30, 2017 and September 30, 2016, respectively. SJRPP's net pension liability is $16,523 as of September 30, 2018 and $16,640 as of September 30, 2017. As discussed in note 3, St. Johns River Power Park, during fiscal year 2018, JEA assumed FPL's portion of the pension obligation in accordance with the shutdown agreement.

For the year ended September 30, 2018 and 2017, SJRPP recognized pension expense is $14,408 and $4,785, respectively. As JEA has implemented regulatory accounting for pensions, the difference between the recognized pension expense and the cash contributions paid has been deferred as a regulatory asset. See note 2, Regulatory Deferrals, for additional details.

SJRPP Plan reported deferred outflows of resources and deferred inflows of resources related to pension from the following sources:

	September 30	
	2018	**2017**
Deferred outflows of resources		
Contributions subsequent to the measurement date	**$ 26,641**	$ 8,664
Net difference between projected and actual earnings on pension plan investments	**4,091**	6,136
Differences between expected and actual experience	**2,451**	4,022
Changes in assumptions	**1,055**	1,809
Total	**$ 34,238**	$ 20,631
Deferred inflows of resources		
Net difference between projected and actual earnings on pension plan investments	**$ (7,091)**	$ (4,976)
Total	**$ (7,091)**	$ (4,976)

(Dollars in Thousands)

12. Pension Plans (continued)

Contributions of $26,641 were reported as deferred outflows of resources related to pensions resulting from contributions subsequent to the September 30, 2017 measurement date and will be recognized as a reduction of the net pension liability in the year ended September 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year Ended September 30	Recognition of Deferred Outflows (Inflows)
2019	$ 1,421
2020	1,679
2021	(1,643)
2022	(951)
Total	$ 506

13. Other Postemployment Benefits

Plan Description

Plan administration – JEA maintains a medical benefits plan (OPEB Plan) that it makes available to its retirees. The medical plan is a single-employer, experience rated insurance contract plan that provides medical benefits to employees and eligible retirees and their beneficiaries.

JEA currently determines the eligibility, benefit provisions, and changes to those provisions applicable to eligible retirees. The OPEB Plan does not issue separate financial statements.

Plan membership – As of September 30, 2017 (the actuarial valuation date), the OPEB Plan membership consisted of the following:

Inactive plan members or beneficiaries currently receiving benefit payments	502
Active plan members	2,041
Total	2,543

(Dollars in Thousands)

13. Other Postemployment Benefits (continued)

Benefits provided – The postretirement benefit portion of the benefits plan (OPEB Plan) refers to the benefits applicable to current and future retirees and their beneficiaries. In addition, retirees are eligible to continue life insurance coverage through the plan sponsored by JEA. Premiums for the first $5,000 of coverage are being subsidized by the employer and, as such, are considered as other postemployment benefits for purposes of GASB Statement No. 75. As of January 1, 2017, the PPO plan out of pocket maximums increased to $5,000/$10,000, the deductible increased to $500 per year, the coinsurance changed to 80%/50%, and the specialist copay increased to $60. The HRA out of pocket maximum increased to $5,000/$10,000. The HSA deductible was set to $1,500 for in network and $2,500 for out of network. The copays for prescription drug benefits under all plan options increased to $10/$40/$60 and copays for specialty drugs increased to $250. Under the HSA Plan, the deductible must be satisfied before the prescription co-pay requirements. The table below outlines other key components of the OPEB plan.

	PPO		HRA		HSA	
	In-Network	Out-of-Network	In-Network	Out-of-Network	In-Network	Out-of-Network
Annual deductible	$ 500	$ 1,000	$ 1,500	$ 3,000	$ 1,500	$ 2,500
Primary Care Physician co-pay	$ 25	40%	$ 25	40%	20%*	40%*
Specialist co-pay	$ 60	40%	$ 60	40%	20%*	40%*
Co-insurance	20%	40%	20%	40%	20%*	40%*

*After the annual deductible is met

Contributions – Retired members pay the full premium associated with the health coverage elected. There is no direct JEA subsidy currently applicable; however, there is an implicit cost. Spouses and other dependents are also eligible for coverage and the member is responsible for payment of the applicable premiums.

Florida law prohibits JEA from separately rating retirees and active employees. Therefore, JEA assigns to both groups blended-rate premiums.

In 2008, JEA began to advance-fund the OPEB obligation. This was accomplished by establishing a separate trust into which JEA makes periodic deposits and withdrawals to reimburse operations for costs incurred on a pay-as-you-go basis.

(Dollars in Thousands)

13. Other Postemployment Benefits (continued)

Actuarial assumptions – The total OPEB liability in the October 1, 2017 and October 1, 2016 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.50%
Salary increases	2.5%–12.5%, including inflation; varies by years of service
Investment rate of return	7.00%
Healthcare cost trend rates	Based on the Getzen Model, with trend starting at 7.00% and gradually decreasing to an ultimate trend rate of 4.57% as of October 1, 2017 and 4.59% as of October 1, 2016 (including the impact of the excise tax).
Mortality rates	Mortality tables used for Regular Class members in the July 1, 2016 actuarial valuation of the Florida Retirement System. They are based on the results of a state wide experience study covering the period 2008 through 2013.

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the OPEB plan's target asset allocation at the measurement date of September 30, 2017 and September 30, 2016, are summarized in the following table.

The target allocation and the best estimates of the rate of return for each major asset class are summarized in the following table:

	2017		2016	
Asset Class	**Target Allocation**	**Long-term Expected Nominal Rate of Return**	**Target Allocation**	**Long-term Expected Nominal Rate of Return**
Large cap domestic equity	**34%**	**8.0%**	39%	9.0%
Global fixed income	**18%**	**4.6%**	24%	4.0%
International equity	**15%**	**8.5%**	10%	9.8%
Domestic fixed income	**12%**	**4.3%**	16%	3.5%
Small cap domestic equity	**11%**	**8.5%**	11%	9.8%
Real estate	**10%**	**7.4%**	0%	N/A
Total	**100%**		100%	

(Dollars in Thousands)

13. Other Postemployment Benefits (continued)

Discount Rate – GASB Statement No. 75 includes a specific requirement for the discount rate that is used for the purpose of the measurement of the Total OPEB Liability. This rate considers the ability of the fund to meet benefit obligations in the future. To make this determination, employer contributions, employee contributions, benefit payments, expenses and investment returns are projected into the future. The Plan Net Position (assets) in future years can then be determined and compared to its obligation to make benefit payments in those years. As the assets are projected to be sufficient to meet benefit payments, the assumed valuation discount rate of 7.00% was used.

Sensitivity of the Net OPEB Liability to Changes in the Discount Rate – The following presents the net OPEB liability, calculated using a discount rate of 7.0%, as well as what the net OPEB liability would be if it were calculated using a rate that is 1% lower or 1% higher than the current rate:

	2018	2017
1% decrease	**$ 23,779**	$ 46,273
Current discount rate	**18,835**	39,508
1% increase	**14,662**	33,799

Healthcare Cost Trend Rate – JEA followed the Getzen model with trend rates for costs and premiums declining over a 22-year period from 7.00% assumed for the year 2018 to the ultimate level of 4.57%.

Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rate – The following presents the net OPEB liability, calculated using a healthcare cost trend rate of 7.0% down to 4.57%, as well as what the net OPEB liability would be if it were calculated using a trend rate that is 1% lower or 1% higher than the current trend rate:

	2018	2017
1% decrease	**$ 14,401**	$ 33,442
Current healthcare cost trend rate	**18,835**	39,508
1% increase	**24,098**	46,709

(Dollars in Thousands)

13. Other Postemployment Benefits (continued)

Changes in the net OPEB liability are detailed below.

	2018	2017
Total OPEB liability		
Beginning balance	**$ 60,949**	$ 62,554
Service cost	**811**	781
Interest on the total OPEB liability	**4,253**	4,203
Changes in benefit terms	**(11,556)**	–
Difference between expected and actual experience	**(7,891)**	–
Benefit payments	**(2,019)**	(6,589)
Ending balance	**44,547**	60,949
Plan fiduciary net postion		
Beginning balance	**21,441**	18,156
Employer contributions	**5,240**	5,061
Net investment income	**2,942**	2,135
Reimbursements to employer	**(3,911)**	(3,911)
Ending balance	**25,712**	21,441
Net OPEB liability	**$ 18,835**	$ 39,508
Plan fiduciary net position as a percentage of the total OPEB liability	**57.72%**	35.18%
Covered payroll	**$155,326**	$150,073
Net OPEB liability as a percentage of covered payroll	**12.13%**	26.33%

Plan Assets – The assets of the plan consist of shares held in the Florida Municipal Investment Trust (FMIT), which is administered by the Florida League of Cities. The FMIT is an interlocal governmental entity created under the laws of the State of Florida and an Authorized Investment under Sec. 163.01 Florida Statutes. It is considered an external investment pool for reporting purposes. JEA owns shares in the OPEB Fund A as directed in the Master Trust Agreement. OPEB Fund A target asset allocation is 60% equities and 40% fixed income.

At September 30, 2017 and September 30, 2016, the OPEB Plan's cash and money market balance within the OPEB Fund A was $309 and $322, respectively.

Risk

In accordance with GASB Statement No. 40, investments also require certain disclosures regarding policies and practices with respect to the risks associated with them (see discussion in the following paragraphs).

(Dollars in Thousands)

13. Other Postemployment Benefits (continued)

Interest Rate Risk

Interest rate risk is the risk that changes in the market interest rates will adversely affect the fair value of an investment. Generally speaking, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. The table below details the interest rate risk in years for investments in the trust.

	September 30, 2017		September 30, 2016	
Fixed Income Fund	**Modified Duration**	**Weighted Average Maturity**	**Modified Duration**	**Weighted Average Maturity**
FMIT Broad Market High Quality Bond Fund	**4.74**	**6.10**	4.45	5.90
FMIT Core Plus Fixed Income Fund	**2.24**	**7.40**	2.04	6.84

Credit risk

Credit risk is the risk that a security or a portfolio will lose some or all of its value due to real or perceived changes in the ability of the issuer to repay its debt. The FMIT Broad Market High Quality Bond Fund was rated by Fitch as AAf/S4 as of September 30, 2017 and September 30, 2016. The remaining funds of the trust are unrated.

Money-Weighted rates of return

The money-weighted rates of return for the fiscal years ended September 30, 2017 and September 30, 2016 are listed below.

Year Ended	Return
2016	7.90%
2017	13.35%

(Dollars in Thousands)

13. Other Postemployment Benefits (continued)

Fair Value Disclosures

The table below summarizes the OPEB Plan's investments. Level 1 investments are valued using prices quoted in active markets for those securities. Level 2 investments are valued using direct market observations combined with quantitative pricing models to generate prices. JEA's investment is in shares of the FMIT OPEB Fund A. The disclosure below is based on the asset allocation provided by the FMIT of those investments held by OPEB Fund A.

	September 30, 2017			September 30, 2016		
	Level 2	**Level 3**	**Total**	**Level 2**	**Level 3**	**Total**
FMIT Broad Market High Quality Bond Fund	**$ 3,831**	**$ –**	**$ 3,831**	$ 3,280	$ –	$ 3,280
FMIT Core Plus Fixed Income Fund	**–**	**5,785**	**5,785**	–	4,996	4,996
Total fixed income	**3,831**	**5,785**	**9,616**	3,280	4,996	8,276
FMIT High Quality Growth Portfolio	**2,057**	**–**	**2,057**	1,630	–	1,630
FMIT Large Cap Diversified Value Portfolio	**2,160**	**–**	**2,160**	1,758	–	1,758
FMIT Russell 1000 Enhanced Index Portfolio	**5,991**	**–**	**5,991**	4,803	–	4,803
FMIT Diversified Small to Mid Cap Equity Portfolio	**2,905**	**–**	**2,905**	2,444	–	2,444
FMIT International Equity Portfolio	**2,674**	**–**	**2,674**	2,208	–	2,208
Total equities	**15,787**	**–**	**15,787**	12,843	–	12,843
Total	**$ 19,618**	**$ 5,785**	**$ 25,403**	$ 16,123	$ 4,996	$ 21,119

OPEB Liabilities, OPEB Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to the OPEB

Net OPEB Liability – JEA's net OPEB liability at September 30, 2018 and September 30, 2017 was measured based on an actuarial valuation as of and with the measurement dates of September 30, 2017 and September 30, 2016, respectively. JEA's net OPEB liability is $18,835 as of September 30, 2018 and $39,508 as of September 30, 2017.

For the year ended September 30, 2018 and 2017, JEA recognized OPEB expense is ($9,272) and $3,508, respectively. As JEA has implemented regulatory accounting for OPEB, the difference between the recognized OPEB expense and the cash contributions paid has been deferred as a regulatory asset. See note 2, Regulatory Deferrals, for additional details.

(Dollars in Thousands)

13. Other Postemployment Benefits (continued)

The JEA Plan recorded deferred outflows of resources and deferred inflows of resources related to OPEB as detailed in the table below.

	September 30 2018	September 30 2017
Deferred outflows of resources		
Contributions subsequent to the measurement date	**$ 4,078**	$ 5,240
Total	**$ 4,078**	$ 5,240
Deferred inflows of resources		
Differences between expected and actual experience	**$ (7,102)**	$ –
Net difference between projected and actual earnings on pension plan investments	**(1,610)**	(659)
Total	**$ (8,712)**	$ (659)

Contributions of $4,078 were reported as deferred outflows of resources related to OPEB resulting from contributions subsequent to the September 30, 2017 measurement date and will be recognized as a reduction of the net OPEB liability in the year ended September 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Year Ended September 30	Recognition of Deferred Outflows (Inflows)
2019	$ (1,233)
2020	(1,233)
2021	(1,233)
2022	(1,068)
2023	(789)
Thereafter	(3,156)
Total	$ (8,712)

(Dollars in Thousands)

14. Fair Value Measurements

GASB Statement No. 72, *Fair Value Measurement and Application*, addresses accounting and financial reporting issues related to fair value measurements. It provides guidance for applying fair value to certain investments and disclosures related to all fair value measurements. For JEA, this statement applies to certain investments, interest rate swap agreements, and natural gas cash flow hedges.

JEA categorizes its fair value measurements within the fair value hierarchy established by GAAP. The hierarchy is based on the valuation inputs used to measure the fair value of the asset or liability.

- Level 1 – quoted prices (unadjusted) for identical assets or liabilities in active markets that a government can access at the measurement date
- Level 2 – Inputs – other than quoted prices included within Level 1 – that are observable for an asset or liability, either directly or indirectly
- Level 3 – unobservable inputs for an asset or liability

Investments

JEA's investments are summarized in the table below. Level 1 investments are valued using prices quoted in active markets for those securities. Level 2 investments are valued using direct market observations combined with quantitative pricing models to generate prices. Money market mutual funds are managed to meet the requirements of Rule 2a-7 under the Investment Company Act of 1940, as amended, and are recorded at net asset value (NAV). The local government investment pools transact with participants at a stable NAV and are recorded at NAV. Certain U.S. Treasury and government agency securities and commercial paper are measured at cost.

	2018			
	Total	**Level 1**	**Level 2**	**Level 3**
Investments by fair value level				
U.S. Treasury and government agency securities	$ 453,060	$ 453,060	$ –	$ –
State and local government securities	223,845	–	223,845	–
Total investments by fair value level	$ 676,905	$ 453,060	$ 223,845	$ –
Investments measured at NAV				
Local government investment pools	194,786			
Money market mutual funds	23,208			
Total investments measured at fair value	894,899			
Investments measured at cost				
Commercial paper	133,074			
U.S. Treasury and government agency securities	9,837			
Total investments by cost	142,911			
Total investments per statement of net position	$ 1,037,810			

(Dollars in Thousands)

14. Fair Value Measurements (continued)

	2017			
	Total	**Level 1**	**Level 2**	**Level 3**
Investments by fair value level				
U.S. Treasury and government agency securities	$ 420,524	$ 420,524	$ –	$ –
State and local government securities	323,507	54,923	268,584	–
Total investments by fair value level	$ 744,031	$ 475,447	$ 268,584	$ –
Investments measured at NAV				
Local government investment pools	138,207			
Money market mutual funds	51,460			
Total investments measured at fair value	933,698			
Investments measured at cost				
Commercial paper	170,829			
U.S. Treasury and government agency securities	118,363			
Total investments by cost	289,192			
Total investments per statement of net position	$ 1,222,890			

Interest Rate Swap Agreements

JEA's interest rate swap agreements are valued using market rates as of September 30, 2018 and 2017 and standard cash flow present valuing techniques, which places them at Level 2 in the fair value hierarchy. The agreements are recorded at fair value as part of long-term debt in the statements of net position. The fair value of the interest rate swap agreements is detailed below.

	2018	**2017**
Electric	**$ (70,103)**	$ (101,350)
Water and Sewer	**(16,253)**	(23,919)
Total	**$ (86,356)**	$ (125,269)

Natural Gas Cash Flow Hedges

JEA's natural gas cash flow hedges consisted of swap agreements for either a 3-month or 12-month period, covering calendar year 2018 and December 2019 through December 2021. These hedges were valued using prices observed on commodities exchanges and/or using industry-standard valuation techniques, such as option modeling or discounted cash flows techniques, incorporating both observable and unobservable valuation inputs, which placed them at Level 3 in the fair value hierarchy. The fair market value changes in the hedges were recorded on a net basis in the statements of net position as either a deferred charge or a deferred credit until such time that the transactions end. At September 30, 2018 and 2017, deferred credits of $2,536 and $0 were included in deferred inflows of resources on the statements of net position, respectively.

15. Commitments and Contingent Liabilities

Grants

JEA participates in various federal and state assisted grant programs that are subject to review and audit by the grantor agencies. Entitlements to these resources are generally conditional upon compliance with the terms and conditions of grant agreements and applicable federal and state regulations, including the expenditure of resources for allowable purposes. Any disallowance resulting from a federal or state audit may become a liability of JEA. It is management's opinion that the results of these audits will have no material adverse effect on JEA's financial position or results of operations.

Regulatory Initiatives

The electric industry and water and wastewater industry have been and will continue to be affected by a number of legislative and regulatory initiatives. The following summarizes the key regulations affecting JEA:

Electric Enterprise System – On August 3, 2015, the Environmental Protection Agency (EPA) issued concurrently three separate rules pertaining to emissions of carbon dioxide (CO2) fossil fuel-fired electric generating units (EGUs):

- The Final Clean Power Plan (CPP), applicable to existing fossil fuel-fired electric EGUs.
- The Final Carbon Pollution Standards Rule (CPS), applicable to new, modified and reconstructed fossil fuel-fired EGUs.
- The Proposed Federal Plan applicable to states that fail to submit an approvable plan that achieves CPP goals.

On February 9, 2016, the United States Supreme Court (SCOTUS) issued an order staying implementation of the CPP. The SCOTUS granted the applications of numerous parties to stay the CPP pending judicial review of the rule. On March 28, 2017, President Trump issued an Executive Order establishing a national policy "in favor of energy independence, economic growth, and the rule of law". The President has directed agencies to review existing regulations that potentially burden the development of domestic energy resources, and appropriately suspend, revise, or rescind regulations that unduly burden the development of U.S. energy resources beyond what is necessary to protect the public interest or otherwise comply with the law. The Executive Order specifically directed EPA to review and, if appropriate, initiate reconsideration proceedings to suspend, revise or rescind the new EPA Final Rules pertaining to CO^2 emissions. EPA initially obtained temporary court orders to hold the court challenge of the CPP and the CPS in abeyance, pending the completion of EPA's review of the rules. EPA subsequently petitioned the court to pause the litigation indefinitely while EPA promulgates new rules.

15. Commitments and Contingent Liabilities (continued)

On August 30, 2018, EPA a proposed rule to replace the CPP. The proposed rule is titled the Affordable and Clean Energy (ACE) Rule. ACE proposes new Existing Source Performance Standards (ESPS) to regulate CO2 emissions from fossil-fueled boilers. The ACE standards are significantly less stringent than the CPP standards. ACE also proposes to simplify and remove considerable ambiguity from EPA's New Source Review (NSR) rules applicable to major improvements to generating units. EPA has also promulgated but not issued proposed New Source Performance Standards (NSPS) for fossil-fueled units. Provisions of ACE are anticipated to be complied with without significant capital expenditure and do not represent significant cost exposure for JEA. Similarly, since JEA is not presently anticipating construction of any electric generation units that would be impacted by a new NSPS, the pending rule likewise does not represent significant cost exposure for JEA. Because these rules are either proposed or pending issuance, it is difficult to know when or if the rules will become "final" and enforceable. For this reason, JEA is unable, at this time, to definitively ascertain the impact to JEA to come from prospective regulation of CO2 emissions.

On July 6, 2011, the EPA released the Cross-State Air Pollution Rule (CSAPR), which is intended as a substitute for the invalidated Clean Air Interstate Rule (CAIR). In the CSAPR, the EPA determined that 27 states in the eastern United States are in violation of the Clean Air Act, because they significantly contribute to nonattainment or interference with the maintenance of attainment of three National Ambient Air Quality Standards (NAAQS) in one or more downwind states. The three air quality standards addressed in the CSAPR are the 1997 and 2006 fine particulate matter ($PM_{2.5}$), NAAQS, and the 1997 ozone NAAQS. To address these violations, the CSAPR imposes Federal Implementation Plans (FIPs) that establish state budgets for SO2 and NOx emissions from EGUs. The EPA targeted these two pollutants, because they are precursors to the formation of $PM_{2.5}$ and ozone in the atmosphere. The budgets are allocated to individual EGUs in the form of allowances and the CSAPR permits limited interstate emissions trading and unlimited intrastate emissions trading as a means of compliance. States became subject to the emission budgets in 2012 with more stringent limits taking effect in 2014. In April 2014, the SCOTUS upheld the rule, but remanded back certain legal issues to the DCA to address. On July 28, 2015, the DCA issued an order and opinion remanding, without vacatur, certain state budgets under the CSAPR for reconsideration by the EPA, including the ozone-season NOx emissions budget for Florida. On September 7, 2016, the EPA issued a final updated CSAPR rule that removed Florida and two other eastern states from the rule. However, the EPA has made known that it is in the early stages of developing a supplemental rule (CSAPR Update II) to address the 2015 ozone and $PM_{2.5}$ NAAQS. It is possible that the CSAPR Update II may mandate deeper emission reductions and an expansion of the geographic area for regulation, possibly to again include Florida. The EPA has not established a rulemaking schedule for the CSAPR Update II. Consequently, JEA is not able to estimate any impacts from the CSAPR Update II.

On December 21, 2011, the EPA issued its Mercury and Air Toxics Standards (MATS) rule, setting forth maximum achievable control technology (MACT) standards for coal and oil generating stations. The new standards regulate four categories of hazardous air pollutants (HAPS) emitted by coal- or oil-fired EGUs, namely mercury, HAP metals, acid gases, and organic HAP.

The compliance deadline for affected sources to have all necessary pollution controls installed was April 2015. JEA's units that are regulated under MATS comply with all rule requirements.

15. Commitments and Contingent Liabilities (continued)

In April 2015, the EPA finalized rules to regulate the disposal and management of coal combustion residuals (CCRs), meaning fly ash, bottom ash, boiler slag, and flue gas desulfurization materials, destined for disposal from coal-fired power plants. The new rule became effective on October 19, 2015 and established technical requirements for surface impoundments and landfills. The rule requires protective controls, such as liners and groundwater monitoring, at landfills and surface impoundments that store CCRs. The rule, as adopted by the EPA, is enforced only by citizen-initiated lawsuits, rather than by the EPA. However, with passage of the WIIN Act in 2016, the rule can now be reformed to provide the following: 1) conversion from a “self-implementing” program to a permit program the states or EPA would have primary responsibility to administer and enforce; and, 2) flexibility for state programs to adjust and tailor federal CCR requirements to meet local, case-specific situations, so long as they are adequately protective of federal CCR requirements.

The rule applies to CCR management practices at SJRPP and Scherer. The rule does not apply to management of CCRs at Northside Generating Station (NGS) as long as it continues to burn a fuel mix with less than 50% coal. The currently operating cell within Area B of SJRPP does not have to be lined, but must comply with the operating and monitoring requirements of the rule even after the plant was decommissioned in 2018. SJRPP’s two closed byproduct storage areas (Areas I and II) are not affected by this rule. SJRPP has no regulated surface impoundments. Existing surface impoundments, like that at Scherer, are required to meet increased and more restrictive technical and operating criteria or close. Georgia Power has decided to close the surface impoundment at Scherer instead of pursuing a retrofit and the timeline for closure activities is currently projected to run through 2030.

The EPA left in place the Bevill exemption for beneficial uses of CCRs in which CCRs are recycled as components of products instead of placed in impoundments or landfills. Large quantities of CCRs are used today in concrete, cement, wallboard, and other contained applications that should not involve any exposure by the public to unsafe contaminants.

On November 22, 2010, the EPA entered into a settlement agreement with Riverkeeper, Inc. regarding rule-making dates for the EPA to set technology standards for cooling water intake systems for existing facilities under Section 316(b) of the Federal Clean Water Act. Section 316(b) requires that standards for the location, design, construction and capacity of cooling water intake systems reflect the best technology available for minimizing adverse environmental impacts. The EPA announced proposed standards for cooling water intake systems on March 28, 2011. Under the proposal, existing facilities are required to conduct studies to help their respective permitting authorities determine whether and what site-specific controls, if any, would be required to reduce the number of aquatic organisms that are captured in cooling water intake systems.

15. Commitments and Contingent Liabilities (continued)

With few changes to the proposed rule, the EPA published the final rule in the Federal Register in August 2015. The new standards will not affect any JEA facilities other than NGS. NGS is one of more than 1,260 existing facilities that use large volumes of cooling water from lakes, rivers, estuaries, or oceans to cool their plants. The new standards will likely require upgrades to the system, varying from establishment of existing facilities as the Best Technology Available (BTA) to improvements to the existing screening facilities or installation of cooling towers. A full two-year biological study is required to evaluate site-specific conditions and form a basis for assessing BTA and was initiated in 2018. Estimated final compliance deadlines are not expected until after 2024 and will depend on the level of upgrade ultimately required. Accordingly, costs of compliance have not been determined for NGS and are not included in JEA's capital program for the Electric System.

On September 30, 2016, the EPA issued the Effluent Limitation Guidelines for Steam Electric Power Plants. In setting the new and more stringent standards, the EPA evaluated the technologies and costs to remove metals and other parameters from individual wastewater streams generated by steam electric power plants and identify the BAT to affect their control. The new requirements for existing power plants must be phased in as soon as possible on or after November 1, 2018, but no later than December 31, 2023. The costs of compliance at NGS and Scherer have been evaluated and are anticipated in operating budgets and in JEA's five-year capital program for the Electric System.

Water Supply System Regulatory Initiatives – JEA was issued a 20-year Consumptive Use Permit (CUP) in May 2011 from the St. Johns River Water Management District (SJRWMD), which allows for aquifer withdrawals sufficient to completely satisfy customer demands until 2031 if certain permit conditions are met. JEA evaluates its total water management plan annually to continuously understand changes in demand and how to balance investments in a three-part program: (1) continued expansion of the reuse system, (2) measured conservation program and (3) water transfers from areas with a higher supply on JEA's north grid to areas with a lower supply on JEA's south grid via river-crossing pipelines. In North Florida, the Suwannee River Water Management District (SRWMD), Florida Department of Environmental Protection (FDEP), and the SJRWMD have set or are setting/revising Minimum Flows and Levels (MFLs) for water bodies in the region. MFLs are intended to assess the potential for ecological resource risks from water withdrawals and ensure sustainable supplies. In 2015, MFLs were adopted in the SRWMD and a determination required a recovery strategy. By permit, JEA will participate to the extent of its proportionate impact in prevention and recovery strategies that may be developed to ensure the groundwater resource remains sustainable.

15. Commitments and Contingent Liabilities (continued)

Wastewater Treatment System Regulatory Initiatives – The Sewer System is regulated by the EPA under provisions of the Federal Clean Water Act and the Federal Water Pollution Act. In Florida, the EPA has delegated the wastewater regulatory program to FDEP. The FDEP has implemented a Total Maximum Daily Load regulation (TMDL) defining the mass of nitrogen and phosphorus that can be assimilated by the St. Johns River, to which 8 of JEA's 11 wastewater treatment plants discharge. This state rule limits the amount of nitrogen and phosphorus that these eight wastewater treatment facilities are allowed to discharge by permit. JEA is meeting these limits as the result of past capital improvements to its wastewater facilities, expansion of the reclaimed water system, and phase-out of smaller old technology wastewater facilities. By virtue of exceeding its own regulatory obligation, JEA has generated nutrient reduction credits and has assisted the City in meeting a portion of their Municipal Separate Storm System nutrient requirements by transferring 33.44 short tons per year. This was recognized in JEA's annual contribution agreement negotiated in 2016. In 2013, both the FDEP and EPA reaffirmed the site-specific nutrient standard that is codified in the Lower St. Johns River TMDL.

Pollution Remediation Obligations

JEA is subject to numerous federal, state, and local environmental regulations resulting in environmental liabilities due to compliance costs associated with new regulatory initiatives, enforcement actions, legal actions, and contaminated site assessment and remediation. Based on an analysis of the cost of cleanup and other identified environmental contingencies, JEA has accrued a liability associated with the remediation efforts. In accordance with GASB No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations*, based on project estimates and probabilities, the liability is estimated to be $20,726 at September 30, 2018. The accrual is related to the following environmental matters: Kennedy Generating Station RCRA Corrective Action for former wood preserving site; Sans Souci Substation remedial activities; Pearl Street Electric Shop remedial activities; WSSC PCB Issue, Northside Generating Station RCRA Corrective Action program; and remediation at a number of miscellaneous petroleum sites. Of the $20,726 that JEA has accrued as environmental liabilities, approximately $15,795 is associated with the expected cost of remediating the former wood preserving facility at the Kennedy Generating Facility. Following are other environmental matters that could have an impact on JEA; however, the resolution of these matters is uncertain and no accurate prediction of range of loss is possible at this time: Pickettville Road Landfill CERCLA site post-closure activities and the Ellis Road CERCLA site. Although uncertainties associated with these recognized environmental liabilities remain, JEA believes that the current provision for such costs is adequate and additional costs, if any, will not have a material adverse effect upon its financial position, results of operations, or liquidity. Costs associated with these obligations that were expensed prior to the approval of regulatory accounting for environmental projects are recorded in other noncurrent liabilities and total $16,818. The remaining liability is recognized as part of revenues to be used for future costs.

15. Commitments and Contingent Liabilities (continued)

Northside Generating Station Byproduct

JEA Northside Generating Station (NGS) Units 1 and 2 produce byproducts that consist of fly ash and bed ash. JEA has obtained a permit from FDEP to beneficially use the processed byproduct material in the State of Florida, subject to certain restrictions. These ash products are processed into materials marketed as EZBase and EZSorb. The expansion of rail capacity, the ability to load rail cars directly from the storage silos, and direct leasing of railcars has enabled JEA to become a full-service marketer, delivering products by truck or rail. EZSorb is currently being transported by truck and rail to leachate solidification and environmental remediation/stabilization projects in several southeastern states.

The Byproducts Storage Area is an FDEP permitted, Class I lined storage facility at NGS. JEA received a new 20-year permit effective May 4, 2015.

A case is pending in the Second Judicial Circuit in Harrison County, Mississippi. Plaintiff is suing multiple defendants seeking damages allegedly resulting from construction defects at The Promenade, a retail shopping mall in D'Iberville, Mississippi. Plaintiff amended the complaint in April 2010 to add JEA as a defendant on various product liability theories, claiming that JEA's ash byproduct was allegedly incorporated as a component of the product of another party defendant and used by other party defendants at the subject project. Plaintiff seeks injunctive relief, to remediate the site, and damages. Multiple third party claims and cross claims were raised and remain pending. JEA believes it has good and meritorious defenses in this action and will vigorously defend the case. The plaintiff is seeking approximately $75,000; however, the trial court ruled that JEA is entitled to a sovereign immunity cap of $500. Plaintiff has appealed this ruling and the pre-trial rulings are currently being heard by the Mississippi Supreme Court.

General Litigation

JEA is party to various pending or threatened legal actions in connection with its normal operations. In the opinion of management, any ultimate liabilities that may arise from these actions are not expected to materially affect JEA's financial position, results of operations, or liquidity.

16. Storm Costs

Hurricane Matthew tracked parallel along the coast of Florida on October 7, 2016 and Hurricane Irma passed to the west of Jacksonville as a tropical storm on September 11, 2017, causing extensive damage within the JEA service territory. Damage to JEA property was primarily to the transmission and distribution systems. Because of the extensive damage, Jacksonville was declared a federal major disaster area, making JEA eligible to receive reimbursement from FEMA. Requests for Public Assistance for both declared disasters were filed and accepted.

(Dollars in Thousands)

16. Storm Costs (continued)

JEA is in the midst of the cost reimbursement process through FEMA, which allows cost share of 87.5% of eligible cost (75.0% from FEMA and 12.5% from the State of Florida) of those costs not covered by insurance. As a result, $27,999 of the eligible costs were deferred as costs to be recovered from future revenues in the statement of net position with the 12.5%, or $4,000, being recognized in the maintenance and other operating expenses financial statement line item in the statement of revenues, expenses and changes in net position in fiscal year 2017. Through September 30, 2018, JEA has received $9,033, which reduced the deferred costs to be recovered from future revenues. Of the $9,033 received, $6,970 was from insurance and $2,063 from FEMA. JEA believes it is probable that reimbursement from either insurance or FEMA will be received for the eligible cost incurred that is remaining.

17. Segment Information

The financial statements of JEA contain four segments, as the Electric System and Bulk Power Supply System, the SJRPP System, the Water and Sewer System, and DES represent separate identifiable activities. These systems have debt outstanding with a revenue stream pledged in support of the debt. In addition, the activities are required to be accounted for separately. JEA's Electric System and Bulk Power Supply System segment consists of an electric utility engaged in the generation, purchase, transmission, distribution, and sale of electricity primarily in Northeast Florida. JEA's SJRPP System segment consists of a generation facility that is 80% owned by JEA, which is currently in the process of being decommissioned as discussed in note 2, St. Johns River Power Park. JEA's Water and Sewer System segment consists of water collection, distribution, and wastewater treatment in Northeast Florida. The DES consists of chilled water activities.

Intercompany billing is employed between the Electric System, the Water and Sewer System, and DES and includes purchases of electricity, water, sewer, and chilled water services and the rental of inventory and buildings. The utility charges between entities are based on a commercial customer rate. All intercompany billings are eliminated in the financial statements. See intercompany charges detailed below.

	2018			2017		
	Electric	**W&S**	**DES**	**Electric**	**W&S**	**DES**
Electricity services	N/A	$ 13,422	$ 3,282	N/A	$ 13,324	$ 3,351
Water and sewer services	505	N/A	136	147	N/A	144
Chilled water services	–	408	N/A	–	507	N/A

The Electric System shares certain administrative functions with the Water and Sewer System. Generally, these costs are charged to the Electric System and the costs of these functions are allocated to the Water and Sewer System based on the benefits provided. Operating expense allocated to the Water and Sewer System was $45,869 for fiscal year 2018 and $43,327 for 2017.

17. Segment Information (continued)

In September 1999, the Water and Sewer System purchased the inventory owned by the Electric System for $32,929. This was initiated to increase the utilization of its assets between the Electric System and the Water and Sewer System. A monthly inventory carrying charge is paid by the Electric System based on the value of the inventory multiplied by one-twelfth of the prior year's Water and Sewer average cost of debt. Inventory carrying charges were $784 for fiscal year 2018 and $280 for 2017.

In July 1999 and July 2004, the Electric System transferred several buildings to the Water and Sewer System in the amounts of $22,940 and $6,284, respectively, an amount equal to the net book value of the assets. Monthly, the Electric System reimburses the Water and Sewer System for their equitable allocation. Annual rent paid by the Electric System to the Water and Sewer System for use of these buildings was $2,030 for fiscal year 2018 and $1,999 for 2017.

To utilize the efficiencies in the Customer Account Information billing system and reduce the administrative efforts in recording deposits, customer deposits are recorded to one Service Agreement per account. Deposits are allocated to the Electric System or Water and Sewer System based on revenues. When the deposits are credited to customer accounts, they are allocated between the service agreements.

(Dollars in Thousands)

17. Segment Information (continued)

Segment information for these activities for the fiscal years ended September 30, 2018 and 2017 was as follows:

	Electric System and Bulk Power Supply System		SJRPP System		Water and Sewer		DES	
	2018	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**
Condensed statements of net position								
Total current assets	**$ 603,965**	$ 604,305	**$ 70,352**	$ 117,017	**$ 196,938**	$ 204,171	**$ 4,396**	$ 4,355
Total noncurrent assets	**740,394**	754,337	**358,767**	276,865	**574,441**	589,523	**3,445**	3,257
Net capital assets	**2,652,224**	2,687,232	**10,144**	474,437	**2,682,864**	2,615,950	**35,027**	36,180
Deferred outflows of resources	**241,405**	278,864	**67,596**	27,339	**125,501**	131,037	**194**	203
Total assets and deferred outflows of resources	**$ 4,237,988**	$ 4,324,738	**$ 506,859**	$ 895,658	**$ 3,579,744**	$ 3,540,681	**$ 43,062**	$ 43,995
Total current liabilities	**$ 163,168**	$ 145,154	**$ 7,668**	$ 11,722	**$ 37,101**	$ 35,426	**$ 103**	$ 89
Total current liabilities payable from restricted assets	**184,899**	191,785	**63,435**	157,877	**117,447**	120,756	**2,601**	2,445
Total noncurrent liabilities	**373,718**	393,733	**39,049**	14,865	**221,990**	235,258	**34**	11
Total long-term debt	**2,166,201**	2,328,211	**281,359**	420,060	**1,570,576**	1,625,187	**34,791**	36,446
Total liabilities	**2,887,986**	3,058,883	**391,511**	604,524	**1,947,114**	2,016,627	**37,529**	38,991
Deferred inflows of resources	**283,185**	282,821	**17,715**	151,613	**47,304**	22,791	**–**	–
Net investment in (divestment of) capital assets	**530,479**	425,023	**2,138**	(3,751)	**1,325,600**	1,202,706	**(1,492)**	(1,818)
Restricted net position	**316,700**	336,210	**26,164**	39,530	**195,319**	211,166	**2,738**	2,539
Unrestricted net position	**219,638**	221,801	**69,331**	103,742	**64,407**	87,391	**4,287**	4,283
Total net position	**1,066,817**	983,034	**97,633**	139,521	**1,585,326**	1,501,263	**5,533**	5,004
Total liabilities, deferred inflows of resources, and net position	**$ 4,237,988**	$ 4,324,738	**$ 506,859**	$ 895,658	**$ 3,579,744**	$ 3,540,681	**$ 43,062**	$ 43,995
Condensed statements of revenues, expenses, and changes in net position information								
Total operating revenues	**$ 1,275,255**	$ 1,299,592	**$ 147,838**	$ 268,899	**$ 435,682**	$ 457,908	**$ 8,756**	$ 8,692
Depreciation	**203,075**	199,743	**10,987**	42,754	**144,144**	141,838	**2,403**	2,364
Other operating expenses	**829,441**	782,778	**115,612**	203,273	**166,291**	163,293	**4,603**	4,570
Operating income	**242,739**	317,071	**21,239**	22,872	**125,247**	152,777	**1,750**	1,758
Total nonoperating expenses, net	**(67,484)**	(72,558)	**(18,028)**	(22,153)	**(44,079)**	(52,807)	**(1,221)**	(1,322)
Total contributions, net	**(91,472)**	(92,271)	**–**	–	**2,895**	1,254	**–**	–
Total special items	**–**	–	**(45,099)**	–	**–**	–	**–**	–
Changes in net position	**83,783**	152,242	**(41,888)**	719	**84,063**	101,224	**529**	436
Net position, beginning of year	**983,034**	832,508	**139,521**	138,802	**1,501,263**	1,401,047	**5,004**	4,568
Effect of adoption of GASB Statement No. 75	**–**	(1,716)	**–**	–	**–**	(1,008)	**–**	–
Net position, beginning of year, restated	**983,034**	830,792	**139,521**	138,802	**1,501,263**	1,400,039	**5,004**	4,568
Net position, end of year	**$ 1,066,817**	$ 983,034	**$ 97,633**	$ 139,521	**$ 1,585,326**	$ 1,501,263	**$ 5,533**	$ 5,004
Condensed statements of cash flow information								
Net cash provided by operating activities	**$ 457,242**	$ 447,104	**$ 38,185**	$ 37,578	**$ 276,662**	$ 287,362	**$ 3,880**	$ 3,588
Net cash used in noncapital and related financing activities	**(91,538)**	(92,225)	**–**	–	**(25,031)**	(23,469)	**–**	–
Net cash used in capital and related financing activities	**(389,543)**	(396,544)	**(193,269)**	(63,622)	**(291,095)**	(259,443)	**(4,064)**	(5,139)
Net cash provided by (used in) investing activities	**(30,410)**	86,505	**174,010**	17,053	**16,616**	(21,679)	**103**	45
Net change in cash and cash equivalents	**(54,249)**	44,840	**18,926**	(8,991)	**(22,848)**	(17,229)	**(81)**	(1,506)
Cash and cash equivalents at beginning of year	**340,063**	295,223	**121,027**	130,018	**145,909**	163,138	**7,035**	8,541
Cash and cash equivalents at end of year	**$ 285,814**	$ 340,063	**$ 139,953**	$ 121,027	**$ 123,061**	$ 145,909	**$ 6,954**	$ 7,035

18. Subsequent Events

On October 11, 2018, Moody's Investors Service lowered its ratings with respect to the Bonds of JEA as follows:

(a) with respect to Electric System Revenue Bonds, Bulk Power Supply System Revenue Bonds, and SJRPP System Revenue Bonds, the long-term debt ratings were lowered from "Aa2" to "A2";

(b) with respect to Electric System Subordinated Revenue Bonds, the long-term ratings were lowered from "Aa3" to "A3";

(c) with respect to Water and Sewer Revenue Bonds and Water and Sewer Subordinated Revenue Bonds, the long-term ratings were lowered from "Aa2" to "A2"; and

(d) with respect to DES Revenue Bonds, the long-term ratings were lowered from "Aa3" to "A3".

As a result of the ratings change above, commitment fees related to Electric System VRDOs changed from a range of 0.38% to 0.40% to a range of 0.48% to 0.55% and commitment fees related to Water and Sewer System VRDOs remained unchanged within a range of 0.38% to 0.42%.

On November 1, 2018, as a result of the ratings change, the interest rate related to the Direct Purchased Bonds changed from SIFMA plus 40 basis points to SIFMA plus 55 basis points.

On November 1, 2018, JEA amended the revolving credit agreement to increase the maximum principal amount of the credit facility available for the Electric System by $200,000, for a total unsecured amount of $500,000.

On November 2, 2018, the revolving credit agreement was drawn upon by the Water and Sewer System for $2,000, with $495,000 available to be drawn.

On November 7, 2018, JEA extended the existing irrevocable direct-pay letter of credit and reimbursement agreement related to the Water and Sewer System 2008 Series A-2 VRDO to a stated expiration date of December 1, 2023. The new commitment fee is 0.42%.

REQUIRED SUPPLEMENTARY INFORMATION

JEA

Required Supplementary Information – Pension
(Dollars in Thousands)

September 30, 2018

Schedules of Required Supplementary Information

Schedule of JEA's Proportionate Share of the Net Pension Liability

City of Jacksonville General Employees Retirement Plan

Last Five Fiscal Years*

	2018	2017	2016	2015	2014
Proportional share percentage	**51.68%**	50.37%	49.15%	48.85%	48.85%
Net pension liability	**$ 527,680**	$ 541,025	$ 480,353	$ 404,466	$ 386,789
Covered payroll	**$ 134,443**	$ 126,808	$ 127,440	$ 128,084	$ 129,922
Net pension liability as a percentage of covered payroll	**392.49%**	426.65%	376.92%	315.78%	297.71%
Plan fiduciary net pension as a percentage of the total pension liability	**63.71%**	63.00%	64.03%	69.06%	68.64%

Schedule of JEA Contributions

City of Jacksonville General Employees Retirement Plan

Last Ten Fiscal Years*

Fiscal Year Ending September 30,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll*	Actual Contribution as a % of Covered Payroll
2009	$ 13,280	$ 13,280	$ –	$ 120,727	11.00%
2010	16,257	16,257	–	125,054	13.00%
2011	17,195	17,195	–	132,269	13.00%
2012	22,301	22,301	–	127,434	17.50%
2013	27,038	27,038	–	129,990	20.80%
2014	34,149	34,149	–	129,922	26.28%
2015	40,179	40,179	–	128,084	31.37%
2016	43,156	43,156	–	127,440	33.86%
2017	48,942	48,942	–	126,808	38.60%
2018	35,459	35,459	–	134,443	26.37%

* All information is on measurement year basis.

Required Supplementary Information – Pension (continued)

(Dollars in Thousands)

Notes to Schedule of Contributions

Valuation date:	October 1, 2017
Methods and Assumptions Used to Determine Contribution Rates:	
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level Percent of Payroll, using 1.14% Annual Increases*
Remaining amortization period	All new bases are amortized over 30 years.
Asset valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value and is recognized over a five-year period, further adjusted, if necessary, to be within 20% of the market value.
Actual assumptions:	
Investment rate of return	7.50%, including inflation, net of pension plan investment expense
Inflation rate	2.75%*
Projected salary increases	3.00% – 6.00%, of which 2.75% is the Plan's long-term payroll inflation assumption
Cost-of-living adjustments	The Plan provision contains a 3.00% COLA.

* The Fund's payroll inflation assumption is 2.75%. However, based on Part VII, Chapter 112.64(5)(a) of *Florida Statutes*, an assumption of 1.14% was used for amortization purposes in the valuation.

Required Supplementary Information – Pension (continued)
(Dollars in Thousands)

SJRPP Plan – Schedule of Changes in Net Pension Liability and Related Ratios*

	2017	2016	2015	2014
Total Pension Liability				
Beginning balance	**$ 158,926**	$ 155,143	$ 150,629	$ 146,521
Service cost	**1,032**	1,210	1,275	1,470
Interest	**10,768**	10,514	10,271	10,026
Changes in benefit terms	**–**	(59)	–	–
Difference between actual and expected experience	**10,826**	714	3,316	2,121
Changes in assumptions	**26**	3,730	–	–
Benefit payments	**(12,257)**	(12,326)	(10,348)	(9,509)
Total pension liability – ending	**$ 169,321**	$ 158,926	$ 155,143	$ 150,629
Plan Fiduciary Net Position				
Beginning balance	**$ 142,286**	$ 138,902	$ 145,425	$ 135,019
Contributions – employer	**8,039**	2,142	3,509	5,559
Contributions – employee	**625**	629	648	655
Net investment income	**14,571**	13,379	(266)	13,763
Benefit payments	**(12,257)**	(12,326)	(10,348)	(9,509)
Administrative expense	**(466)**	(440)	(66)	(62)
Plan fiduciary net position – ending	**$ 152,798**	$ 142,286	$ 138,902	$ 145,425
Net Pension Liability – Ending	**$ 16,523**	$ 16,640	$ 16,241	$ 5,204
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	**90.24%**	89.53%	89.53%	96.55%
Covered Payroll	**$ 15,621**	$ 15,730	$ 16,665	$ 21,304
Net Pension Liability as a Percentage of Covered Payroll	**105.78%**	105.79%	97.46%	24.43%

* These schedules are presented to illustrate the requirement to share information for ten years. However, until a full ten-year trend is compiled, only available information is shown. All information is on a measurement year basis.

SJRPP Plan – Investment Returns

Year Ended	Return
2008	-12.67%
2009	7.60%
2010	10.14%
2011	0.41%
2012	17.17%
2013	12.64%
2014	10.32%
2015	-0.19%
2016	9.99%
2017	10.39%

Required Supplementary Information – Pension (continued)
(Dollars in Thousands)

SJRPP Plan – Schedule of Contributions

Fiscal Year Ending September 30,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2009	10,239	10,398	(159)	21,327	48.76%
2010	13,453	13,565	(112)	19,431	69.81%
2011	8,919	9,028	(109)	19,895	45.38%
2012	7,995	8,005	(10)	19,318	41.44%
2013	11,845	11,885	(40)	17,761	66.92%
2014	5,397	5,559	(162)	21,304	26.09%
2015	3,414	3,509	(95)	16,665	21.06%
2016	2,050	2,142	(92)	15,730	13.62%
2017	7,967	8,039	(72)	15,621	51.46%
2018	7,727	26,409	(18,682)	5,809	454.62%

Required Supplementary Information – Pension (continued)
(Dollars in Thousands)

Notes to Schedule of Contributions

Valuation date:	October 1, 2017

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial cost method	Entry Age Normal
Amortization method	Level Dollar, Closed
Remaining amortization period	2 years
Asset valuation method	Market value of assets

Actual assumptions:

Investment rate of return	7.00% per year, compounded annually, net of investment expenses
Inflation rate	2.5%
Projected salary increases	2.5% – 12.5%, per year, including inflation
Retirement age	Experience-based table of rates based on year of eligibility.
Mortality	Mortality tables used for Regular Class and Special Risk Class members in the July 1, 2016 actuarial valuation of the Florida Retirement System. They are based on the results of a statewide experience study covering the period 2008 through 2013.

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Required Supplementary Information – OPEB
(Dollars in Thousands)

September 30, 2018

OPEB Plan – Schedule of Changes in Net OPEB Liability and Related Ratios*

	2017	2016
Total OPEB Liability		
Beginning balance	**$ 60,949**	$ 62,554
Service cost	**811**	781
Interest on the total OPEB liability	**4,253**	4,203
Changes in benefit terms	**(11,556)**	–
Difference between actual and expected experience	**(7,891)**	–
Benefit payments	**(2,019)**	(6,589)
Total OPEB liability – ending	**$ 44,547**	$ 60,949
Plan Fiduciary Net Position		
Beginning balance	**$ 21,441**	$ 18,156
Employer contributions	**5,240**	5,061
Net investment income	**2,942**	2,135
Reimbursements to employer	**(3,911)**	(3,911)
Plan fiduciary net position – ending	**$ 25,712**	$ 21,441
Net OPEB Liability – Ending	**$ 18,835**	$ 39,508
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	**57.72%**	35.18%
Covered Payroll	**$ 155,326**	$ 150,073
Net OPEB Liability as a Percentage of Covered Payroll	**12.13%**	26.33%

* This schedule is presented to illustrate the requirement to share information for ten years. However, until a full ten-year trend is compiled, only available information is shown. All information is on a measurement year basis.

OPEB Plan – Investment Returns

All information is on a measurement year basis

Year Ended	Return
2008	0.03%
2009	1.44%
2010	6.74%
2011	-1.41%
2012	15.84%
2013	11.93%
2014	8.22%
2015	-0.46%
2016	7.90%
2017	13.35%

Required Supplementary Information – OPEB (continued)
(Dollars in Thousands)

OPEB Plan – Schedule of Contributions*

Fiscal Year Ending September 30,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2009	$ 5,779	$ 4,023	$ 1,756	N/A	N/A
2010	5,126	5,236	(110)	138,093	3.79%
2011	5,344	6,601	(1,257)	N/A	N/A
2012	5,211	5,423	(212)	150,714	3.60%
2013	5,433	6,185	(752)	N/A	N/A
2014	4,819	4,382	437	148,617	2.95%
2015	5,011	7,255	(2,244)	N/A	N/A
2016	5,061	7,739	(2,678)	150,073	5.16%
2017	4,138	5,240	(1,102)	155,326	3.37%
2018	3,885	4,078	(193)	161,602	2.52%

* This schedule is presented to illustrate the requirement to share information for ten years. However, until a full ten-year trend is compiled, only available information is shown.

Required Supplementary Information – OPEB
(Dollars in Thousands)

Notes to Schedule of Contributions

Actuarial valuations are performed as of the beginning of the fiscal year and assumptions below pertain to all years presented unless otherwise noted.

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial cost method	Entry Age Normal
Inflation	2.50%
Discount rate	7.00%
Salary increases	2.5% – 12.5% per year, including inflation; varies by years of service
Retirement age	Experience-based table of rates that are specific to the type of eligibility condition
Mortality	Mortality tables used for Regular Class members in the July 1, 2016 actuarial valuation of the Florida Retirement System. They are based on the results of a statewide experience study covering the period 2008 through 2013.
Healthcare cost trend rates	Based on the Getzen Model, with trend starting at 7.00% and gradually decreasing to an ultimate trend rate of 4.57% as of October 1, 2017 and 4.59% as of October 1, 2016 (including the impact of the excise tax). The decrease is a result of the decrease in the load for excise tax.
Aging factors	Based on the 2013 SOA Study "Health Care Costs – From Birth to Death".
Expenses	Investment returns are net of the investment expenses; and, administrative expenses related to operation of the health plan are included in the premium costs.

Other information:

Notes	Health-related assumptions are based on experience over the plan year ending December 31, 2017.

JEA

Combining Statement of Net Position
(In Thousands)

September 30, 2018

	Electric System and Bulk Power Supply System	SJRPP System	Elimination of intercompany transactions	Total Electric Enterprise Fund	Water and Sewer Enterprise Fund	District Energy System Fund	Total JEA
Assets							
Current assets:							
Cash and cash equivalents	$ 285,611	$ 65,840	$ –	$ 351,451	$ 86,219	$ 3,536	$ 441,206
Investments	83,268	2,042	–	85,310	–	–	85,310
Accounts and interest receivable, net of allowance of $1,830	197,041	790	(1,912)	195,919	54,369	860	251,148
Inventories:							
Fuel	35,856	1,015	–	36,871	–	–	36,871
Materials and supplies	2,189	665	–	2,854	56,350	–	59,204
Total current assets	603,965	70,352	(1,912)	672,405	196,938	4,396	873,739
Noncurrent assets:							
Restricted assets:							
Cash and cash equivalents	203	74,113	–	74,316	36,842	3,418	114,576
Investments	419,536	23,330	–	442,866	288,761	–	731,627
Accounts and interest receivable	7	47	–	54	8	–	62
Total restricted assets	419,746	97,490	–	517,236	325,611	3,418	846,265
Costs to be recovered from future revenues	301,805	261,277	–	563,082	244,987	27	808,096
Investment in The Energy Authority	6,811	–	–	6,811	–	–	6,811
Other assets	12,032	–	–	12,032	3,843	–	15,875
Total noncurrent assets	740,394	358,767	–	1,099,161	574,441	3,445	1,677,047
Net capital assets	2,652,224	10,144	–	2,662,368	2,682,864	35,027	5,380,259
Total assets	3,996,583	439,263	(1,912)	4,433,934	3,454,243	42,868	7,931,045
Deferred outflows of resources							
Unrealized pension contributions and losses	83,649	34,238	–	117,887	53,480	–	171,367
Unamortized deferred losses on refundings	85,165	4,185	–	89,350	54,178	194	143,722
Accumulated decrease in fair value of hedging derivatives	70,103	–	–	70,103	16,253	–	86,356
Unrealized asset retirement obligation	–	29,173	–	29,173	–	–	29,173
Unrealized OPEB contributions and losses	2,488	–	–	2,488	1,590	–	4,078
Total deferred outflows of resources	241,405	67,596	–	309,001	125,501	194	434,696
Total assets and deferred outflows of resources	$ 4,237,988	$ 506,859	$ (1,912)	$ 4,742,935	$ 3,579,744	$ 43,062	$ 8,365,741
Liabilities							
Current liabilities:							
Accounts and accrued expenses payable	$ 118,901	$ 7,668	$ (796)	$ 125,773	$ 21,485	$ 103	$ 147,361
Customer deposits	44,267	–	–	44,267	15,616	–	59,883
Total current liabilities	163,168	7,668	(796)	170,040	37,101	103	207,244
Current liabilities payable from restricted assets:							
Debt due within one year	130,690	1,720	–	132,410	51,720	1,660	185,790
Renewal and replacement reserve	–	54,370	–	54,370	–	–	54,370
Interest payable	37,613	5,603	–	43,216	29,841	680	73,737
Construction contracts and accounts payable	16,596	1,742	(1,116)	17,222	35,886	261	53,369
Total current liabilities payable from restricted assets	184,899	63,435	(1,116)	247,218	117,447	2,601	367,266
Noncurrent liabilities:							
Net pension liability	321,885	16,523	–	338,408	205,795	–	544,203
Asset retirement obligation	–	22,526	–	22,526	–	–	22,526
Net OPEB liability	11,489	–	–	11,489	7,346	–	18,835
Other liabilities	40,344	–	–	40,344	8,849	34	49,227
Total noncurrent liabilities	373,718	39,049	–	412,767	221,990	34	634,791
Long-term debt:							
Debt payable, less current portion	2,019,350	278,885	–	2,298,235	1,480,620	34,825	3,813,680
Unamortized premium (discount), net	76,748	2,474	–	79,222	73,703	(34)	152,891
Fair value of debt management strategy instruments	70,103	–	–	70,103	16,253	–	86,356
Total long-term debt	2,166,201	281,359	–	2,447,560	1,570,576	34,791	4,052,927
Total liabilities	2,887,986	391,511	(1,912)	3,277,585	1,947,114	37,529	5,262,228
Deferred inflows of resources							
Revenues to be used for future costs	249,085	10,624	–	259,709	27,123	–	286,832
Unrealized pension gains	26,250	7,091	–	33,341	16,783	–	50,124
Unrealized OPEB gains	5,314	–	–	5,314	3,398	–	8,712
Accumulated increase in fair value of hedging derivatives	2,536	–	–	2,536	–	–	2,536
Total deferred inflows of resources	283,185	17,715	–	300,900	47,304	–	348,204
Net position							
Net investment in (divestment of) capital assets	530,479	2,138	–	532,617	1,325,600	(1,492)	1,856,725
Restricted							
Debt service	130,072	1,843		131,915	53,799	1,660	187,374
Other purposes	186,628	24,321	1,116	212,065	141,520	1,078	354,663
Unrestricted	219,638	69,331	(1,116)	287,853	64,407	4,287	356,547
Total net position	1,066,817	97,633	–	1,164,450	1,585,326	5,533	2,755,309
Total liabilities, deferred inflows of resources, and net position	$ 4,237,988	$ 506,859	$ (1,912)	$ 4,742,935	$ 3,579,744	$ 43,062	$ 8,365,741

JEA

Combining Statement of Net Position
(In Thousands)

September 30, 2017

	Electric System and Bulk Power Supply System	SJRPP System	Elimination of intercompany transactions	Total Electric Enterprise Fund	Water and Sewer Enterprise Fund	District Energy System Fund	Total JEA
Assets							
Current assets:							
Cash and cash equivalents	$ 340,063	$ 41,950	$ –	$ 382,013	$ 103,741	$ 3,805	$ 489,559
Investments	20,629	4,493	–	25,122	–	–	25,122
Accounts and interest receivable, net of allowance of $2,101	203,433	16,597	(27,230)	192,800	52,094	550	245,444
Inventories:							
Fuel	38,044	34,728	–	72,772	–	–	72,772
Materials and supplies	2,136	19,249	–	21,385	48,336	–	69,721
Total current assets	604,305	117,017	(27,230)	694,092	204,171	4,355	902,618
Noncurrent assets:							
Restricted assets:							
Cash and cash equivalents	–	79,077	–	79,077	42,168	3,230	124,475
Investments	442,080	192,794	–	634,874	301,834	–	936,708
Accounts and interest receivable	20	952	–	972	12	–	984
Total restricted assets	442,100	272,823	–	714,923	344,014	3,230	1,062,167
Costs to be recovered from future revenues	297,241	4,042	–	301,283	239,711	27	541,021
Investment in The Energy Authority	6,283	–	–	6,283	–	–	6,283
Other assets	8,713	–	–	8,713	5,798	–	14,511
Total noncurrent assets	754,337	276,865	–	1,031,202	589,523	3,257	1,623,982
Net capital assets	2,687,232	474,437	–	3,161,669	2,615,950	36,180	5,813,799
Total assets	4,045,874	868,319	(27,230)	4,886,963	3,409,644	43,792	8,340,399
Deferred outflows of resources							
Unrealized pension contributions and losses	95,814	16,505	–	112,319	61,259	–	173,578
Unamortized deferred losses on refundings	78,503	10,834	–	89,337	43,816	203	133,356
Accumulated decrease in fair value of hedging derivatives	101,350	–	–	101,350	23,919	–	125,269
Unrealized OPEB contributions and losses	3,197	–	–	3,197	2,043	–	5,240
Total deferred outflows of resources	278,864	27,339	–	306,203	131,037	203	437,443
Total assets and deferred outflows of resources	$ 4,324,738	$ 895,658	$ (27,230)	$ 5,193,166	$ 3,540,681	$ 43,995	$ 8,777,842
Liabilities							
Current liabilities:							
Accounts and accrued expenses payable	$ 102,962	$ 11,722	$ (3,221)	$ 111,463	$ 20,340	$ 89	$ 131,892
Customer deposits	42,192	–	–	42,192	15,086	–	57,278
Total current liabilities	145,154	11,722	(3,221)	153,655	35,426	89	189,170
Current liabilities payable from restricted assets:							
Debt due within one year	135,105	41,330	–	176,435	51,020	1,640	229,095
Renewal and replacement reserve	–	82,577	–	82,577	–	–	82,577
Interest payable	40,458	9,571	–	50,029	31,501	691	82,221
Construction contracts and accounts payable	16,222	24,399	(24,009)	16,612	38,235	114	54,961
Total current liabilities payable from restricted assets	191,785	157,877	(24,009)	325,653	120,756	2,445	448,854
Noncurrent liabilities:							
Net pension liability	330,025	13,312	–	343,337	211,000	–	554,337
Net OPEB liability	24,100	–	–	24,100	15,408	–	39,508
Other liabilities	39,608	1,553	–	41,161	8,850	11	50,022
Total noncurrent liabilities	393,733	14,865	–	408,598	235,258	11	643,867
Long-term debt:							
Debt payable, less current portion	2,171,305	408,885	–	2,580,190	1,555,485	36,485	4,172,160
Unamortized premium (discount), net	55,556	11,175	–	66,731	45,783	(39)	112,475
Fair value of debt management strategy instruments	101,350	–	–	101,350	23,919	–	125,269
Total long-term debt	2,328,211	420,060	–	2,748,271	1,625,187	36,446	4,409,904
Total liabilities	3,058,883	604,524	(27,230)	3,636,177	2,016,627	38,991	5,691,795
Deferred inflows of resources							
Revenues to be used for future costs	277,552	147,632	–	425,184	19,422	–	444,606
Unrealized pension gains	4,867	3,981	–	8,848	3,112	–	11,960
Unrealized OPEB gains	402	–	–	402	257	–	659
Total deferred inflows of resources	282,821	151,613	–	434,434	22,791	–	457,225
Net position							
Net investment in (divestment of) capital assets	425,023	(3,751)	–	421,272	1,202,706	(1,818)	1,622,160
Restricted							
Debt service	134,071	41,709	–	175,780	56,848	1,640	234,268
Other purposes	202,139	(2,179)	24,009	223,969	154,318	899	379,186
Unrestricted	221,801	103,742	(24,009)	301,534	87,391	4,283	393,208
Total net position	983,034	139,521	–	1,122,555	1,501,263	5,004	2,628,822
Total liabilities, deferred inflows of resources, and net position	$ 4,324,738	$ 895,658	$ (27,230)	$ 5,193,166	$ 3,540,681	$ 43,995	$ 8,777,842

JEA

Combining Statement of Revenues, Expenses, and Changes in Net Position
(In Thousands)

Year Ended September 30, 2018

	Electric System and Bulk Power Supply System	SJRPP System	Elimination of intercompany transactions	Total Electric Enterprise Fund	Water and Sewer Enterprise Fund	District Energy System Fund	Eliminations	Total JEA
Operating revenues								
Electric	$ 1,253,139	$ 87,749	$ (56,982)	$ 1,283,906	$ –	$ –	$ (16,704)	$ 1,267,202
Water and sewer	–	–	–	–	424,121	–	(641)	423,480
District energy system	–	–	–	–	–	8,756	(408)	8,348
Other	22,116	60,089	–	82,205	11,561	–	(2,814)	90,952
Total operating revenues	1,275,255	147,838	(56,982)	1,366,111	435,682	8,756	(20,567)	1,789,982
Operating expenses								
Operations and maintenance:								
Fuel	356,877	64,175	–	421,052	–	–	–	421,052
Purchased power	166,176	–	(56,982)	109,194	–	–	–	109,194
Maintenance and other operating expenses	244,011	52,296	–	296,307	149,646	4,603	(20,567)	429,989
Depreciation	203,075	10,987	–	214,062	144,144	2,403	–	360,609
State utility and franchise taxes	60,831	–	–	60,831	10,476	–	–	71,307
Recognition of deferred costs and revenues, net	1,546	(859)	–	687	6,169	–	–	6,856
Total operating expenses	1,032,516	126,599	(56,982)	1,102,133	310,435	7,006	(20,567)	1,399,007
Operating income	242,739	21,239	–	263,978	125,247	1,750	–	390,975
Nonoperating revenues (expenses)								
Interest on debt	(86,808)	(20,292)	–	(107,100)	(58,034)	(1,374)	–	(166,508)
Investment income	6,910	1,196	–	8,106	3,617	103	–	11,826
Allowance for funds used during construction	3,912	–	–	3,912	7,802	50	–	11,764
Other nonoperating income, net	6,025	1,068	–	7,093	2,764	–	–	9,857
Earnings from The Energy Authority	4,074	–	–	4,074	–	–	–	4,074
Other interest, net	(1,597)	–	–	(1,597)	(228)	–	–	(1,825)
Total nonoperating expenses, net	(67,484)	(18,028)	–	(85,512)	(44,079)	(1,221)	–	(130,812)
Income before contributions	175,255	3,211	–	178,466	81,168	529	–	260,163
Contributions (to) from								
General Fund, City of Jacksonville, Florida	(91,472)	–	–	(91,472)	(25,148)	–	–	(116,620)
Developers and other	1,597	–	–	1,597	80,560	–	–	82,157
Reduction of plant cost through contributions	(1,597)	–	–	(1,597)	(52,517)	–	–	(54,114)
Total contributions, net	(91,472)	–	–	(91,472)	2,895	–	–	(88,577)
Special items								
SJRPP deferred revenues, net	–	451,037	–	451,037	–	–	–	451,037
SJRPP impairment loss	–	(496,136)	–	(496,136)	–	–	–	(496,136)
Total special items	–	(45,099)	–	(45,099)	–	–	–	(45,099)
Change in net position	83,783	(41,888)	–	41,895	84,063	529	–	126,487
Net position, beginning of year	983,034	139,521	–	1,122,555	1,501,263	5,004	–	2,628,822
Net position, end of year	1,066,817	97,633	–	1,164,450	1,585,326	5,533	–	2,755,309

JEA

Combining Statement of Revenues, Expenses, and Changes in Net Position
(In Thousands)

Year Ended September 30, 2017

	Electric System and Bulk Power Supply System	SJRPP System	Elimination of intercompany transactions	Total Electric Enterprise Fund	Water and Sewer Enterprise Fund	District Energy System Fund	Eliminations	Total JEA
Operating revenues								
Electric	$ 1,270,144	$ 268,899	$ (140,162)	$ 1,398,881	$ –	$ –	$ (16,675)	$ 1,382,206
Water and sewer	–	–	–	–	448,348	–	(291)	448,057
District energy system	–	–	–	–	–	8,692	(507)	8,185
Other	29,448	–	–	29,448	9,560	–	(2,279)	36,729
Total operating revenues	1,299,592	268,899	(140,162)	1,428,329	457,908	8,692	(19,752)	1,875,177
Operating expenses								
Operations and maintenance:								
Fuel	289,949	168,845	–	458,794	–	–	–	458,794
Purchased power	217,618	–	(140,162)	77,456	–	–	–	77,456
Maintenance and other operating expenses	219,434	46,445	–	265,879	141,445	4,570	(19,752)	392,142
Depreciation	199,743	42,754	–	242,497	141,838	2,364	–	386,699
State utility and franchise taxes	59,121	–	–	59,121	10,562	–	–	69,683
Recognition of deferred costs and revenues, net	(3,344)	(12,017)	–	(15,361)	11,286	–	–	(4,075)
Total operating expenses	982,521	246,027	(140,162)	1,088,386	305,131	6,934	(19,752)	1,380,699
Operating income	317,071	22,872	–	339,943	152,777	1,758	–	494,478
Nonoperating revenues (expenses)								
Interest on debt	(94,350)	(24,064)	–	(118,414)	(63,183)	(1,395)	–	(182,992)
Investment income	5,177	1,522	–	6,699	3,832	45	–	10,576
Allowance for funds used during construction	6,102	–	–	6,102	5,644	28	–	11,774
Other nonoperating income, net	4,595	389	–	4,984	934	–	–	5,918
Earnings from The Energy Authority	6,335	–	–	6,335	–	–	–	6,335
Other interest, net	(417)	–	–	(417)	(34)	–	–	(451)
Total nonoperating expenses, net	(72,558)	(22,153)	–	(94,711)	(52,807)	(1,322)	–	(148,840)
Income before contributions	244,513	719	–	245,232	99,970	436	–	345,638
Contributions (to) from								
General Fund, City of Jacksonville, Florida	(92,271)	–	–	(92,271)	(23,552)	–	–	(115,823)
Developers and other	906	–	–	906	65,969	–	–	66,875
Reduction of plant cost through contributions	(906)	–	–	(906)	(41,163)	–	–	(42,069)
Total contributions, net	(92,271)	–	–	(92,271)	1,254	–	–	(91,017)
Change in net position	152,242	719	–	152,961	101,224	436	–	254,621
Net position, beginning of year	832,508	138,802	–	971,310	1,401,047	4,568	–	2,376,925
Effect of adoption of GASB Statement No. 75	(1,716)	–	–	(1,716)	(1,008)	–	–	(2,724)
Net position, beginning of year, as restated	830,792	138,802	–	969,594	1,400,039	4,568	–	2,374,201
Net position, end of year	983,034	139,521	–	1,122,555	1,501,263	5,004	–	2,628,822

JEA

Combining Statement of Cash Flows

(In Thousands)

Year Ended September 30, 2018

	Electric System and Bulk Power Supply System	SJRPP System	Elimination of intercompany transactions	Total Electric Enterprise Fund	Water and Sewer Enterprise Fund	District Energy System Fund	Elimination of intercompany transactions	Total JEA
Operating activities								
Receipts from customers	$ 1,249,048	$ 104,261	$ (34,089)	$ 1,319,220	$ 430,685	$ 8,446	$ (17,753)	$ 1,740,598
Payments to suppliers	(655,986)	(81,496)	34,089	(703,393)	(104,124)	(4,012)	20,567	(790,962)
Payments to employees	(160,943)	(44,669)	–	(205,612)	(61,403)	(554)	–	(267,569)
Other operating activities	25,123	60,089	–	85,212	11,504	–	(2,814)	93,902
Net cash provided by operating activities	457,242	38,185	–	495,427	276,662	3,880	–	775,969
Noncapital and related financing activities								
Contribution to General Fund, City of Jacksonville, Florida	(91,538)	–	–	(91,538)	(25,031)	–	–	(116,569)
Net cash used in noncapital and related financing activities	(91,538)	–	–	(91,538)	(25,031)	–	–	(116,569)
Capital and related financing activities								
Defeasance of debt	(405,105)	(128,280)	–	(533,385)	(460,305)	–	–	(993,690)
Proceeds from issuance of debt, net	383,840	–	–	383,840	437,160	–	–	821,000
Acquisition and construction of capital assets	(180,050)	–	–	(180,050)	(203,474)	(1,053)	–	(384,577)
Repayment of debt principal	(135,105)	(41,330)	–	(176,435)	(51,020)	(1,640)	–	(229,095)
Interest paid on debt	(97,134)	(16,685)	–	(113,819)	(67,659)	(1,371)	–	(182,849)
Capital contributions	–	–	–	–	28,043	–	–	28,043
Other capital financing activities	44,011	(6,974)	–	37,037	26,160	–	–	63,197
Net cash used in capital and related financing activities	(389,543)	(193,269)	–	(582,812)	(291,095)	(4,064)	–	(877,971)
Investing activities								
Purchase of investments	(506,359)	(252,593)	–	(758,952)	(279,014)	–	–	(1,037,966)
Proceeds from sale and maturity of investments	462,211	428,653	–	890,864	288,607	–	–	1,179,471
Investment income	10,225	(2,050)	–	8,175	7,023	103	–	15,301
Distributions from The Energy Authority	3,513	–	–	3,513	–	–	–	3,513
Net cash provided by (used in) investing activities	(30,410)	174,010	–	143,600	16,616	103	–	160,319
Net change in cash and cash equivalents	(54,249)	18,926	–	(35,323)	(22,848)	(81)	–	(58,252)
Cash and cash equivalents at beginning of year	340,063	121,027	–	461,090	145,909	7,035	–	614,034
Cash and cash equivalents at end of year	$ 285,814	$ 139,953	$ –	$ 425,767	$ 123,061	$ 6,954	$ –	$ 555,782
Reconciliation of operating income to net cash provided by operating activities								
Operating income	$ 242,739	$ 21,239	$ –	$ 263,978	$ 125,247	$ 1,750	$ –	$ 390,975
Adjustments:								
Depreciation and amortization	203,075	10,987	–	214,062	145,424	2,403	–	361,889
Recognition of deferred costs and revenues, net	1,546	(859)	–	687	6,169	–	–	6,856
Other nonoperating income, net	103	700	–	803	270	–	–	1,073
Changes in noncash assets and noncash liabilities:								
Accounts receivable	13,184	15,812	–	28,996	(2,200)	(310)	–	26,486
Accounts receivable, restricted	13	–	–	13	3	–	–	16
Inventories	2,136	52,297	–	54,433	(8,014)	–	–	46,419
Other assets	5,688	–	–	5,688	733	–	–	6,421
Accounts and accrued expenses payable	10,076	(10,441)	–	(365)	1,330	14	–	979
Current liabilities payable from restricted liabilities	–	(49,998)	–	(49,998)	–	–	–	(49,998)
Other noncurrent liabilities and deferred inflows	(21,318)	(1,552)	–	(22,870)	7,700	23	–	(15,147)
Net cash provided by operating activities	$ 457,242	$ 38,185	$ –	$ 495,427	$ 276,662	$ 3,880	$ –	$ 775,969
Non-cash activity								
Contribution of capital assets from developers	$ 1,597	$ –	$ –	$ 1,597	$ 52,517	$ –	$ –	$ 54,114
Unrealized gains (losses) on fair value of investments	$ (4,052)	$ 4,146	$ –	$ 94	$ (3,480)	$ –	$ –	$ (3,386)

JEA

Combining Statement of Cash Flows
(In Thousands)

Year Ended September 30, 2017

	Electric System and Bulk Power Supply System	SJRPP System	Elimination of intercompany transactions	Total Electric Enterprise Fund	Water and Sewer Enterprise Fund	District Energy System Fund	Elimination of intercompany transactions	Total JEA
Operating activities								
Receipts from customers	$ 1,207,855	$ 269,957	$ (143,764)	$ 1,334,048	$ 433,658	$ 8,282	$ (17,473)	$ 1,758,515
Payments to suppliers	(605,225)	(201,043)	143,764	(662,504)	(91,308)	(4,171)	19,752	(738,231)
Payments to employees	(159,127)	(31,336)	–	(190,463)	(58,234)	(496)	–	(249,193)
Other operating activities	3,601	–	–	3,601	3,246	(27)	(2,279)	4,541
Net cash provided by operating activities	447,104	37,578	–	484,682	287,362	3,588	–	775,632
Noncapital and related financing activities								
Contribution to General Fund, City of Jacksonville, Florida	(92,225)	–	–	(92,225)	(23,469)	–	–	(115,694)
Net cash used in noncapital and related financing activities	(92,225)	–	–	(92,225)	(23,469)	–	–	(115,694)
Capital and related financing activities								
Defeasance of debt	(153,210)	–	–	(153,210)	(6,135)	–	–	(159,345)
Proceeds from issuance of debt, net	90,405	–	–	90,405	–	–	–	90,405
Acquisition and construction of capital assets	(128,665)	–	–	(128,665)	(177,345)	(2,123)	–	(308,133)
Repayment of debt principal	(102,240)	(43,785)	–	(146,025)	(33,875)	(1,625)	–	(181,525)
Interest paid on debt	(102,667)	(20,226)	–	(122,893)	(69,199)	(1,391)	–	(193,483)
Capital contributions	–	–	–	–	24,805	–	–	24,805
Other capital financing activities	(167)	389	–	222	2,306	–	–	2,528
Net cash used in capital and related financing activities	(396,544)	(63,622)	–	(460,166)	(259,443)	(5,139)	–	(724,748)
Investing activities								
Purchase of investments	(641,438)	(572,124)	–	(1,213,562)	(589,885)	–	–	(1,803,447)
Proceeds from sale and maturity of investments	714,603	585,322	–	1,299,925	561,671	–	–	1,861,596
Investment income	7,158	3,855	–	11,013	6,535	45	–	17,593
Distributions from The Energy Authority	6,182	–	–	6,182	–	–	–	6,182
Net cash provided by (used in) investing activities	86,505	17,053	–	103,558	(21,679)	45	–	81,924
Net change in cash and cash equivalents	44,840	(8,991)	–	35,849	(17,229)	(1,506)	–	17,114
Cash and cash equivalents at beginning of year	295,223	130,018	–	425,241	163,138	8,541	–	596,920
Cash and cash equivalents at end of year	$ 340,063	$ 121,027	$ –	$ 461,090	$ 145,909	$ 7,035	$ –	$ 614,034
Reconciliation of operating income to net cash provided by operating activities								
Operating income	$ 317,071	$ 22,872	$ –	$ 339,943	$ 152,777	$ 1,758	$ –	$ 494,478
Adjustments:								
Depreciation and amortization	199,743	42,754	–	242,497	143,179	2,364	–	388,040
Recognition of deferred costs and revenues, net	(3,344)	(12,017)	–	(15,361)	11,286	–	–	(4,075)
Other nonoperating income, net	45	–	–	45	(1,117)	–	–	(1,072)
Changes in noncash assets and noncash liabilities:								
Accounts receivable	(2,083)	1,058	–	(1,025)	(12,751)	(409)	–	(14,185)
Accounts receivable, restricted	28	–	–	28	4	–	–	32
Inventories	(1,582)	(19,603)	–	(21,185)	(3,507)	–	–	(24,692)
Other assets	(23,056)	–	–	(23,056)	(4,542)	(27)	–	(27,625)
Accounts and accrued expenses payable	21,878	(2,327)	–	19,551	3,780	(69)	–	23,262
Current liabilities payable from restricted liabilities	–	4,409	–	4,409	–	–	–	4,409
Other noncurrent liabilities and deferred inflows	(61,596)	432	–	(61,164)	(1,747)	(29)	–	(62,940)
Net cash provided by operating activities	$ 447,104	$ 37,578	$ –	$ 484,682	$ 287,362	$ 3,588	$ –	$ 775,632
Non-cash activity								
Contribution of capital assets from developers	$ 906	$ –	$ –	$ 906	$ 41,163	$ –	$ –	$ 42,069
Unrealized losses on fair value of investments	$ (2,193)	$ (2,556)	$ –	$ (4,749)	$ (2,961)	$ –	$ –	$ (7,710)

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Report of Independent Auditors on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

The Board of Directors
JEA
Jacksonville, Florida

We have audited, in accordance with auditing standards generally accepted in the United States and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of JEA, which comprise the statement of net position as of September 30, 2018, and the related statements of revenues, expenses and changes in net position and cash flows for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated December 3, 2018.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered JEA's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of JEA's internal control. Accordingly, we do not express an opinion on the effectiveness of JEA's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether JEA's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

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Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Ernst & Young LLP

December 3, 2018

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BOND COMPLIANCE INFORMATION

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Report of Independent Auditors on Schedules of Debt Service Coverage

The Board of Directors
JEA
Jacksonville, Florida

We have audited, in accordance with auditing standards generally accepted in the United States, the accompanying schedules of debt service coverage (as specified in the respective JEA Bond Resolutions) of the JEA Electric System, the JEA Bulk Power Supply System, the JEA St. Johns River Power Park System, the JEA Water and Sewer System and the JEA District Energy System for the years ended September 30, 2018 and 2017, based on the financial statements referred to in the Report on Financial Statements as of September 30, 2018 and 2017 paragraph below.

Management's Responsibility for the Schedules

Management is responsible for the preparation and fair presentation of the schedules of debt service coverage in conformity with the respective JEA Bond Resolutions. Management also is responsible for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the schedules of debt service coverage that are free of material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on the schedules of debt service coverage based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedules of debt service coverage are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the schedules of debt service coverage. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the schedules of debt service coverage, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the schedules of debt service coverage in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the schedules of debt service coverage.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the schedules referred to above present fairly, in all material respects, the debt service coverage of the JEA Electric System, the JEA Bulk Power Supply System, the JEA St. Johns River Power Park System, the JEA Water and Sewer System, and the JEA District Energy System for the years ended September 30, 2018 and 2017, in conformity with the basis specified in the respective JEA Bond Resolutions.

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Contractual Basis of Accounting

The method of calculating the schedules of debt service coverage is prescribed by the applicable JEA Bond Resolutions, which require the maintenance of certain minimum debt service coverage ratios. Our opinion is not modified with respect to this matter.

Report on Financial Statements as of September 30, 2018 and 2017

We have audited, in accordance with auditing standards generally accepted in the United States, the basic financial statements of JEA as of and for the years ended September 30, 2018 and 2017, and have issued our report, with an unmodified opinion thereon, dated December 3, 2018.

Restrictions on Use

This report is intended solely for the information and use of management and the board of directors of JEA, and the bond trustees and is not intended to be and should not be used by anyone other than these specified parties.

Ernst & Young LLP

December 3, 2018

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JEA Electric System

Schedule of Debt Service Coverage
(In Thousands)

	Year Ended September 30			
		2018		**2017**
Revenues				
Electric	**$**	**1,229,625**	$	1,206,919
Investment income (1)		**9,525**		5,939
Earnings from The Energy Authority		**4,074**		6,335
Other, net (2)		**22,216**		29,490
Plus: amounts paid from the rate stabilization fund into the revenue fund		**88,415**		79,216
Less: amounts paid from the revenue fund into the rate stabilization fund		**(64,901)**		(15,991)
Total revenues		**1,288,954**		1,311,908
Operating expenses (3)				
Fuel		**328,160**		253,204
Purchased power (4)		**244,478**		284,436
Other operations and maintenance		**204,982**		199,511
State utility taxes and franchise fees		**59,551**		57,951
Total operating expenses		**837,171**		795,102
Net revenues	**$**	**451,783**	$	516,806
Debt service	**$**	**71,890**	$	71,557
Less: investment income on sinking fund		**(1,436)**		(1,431)
Less: Build America Bonds subsidy		**(1,521)**		(1,516)
Debt service requirement	**$**	**68,933**	$	68,610
Senior debt service coverage (5), (min 1.20x)		**6.55 x**		7.53 x
Net revenues (from above)	**$**	**451,783**	$	516,806
Debt service requirement (from above)	**$**	**68,933**	$	68,610
Plus: aggregate subordinated debt service on outstanding subordinated bonds		**129,469**		137,892
Less: Build America Bonds subsidy		**(2,045)**		(2,070)
Total debt service requirement and aggregate subordinated debt service	**$**	**196,357**	$	204,432
Senior and subordinated debt service coverage (6), (min 1.15x)		**2.30 x**		2.53 x

(1) Excludes investment income on sinking funds.
(2) Excludes the Build America Bonds subsidy.
(3) Excludes depreciation and recognition of deferred costs and revenues, net.
(4) In accordance with the requirements of the Electric System Resolution, all the contract debt payments from the Electric System to the SJRPP and Bulk Power Supply System with respect to the use by the Electric System of the capacity and output of the SJRPP and Bulk Power Systems are reflected as a purchased power expense on these schedules. These schedules do not include revenues of the SJRPP and Bulk Power Supply System, except that the purchased power expense is net of interest income on funds maintained under the SJRPP and Bulk Power Supply System resolutions.
(5) Net revenues divided by debt service requirement. Minimum annual coverage is 1.20x.
(6) Net revenues divided by total debt service requirement and aggregate subordinated debt service. Minimum annual coverage is 1.15x

JEA Bulk Power Supply System

Schedule of Debt Service Coverage

(In Thousands)

	Year ended September 30 2018		Year ended September 30 2017	
Revenues				
Operating	**$**	**78,302**	$	66,818
Investment income		**162**		150
Total revenues		**78,464**		66,968
Operating expenses (1)				
Fuel		**28,717**		36,745
Other operations and maintenance		**17,545**		14,522
Total operating expenses		**46,262**		51,267
Net revenues	**$**	**32,202**	$	15,701
Aggregate debt service	**$**	**9,943**	$	9,679
Less: Build America Bonds subsidy		**(667)**		(699)
Aggregate debt service	**$**	**9,276**	$	8,980
Debt service coverage (2)		**3.47 x**		1.75 x

(1) Excludes depreciation and recognition of deferred costs and revenues, net.

(2) Net revenues divided by aggregate debt service. Minimum annual coverage is 1.15x.

JEA St. Johns River Power Park System, Second Resolution

Schedule of Debt Service Coverage

(In Thousands)

	Year Ended September 30 2018		Year Ended September 30 2017	
Revenues				
Operating	**$**	**34,196**	$	14,572
Investment income		**1,339**		250
Total revenues		**35,535**		14,822
Operating expenses (1)		**15,389**		–
Net revenues	**$**	**20,146**	$	14,822
Aggregate debt service	**$**	**12,925**	$	12,950
Less: Build America Bonds subsidy		**(367)**		(389)
Aggregate debt service	**$**	**12,558**	$	12,561
Debt service coverage (2)		**1.60 x**		1.18 x

(1) Excludes depreciation and recognition of deferred costs and revenues, net.

(2) Net revenues divided by aggregate debt service. Minimum annual coverage is 1.15x.

JEA Water and Sewer System

Schedule of Debt Service Coverage

(In Thousands)

	Year Ended September 30			
		2018		2017
Revenues				
Water	**$**	**171,216**	$	181,313
Water capacity fees		**9,730**		8,859
Sewer		**260,606**		264,469
Sewer capacity fees		**18,268**		15,916
Investment income		**7,097**		6,793
Other (1)		**11,831**		9,560
Plus: amounts paid from the rate stabilization fund into the revenue fund		**16,128**		26,842
Less: amounts paid from the revenue fund into the rate stabilization fund		**(23,829)**		(24,276)
Total revenues		**471,047**		489,476
Operating expenses				
Operations and maintenance (2)		**160,122**		152,007
Total operating expenses		**160,122**		152,007
Net revenues	**$**	**310,925**	$	337,469
Aggregate debt service	**$**	**95,818**	$	97,699
Less: Build America Bonds subsidy		**(2,495)**		(2,500)
Aggregate debt service	**$**	**93,323**	$	95,199
Senior debt service coverage (3), (min 1.25x)		**3.33 x**		3.54 x
Net revenues (from above)	**$**	**310,925**	$	337,469
Aggregate debt service (from above)	**$**	**93,323**	$	95,199
Plus: aggregate subordinated debt service on outstanding subordinated debt		**18,084**		17,592
Total aggregate debt service and aggregate subordinated debt service	**$**	**111,407**	$	112,791
Senior and subordinated debt service coverage excluding capacity fees (4)		**2.54 x**		2.77 x
Senior and subordinated debt service coverage including capacity fees (4)		**2.79 x**		2.99 x

(1) Excludes the Build America Bonds subsidy.
(2) Excludes depreciation and recognition of deferred costs and revenues, net.
(3) Net revenues divided by aggregate debt service. Minimum annual coverage is 1.25x.
(4) Net revenues divided by total aggregate debt service and aggregate subordinated debt service. Minimum annual coverage is either 1.00x aggregate debt service and aggregate subordinated debt service (excluding capacity charges) or the sum of 1.00x aggregate debt service and 1.20x aggregate subordinated debt service (including capacity charges).

JEA District Energy System

Schedule of Debt Service Coverage

(In Thousands)

	Year Ended September 30	
	2018	2017
Revenues		
Service revenues	**$ 8,756**	$ 8,692
Investment income	**103**	45
Total revenues	**8,859**	8,737
Operating expenses (1)		
Operations and maintenance	**4,603**	4,570
Total operating expenses	**4,603**	4,570
Net revenues	**$ 4,256**	$ 4,167
Aggregate debt service (2)	**$ 3,019**	$ 3,022
Debt service coverage (3), (min 1.15x)	**1.41 x**	1.38 x

(1) Excludes depreciation.

(2) On June 19, 2013, the closing date of the District Energy System Refunding Revenue Bonds, 2013 Series A, the JEA covenanted to deposit into the 2013 Series A Bonds Subaccount from Available Water and Sewer System Revenues an amount equal to the Aggregate DES Debt Service Deficiency that exists with respect to the 2013 Series A Bonds, in the event that the amount on deposit in the Debt Service Account in the Debt Service Fund in accordance with the District Energy System Resolution is less than Accrued Aggregate Debt Service as of the last business day of the then current month.

(3) Net revenues divided by aggregate debt service. Minimum annual coverage is 1.15x.

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