

# BOARD MEETING PACKAGE



## BOARD MEETING AGENDA ITEMS

For the JEA Board of Directors Meeting  
**Tuesday, August 21, 2018**  
**12:00 PM**  
**19<sup>th</sup> Floor, JEA Tower**

Melissa Charleroy  
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CEO & Board of Directors  
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# JEA BOARD MEETING AGENDA

August 21, 2018 • 12:00 p.m.

21 W. Church Street, 19<sup>th</sup> Floor



I. WELCOME	
A.	Call to Order
B.	Time of Reflection
C.	Pledge to Flag
D.	Adoption of the Agenda – Action
E.	Safety Briefing – Aaron Zahn, Interim Managing Director/CEO
F.	Sunshine Law/Public Records Statement – Jody Brooks, Vice President & Chief Legal Officer

II. PUBLIC HEARING		
Item(s)		Speaker/Title
A.	Call to Order and Comments from the Chair	Chair Howard
B.	Staff Presentation and Board Discussion	Ryan Wannemacher, Interim Chief Financial Officer
C.	Comments from the Public <i>Comments from the public at this time should only be related to the Public Hearing</i>	Public
D.	Adjourn Public Hearing	

III. ACTION ON PUBLIC HEARING		
Item(s)		Speaker/Title
A.	Public Hearing to Modify the Electric Tariff Documentation and Rate Document	Chair Howard

IV. COMMENTS / PRESENTATIONS		
Item(s)		Speaker/Title
A.	Comments from the Public	Public
B.	Council Liaison's Comments	Council Member Matt Schellenberg
C.	Office of the Mayor Liaison's Comments	Dr. Johnny Gaffney

V. OPERATIONS (DISCUSSION / ACTION)			
Definition: The "Operations" section of the Board Meeting is for business matters requiring Board discussion and action.			
Item(s)		Speaker/Title	Discussion Action/Information
A.	Consent Agenda – The Consent Agenda consists of agenda items that require Board approval but are routine in nature, or have been discussed in previous public meetings of the Board. The Consent Agenda items require no explanation, discussion or presentation, and are approved by one motion and vote.		
	Consent Agenda Reference Material (Provided in Appendices)		
	Appendix A: Board Meeting Minutes July 30, 2018		Action

	Appendix B:	Monthly Financial Statements		Information
	Appendix C:	Monthly FY18 Communications & Engagement Calendar and Plan Update		Information
	B.	2019 Proposed Board of Directors Meeting Schedule	Aaron Zahn, Interim MD/CEO	Action
	C.	Strategic Framework	Aaron Zahn, Interim MD/CEO	Action
	D.	Southside Capital Allocation	Aaron Zahn, Interim MD/CEO	Action
	E.	Monthly Financial and Operations Report	Melissa Dykes, President/COO & Ryan Wannemacher, Chief Financial Officer	Information

<b>VI.</b>	<b>STRATEGY (DISCUSSION ONLY)</b>			
	Definition: The “Strategy” section of the Board Meeting is <u>only</u> for discussion & feedback to management on strategic initiatives of and for JEA.			
	Item(s)		Speaker/Title	
	A.	Corporate Headquarters – Downtown Campus Update	Melissa Dykes, President/COO	
	B.	Transition Update	Aaron Zahn, Interim MD/CEO	

<b>VII.</b>	<b>SUBJECT MATTER EXPLORATION (OPPORTUNITIES &amp; RISKS – PRESENTATION)</b>			
	Definition: The “Subject Matter Exploration” section of the Board Meeting will be used to brief the Board Members on market, environment, business or other generally important matters. Staff and/or 3 <sup>rd</sup> party experts will provide presentations on a specific subject and the Board will be afforded an opportunity for Q&A at the end.			
	Item(s)		Speaker/Title	
	A.	Integrated Distributed Energy Resources (iDER)	Mike Brost, Vice President/General Manager, Electric Systems & Lucas McIntosh, Burns & McDonnell	

<b>VIII.</b>	<b>COMMITTEE REPORTS</b>			
	Item(s)		Speaker/Title	Discussion/Action/Information
	A.	Finance & Audit Committee	Kelly Flanagan, Committee Chair	
	1.	Approval of Minutes – May 7, 2018		Action
	2.	Approval of Annual Internal Audit Plan		Action
	3.	Annual Approval of Internal Audit Charter		Action
	4.	Quarterly Audit Services Update		Information
	5.	Ethics Officer Quarterly Report		Information
	6.	Ernst & Young FY2018 Annual Financial Audit Plan		Action
	7.	Electric System and Water and Sewer System Reserve Fund Quarterly Report		Information
	8.	JEA Investment Policy – Revision to Authorized Investments		Action
	9.	JEA Energy Market Risk Management Policy Report		Information

		10.	Next Meeting, December 3, 2018		Information
		11.	Committee Discussion Session <ul style="list-style-type: none"> <li>a. Ernst &amp; Young – John DiSanto</li> <li>b. Director, Audit Services – Steve Tuten</li> <li>c. Council Auditor’s Office – Jeff Rodda</li> </ul>		Information

IX. OTHER BUSINESS					
Item(s)			Speaker/Title		
A.	Old Business				
B.	Other New Business				
C.	Open Discussion				
D.	Interim Managing Director/CEO’s Report		Aaron Zahn, Interim Managing Director/CEO		
E.	Chair’s Report		Alan Howard, Board Chair		

X. CLOSING CONSIDERATIONS					
Item(s)					
A.	Announcements – Next Board Meeting September 18, 2018				
B.	Adjournment				

## Board Calendar

**Board Meetings:** 12:00 p.m. – Third Tuesday of Every Month (exception(s): November 27, 2018 and December 11, 2018)

**Committees:** Finance & Audit Committee: December 3, 2018

CEO Search Committee: TBD

Compensation Committee: TBD

Government, Legal and Real Estate Affairs Committee: TBD

A. If you have a disability that requires reasonable accommodations to participate in the above meeting, please call **665-7550** by **8:30 AM** the day before the meeting and we will provide reasonable assistance for you.

B. If a person decides to appeal any decision made by the JEA Board with respect to any matter considered at this meeting, that person will need a record of the proceedings, and, for such purpose, needs to ensure that verbatim record of the proceedings is made, which record includes the evidence and testimony upon which the appeal is to be based.



I. F.

## Sunshine Law/Public Records Statement

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Agenda](#)

I. F.  
08/21/2018

## Florida's Government in the Sunshine Law Office of General Counsel

This meeting is being held in compliance with Florida's Government in the Sunshine Law, §286.011, Florida Statutes, and shall be open to the public at all times. Official acts of the JEA Board may be conducted at this meeting that will be considered binding on the JEA. Reasonable notice has been provided and minutes of this meeting shall be taken and promptly recorded.

### III. A.

## Public Hearing to Modify the Electric Tariff Documentation and Rate Document

August 2, 2018

**SUBJECT:** PUBLIC HEARING TO MODIFY THE ELECTRIC TARIFF DOCUMENTATION

**Purpose:**

☐ Information Only

☒ Action Required

☐ Advice/Direction

**Issue:** 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. Currently, JEA's deadline to accept applications under the Economic Development Program (EDP) expires September 30, 2018. Staff proposes to extend the application period to September 30, 2019 in the Electric Tariff documentation.

**Significance:** High. JEA proposes to extend application for service of the EDP rider an additional year, until September 30, 2019.

**Effect:** The Board and public will be informed of the proposed modifications.

**Cost or Benefit:** Transparency of JEA's current and proposed rate options.

**Recommended Board action:** Pending the outcome of the public rate hearing, staff recommends that the Board adopt Resolution 2018-06 and Exhibits I and II prepared by staff and approved by the VP and Chief Legal Officer, to document the action taken.

**For additional information, contact:** Ryan Wannemacher

Submitted by: AFZ/ RFW/ JEC



**Commitments to Action**

- 1 Earn Customer Loyalty
- 2 Deliver Business Excellence
- 3 Develop an Unbeatable Team



**INTER-OFFICE MEMORANDUM**

August 2, 2018

**SUBJECT:** PUBLIC HEARING TO MODIFY THE ELECTRIC TARIFF  
DOCUMENTATION

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**FROM:** Aaron F. Zahn, Interim Managing Director/CEO

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**TO:** JEA Board of Directors

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**BACKGROUND:**

In 2013, JEA initially established an Economic Development Program (EDP) to drive retention, expansion and recruitment of business and commercial customers to portions of Northeast Florida. The economic development incentives are directed to electric services and offer discounts based on job creation thresholds and demand for new or expanded electric load. The program is offered to new or existing customers whose new demand or incremental demand is a minimum of 300kW at a single site and the customer employs an additional workforce of at least 15 full-time employees in the JEA service area. Customers receive a discount on energy, demand, and environmental charges in accordance with a six-year declining discount schedule, starting at 30%. The discounts do not result in an increase to any other JEA customer bills. EDP customers must sign a service agreement to participate in the program.

In 2015, JEA extended the date of applications considered under the EDP three years to September 30, 2018. Currently, there are five customers with thirteen service locations participating in the program.

**DISCUSSION:**

JEA is committed to further supporting high value utility services that boost the economic health of our region. JEA recognizes the value in offering competitive and innovative utility services for business growth within the community. The EDP program has been a successful incentive tool for the City of Jacksonville in attracting and expanding business to the area. Currently, there are up to seven businesses going through the program application process. JEA requests to extend the program application date by one year to September 30, 2019, which will allow for additional customers to grow and expand in Northeast Florida. The extension date will also give JEA time, during the next year, to consider improvements or enhancements to the program that align with the overall future strategic vision concurrently being developed.

Staff will submit all Electric Tariff Documentation changes to the Florida Public Service Commission.

**RECOMMENDATION:**

Pending the outcome of the public rate hearing, staff recommends that the Board adopt Resolution 2018-06 and Exhibits I and II prepared by staff and approved by the VP and Chief Legal Officer, to document the action taken.

AFZ/RFW/JEC

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Aaron F. Zahn, Interim Managing Director/CEO

## **RESOLUTION 2018-06**

**A RESOLUTION REGARDING RATE SCHEDULE CHANGES AND ADDITIONS TO THE EXISTING ELECTRIC TARIFF DOCUMENTATION AND WATER AND SEWER RATE DOCUMENT; CONDUCTING A PUBLIC HEARING AND FINDING THE MODIFICATIONS OF THE TARIFF DOCUMENTATION AND RATE DOCUMENT TO BE REASONABLE; IMPOSING THESE MODIFICATIONS FOLLOWING THE PUBLIC HEARING; PROVIDING FOR THE IMPLEMENTATION OF THESE MODIFICATIONS, AND PROVIDING FOR AN EFFECTIVE DATE.**

**WHEREAS**, JEA, pursuant to duly published notice, a copy of which is attached hereto as **Exhibit I**, held a public hearing to consider changes to the existing Electric Tariff Documentation to extend the availability of Economic Development Rider by one year; and

**WHEREAS**, at that public hearing JEA presented statements and documentation which demonstrated the requested modifications of the existing Electric Tariff Documentation; and

**WHEREAS**, rate matters addressed at the public hearing were: administrative change to the availability of Economic Development Rider; and

**WHEREAS**, any public testimony which was presented at the Public Hearing was considered; and

**WHEREAS**, JEA has heard all presentations, reviewed all documentation and is fully advised of the premises; now therefore:

### **BE IT RESOLVED by JEA:**

1. Modifications to the JEA Electric Tariff Documentation extending the availability of the Economic Development Rider, copies of which are attached hereto as **Exhibit II**, and incorporated

herein by reference, are hereby found to be reasonable, and accordingly are adopted effective September 1, 2018.

2. Staff is authorized to take any necessary administrative actions to implement the approved JEA Electric Tariff Documentation modifications.

3. This Resolution shall be effective immediately upon passage by the Board.

Dated this 21<sup>st</sup> day of August, 2018.

**JEA**

By: \_\_\_\_\_  
Alan Howard, Chair

Form Approved:

By:   
Jody Brooks, JEA Chief Legal Officer

## Notice of Public Hearing



JEA continues to review, update, and where possible, expand its rate options to provide customers more choices for their utility services. The following actions, if passed, will result in bill decreases to eligible customers to bring rates more in line with best practices.

JEA will conduct a public hearing at 12 p.m., or as soon thereafter as the matter may be heard, on Tuesday, August 21, 2018 at the JEA Tower, 21 West Church St., Jacksonville, Florida 32202, to consider the following:

- A. Modification of the Electric Rate Documentation extending the availability of the Economic Development Rider.

The public is invited to be present and heard. If any person with a disability requires reasonable accommodations to participate in the above hearing, please call (904) 665-7550 no later than three (3) days before the meeting.

If a person decides to appeal any decisions made by JEA with respect to any matter considered at the proceedings, for the purpose of such appeal, that person will need a record of the proceedings and for such purpose, that person may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

Alan Howard  
Chair

Form Approved:

A handwritten signature in blue ink, reading "Jody Brooks", is written over a horizontal line.

Jody Brooks, Chief Legal Officer

**EXHIBIT I**



JEA

Canceling ~~Eighteenth~~ Revised Sheet No. 17.0  
~~Seventeenth~~ Revised Sheet No. 17.0

Deleted: Seventeenth

Deleted: Sixteenth

RIDER EDP  
ECONOMIC DEVELOPMENT PROGRAM RIDER

(Experimental)

Available

To new and existing customers receiving service in all territory served by JEA. Application for service under this Rider will not be accepted after September 30, 2019.

Deleted: 8

Applicable

To new or existing Customers who have executed an Economic Development Program Electric Service Agreement with JEA on or after October 1, 2013 and whose new or modified account qualifies for electric service under Rate Schedule GSD, GSDT, GSLD, GSLDT, or GSLDHLF. New or incremental existing metered demand under this rider must be a minimum of 300 kW at a single site of delivery and the Customer must employ an additional work force of at least 15 full-time employees in JEA's service territory. This rider applies to new or incremental metered demand and additional employees on or after October 1, 2013. JEA reserves the right to accept or not accept any application for the Economic Development Program Rider.

Character of Service

JEA's standard voltage levels.

Rate Per Month

Customers executing an Economic Development Program Electric Service Agreement on or after October 1, 2013 shall receive a discount for new or incremental metered demand based on the percentages listed below. The discounts below will be applied to the electric charges including demand, energy, and environmental charges. The adjustment will not apply to other charges, including basic monthly charges, fuel charge, excess KVAR charge, penalties, service charges, Gross Receipts Tax or other applicable taxes including franchise fees. For existing Customers, the adjustment will only be applied to the charges above the base metered demand and energy as defined in "Definition of Baseline."

Year	Discount	Discount in Load Density Improvement Areas
Year 1*	30%	35%
Year 2	25%	30%
Year 3	20%	25%
Year 4	15%	20%
Year 5	10%	15%
Year 6	5%	10%
Year 7	0%	0%

\*Year 1 can be extended as outlined in General Provisions (g) below

(Continued to Sheet No. 17.1)

RYAN WANNEMACHER, DIRECTOR  
FINANCIAL PLANNING, BUDGETS, AND RATES

Effective September 1, 2018

Deleted: October 1, 2015

EXHIBIT II



# **PUBLIC HEARING TO MODIFY ELECTRIC TARIFF**

**JEA Board of Directors Meeting**

**August 21, 2018**



*In 2013, JEA initially established an Economic Development Program (EDP) to drive **retention**, **expansion** and **recruitment** of business and commercial customers to portions of Northeast Florida.*

*In 2015, JEA extended the date of applications considered under the EDP three years to September 30, 2018.*

AUGUST 2018



**PUBLIC  
RATE HEARING**

# ECONOMIC DEVELOPMENT PROGRAM

- The economic development incentives are directed to electric services and offer discounts based on job creation thresholds and demand for new or expanded electric load.
- The program is offered to new or existing customers whose new demand or incremental demand is a minimum of 300kW at a single site and the customer employs an additional work force of at least 15 full-time employees in the JEA service area.
- Customers receive a discount on energy, demand, and environmental charges in accordance with a six-year declining discount schedule, starting at 30%, or 35% for those located in load density improvement areas.
- The discounts do not affect any other JEA customer bills.



JEA is committed to further supporting high value utility services that boost the economic health of our region. JEA recognizes the value in offering competitive and innovative utility services for business growth within the community.

AUGUST 2018



**PUBLIC  
RATE HEARING**

## CURRENT STATUS

The EDP program has been a successful incentive tool for the City of Jacksonville and JAXUSA Partnership in attracting and expanding business to the area. Currently, there are up to seven businesses going through the program application process.

## REQUEST

JEA requests to extend the program application date by one year – to September 30, 2019, which will allow for additional customers to grow and expand in Northeast Florida.

There are five customers with thirteen service locations participating in the program



An additional seven customers will be taking advantage of the program once they are fully up and running

Over **\$350,000** in customer bill savings with the majority coming within last 18 months

Nearly **\$1 billion** planned capital investment

Over **7,000** jobs added to Jacksonville with a wage impact close to **\$300 million** per year

AUGUST 2018



**PUBLIC  
RATE HEARING**

# RECOMMENDATION

Staff recommends, pending the outcome of the public rate hearing, that the Board adopt the attached Resolution 2018-06 and its attachments (Exhibits I and II) prepared by staff and approved by the Chief Legal Officer, to document the action taken.

AUGUST 2018



**PUBLIC  
RATE HEARING**

All changes proposed to be effective September 1st 2018

V. B.

Proposed Board of Directors Meeting  
Schedule



## 2019 Proposed JEA Board Meeting Schedule

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### *Plan A – First Tuesday of Each Month*

January 8 (2 <sup>nd</sup> Tuesday of the month due to New Years Day)	July 2
February 5	August 6
March 5	September 3
April 2	October 1
May 7	November 5
June 4	December 3

*\*All Board Meetings are scheduled the 1<sup>st</sup> Tuesday of the month, with the exception of January, which will be held on the 2<sup>nd</sup> Tuesday of the month.*

### *Plan B – Fourth Tuesday of Each Month*

January 22	July 23
February 26	August 27
March 26	September 24
April 23	October 22
May 28	November 19 (3 <sup>rd</sup> Tuesday of the month due to Thanksgiving)
June 25	December 17 (3 <sup>rd</sup> Tuesday of the month due to Christmas)

*\*All Board Meetings are scheduled the 4<sup>th</sup> Tuesday of the month, with the exception of November and December, which will be held on the 3<sup>rd</sup> Tuesday of the month.*



## 2019 JEA Board Committee Meeting Schedule

### **Finance & Audit Committee – Plan A**

*\*Based on Board Meeting Scheduled the first week of the month*

February 25

July 29

April 29

December 3 (Day of Board Meeting due to Thanksgiving)

### **Finance & Audit Committee – Related to Plan B**

*\*Based on Board Meeting Scheduled the fourth week of the month*

March 18

August 19

May 20

December 9

### **CEO Search Committee**

Schedule as necessary

### **Compensation Committee**

Schedule as necessary

### **Government, Legal and Real Estate Affairs Committee**

Schedule as necessary

### **Nominating Committee**

March – Date TBD

*From the JEA By-Laws “Elections of Officers shall be conducted at the first regular meeting in March which may be preceded by a meeting of the nominating committee composed of the JEA Board acting as a whole or such other membership as the Chair may designate.”*

V. C.

## Strategic Framework

August 14, 2018

**SUBJECT:** STRATEGIC FRAMEWORK

**Purpose:** ☒ Information Only ☐ Action Required ☐ Advice/Direction

**Issue:** On April 17, 2018, the Board and Interim CEO contemplated a transition period and plan for JEA and its management ("Transition"). The Transition period contemplated by the Board included a process and mechanism for ensuring alignment of JEA with the City Council and Mayor's Office relative to financial, operational, and community expectations of JEA.

**Significance:** Alignment of Board, management, City Council, and Mayor is critically important to JEA's success. The City being a "Shareholder" and the City Council / Mayor being "Shareholder Trustees" is still a relatively new concept. Furthermore, ensuring alignment of Shareholder Trustees with JEA's strategic plan implemented by its Board and management team is a new concept. A full appreciation for alignment is a prerequisite for optimum corporate and operational structuring. Creating an optimum alignment among the stakeholders can dramatically improve organizational success. Failure to create alignment often leads directly to failure to execute financial, operational, and community improvement strategies.

**Effect:** A consensus by the Board around a letter from the Board of Directors to the City, inclusive of a Framework for upcoming JEA's Strategic Planning process will provide JEA with a simple measuring stick upon which to develop, implement, and execute a corporate strategic plan.

**Cost or Benefit:** Long term planning and value creation for JEA.

**Recommended Board action:** This agenda item was discussed at the May, June and July Board Meetings. Staff requests resolution of final approval of the Strategic Framework and authorization of JEA staff to coordinate follow-up meetings with City Council and Mayor to maintain alignment.

**For additional information, contact:** Aaron Zahn – 904-665-4396

Submitted by: AFZ



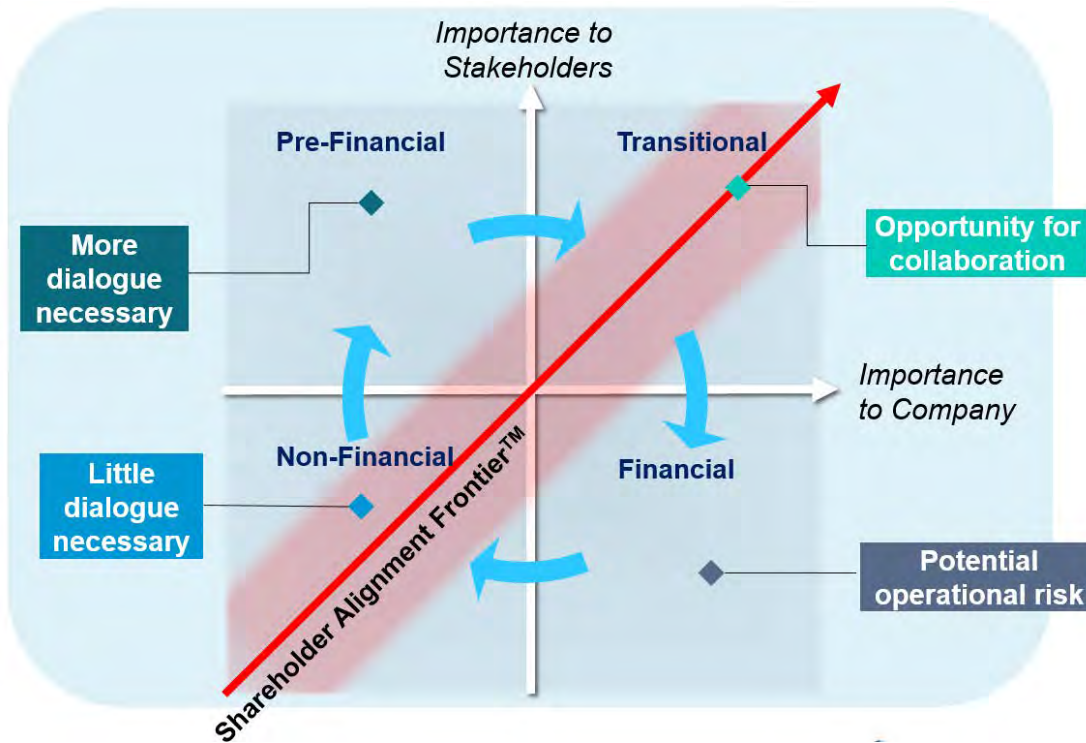
#### Commitments to Action

- 1 Earn Customer Loyalty
- 2 Deliver Business Excellence
- 3 Develop an Unbeatable Team

# Strategic Framework Timeline



# Objectives by October 2018



**Create Critical Alignment**

## 1 Stakeholders (Customers, Employees Unions & Community)

- 1) Feedback & Ideas
- 2) Aligned with “2019 Year of Innovation” and asking “What if...”

## 2 Shareholders (Mayor & City Council)

- 1) Feedback & Ideas
- 2) Documented Expectations (e.g. “Strategic Framework”)

## 3 Board & Leadership

- 1) Feedback & Ideas
- 2) Prepared to lead and execute on “2019 Year of Innovation”
- 3) Begin 2028 Strategic Plan

August 14, 2018

Mayor Lenny Curry  
117 W Duval St.  
Jacksonville, FL 32202

Jacksonville City Council  
117 W Duval St  
Jacksonville, FL 32202

Re: The Future of JEA and a Framework for a Strategic Plan

Dear Mayor and City Council:

The extensive dialogue that has taken place concerning the future of JEA has brought increased awareness of JEA's value and its role in our community. The Special Committee on the Future of JEA concluded that JEA is one of Jacksonville's most important assets. We agree. The Special Committee also noted that JEA is facing challenges in a rapidly changing utility market. These changes, and the pace at which they are occurring, require JEA to be swift and agile in its approach to technological and utility market advancements. Embracing the changes in our markets will ultimately enable JEA to best serve our customers and the community.

JEA recognizes the unique and longstanding partnerships JEA has with the City of Jacksonville and community organizations. We understand the importance of JEA's status as a trusted partner of core essential services to our customers and region. We believe JEA should be a steward of the local environment and an engine of economic development in Northeast Florida.

Mindful of these facts, the Board of Directors is working with JEA's management and employees to develop an updated strategic plan to meet the needs of our customers and the community. We will base JEA's strategical plan on the following high level objectives and metrics:

**The Goal & Objective ("Strategic Goal"):** Maximize the value of JEA both now and in the future.

**The Measures of JEA's Goal ("Corporate Measures"):** Our strategy will be guided by and evaluated against four basic Corporate Measures of JEA's value:

- 1) Value to our customer;
- 2) Financial value;
- 3) Community impact value;
- 4) Environmental value.

These Corporate Measures will be used in evaluating the plan's potential effectiveness and JEA's future execution of the plan. Within each of the areas of Corporate Measure we believe JEA

can define quantitative metrics that can be used to create internal and external alignment while being transparent about JEA's performance. We believe that all strategic decisions and initiatives of JEA should be evaluated relative to these Corporate Measures of value.

The Board of Directors of JEA has discussed, deliberated and reached consensus on the attached Framework for the Strategic Plan. We look forward to developing JEA's strategic plan in partnership with the City and entire community.

Thank you for the time committed by the Special Committee on the Future of JEA related to studying JEA. We will consider the analysis, feedback and conclusions from the Special Committee's report in formulating the updated strategic plan of JEA. We appreciate the encouragement from the Administration and City Council to think outside the box on how to grow and remain relevant in our markets. In the event our new strategic plan requires changes to JEA's Charter, we look forward to discussing those changes in a collaborative spirit so that JEA may increase in value both now and in the future.

Sincerely,

G. Alan Howard, Chairman

Cc:

Board of Directors of JEA

Aaron F. Zahn – Interim Managing Director and CEO

## **Exhibit A**

### **History and Background**

JEA is currently the eighth largest municipal electric utility and one of the top 20 largest water and wastewater utilities in the United States. JEA serves more than 465,000 electric customers, 348,000 water customers and 271,000 sewer customers. JEA, in accordance with Article 21 of the Ordinance Code of Jacksonville, was created by the Florida Legislature to serve the citizens of Jacksonville and its surrounding communities by acquiring, owning, constructing, operating, financing and otherwise having plenary authority utilities systems with respect to electric, water, sewer, natural gas and other utility systems.

Today, JEA makes an annual contribution to the City of Jacksonville in the amount of ~\$116 million dollars (the “Contribution”). Furthermore the Jacksonville City Council has declared as City policy that the “services provided by the Consolidated Government should be delivered in the most expeditious and efficient manner possible with delivery of said services being continually evaluated so that inefficiency is eliminated and quality of services improved.” Consistent with this mandate, JEA seeks to produce “best in class” services to its customers.

As part of an in-depth discussion, from November 2017 to May 2018, around the: 1) value of JEA; 2) the role of JEA in community; and 3) the future of JEA, it has become evident the future success of JEA is dependent on the alignment of JEA’s Board of Directors with the City of Jacksonville’s City Council and Mayor. JEA is an independent authority with an independent Board of Directors and a professional management team tasked with the fiduciary responsibility of managing JEA. However, equally critical due to the construct of Article 21, the City Council of Jacksonville acts as both a fiduciary trustee for the City of Jacksonville related to JEA (“Shareholder Trustee”) and as a policy making body and advocate for the citizens of Jacksonville (“Customer Advocate”).

### **10-Year Strategic Plan**

The JEA Board of Directors (“Board”) believes JEA would benefit from a 10-year strategic plan that identifies the resources and initiatives needed to effectively anticipate and respond to the rapid changes in competition, technology and the utility industry. The Board will, in collaboration JEA’s management, update the JEA’s strategic plan as a whole and for each of its service divisions as outlined in the Charter (“Strategic Plan”). The Board expects our Strategic Plan to be complete by no later than September 30, 2019. The 2018/2019 fiscal year will be a “Year of Innovation” for JEA and we are excited to be a thought leader in the City and our industry.



## **Strategic Plan Framework**

**Strategic Goal:** Maximize the value of JEA both now and in the future.

### **Corporate Measures of the Strategic Goal:**

- 1) Value to our customer;
- 2) Financial value;
- 3) Community impact value; and
- 4) Environmental value.

The Board of JEA, recognizes the importance of the financial and operational success of JEA to its customers and our community. In order to provide an example of the types of financial and operational metrics we are providing the below list. The final list, to be developed during the strategic planning process, may include but not be limited to:

- 1) Value to our customer
  - a) provide JEA customers with safe and reliable electric, water and wastewater services at a rate structure equal to or less than industry average
  - b) maintain customer service standards and experience within the top quartile of the industry
  - c) expand our trusted partner relationship with our customers
- 2) Financial value
  - a) maintain financial performance metrics necessary to preserve Aa3 / AA- ratings, or similar comparable risk measures as adopted and deemed appropriate by JEA from time to time
  - b) preserve the level of financial Contribution of JEA to the City
  - c) establish growth initiatives to drive values and efficiencies with respect to electric, water, sewer, natural gas and other utility services, systems and/or products
- 3) Community impact value
  - a) establish and maintain open and transparent communication with employee, customer and all our stakeholders
  - b) continue investment and leadership of economic development within Jacksonville
  - c) continue and drive employment within the region
  - d) foster an environment of engaged employees that treat JEA as owners
- 4) Environmental Value
  - a) maintain compliance with all regulations and meet or exceed industry standards that impact the environment
  - b) establish and lead a sustainability program for the benefit of the region
  - c) set an example of environmental stewardship

## **Strategic Plan Considerations**

The Board recognizes the unique and longstanding partnerships JEA has with the City of Jacksonville and the entire community of Northeast Florida. JEA plays a significant role as an environmental steward, thought leader and as a trusted partner. JEA's Strategic Plan will first and foremost consider the Strategic Plan Framework outlined above. However, as a leader in the community we will also give significant consideration in our Strategic Plan to important initiatives and requests made by the City Council, Administration and our community. Below is a list of major considerations the Board understands to be priorities for the City of Jacksonville where JEA may serve as a thought leader, partner or solution provider.

**Electric Services Considerations:** JEA's Strategic Plan will consider and seek to propose solutions for the City to address:

- 1) expansion of electric services within the current JEA service territory;
- 2) overhead to underground conversion / migration;
- 3) value-add electric services behind the meter to enhance customer experience;
- 4) renewable energy initiatives;
- 5) economic development support within the JEA service territory;
- 6) reduction in carbon emissions from electric generation; and
- 7) small and emerging business opportunities.

**Water and Wastewater Services:** JEA's Strategic Plan will consider and seek to propose solutions for the City to address:

- 1) expansion of water and wastewater services (inclusive of septic tank phase out) within the current JEA service territory;
- 2) environmental stewardship and improvement of water quality within JEA service territory;
- 3) value-add water and wastewater services behind the meter to enhance customer experience;
- 4) sustainable and efficient management of water supply within JEA service territory;
- 5) economic development support within the JEA service territory; and
- 6) small and emerging business opportunities.

**Other Services:** JEA's Strategic Plan will consider and try to propose solutions for the City to address:

- 1) services, partnerships and support of Smart City and sustainability enhancements with the City of Jacksonville;
- 2) services, partnerships and support for economic development with the City of Jacksonville;
- 3) services and/or partnerships that enhance the environment of the City of Jacksonville;
- 4) coordinate and maintain partnership with the City of Jacksonville around emergency response and storm preparedness programs;
- 5) education and university partnerships; and
- 6) volunteerism.

V. D.

Southside Capital Allocation

August 21, 2018

**SUBJECT: SOUTHSIDE CAPITAL ALLOCATION**

**Purpose:** ☐ Information Only ☒ Action Required ☒ Advice/Direction

**Issue:** On June 12, 2018, the Board received a letter from the Interim Managing Director/CEO “Re: How JEA may utilize Southside Generating Station (SGS) resources to drive water and wastewater innovation.” The letter outlined an idea for consideration and discussion by the Board of Directors. The topic was discussed at the July 30, 2018 Board meeting.

**Significance:** To ensure management is aligned with the Board of Directors relative to corporate resource utilization. Follow up questions were asked during the July 30 Board meeting about other possible uses of proceeds, the current City contribution agreement, parameters around providing funds to the City, the timing of a proposed study and the septic tank phase out (STPO) program.

**Effect:** See attached for an analysis of using the SGS proceeds for contribution to the City and the questions asked in July.

**Cost or Benefit:** The proposed use of proceeds will benefit the City in two ways: 1) a possible new approach to solving a long-standing City problem around water and wastewater for underserved citizens of the City of Jacksonville; and, 2) demonstrate JEA’s new Bold leadership approach that tries to find solutions for complex public problems. See attached analysis for cost analysis and additional information. This action could provide benefits to the City and JEA for STPO and more stability around the contribution agreement.

**Recommended Board action:** Board approve draft resolution provided herein.

**For additional information, contact:** Aaron Zahn – 904-665-4396

Submitted by: AFZ



#### Commitments to Action

- 1 Earn Customer Loyalty
- 2 Deliver Business Excellence
- 3 Develop an Unbeatable Team

**Memo:** Proposal for Water and Wastewater Innovation  
Follow up from June 12, 2018 letter to Board of Directors, June Board Meeting, and July Board Meeting discussion

**Date:** August 21, 2018

---

## Background

JEA decommissioned its former Southside Generating Station (SGS) site in 2000. JEA closed on the property on July 12, 2018 with net proceeds of \$18.54 M.

## Recommendation

Approve resolution providing staff the ability to finalize a new “Interagency Agreement” with the City of Jacksonville around a \$15 million contribution from JEA (see attached proposed resolution) and negotiate an extension of JEA’s existing contribution agreement.

## Financial Analysis

### Financial Accounting Considerations

The sales transaction will have specific financial reporting implications depending on JEA’s basis of accounting.

Budget Basis: Since the SGS land sale is an Electric System balance sheet transaction, it will not have any budget implications and therefore the \$18.5 million will not be added to the budget as revenue.

GAAP Accounting: In general, the sale of SGS land will be recognized as an \$18.5 million increase to Cash, \$16.8 million decrease to Capital Assets and \$1.7 million Gain from Sale to the Electric System. The gain on sale of assets will be recorded below the line in non-operating revenue and expenses, specifically to the line item, “other non-operating income, net”.

Debt Service Coverage: The sales of SGS land will not affect the Electric System revenues for coverage. Since the gain on the sale of assets is non-operating, that amount will not affect revenues for coverage either.

Treasury Flow of Funds: The sale proceeds of \$18.5 million will be received and deposited into the Electric System R&R fund.



There will be additional accounting impacts for the contribution which will be dependent on the source of the contribution.

### **Water and Sewer System Contribution Source**

Budget Basis: The \$15 million proceeds given to City of Jacksonville will be expensed to the line item "Interlocal Agreement" not City Contribution to segregate these transfers to the City and the \$3.5 million proceeds towards the studies of advancements in water and wastewater technologies will be expensed to Environmental Rate Stabilization line. Also, Budget's Operating Capital Outlay will be reduced by the Interlocal Agreement transfer of \$15 million in the year it's expensed.

GAAP Accounting: The \$15 million contribution will be recognized as City Contribution on the Water and Sewer System income statement.

Debt Service Coverage: The \$15 million paid to the City will reduce fixed charge coverage from approximately 2.41x to approximately 2.28x for FY19.

### **Electric System Contribution Source**

Budget Basis: The \$15 million proceeds given to City of Jacksonville will be expensed to the line item "Interagency Agreement" not City Contribution to segregate these transfers to the City. Also, Budget's Operating Capital Outlay will be reduced by the Interagency Agreement transfer of \$15 million in the year it's expensed.

GAAP Accounting: The \$15 million contribution will be recognized as City Contribution on the Electric System income statement.

Debt Service Coverage: The \$15 million paid to the City will reduce fixed charge coverage from approximately 1.66x to approximately 1.60x for FY19.

### **Analysis of Credit Agency Impact**

The financial analysis also includes a credit component. JEA's contribution agreement with the City is an important element of our overall credit analysis by the credit rating agencies. Greater stability around the contribution is a credit positive; conversely, uncertainty around the overall level of contribution and future contribution requirements is a credit negative. Although the one-time contribution is an increase in current year contribution to the City, from a credit perspective the extension of the contribution agreement will be a significant credit positive for JEA.

## Follow up questions

1. How using funds for septic tank phase out (STPO) fits into existing contribution agreement (Cumber)
  - An Interagency Agreement dated March 22, 2016 governs a one-time payment of \$15 M by JEA to the City. The City designated the one-time funding to the current STPO program and committed to a match via the Interagency Agreement.
  - Based on the JEA Charter monies provided to the City are for use at the City's discretion and cannot be designated for specific purposes by JEA.
  - JEA cannot provide free service and must charge similar rates and fees by customer class based on its bond covenants.
  - In order to expand STPO, a similar interagency agreement to the March 22, 2016 agreement is necessary and it is recommended that the City appropriate the capital for STPO and/or Neighbor-to-Neighbor programs. This interagency agreement can be used to negotiate an extension to JEA's existing contribution agreement.
2. List of projects/items that we considered to use proceeds on (Cumber)
  - Early debt retirement
  - Capital improvement program (CIP)
3. Timing on the study that we want to commission from the proceeds (Cumber)
  - The study would begin upon approval of a portion of the proceeds being provided to the City (scoping to start by August 30, 2018).
  - The study is expected to take approximately one year and will require consulting services to identify and assess various methods and technologies.
  - A formal RFP/ITN process is envisioned for any requisite consulting services.
  - The goal of further study is to decrease capital and life cycle costs of STPO with new technological and/or commercial approaches.
4. Details on conversion rate/cost
  - For the current septic tank phase out program, planning level cost estimates for septic tank phase out range from \$23,000 to \$36,000 per unit, inclusive of all costs including engineering, sewer mains, pump stations, private side connection to existing primary structure, future connection points for vacant properties, and septic tank abandonment. The range of costs are influenced by density, number of pump stations needed, etc.
  - Based on preliminary engineering cost estimates during early design for the first neighborhood, unit costs may trend toward the upper limits of the planning level cost estimates due to current material and labor costs and construction trends.



- The current program will also provide central water service where lacking and is estimated at \$8,000 per unit including connection costs. The first three neighborhoods that have been approved for the program by the City represent the gamut of situations from full central water available, partial central water and no central water currently.

### Status of Current Septic Tank Phase Out Program

Three neighborhoods were approved by the City Council in 2016, with a total parcel count just over 1600.

#### Biltmore C

- 358 lots
- Reached necessary 70% in July 2017
- Property owner agreements now at 78% (as of July 2018)
- Includes water and sewer
- Project is in design (30% submittal completed and reviewed)
- Survey in rights-of-way substantially complete
- Surveying of lots for connection points 80% complete
- Estimated advertisement for construction bids in March 2019

#### Beverly Hills

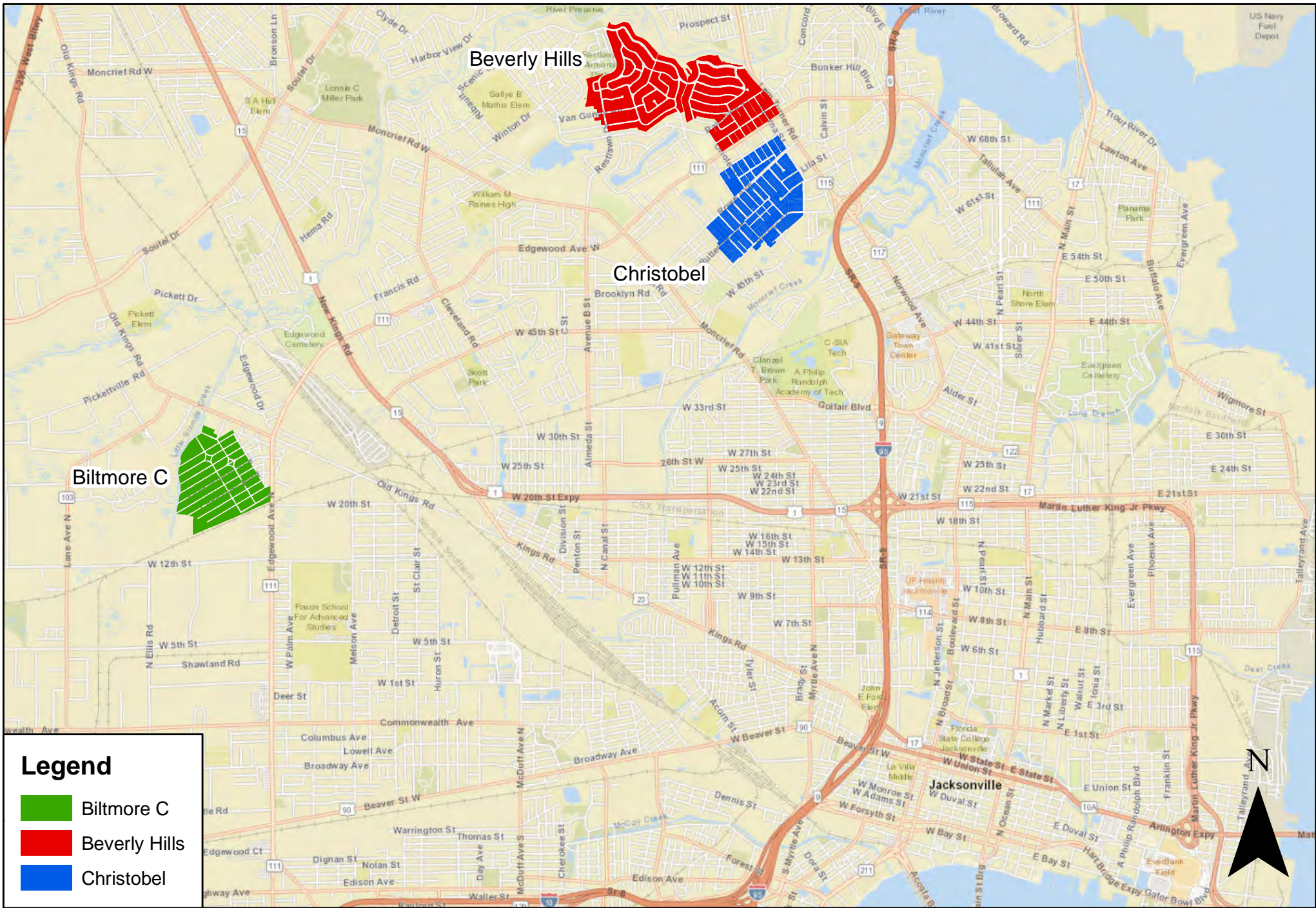
- 749 lots
- Reached necessary 70% in May 2018
- Property owner agreements now at 76% (as of July 2018)
- Includes sewer only (central water existing)
- Design and construction in two phases
- Phase I design RFPs recently scored and ranked, currently in negotiation, award will follow
- Phase II design RFPs being scored now

#### Christobel

- Approximately 509 lots
- Outreach not yet started
- Will include sewer and partial water (central water existing for majority of area)

A map of the current neighborhoods is attached on the following page.





# Septic Tank Phase Out Program-Current Projects



JEA RESOLUTION NO. 2018-\_\_\_\_

A RESOLUTION OF JEA AUTHORIZING MANAGEMENT TO PREPARE AN INTERAGENCY AGREEMENT BETWEEN JEA AND THE CITY OF JACKSONVILLE (“CITY”) FOR A ONE TIME CONTRIBUTION OF \$15,000,000 OF THE PROCEEDS FROM THE DECOMMISSIONED SOUTHSIDE GENERATING STATION REAL ESTATE TRANSACTION FROM JEA TO THE CITY; NEGOTIATE CONTRIBUTION AGREEMENT EXTENSION; PROVIDING AN EFFECTIVE DATE.

**WHEREAS**, the City and JEA maintain a unique relationship and as consideration for the unique relationship and in recognition of the shared attributes in connection with the utility systems, JEA pays to the City in accordance with the assessment calculations contained within Section 21.07 of Article 21 an annual contribution; and

**WHEREAS**, in addition to the required annual contribution, JEA and the City work cooperatively with one another to provide efficient utility services to the community; and

**WHEREAS**, the City and JEA have been working cooperatively on a septic tank phase out program as provided for in the Interagency Agreement by and Between the City of Jacksonville and JEA dated March 22, 2016 and by Ordinance Code Chapter 751; and

**WHEREAS**, JEA desires to utilize \$15,000,000 of the sales proceeds from the decommissioned Southside Generating Station real estate transaction as a one-time, additional contribution to the City with the intent that this contribution will be used for water and sewer infrastructure expansion; and

**WHEREAS**, JEA desires to negotiate an extension to the existing contribution agreement to provide greater stability for the City and JEA and maintain credit positives; now therefore:

BE IT RESOLVED BY JEA:

**Section 1. Interagency Agreement.** The Managing Director, or his designee, is hereby authorized to prepare for the Board's future consideration an interagency agreement and such documents as may be required for the dedication to the City a one-time, additional contribution in the amount of \$15,000,000 with the intent of the contribution being used for water and sewer infrastructure expansion or JEA's Neighbor to Neighbor Program.

**Section 2. Contribution Agreement.** The Managing Director, or his designee, is hereby authorized to negotiate an extension of JEA's existing annual contribution agreement with the City subject to review and approval by the JEA Board of Directors.

**Section 3. Effective Date.** This Resolution shall become effective upon approval of the JEA Board of Directors and execution by the Chair.

**JE A**

By: \_\_\_\_\_  
G. Alan Howard, Its Chair

Form Approved:

\_\_\_\_\_  
Jody Brooks, Chief Legal Officer



June 12, 2018

Board of Directors of JEA  
21 W Church St  
Jacksonville, FL 32202



Re: How JEA may utilize Southside Generating Station resources to drive water and wastewater innovation

Dear Members of JEA's Board of Directors:

As you know, JEA is currently under contract with Elements, LLC ("Elements") to purchase a portion of the former Southside Generating Station property with a contractual closing date by July 16, 2018. Per the terms of the agreement, JEA will receive ~\$18.6 million in proceeds from the transaction. On June 12, 2018, Elements finalized the legislative process with the Jacksonville City Council to approve a development agreement in support of the proposed project. Closing of the transaction would represent another step in a multi-year effort by JEA to support economic and downtown development. Furthermore, it demonstrates JEA's ability to be forward thinking about partnerships that benefit the City, JEA's financial position and our customers.

Development of this site will be a benefit to the community. However, I believe this transaction presents another opportunity to help move Jacksonville forward.

For many years, our community has discussed the lack of water and wastewater infrastructure in existing neighborhoods. This subject has been studied and partially addressed over a number of years through traditional means and methods and with a seemingly insurmountable expense (>\$2.5 billion). Joint COJ/JEA septic tank phase out programs have successfully completed many projects as a positive step forward in addressing this issue. In spite of the joint efforts, a comprehensive and affordable plan remains elusive.

In the past months, we have spoken about JEA's new BOLD vision. On June 8, we initiated our "Management Listening Tour" as part of a stepwise approach to a JEA of the Future: 1) listen, 2) innovate, 3) grow, and 4) excel. This 12-to-18 month process is part of a comprehensive look at JEA's entire business. On the matter of underserved water and sewer, we have listen to the basic needs of our community for long enough. Therefore, I propose it is time that JEA now innovate. New innovative technologies and methods may allow solutions that differ from JEA's traditional centralized services model with a potentially lower financial impact (<\$2.5 billion) while also being environmentally responsible. The ultimate solution will continue to require a joint commitment by the City, JEA and the entire community. However, this proposed step is JEA's opportunity to provide thought leadership to advance toward higher common ground and help the City in identifying solutions.



I recommend JEA reserve a portion of the proceeds from the Elements transaction to engage the best and brightest engineering and commercial minds to study the issue and propose previously unconsidered solutions. Additionally, I recommend JEA consider offering the balance of the proceeds (~\$15-16 million) to the City as a one-time contribution to support important community goals like septic tank phase out.

I believe this proposal is illustrative of the type of leadership and innovation JEA needs to undertake as we seek to move JEA toward the concept of being a “utility of the future.” I hope you will agree and look forward to discussing this opportunity with the Board of Directors at the June 19, 2018 Board Meeting.

AARON F. ZAHN



By:

Title: Interim Managing Director & CEO

Cc:

Mayor of Jacksonville  
City Council of Jacksonville

V. E.

## Monthly Financial and Operation Report

[Return to  
Agenda](#)

V. E.  
08/21/2018

# Operations Update

as of July 31, 2018

## Board of Directors

August 21, 2018













# Electric System Update





# Electric Monthly Operations Scorecard

Electric System	FY2017	FY2018 Goal	FY2018 YTD	Status
JEA Safety RIR	2.0	1.40	<b>1.50</b>	
Sales Forecast (million MWh)	12.1	12.4	<b>12.3</b>	
T&D Grid Performance Customer Outage				
<i>Frequency (outages/year)</i>	1.6	1.8	<b>1.6</b>	
<i>Electric Outage Duration (minutes/year)</i>	99.5	80	<b>79</b>	
<i>Transmission Line Faults (# per 100 miles)</i>	1.9	2.5	<b>2.1</b>	
<i>CEMI<sub>5</sub> (% cust. &gt; 5 outages/year)</i>	1.07	1.0	<b>0.68</b>	
Generating Plant Performance				
<i>Generation Fleet Reliability (forced outages rate)</i>	2.17	2.3	<b>1.9</b>	
<i>Environmental Compliance (permit exceedances)</i>	6	5	<b>2</b>	

## Significant Occurrences or Concerns This Month

- Outage duration running high due to storms. JEA launched a new program this year aimed at reducing outage duration.
- The JEA fleet Forced Outage Rate has been running in line with prior 6-year performance.
- Started FY18 with a set of unit issues in October. November through July have been much better.



# Electric System: Financial Results and Cost Metrics

(\$ in thousands)

Revenues	FY18 Forecast	FY17 Actual	FY18 Budget	FY18 vs FY17 (%)	Variance (%)
Fuel Revenue	\$394,235	\$394,188 <sup>1</sup>	\$397,761	\$47	0.0%
Base Revenue	766,362	750,330 <sup>1</sup>	772,652	16,032	2.1%
Other Revenue	36,330	45,938	39,650	(9,608)	(20.9%)
<b>Total Revenues</b>	<b>\$1,196,927</b>	<b>\$1,190,456</b>	<b>\$1,210,063</b>	<b>\$6,471</b>	<b>0.5%</b>
<div> <div></div> <div>(\$13m)</div> <div></div> </div>					
Select Expenses					
Fuel Expense	\$463,082	\$442,588	\$430,561	(\$20,494)	(4.6%)
Fuel Fund Transfers	(68,847)	(48,400)	(32,800)	20,447	
O & M Expense	209,300	199,470	228,801	(9,830)	(4.9%)
Non-fuel Purchased Power	122,892 <sup>4</sup>	76,260	85,372	(46,632)	(61.1%)
<b>Net Revenues</b>	<b>\$455,440</b>	<b>\$517,074</b>	<b>\$492,947</b>	<b>(\$61,633)</b>	<b>(11.9%)</b>
<div> <div></div> <div>(\$38m)</div> <div></div> </div>					
Capital Expenditures	\$187,000 <sup>3</sup>	\$134,782	\$205,195 <sup>2</sup>	(\$52,218)	(38.7%)
Debt Service	\$196,134	\$204,477	\$204,971	\$8,343	4.1%

Electric Costs/MWh	Non-Fuel
Target	\$56.88
Forecast	56.72
Difference	\$0.17

Fuel Fund	(\$ in millions)
Beginning Balance	\$131.7
Surplus/Defecit	(68.8)
Ending Balance	\$62.9

Financial Metrics	FY18 Forecast
Coverage:	2.3x
Days Liquidity/Cash:	325 / 223
Debt/Asset:	71%
Total Debt:	\$2.4B (\$326m lower)



<sup>1</sup> Includes rate change in December 2016

<sup>2</sup> Council approved limit for capital expenditures in FY18 is \$205 million

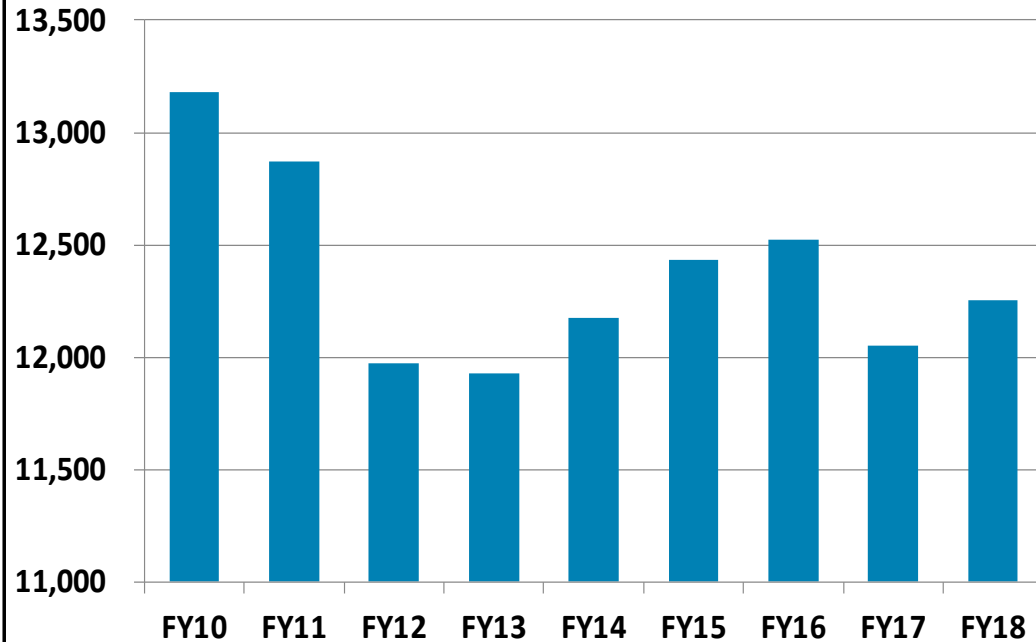
<sup>3</sup> Includes \$28 million for Solar Land purchase

<sup>4</sup> Includes \$40 million contribution to Rate Stabilization – Non-fuel Purchased Power for Plant Vogtle

# Electric System: MWh Sales

## MWh Sales

(in Thousands)



Month	FY18	FY17	%
Oct	1,065,925	951,426	12.0%
Nov	833,994	863,238	(3.4%)
Dec	989,619	905,219	9.3%
Jan	1,205,005	932,807	29.2%
Feb	733,718	759,141	(3.3%)
Mar	889,143	914,242	(2.7%)
Apr	855,216	933,563	(8.4%)
May	1,050,255	1,084,832	(3.2%)
Jun	1,124,820	1,094,475	2.8%
Jul	1,170,996	1,298,608	(9.8%)
<b>YTD</b>	<b>9,918,690</b>	<b>9,737,551</b>	<b>1.9%</b>
Aug		1,260,217	
Sep		1,052,365	
<b>Forecast/Total</b>	<b>12,250,926</b>	<b>12,050,133</b>	

**Unit Sales Driver:** FY18 MWh increase due to a colder winter, evidenced by 15% increase in Degree Days.



YTD Degree Days		
30-yr. Avg.	FY18	FY17
3,097	3,178	2,763

YTD Customer Accounts		
FY18	FY17	%
463,861	458,373	1.2%

<b>Total System</b>	<b>1.9%</b>
Residential	5.9%
Comm./Industrial	(0.67%)
Interruptible	6.2%
Wholesale (FPU)	(65.6%)

# FY 2018 Performing Objectives

## Electric Systems Reliability Metrics

T&D Grid Performance	Metric	FY2018	FY2018 Target	FY2017	FY2016
Customer Outage Frequency	# of Outages per Year	1.6	1.8	1.55	1.4
Electric Outage Duration	# of Minutes out per Year	79	80	99.5	71
Transmission Line Faults	# of Faults per 100 miles	2.1	2.5	1.9	0.7
CEMI <sub>5</sub>	% Customers > 5 outages per yr	0.68	1.0	1.07	1.4

### Electric Service Reliability

- Outage frequency and duration have been reduced significantly over the last 8 years; running flat over last several years
- The typical JEA customer sees 1.6 outages per year and a total outage duration of about 79 minutes
- Improvement trend over past three years for CEMI<sub>5</sub>. 3,260 (0.68%) of our customers have experienced more than 5 outages in the past 12 months

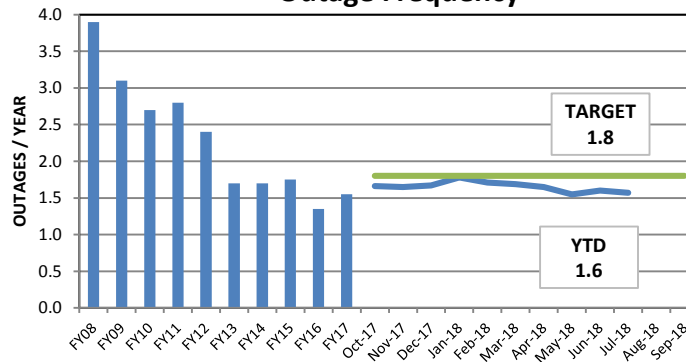
### Transmission Line Reliability

- Overall downward trend over the last eight years
- FY18 (2.1) is better than target.

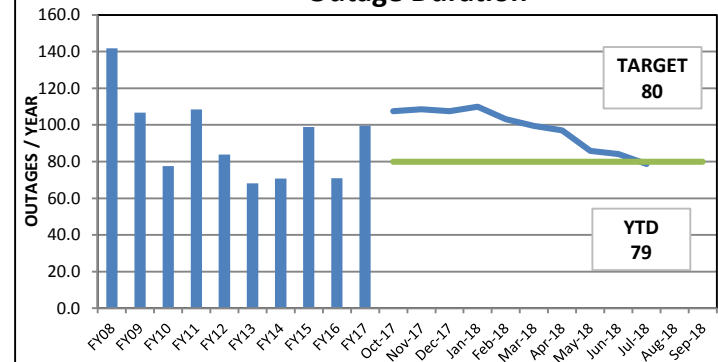
### Other Operational Metrics

- Continue showing favorable trends over time

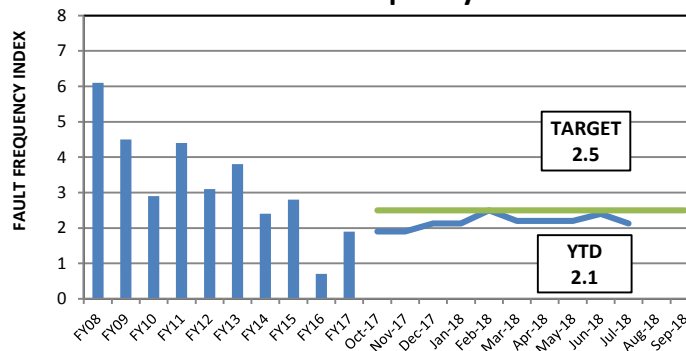
### Electric Service Reliability Outage Frequency



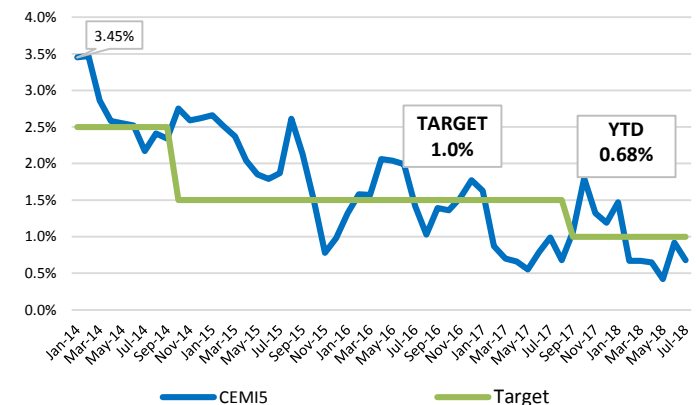
### Electric Service Reliability Outage Duration



### Transmission Line Reliability Fault Frequency



### CEMI-5

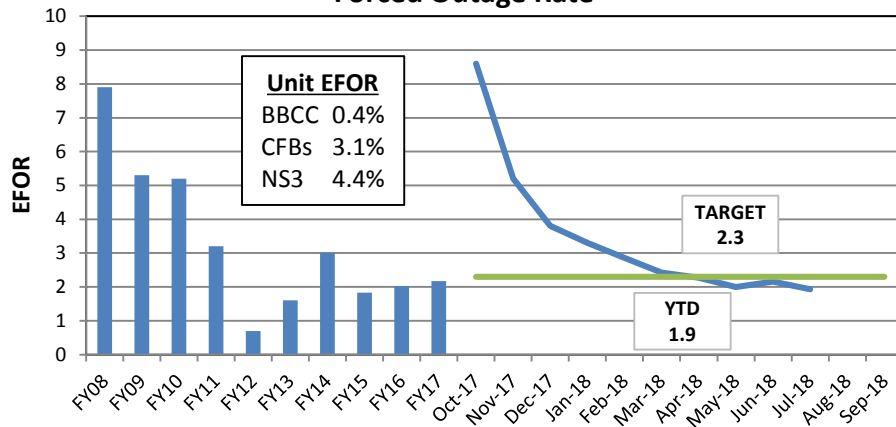


# JEA FY 2018 Performing Objectives

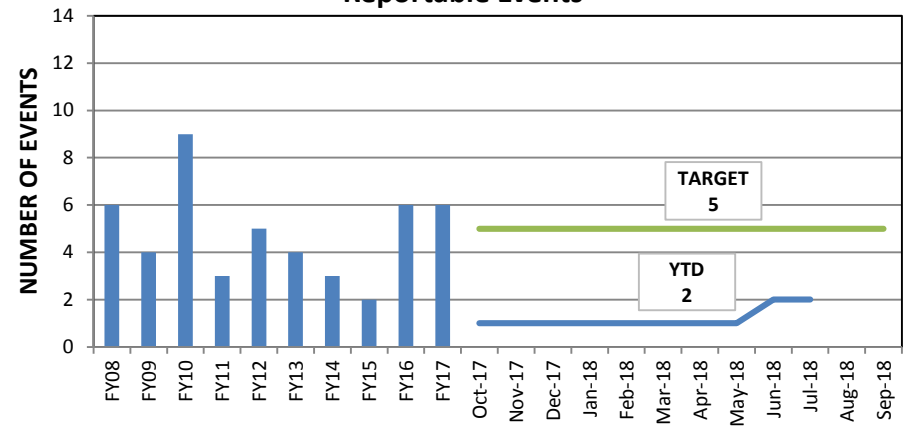
## Electric Systems Reliability Metrics

Generating Plant Performance	Metric	FY2018 YTD	FY2018 Target	FY2017	FY2016
Generation Fleet Reliability	Forced Outages Rate	1.9	2.3	2.17	2.0
Environmental Compliance	Permit Exceedances	2	5	6	6

### JEA Fleet Reliability Forced Outage Rate



### Environmental Compliance Reportable Events



#### Generating Fleet Reliability

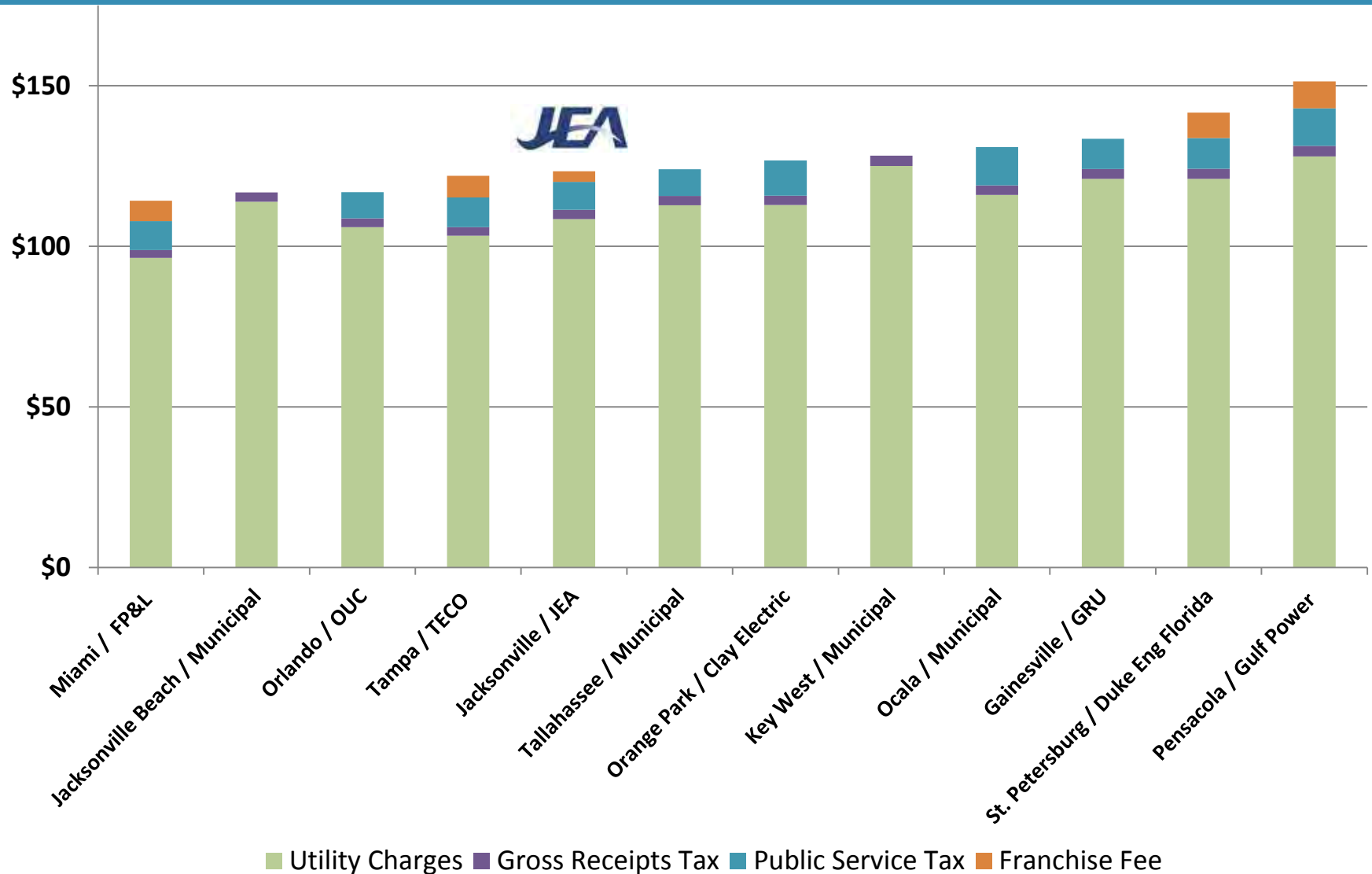
- The JEA fleet Forced Outage Rate has been running in line with prior 6-year performance and currently running slightly better than the FY2018 target.
- Started FY18 with a set of unit issues in October. Fleet performance during the subsequent months has been much better.
- High unit reliability contributes to lower fuel and non-fuel expenses.

#### Environmental Compliance

- Excellent environmental performance in prior years. No air permit exceedances occurred in FY16 or FY17.
- We experienced 2 reportable events at Northside thus far during FY2018.
- JEA remains actively engaged in and preparing for all new and emerging environmental regulations.

# Florida Utilities Monthly Residential Electric Bill Comparison

(Consumption @ 1,000 kWh)  
Residential Rates as of July 2018











# Water/Wastewater Update





# Water & Wastewater Monthly Operations Scorecard

Water & Wastewater	FY2017	FY2018 Goal	FY2018 YTD	Status
JEA Safety RIR	2.0	1.40	<b>1.50</b>	
Sales Forecast (kGals in 1000's)	37,245	37,615	<b>36,924</b>	
Water Unplanned Outages (# cust.)	4,893	9,000	<b>15,069</b>	
CUP Compliance	Yes	Yes	<b>Yes</b>	
Nitrogen to the River (tons)	558	550	<b>485</b>	
Sanitary Sewer Overflows (SSO's)	57*	30	<b>27</b>	

## Significant Occurrences or Concerns This Month

- Two (2) OSHA recordable safety incidents for JEA in the month of July
- Unplanned Water Main Outages: 3,781 customers experienced an outage in the month of July
- CUP: Average daily flow of 112 MGD was 18% below CY limit of 135 MGD; reclaimed usage at 16 MGD
- Nitrogen to River: 580 tons due to high flows in October, repairs at Buckman post-hurricane, and construction at Arlington East for a clarifier addition; JEA has a limit of 683 tons per year and provides the COJ with 37 tons
- SSO's Impacting Waters of the US: 27 YTD, root cause analysis is performed on each SSO



# Water and Sewer System: Financial Results and Cost Metrics

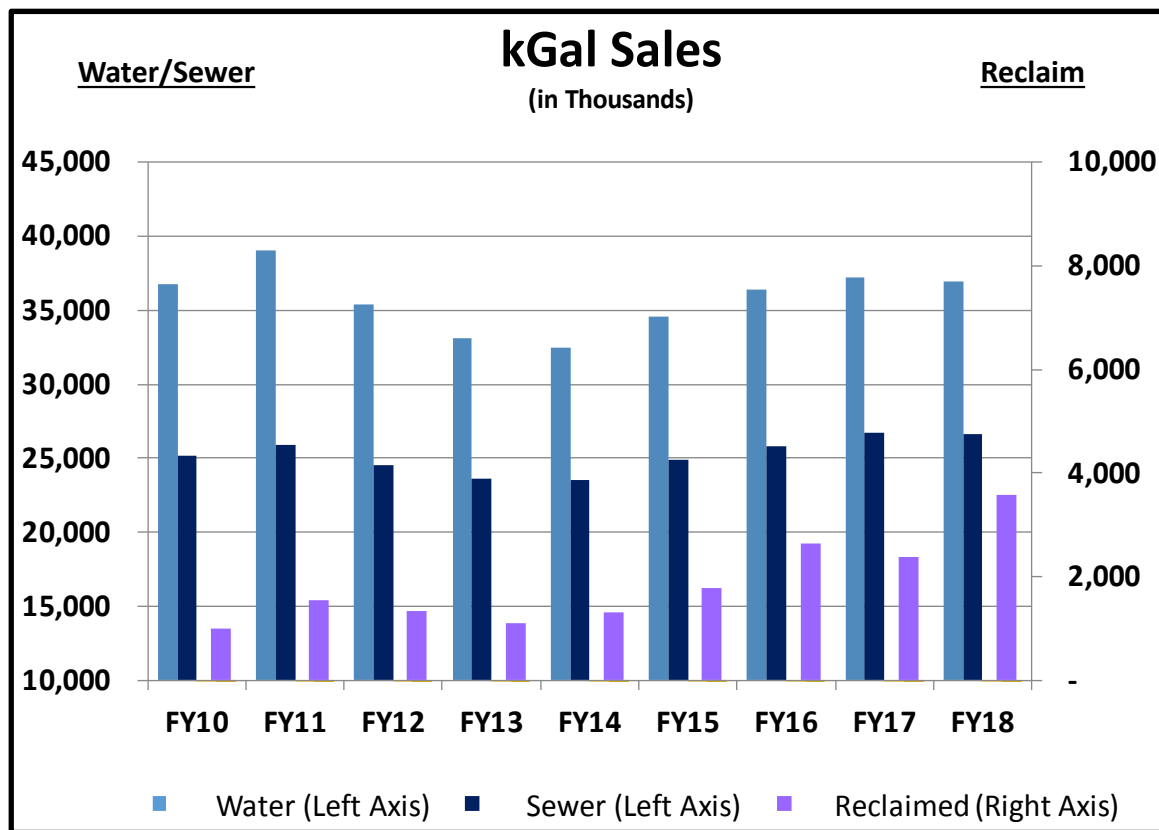
(\$ in thousands)

Revenues	FY18 Forecast	FY17 Actual	FY18 Budget	FY18 vs FY17 (\$)	Variance (%)
Water & Sewer Revenues	\$426,183	\$424,594	\$438,619	\$1,589	0.4%
Other Revenue	67,788	43,204	59,946	24,584	56.9%
<b>Total Revenues</b>	<b>\$493,971</b>	<b>\$467,798</b>	<b>\$498,565</b>	<b>\$26,173</b>	<b>5.6%</b>
<div> <div></div> <div>(\$5m)</div> <div></div> </div>					
Select Expenses					
O&M Expense	\$149,000	\$139,447	\$153,394	(\$9,553)	(6.9%)
<b>Net Revenues</b>	<b>\$345,495</b>	<b>\$337,469</b>	<b>\$342,030</b>	<b>\$8,026</b>	<b>2.4%</b>
<div> <div></div> <div>\$3m</div> <div></div> </div>					
Capital Expenditures	\$196,000	\$187,593	\$236,500 <sup>1</sup>	(\$8,407)	(4.5%)
Debt Service	\$111,322	\$112,791	\$116,948	\$1,469	1.3%

Cost/Kgal	Water	Sewer
Target	\$4.40	\$9.85
Forecast	4.69	9.97
Difference	(\$0.29)	(\$0.12)

Metrics	FY18 Forecast
Coverage:	3.1x
Days Liquidity/Cash:	593 / 495
Debt/Asset:	49%
Total Debt:	\$1.5B (\$74m lower)

# Water and Sewer System: kGal Sales



Month	FY18	FY17	%
Oct	2,992	3,129	(4.4%)
Nov	3,037	3,068	(1.0%)
Dec	2,883	2,923	(1.4%)
Jan	2,790	2,768	0.8%
Feb	2,553	2,624	(2.7%)
Mar	3,191	3,168	0.7%
Apr	3,006	3,476	(13.5%)
May	3,270	3,736	(12.5%)
Jun	3,001	2,833	5.9%
Jul	3,133	3,480	(10.0%)
<b>YTD</b>	<b>29,856</b>	<b>31,205</b>	<b>(4.3%)</b>
Aug		3,043	
Sep		2,998	
<b>Forecast/Total</b>	<b>36,924</b>	<b>37,246</b>	

**Unit Sales Driver:** FY18 rain days up 19.0 days. Irrigation for FY18 down 18.3% versus FY17.

YTD Customer Accounts			
	FY18	FY17	%
Water	347,477	340,370	2.1%
Sewer	270,251	263,770	2.5%
Reclaimed	11,216	10,756	4.3%

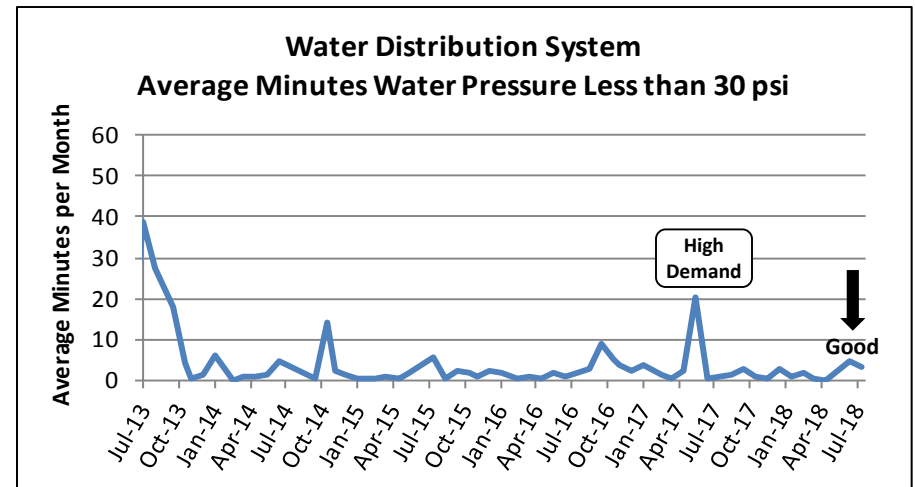
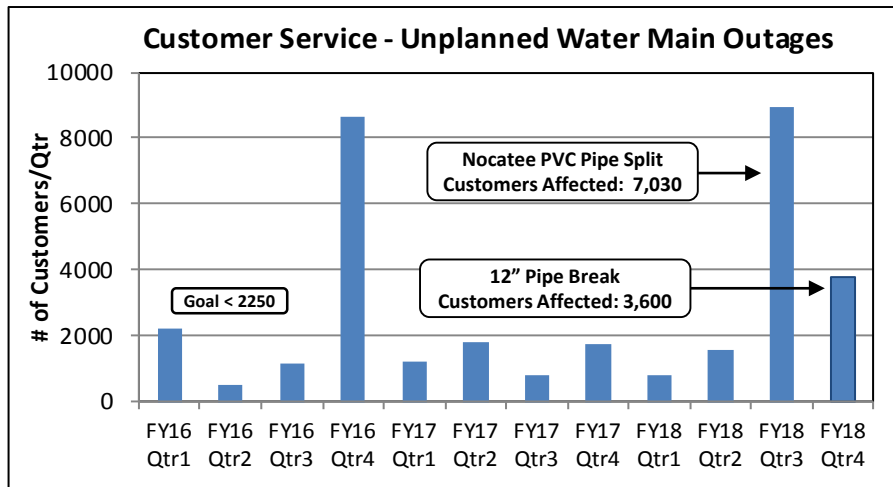
YTD Rainfall			
	30-Yr. Avg.	FY18	FY17
Inches	37.4	46.3	50.5
Days	86.3	93.0	74.0

Total System	(4.3%)
Residential	(5.2%)
Comm./Industrial	3.5%
Irrigation	(18.3%)

# Customer Reliability

## Water and Wastewater System

Water Grid Performance	Metric	FY2018	FY2018 Target	FY2017	FY2016
Water Main Outages	# of Customers per Year	15,069	9,000	4,893	12,735



### Unplanned Water Outages

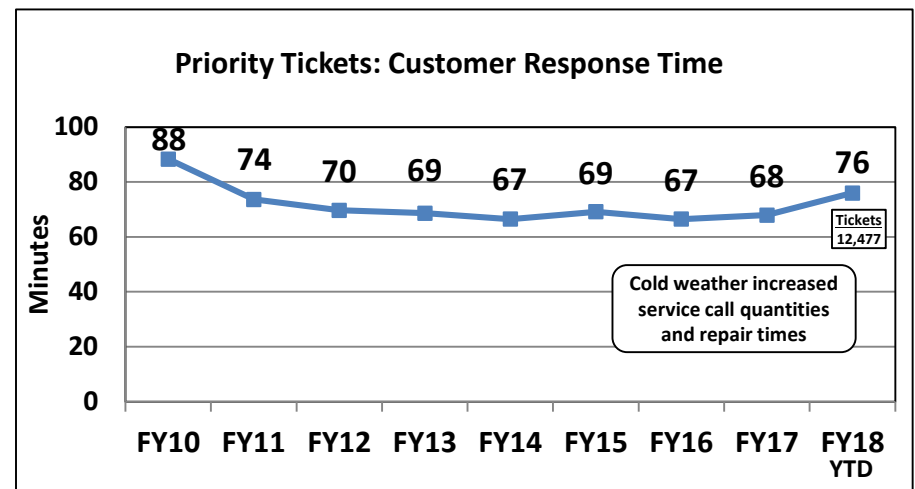
Number of Customers affected by unplanned outages

### Water Pressure (minutes per month < 30 psi)

Measured by 129 pressure monitoring stations in the distribution system. Pressure must be greater than 30 psi, and is expected to be greater than 50 psi.

### Customer Response Time

Average time from a customer call to the ticket completion or transfer to a field crew for a more extensive repair



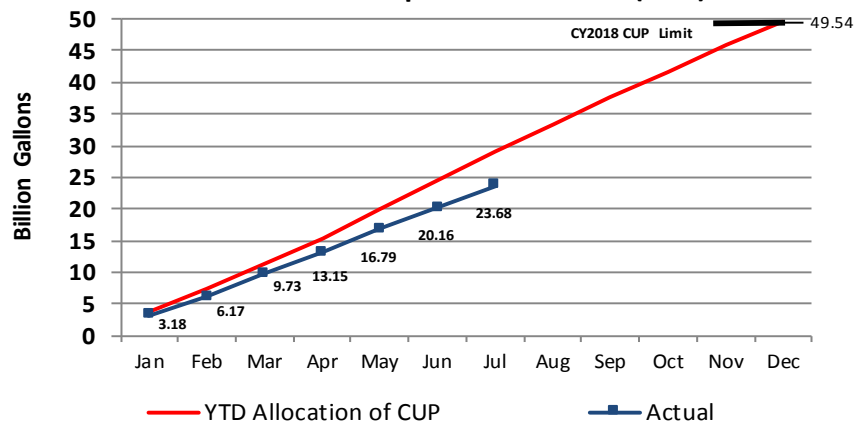
\*Aligned with the PSC Rule for Electric Reliability Reporting, the Operational Metrics will exclude the impact of all service interruptions associated with a storm named by the National Hurricane Center.

# Environmental Compliance

## Water System – Consumptive Use Permit (CUP)

Compliance	Metric – CY Basis	CY2018	2018 Target	2017	2016	2015
Water	CUP Limits (MGD)	112	135 limit	114 (133 limit)	112 (131 limit)	107 (129 limit)
South Grid	Wellfield Allocation (MGD)	46.76	< 50.23 limit	48.62 (<50.23 limit)	52.95 (<50.23 limit)	47.50 (<50.23 limit)
Reclaim	Usage (MGD)	16	17	20	16	13

2018 Consumptive Use Permit (CUP)



CUP Condition 44: South Grid Wellfield Allocation Limits

Actuals							Post Sep -14 Limit
Critical Wellfields	2013	2014	2015	2016	2017	CY 2018	
Deerwood III	6.96	7.01	6.67	7.88	7.64	7.11	7.00
Ridenour	5.97	6.39	6.66	7.64	6.68	6.28	6.85
Oakridge	8.78	6.23	4.99	5.79	5.49	6.34	5.65
Greenland		1.53	4.27	4.16	3.99	4.36	4.53
Brierwood	5.58	4.53	2.84	3.36	2.98	2.61	3.02
Subtotal	27.29	25.69	25.43	28.83	26.78	26.70	27.05
Other Wellfields	22.21	20.92	22.07	24.12	21.85	20.06	23.18
Total South Grid	49.50	46.61	47.50	52.95	48.62	46.76	50.23
Total System MGD	100	104	107	112	114	112	135

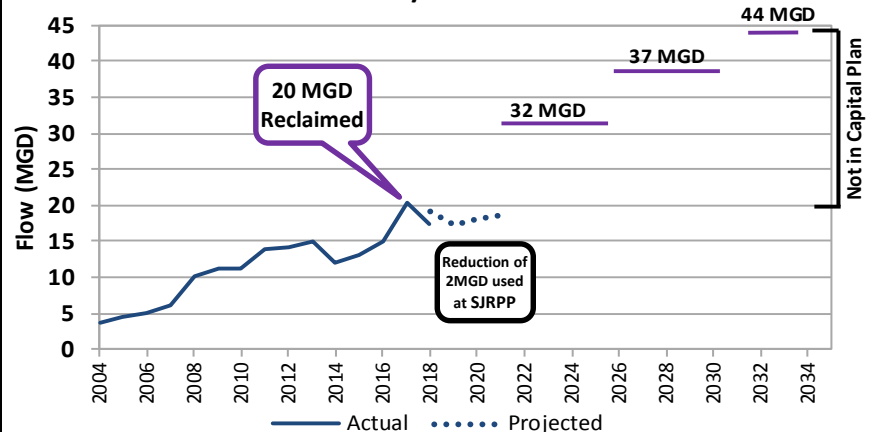
### St. Johns River Water Management District CUP

**Condition 12:** YTD average daily flow is 18% below CY limit of 135 MGD

**Condition 44:** South Grid Wellfields are 7% below the base limit in CY18, and have annual operational flexibility of 20% above allocation limits.

**Conditions 37/38:** Use of reclaimed water “to the maximum extent technologically, economically, and environmentally feasible”. The annual CUP limit continues to increase beginning in FY21 if 32 MGD is achieved.

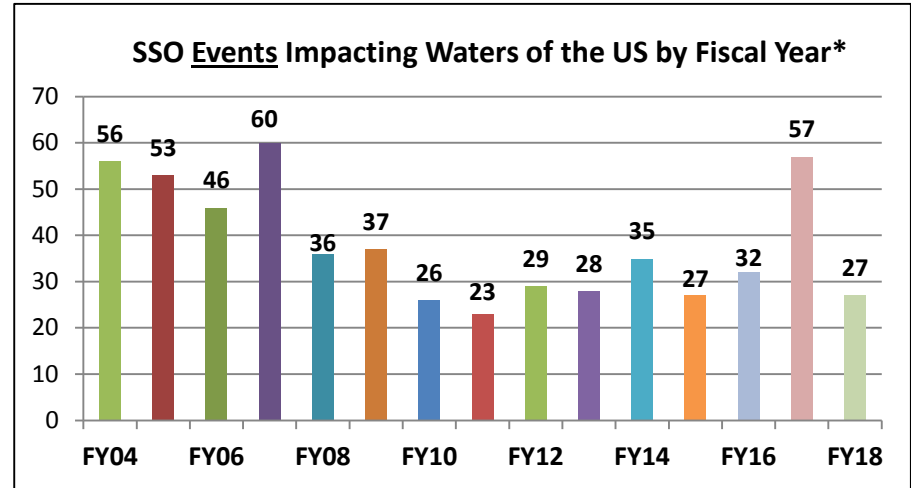
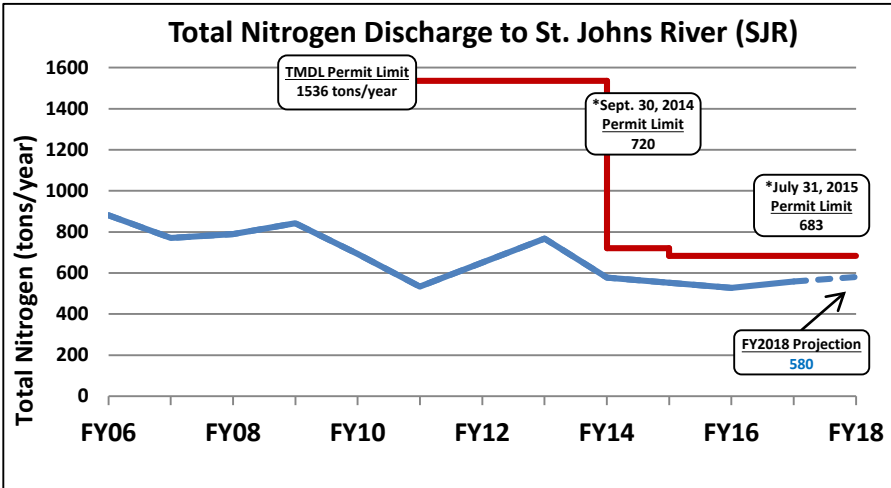
CUP Conditions 37/38: Reclaimed Water Use



# Environmental Compliance

## Wastewater System

Compliance	Metric	FY2018	FY2018 Target	FY2017	FY2016
Sewer	Nitrogen (N) Tons – FY basis	485	550	558 (TMDL of 683*)	527 (TMDL of 683*)
Sewer	SSOs – US Waters	18	30	57	32

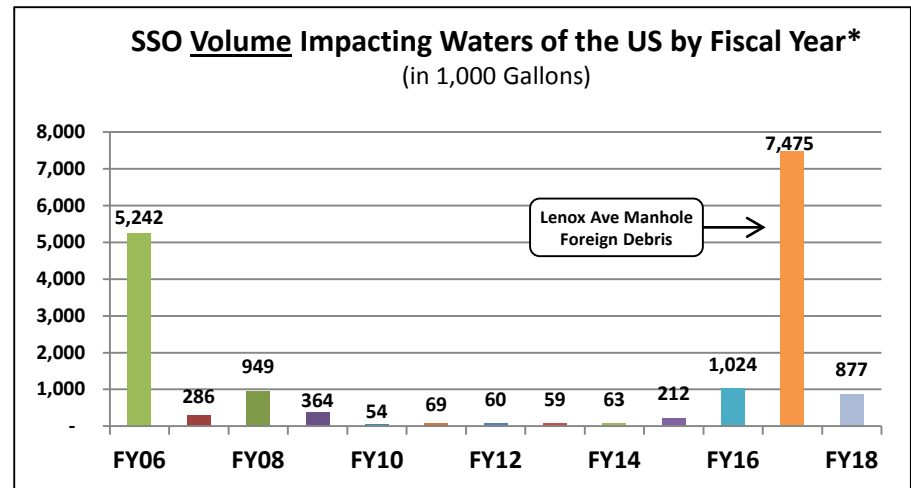


### Nitrogen Discharge to St. Johns River

Total Maximum Daily Load (TMDL) is 683 tons (rolling 12 month average). FY18 projection is 580 tons supported by treatment efficiency during warm weather periods.

### Sanitary Sewer Overflows (SSOs to US Waters)

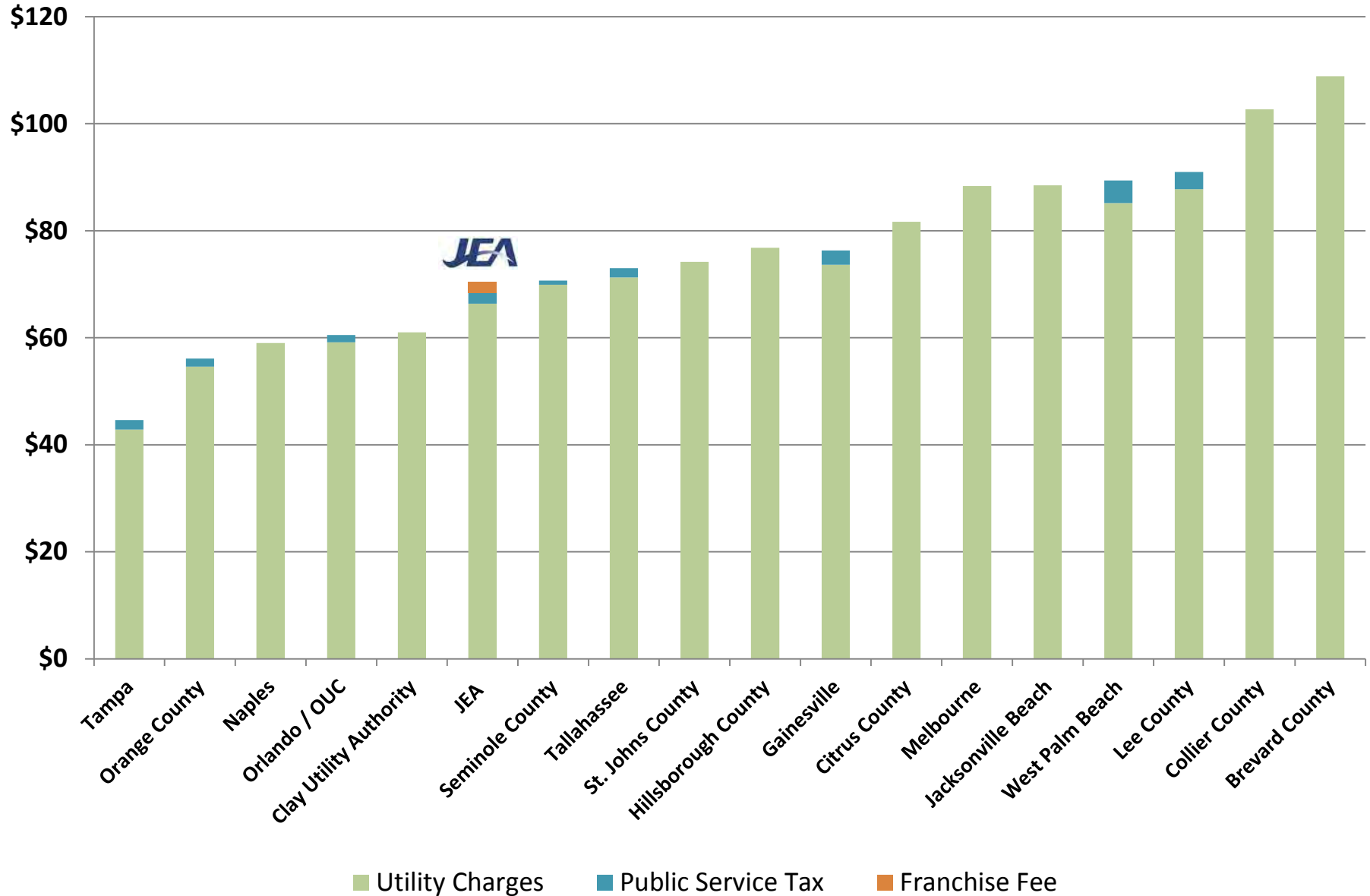
FY04 – FY07: 54 per year average, FY08-FY16: 30 per year average. Twenty (27) SSO's impacting US Waters during FY18.



\*Aligned with the PSC Rule for Electric Reliability Reporting, the Operational Metrics will exclude the impact of all service interruptions associated with a storm named by the National Hurricane Center.

# Water & Sewer Rates in Florida

Residential Service with a 5/8" meter and 6 kgals of Consumption  
Residential Rates as of July 2018





# Customer Experience Update

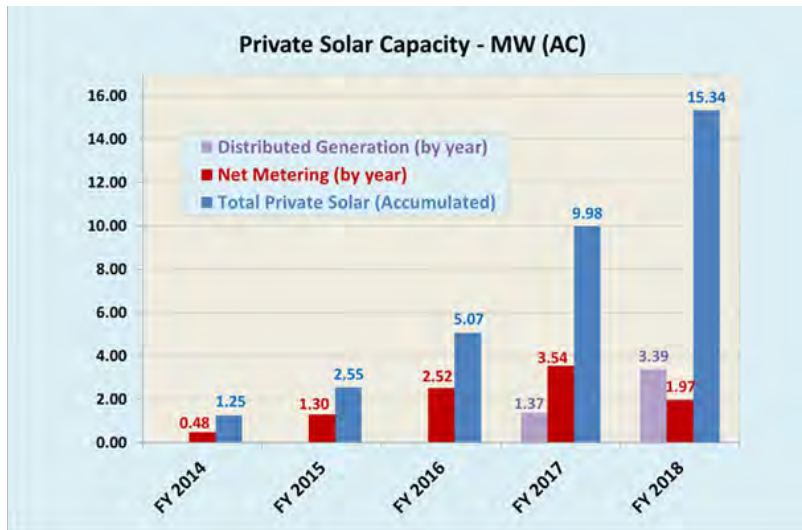




# Customer Experience Monthly Operations Scorecard

Customer Experience	FY2016	FY2017	FY2018 YTD	Status
JDP Customer Satisfaction Index - Residential	2 <sup>nd</sup> Q	1 <sup>st</sup> Q	2 <sup>nd</sup> Q	●
JDP Customer Satisfaction Index - Business	1 <sup>st</sup> Q	1 <sup>st</sup> Q	1 <sup>st</sup> Q	●
Overall First Contact Resolution Index	79.4%	79.4%	78.8%	●
Self Service Utilization	76.0%	78.5%	81.7%	●
Net Write-Offs	0.14%	0.15%	0.13%	●

## Significant Occurrences or Concerns This Month



## New Residential Solar 2017 vs. 2018

	Apr	May	Jun	Jul	Total
2017	20	46	37	28	131
2018	33	18	17	17	84

## New Solar + Battery Incentive Program

	Apr	May	Jun	Jul	Total
2018	10	7	3	3	23



# FY18 Customer Satisfaction Goal

Achieve 1st Quartile Ranking for JD Power  
Customer Satisfaction Index for both  
Residential and Business Studies

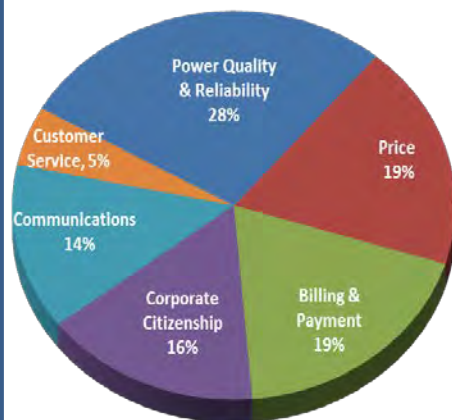
## Residential (R)

FY16	FY17	Wave 1	Wave 2	Wave 3	Wave 4	FY18
2Q 703	1Q 747	1Q 753	2Q 736	2Q 730	3Q 730	2Q 737

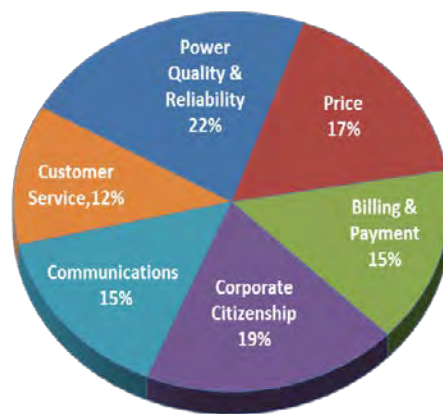
## Business (B)

FY16	FY17	Wave 1	Wave 2	FY18
1Q 754	1Q 780	1Q 787	1Q 796	1Q 791

### Residential



### Business



FY18 Residential # of companies ranked: 138

FY18 Business # of companies ranked: 86

1Q= 1st quartile 2Q= 2<sup>nd</sup> quartile 3Q = 3<sup>rd</sup> quartile 4Q = 4<sup>th</sup> quartile

# Achieve 1st Quartile Ranking on All Drivers

## Be Easy to Do Business With

### Customer Service

	FY17	Wave 1	Wave 2	Wave 3	Wave 4	FY18
R	1Q 800	1Q 824	3Q 761	2Q 790	3Q 784	2Q 788
B	1Q 829	3Q 790	1Q 839			2Q 813

### Power Quality & Reliability

	FY17	Wave 1	Wave 2	Wave 3	Wave 4	FY18
R	1Q 792	2Q 781	2Q 784	2Q 786	3Q 773	2Q 781
B	1Q 816	1Q 823	2Q 810			2Q 816

## Empower Customers to Make Informed Decisions

### Billing & Payment

	FY17	Wave 1	Wave 2	Wave 3	Wave 4	FY18
R	1Q 807	1Q 807	2Q 796	2Q 790	3Q 782	2Q 794
B	2Q 803	1Q 830	1Q 830			1Q 830

### Communication

	FY17	Wave 1	Wave 2	Wave 3	Wave 4	FY18
R	1Q 712	1Q 716	1Q 702	2Q 683	2Q 683	1Q 696
B	1Q 757	1Q 766	1Q 797			1Q 781

### Price

	FY17	Wave 1	Wave 2	Wave 3	Wave 4	FY18
R	2Q 679	1Q 708	3Q 660	3Q 648	2Q 682	2Q 675
B	1Q 735	2Q 730	1Q 751			2Q 741

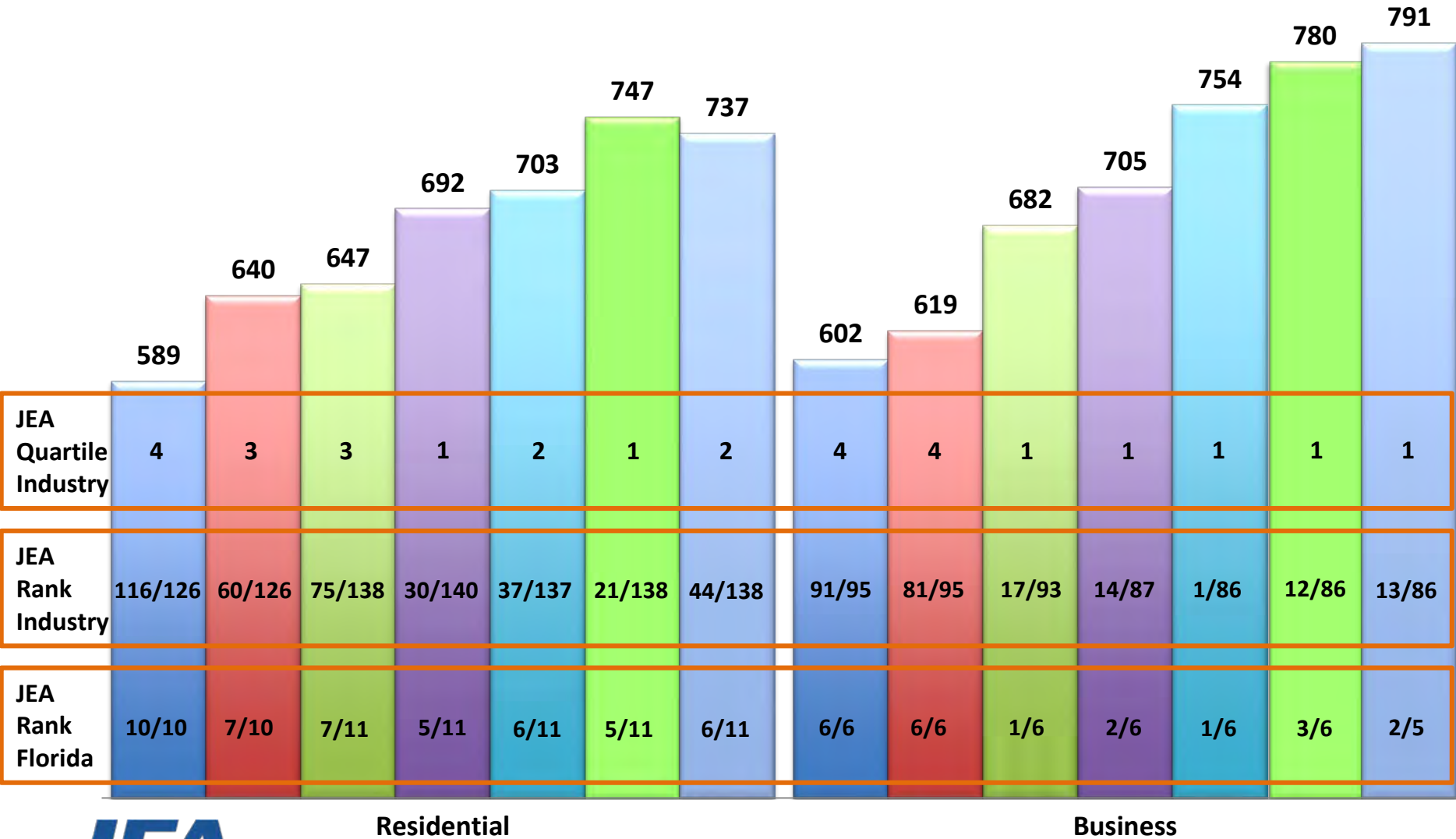
## Demonstrate Community Responsibility

### Corporate Citizenship

	FY17	Wave 1	Wave 2	Wave 3	Wave 4	FY18
R	1Q 685	1Q 700	1Q 694	2Q 681	3Q 663	2Q 684
B	1Q 748	1Q 762	1Q 762			1Q 762

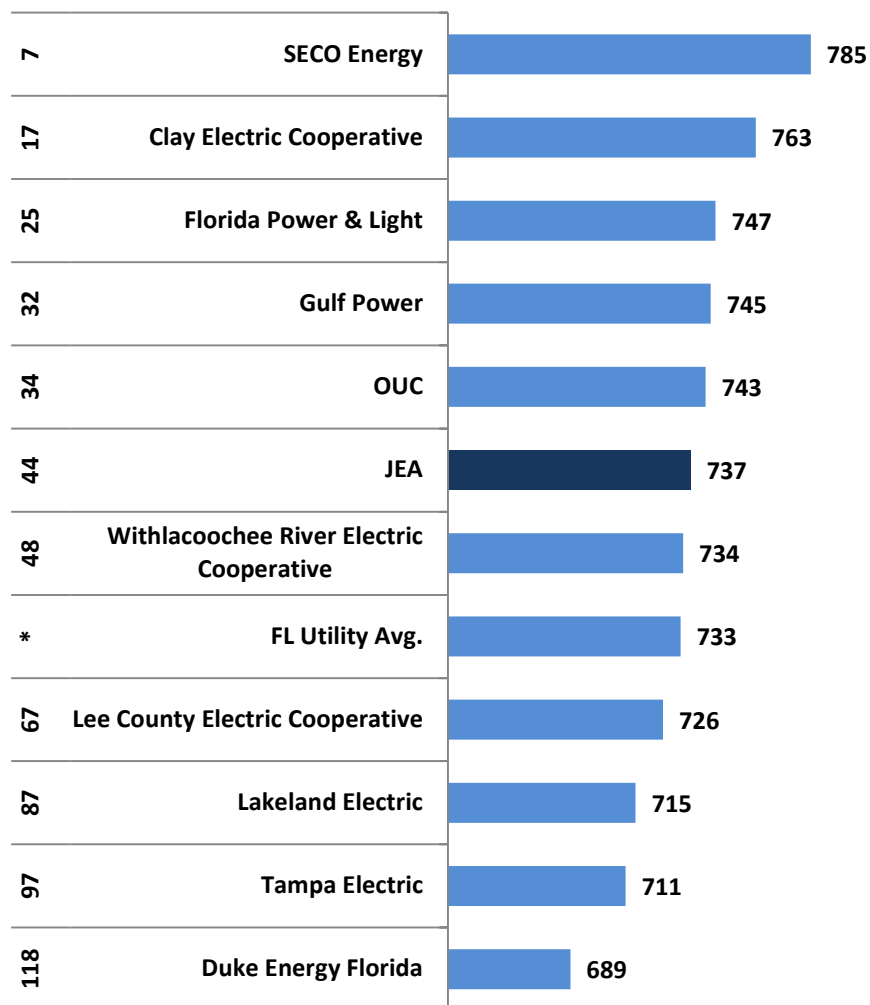
# Customer Satisfaction Index Scores

FY12 FY13 FY14 FY15 FY16 FY17 FY18

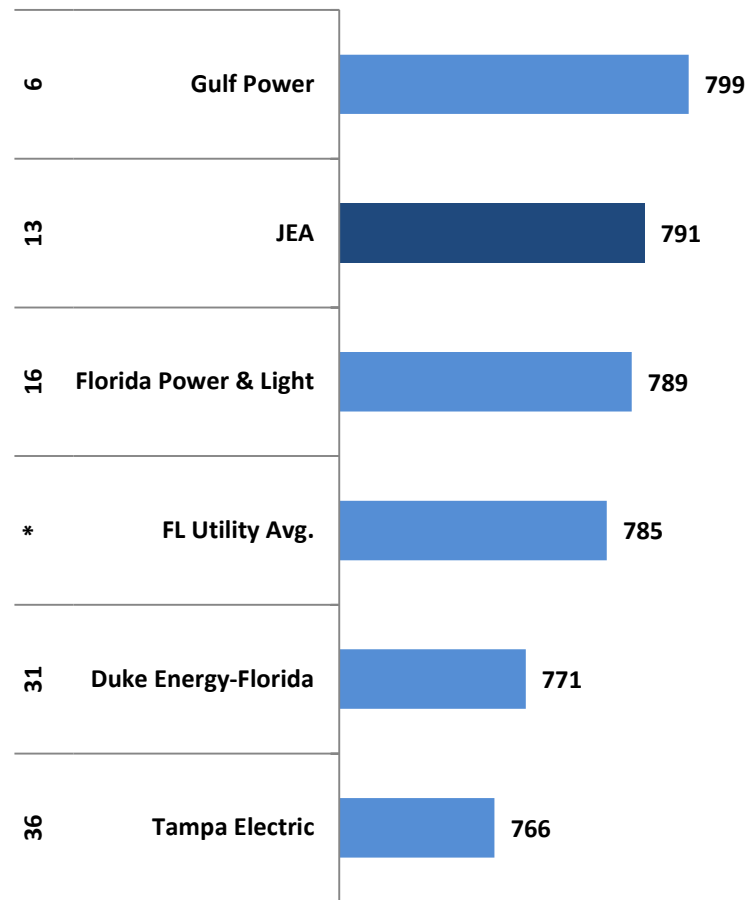


# Customer Satisfaction Index Scores – Florida Utilities

## Residential FY18 Final



## Business FY18 Final





# Safety Update



## FY2017

- RIR = 2.0
- # of Recordables = 43
- July YTD Recordables = 32

## FY2018

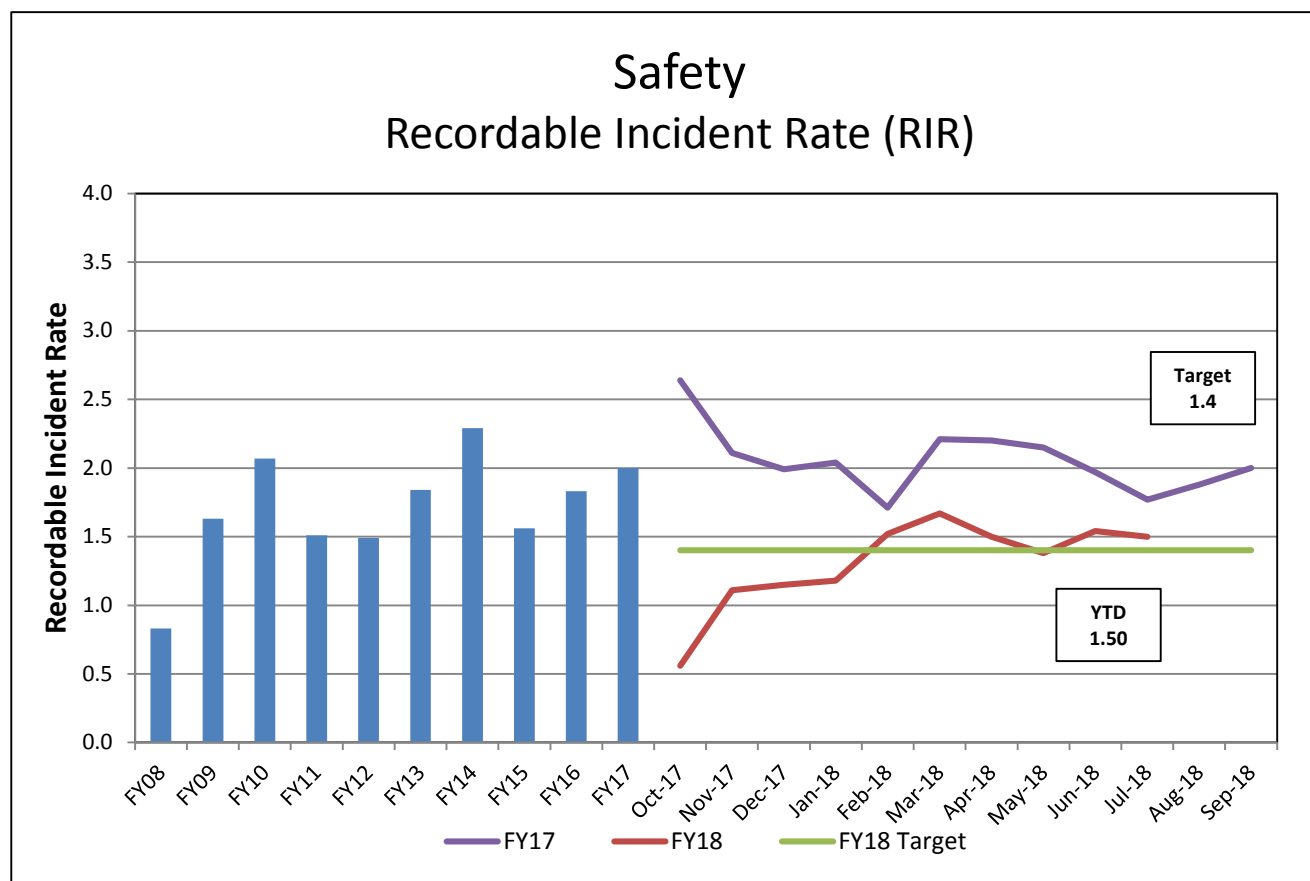
- July Recordables = 2
- FY18 YTD Recordables = 26
  - Customer Relationships = 4
  - Compliance = 1
  - Electric Systems = 12
  - Human Resources = 1
  - Public Affairs = 1
  - Water/Wastewater = 7
- Lost Time Incidents = 8
- Continuing to “Plan for Zero”
- Increased focus on:
  - Complacency
  - Hand/Finger
  - 0-5 Year Employees
  - PPE Use
  - Strains, Sprains, Slip/Trip/Fall
  - Repeat Occurrences

### Industry Benchmark\*

Average Municipal Utility RIR is 6.3

Average LPPC RIR is 3.7

Units	FY2018	FY2018 Target	FY2017	FY2016
RIR	1.50	1.4	2.0	1.82





# Financial Update





# Key Financial Metrics

Electric System	Year-to-Date		FY2018 Full Year		Result
	FY2018	FY2017	Forecast	Target	
Debt Service Coverage	2.5x	2.5x	<b>2.3x</b>	≥ 2.2x	✓
Days Liquidity	317	317	<b>325</b>	150 to 250 days <sup>1</sup>	✓
Days Cash on Hand	218	213	<b>223</b>		✓
Debt to Asset %	74% <sup>4</sup>	66%	<b>71%</b>	52% <sup>2</sup>	✓

Water and Sewer System	Year-to-Date		FY2018 Full Year		Result
	FY2018	FY2017	Forecast	Target	
Debt Service Coverage	2.8x	2.9x	<b>3.1x</b>	≥ 1.8x	✓
Days Liquidity	586	643	<b>593</b>	150 to 250 days <sup>1</sup>	✓
Days Cash on Hand	490	542	<b>495</b>		✓
Debt to Asset %	51% <sup>4</sup>	55%	<b>49%</b>	49% <sup>3</sup>	✓



<sup>1</sup> Moody's Aa benchmark: 150 to 250 days










<sup>2</sup> Long-term target is 52.1%: per Moody's Sector In-Depth Report "Public Power Medians – Sound metrics signal stability as carbon challenges loom", Sept. 2017

<sup>3</sup> Long-term target is 49%: calculated peer group from Moody's 214 Aa rated public water-sewer utilities, Dec. 2016











<sup>4</sup> Revised ratio calculation and inclusion of SJRPP impairment

# Financial Results and Cost Metrics

## Electric System Metrics

	Rating Agency/ Perform. Goal	Forecast	Score
System Sales (GWh)	12,000	12,251	
Base Revenue Growth	0.5%	2.1%	
Debt Svc. Coverage	2.2x	2.3x	
Days Liquidity (Cash)	280 (180)	325 (223)	
Debt/Asset % <sup>1</sup>	71%	71%	
Non-Fuel/MWh	\$56.88	\$56.72	
Net Funded Debt Reduction	\$135m	\$157m	
Capital Expenditures	\$205m	\$187m	
Moody's/S&P/Fitch	Aa2/AA-/AA	Aa2/AA-/AA	

## Water and Sewer Systems Metrics

	Rating Agency/ Perform. Goal	Forecast	Score
Water System Sales (kGals)	37,615	36,924	
Base Revenue Growth	1.5%	0.4%	
Debt Svc. Coverage	2.7x	3.1x	
Days Liquidity (Cash)	502 (404)	593 (495)	
Debt/Asset % <sup>1</sup>	49%	49%	
Water Cost/kgal	\$4.40	\$4.69	
Sewer Cost/kgal	\$9.85	\$9.97	
Net Funded Debt Reduction	\$50m	\$70m	
Capital Expenditures	\$215m	\$196m	
Moody's/S&P/Fitch	Aa2/AA/AA	Aa2/AAA/AA	

## Significant Occurrences or Concerns This Month

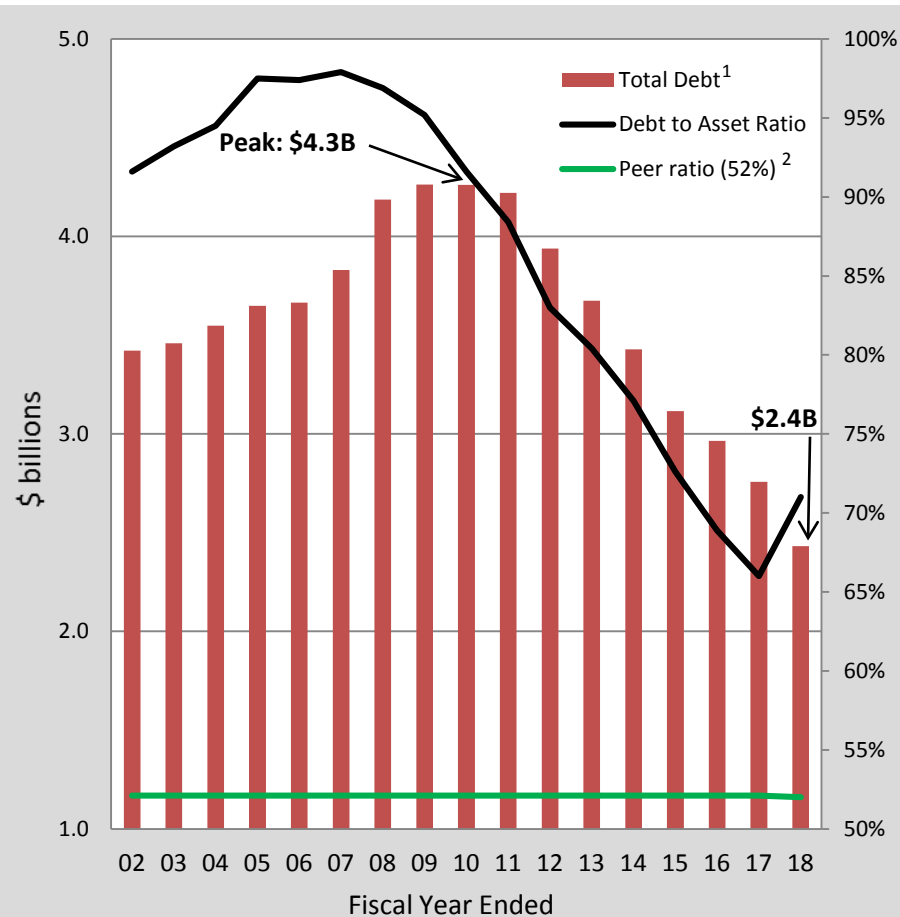
- Electric System Sales were 1.9% above 2017, due to a colder winter, evidenced by 15% increase in Degree Days.

<sup>1</sup> Revised ratio calculation and inclusion of SJRPP impairment

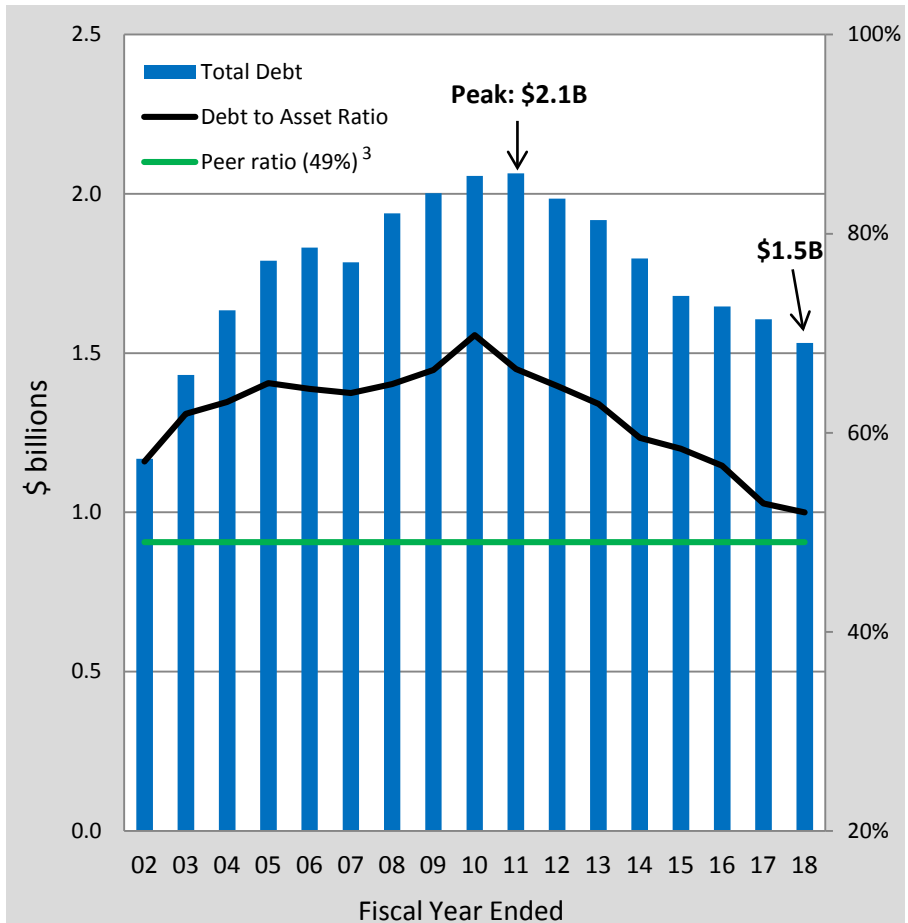


# Debt and Debt to Asset Ratios

## Electric System



## Water and Sewer System



<sup>1</sup> Includes JEA, Scherer and SJRPP

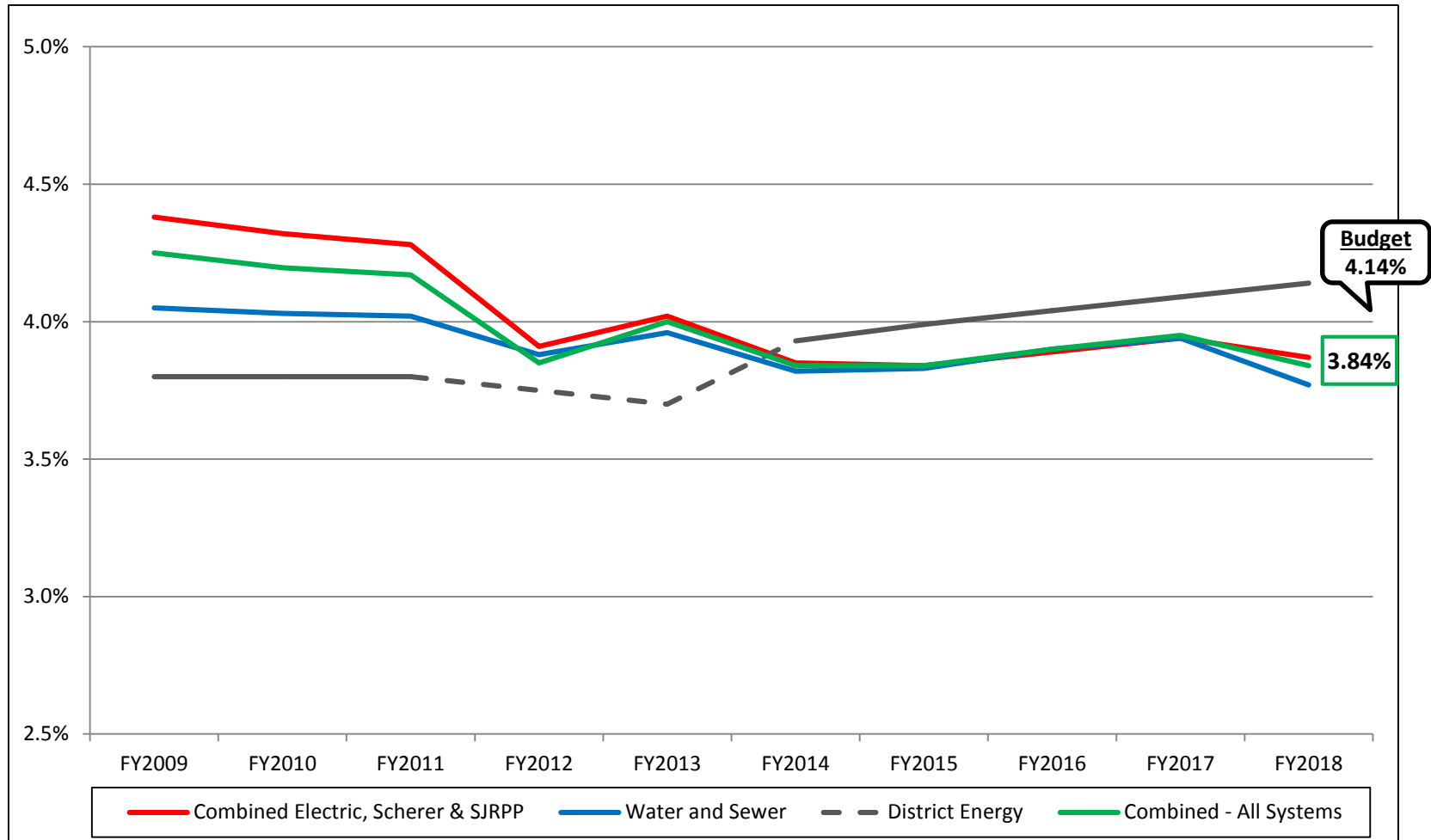
<sup>2</sup> Per Moody's Sector In-Depth Report "Public Power Medians – Sound metrics signal stability as carbon challenges loom", Sept. 2017

<sup>3</sup> As calculated from Moody's Municipal Financial Ratio Analysis database of 209 Aa rated public water-sewer utilities, Jan. 10, 2017

<sup>4</sup> Changes to the Debt to Asset Ratio for both Electric and Water and Sewer Systems reflect a new calculation methodology published by Moody's

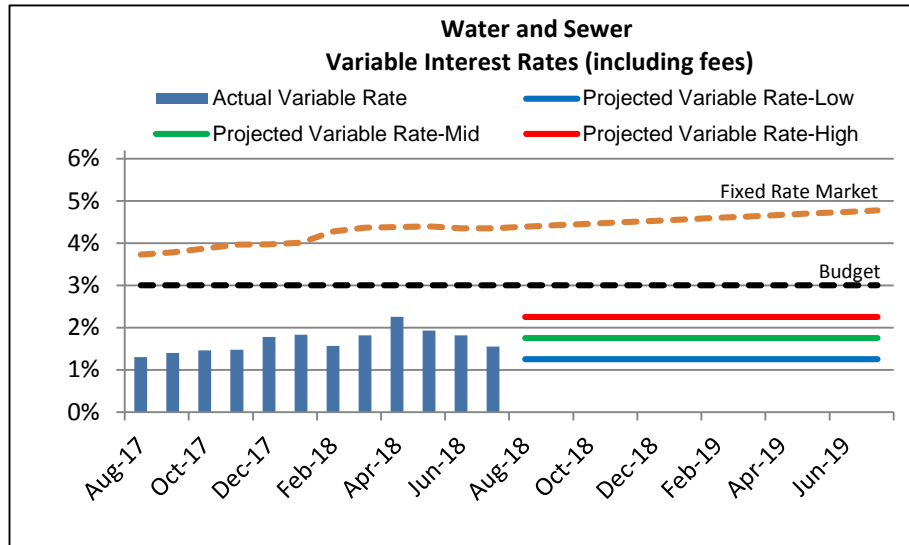
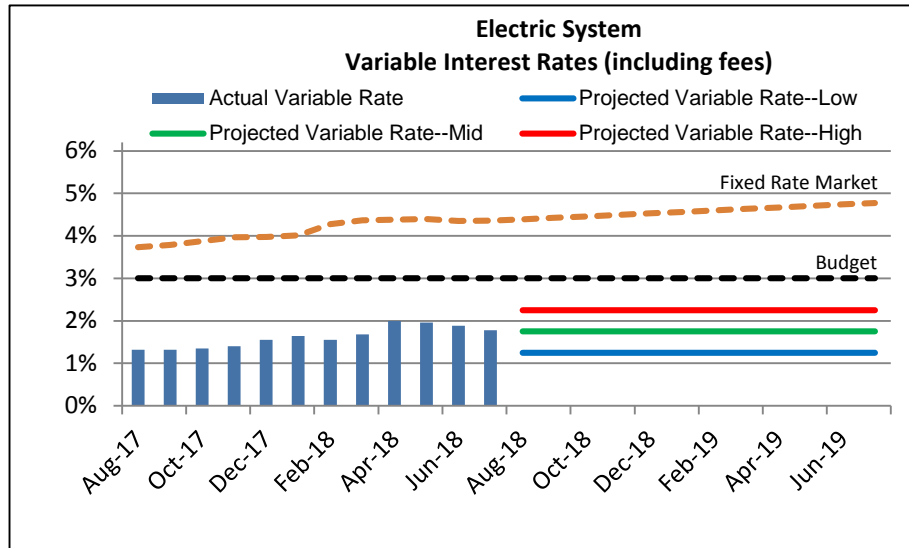
# Combined Debt Outstanding

Weighted Average  
Interest Rates\*



- Fiscal year end interest rates are net of BABs subsidy, original issue premiums / discounts and includes variable debt liquidity / remarketing fees and interest rate swap payments.
- - - - During FY2008 – FY2013 DES was funded with variable rate debt at an average of 1 percent.

# Variable Rate Debt Risk Analysis



Total variable rate debt of \$872 with \$522 swapped to fixed rate

Liquidity Facilities and Direct Purchase Bonds (DPBs)			
Bank	Moody's/S&P/Fitch	\$ (in millions)	%
Wells Fargo Bank N.A. (100% DPBs)	Aa2/A+/AA-	\$218	26
JP Morgan Chase Bank N.A.	Aa3/A+/AA	199	24
Royal Bank of Canada	Aa2/AA-/AA	193	23
US Bank, N.A.	A1/AA-/AA-	146	17
Sumitomo	A1/A/A	52	6
State Street Bank	Aa3/AA-/AA	31	4
Total		\$839	

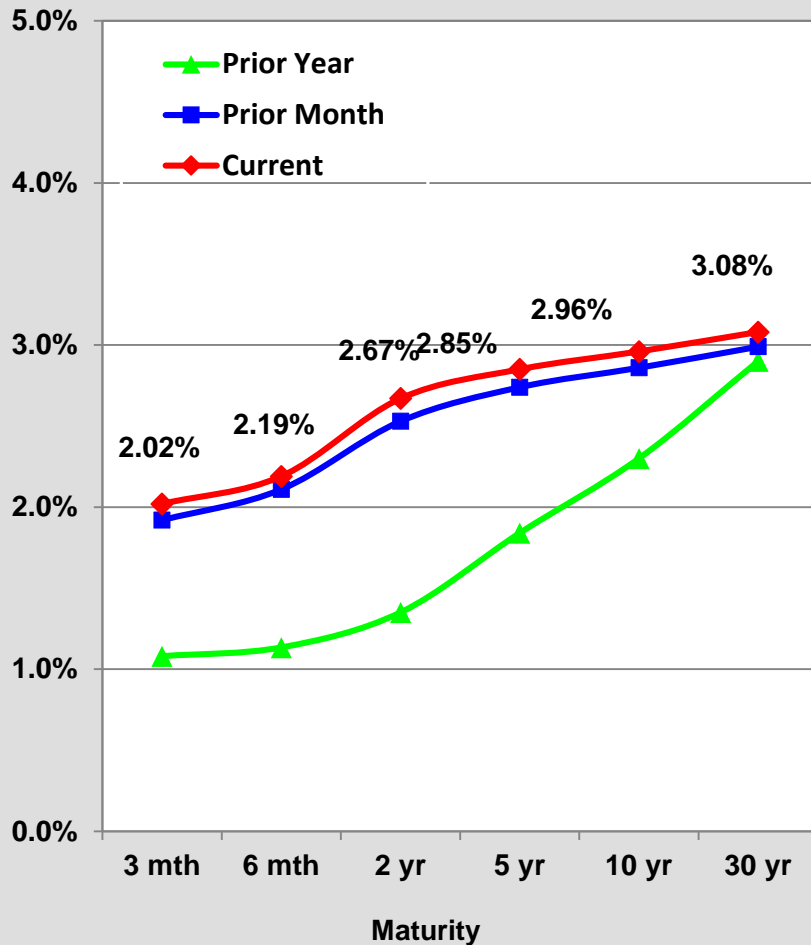
Swap Providers			
Bank	Moody's/S&P/Fitch	\$ (in millions)	%
Morgan Stanley Capital Services	A3/BBB+/A	\$176	34
Goldman Sachs Mitsui Marine Derivative Products	Aa2/AA-/NR	136	26
JP Morgan Chase Bank N.A.	Aa3/A+/AA	125	24
Merrill Lynch	A3/A-/A+	85	16
Total		\$522	

## Items of Interest

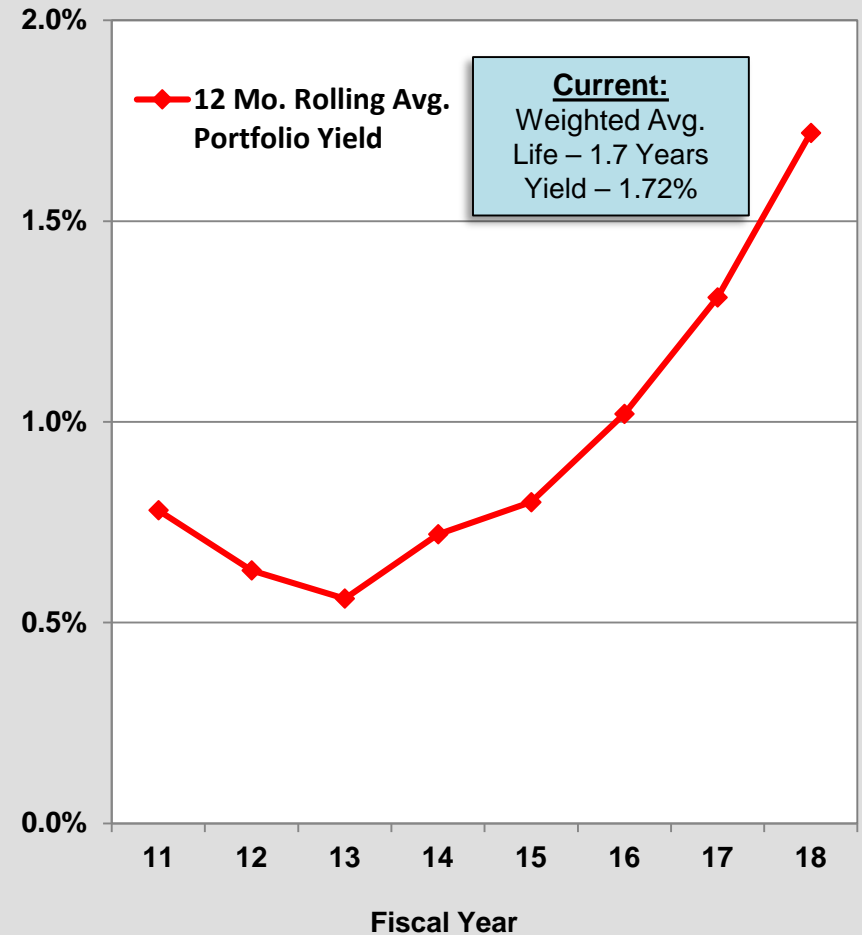
- Variable debt as a percentage of total debt:
  - Unhedged variable at 8% for Electric and 11% for Water and Sewer.
  - Hedged variable at 17% for Electric and 7% for Water and Sewer.
- Liquidity facilities / direct purchase bonds are with highly rated providers.
- State Street liquidity facility renewed in Feb 2018.
- US Bank liquidity facilities renewed in Oct 2017 and Jun 2018
- 2018 liquidity facility renewals include: Wells Fargo Bank, Royal Bank of Canada and Sumitomo.
- Variable rate reserve to mitigate risk of higher rates – \$44 million.
- Used \$18 million of variable rate reserve on 2017 debt defeasances.

# Combined Investments Outstanding

## U. S. Treasury Yield Curve



## Investment Portfolio Yield



## VI. A.

### Corporate Headquarters Downtown Campus

August 12, 2018

**SUBJECT: CORPORATE HEADQUARTERS - DOWNTOWN CAMPUS UPDATE**

**Purpose:** ☒ Information Only ☐ Action Required ☒ Advice/Direction

**Issue:** The most recent storms shined a light on JEA's own downtown facilities as a risk of operational continuity. In the short term, JEA has partially addressed this risk by leasing a small storm-hardened space in which to locate its Emergency Operations Center (EOC). This, however, does not address the larger and longer-term business continuity risk discussed at last month's Board meeting.

**Significance:** The current downtown campus is in need of significant restoration and rebuilding, with major building systems reaching the end of their useful lives. In addition, during the storms JEA sustained significant damage to these facilities, including water intrusion, elevators offline, significant roof damage, and window damage. JEA's business needs as a bulk power operator, including security and business continuity, are also important considerations. At present, JEA's Headquarters presents an unresolved business continuity risk.

**Effect:** As discussed in June and July, JEA has been evaluating its Downtown Corporate Headquarters (HQ) options for several years. Board members discussed campus evaluation criteria at its July 30 meeting and requested updates on the process going forward.

**Cost or Benefit:** Modified proposed criteria and weighting are presented for Board discussion based on feedback provided in July. JEA staff will further develop more detailed evaluation criteria for the general categories for a formal solicitation of locations. Cost and benefits for various options will be considered during evaluation.

Three types of building situations are included for the Board's consideration and further discussion. These include lease in multi-tenant existing buildings, lease in single-tenant existing buildings and new space constructed for or by JEA. JEA is likely to receive offers for locations within and outside downtown. Information presented in July included only properties in the downtown boundary.

**Recommended Board action:** This item is being presented for discussion and advice purposes. Additional input and guidance around building types and priority and weighting of evaluation criteria will assist staff in developing more detailed criteria and scoring for the solicitation stage.

**For additional information, contact:** Melissa Dykes 665-7054 or Nancy Veasey 509-0521

Submitted by: AFZ/MHD/NKV



#### Commitments to Action

- 1 Earn Customer Loyalty
- 2 Deliver Business Excellence
- 3 Develop an Unbeatable Team





**INTER-OFFICE MEMORANDUM**

August 12, 2018

**SUBJECT: CORPORATE HEADQUARTERS – DOWNTOWN CAMPUS UPDATE**

**FROM:** Aaron F. Zahn, Managing Director/Interim CEO

**TO:** JEA Board of Directors

**BACKGROUND:**

As discussed in June and July, the most recent storms shined a light on JEA's own downtown facilities as a risk of operational continuity. For several years JEA has been evaluating its Downtown Corporate Headquarters (HQ) options. Board members discussed campus evaluation criteria at its July 30 meeting and requested updates on the process going forward.

**DISCUSSION:**

Proposed criteria and weighting are presented for Board discussion based on feedback provided in July. JEA staff will further develop more detailed evaluation criteria for the general categories for a formal solicitation of locations.

Three types of building situations are included for the Board's consideration and further discussion. These include lease in multi-tenant existing buildings, lease in single-tenant existing buildings and new space constructed for or by JEA. JEA is likely to receive offers for locations within and outside downtown. Information presented in July included only properties in the downtown boundary.

**RECOMMENDATION:**

This item is being presented for discussion and advice purposes. Additional input and guidance around building types and priority and weighting of evaluation criteria will assist staff in developing more detailed criteria and scoring for the solicitation stage.

\_\_\_\_\_  
Aaron F. Zahn, Managing Director/Interim CEO

AFZ/MHD/NKV

JEA CAMPUS CRITERIA SUMMARY	
QUALITATIVE SUMMARY (2/3 Total Score)	% WEIGHT
Customer engagement/customer value	5
Building program accommodation (flexibility on campus program elements)	30
Workforce engagement/culture change opportunity	20
Development schedule (business continuity consideration)	20
Beneficial to economic development/downtown development	10
Timing and risk to contract (site control)	15
Percentage qualitative	100
QUANTITATIVE SUMMARY (1/3 Total Score)	% WEIGHT
Total or annualized cost	50
Life cycle costs	50
Percentage quantitative	100

	Lease Existing		Lease Existing		New Build	
	Multi-tenant Occupancy		Single-tenant Occupancy		Single-tenant occupancy	
Qualitative Criteria	Pros	Cons	Pros	Cons	Pros	Cons
Building Program						
Business need accommodation/functions	Accommodate with build-out of occupied floors	Multi-tenant likely (not JEA only); non-contiguous or shared floors possible	Allows flexibility in space planning and may offer a campus option	Constrained by existing design	Optimize building program – allows more flexibility and campus components	Longer lead time than existing options
Security	Add security layers	Creates security challenges for systems and customer center operations; parking may partially be within building; higher capital & operating costs	Allows greater flexibility in design and implementation of security measures with single tenant building	May require additional capital outlay for systems	Design security measures into full space & parking planning, customer, business & employee centric	Location and accessibility a consideration for security
Parking	Ability to accommodate parking with multiple locations	Parking constrained, multiple garages, surface parking or shuttling possible	Likely offers dedicated parking solution	Parking sufficiency should be considered including customer parking	Fully customized parking; allows for separation of office & parking	Possible shared parking depending on location
Workforce engagement/Culture change	Customize interior space for JEA use	Constrained by existing core and floor layout; employee perception of commitment and parking availability	Customize interior space for JEA use; advantage over multi-tenant space	Constrained by existing design; Location and access will be important for commute considerations	Design space for specific workforce needs & culture change opportunity	Location and access will be important for workforce recruitment and commute considerations
Customer engagement (customer center)	Customer walk-in center ground floor	Requires fit into available space & configuration	Customer walk-in center ground floor; possible flexibility in customer engagement areas	Location, access and bus routes should be considered for customer access	Tailored customer center and customer engagement space	Location, access and bus routes should be considered for customer access
Brand/identification	Limited; could have signage rights	Location and accessibility a consideration for brand	Brand flexibility and signage capability	Location and accessibility a consideration for brand	Highly visible, tailored	Location and accessibility a consideration for brand
Economic Development	Utilize substantial existing vacant space, economic advantage to immediate area	Absorbs space available to others in the market	Utilize existing vacant building, economic advantage to immediate area	Options likely to be suburban (not downtown); may absorb space available to others in the market	Allows for new development and support of surrounding economy	Current JEA location to be sold or razed vacating existing site
Timing/site control	Generally shorter time to move and build out; provides intermediate term flexibility	Design and build-out still a required lead time	Generally shorter time to move and build out; provides intermediate or long term flexibility	Design and build-out still a required lead item	Control with contract timing	Longer lead time
Development Schedule (business continuity)	18 months from lease execution to build out space		18 to 24 months from lease execution to build out space		24 to 36 months or longer from contract or lease execution	

## VI. B.

### Transition Update

August 13, 2018

**SUBJECT:** TRANSITION UPDATE

**Purpose:** ☒ Information Only ☐ Action Required ☐ Advice/Direction

**Issue:** On April 17, 2018, the Board contemplated a transition period and plan for JEA and its management ("Transition"). The Transition period contemplated by the Board was approximately 12 months starting April 17, 2018 and concluding April 30, 2019.

**Significance:** To provide additional clarity for the Board on the process, progress, and future contemplated steps of management related to the Transition. To ensure management is aligned with the Board of Director's relative to Transition steps and actions.

**Effect:** The Transition and related plan is intended to accomplish the following key initiatives: 1) establish stability and focus on JEA's Core Business of providing electric, water, wastewater and other essential services to its customers; 2) create a 'framework' of understanding and measuring device for alignment of JEA's Board, JEA's management, City Council, the Mayor and other key stakeholders; and 3) establish a basis and foundation for a forward looking strategic planning process and permanent CEO placement.

**Cost or Benefit:** Long term planning and value creation for JEA.

**Recommended Board action:** Provided for information only.

**For additional information, contact:** Aaron Zahn – 904-665-4396

Submitted by: AFZ



#### Commitments to Action

- 1 Earn Customer Loyalty
- 2 Deliver Business Excellence
- 3 Develop an Unbeatable Team





# Points of Progress

- **City Council and Board 1:1 meetings complete to provide input to “Strategic Framework” for JEA**
- **New format for Board agendas (Operations, Strategy and Subject Matter Exploration) created to provide better public transparency and Board interaction**
- **Iterative work with Board, SLT, City and Stakeholders to draft Strategic Framework**
- **SLT Workshops on Future of JEA**
  - Started April and ongoing in alignment with discussions with Board around Strategic Framework
  - Intend to create comprehensive draft “Guiding Principles” document for Board review that builds from the “Strategic Framework” and allows a cascade of initiatives top-to-bottom and bottom-to-top throughout JEA
- **10-Year Strategic Planning Update (Estimated start Q4 2018)**
  - JEA should be positioned with alignment, tools and systems to start strategic planning by October BOD meeting
  - Envision solid foundation to be set for Permanent CEO with work product from: (1) SLT workshops; (2) listening tour; (3) collaboration on key stakeholder reports - City Council subcommittee, JCC, DuPont, etc. (4) selection of strategic planning consultant; (5) “Strategic Framework” approved by board; (5) final 2018/2019 budget; (6) a “Guiding Principles” document; (7) updated CTR (commitment to results) process cascade throughout organization – previously CTA (commitments to action); and (7) new management dashboards with consolidated financial reporting

# Points of Concern

- **Maintaining alignment of Stakeholders will be critical**
  - Stakeholder alignment to “Strategic Framework” will require significant Board, SLT and City commitment
  - Employee alignment to “Strategic Framework” will require significant shift in tools, systems and training
  - Alignment of all stakeholders will be necessary before, during and after strategic planning update
- **Time to ‘pivot’ is critical for JEA in updating business strategy and plan**
  - Creating updated strategic plan that maps to “Strategic Framework” direction from the Board needs to be comprehensive and will more than likely be 1+ year process
  - Competitive and market pressures are persistent therefore all time is lost time
- **Culture**
  - Utilities are not built to pivot
- **Capital**
  - Leverage and pivots are like oil and water
- **City Council engagement on future Charter changes necessary to migrate business**

## VII. A.

### Integrated Distributed Energy Resources (iDER)

August 1, 2018

**SUBJECT:** INTEGRATED DISTRIBUTED ENERGY RESOURCES (IDER)

**Purpose:**

☒ Information Only

☐ Action Required

☐ Advice/Direction

**Issue:** Integrated Distributed Energy Resources (iDER) is a term used to encompass the wide-range of transformative technologies developing in the electric generation and distribution arena. Technologies considered range from mature, such as rooftop solar, to developing, such as battery storage, and on to conceptual, such as vehicle to grid (V2G) charging. Both utility- and customer-side technologies fall within the iDER definition. The broad scope of iDER technologies will require frequent Board interaction to develop a comprehensive strategy.

**Significance:** The City Council Special Committee on the Future of JEA noted in its June 27, 2018 “Final Draft Report” that “because of the success of energy conservation measures in reducing electric and water consumption and sales, JEA needs to consider expanding operations into other related business lines to diversify its revenue streams and ensure continued financial health.” The programs that come out of iDER are expected to either be new revenue producing businesses, or businesses that allow our existing assets to operate more efficiently.

**Effect:** Programs developed under iDER could range from JEA installing residential solar arrays to an advanced demand-side management program to developing combined heat and power (CHP) projects for industrial or commercial customers. Any of these programs will be measured against their value to the customer, financial value, community impact value, and environmental value.

**Cost or Benefit:** JEA will produce business cases for iDER concepts with a return on investment that exceeds JEA’s cost of capital. Various options and business cases will be presented at future Board meetings.

**Recommended Board action:** This item is presented for information. No action is required by the Board.

**For additional information, contact:** Steve McInall, Director Electric Production Resource Planning

Submitted by: AFZ/MHD/MJB/SGM



#### Commitments to Action

- 1 Earn Customer Loyalty
- 2 Deliver Business Excellence
- 3 Develop an Unbeatable Team





# Integrated Distributed Energy Resources (iDER)





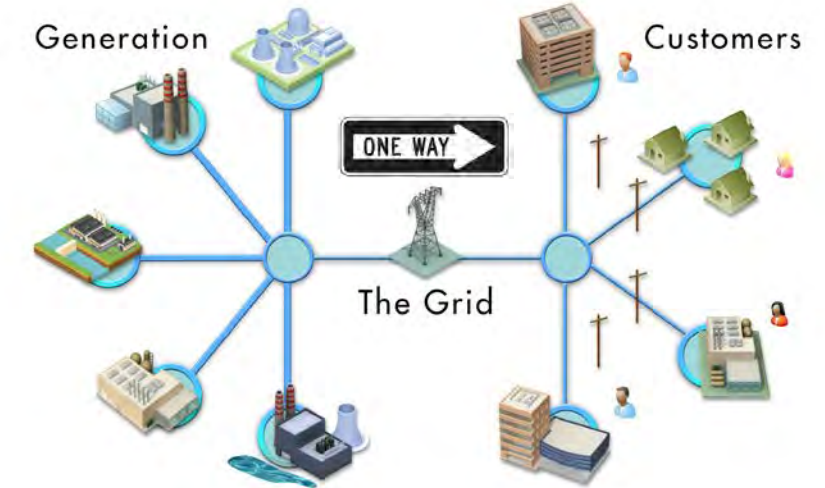
Traditionally, the utility produces electricity at large central plants and distributes it to customers through a one-way grid.

With iDER, generation, distribution, and customers are integrated, allowing electricity to move between each seamlessly.

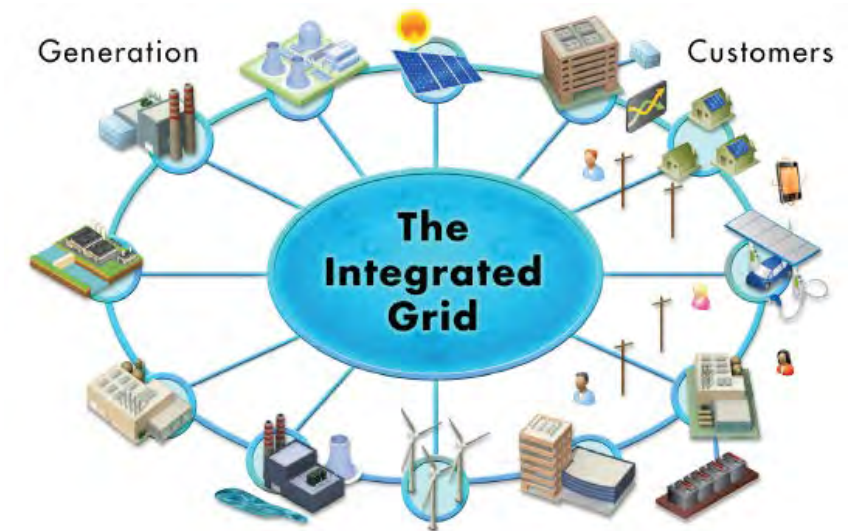
AUGUST 2018

## Traditional Utility v. iDER

### Traditional Generation and Distribution (Utility 1.0)

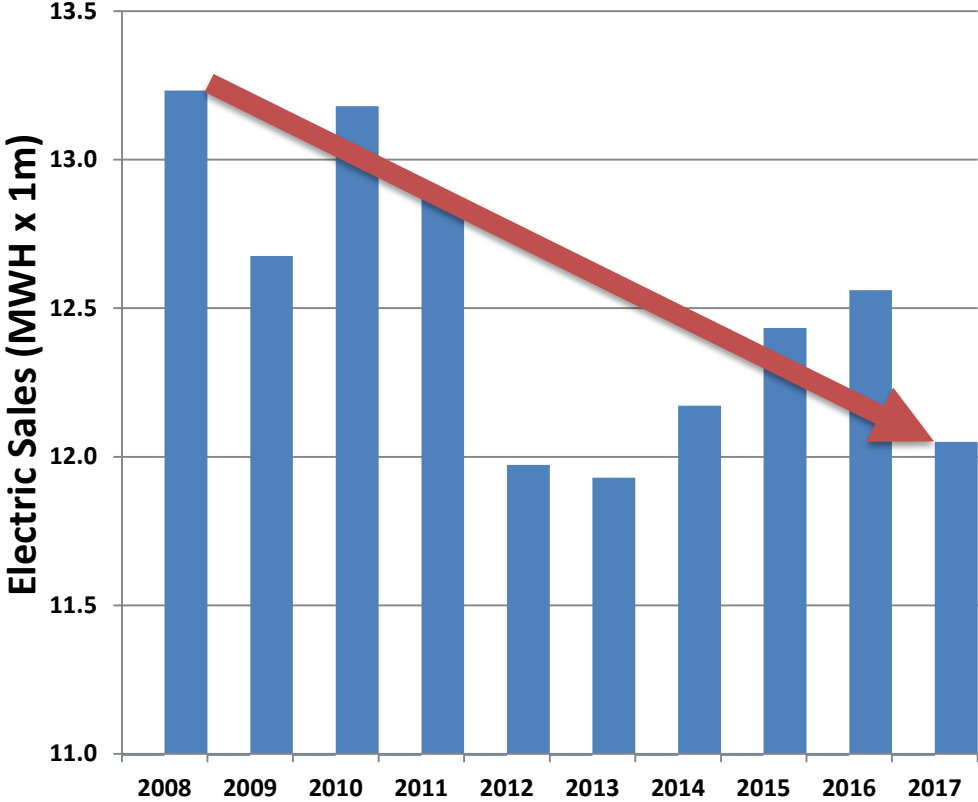


### iDER Generation and Distribution (Utility 2.0)



# Electric Sales

(in millions of MWh)



Sales have declined about 10% from peak, driven by:

- Energy efficiency
- Conservation
- Distributed Energy Resources

AUGUST 2018

## iDER Challenges

# Potential Impact of Solar PV to Net Income

Year-on-year growth rate for solar PV in JEA territory is 92%/yr since 2014. Depending on future growth rates, the impact of further PV development may have extreme consequences by **2025**:

		2025 Projection Using Growth Rate Below				
	2018	25%	40%	55%	70%	85%
Cumulative Solar Capacity (MW)	17	80	180	360	700	1,300
Cumulative Storage Capacity (MW)	0.2	14	34	73	140	260
Private Solar PV Generated (GWh)	23	110	250	500	970	1,800
Total Lost Revenue (\$1000)	\$2,000	\$7,800	\$17,000	\$33,000	\$63,000	\$110,000

iDER threatens the traditional utility business but can also be an opportunity

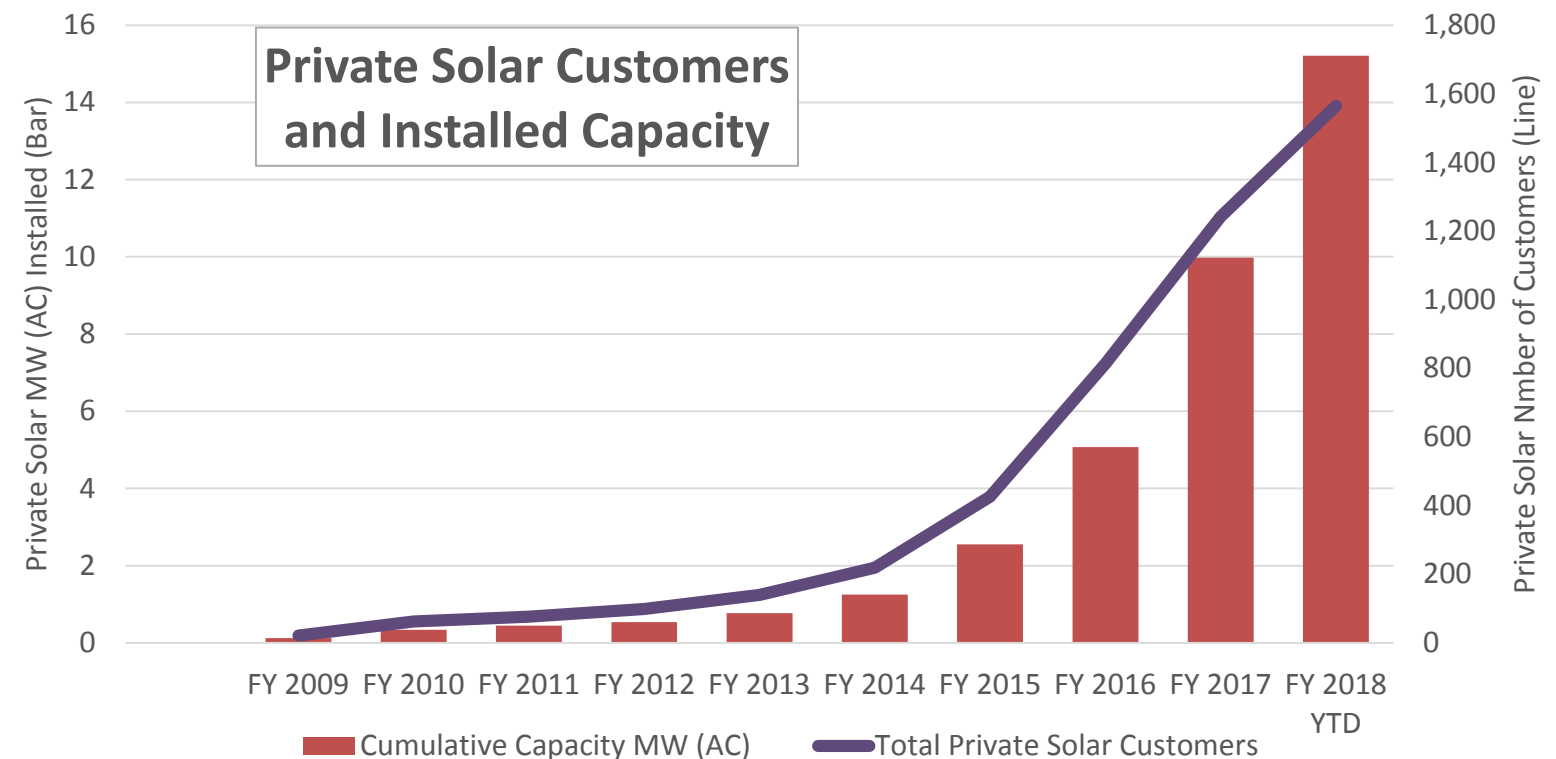


**JEA's largest private solar installation: IKEA – 1.4 MW**

AUGUST 2018

**iDER Customers Today**

## Existing JEA iDER Customers



### Combined Heat and Power

- Anheuser Busch
- Baptist Hospital
- Firestone
- WestRock

### Generation Only

- Jax LNG
- Eagle LNG (Normandy)



AUGUST 2018



# Evolution of iDER at JEA

## Evolution of iDER at JEA

### Incubate and pioneer

1999 - JEA pioneers distributed solar energy by **installing solar panels** on more than 25 locations across Jacksonville

2004 **12 MW Jax Solar** is the largest installation in Florida at that time

**Net Metering** temporary incentive established

**Interruptible Rate** Program

### Integrate

JEA significantly expands universal solar. By [2020?], Jacksonville will have the most solar of any city in the country

JEA launches **JEA SolarSmart** and **JEA SolarMax** programs

T&D World recognizes JEA for leadership in integrating intermittent renewable energy resources without compromising power quality and reliability

### Treat fairly and protect

JEA revises Net Metering with an integrated **Distributed Generation Policy**

JEA launches a ground-breaking **Battery Incentive Programs** to complement the DG Policy

**Interruptible Rate** program closed

iDER Comprehensive Rate Policy

### Participate

- Launch iDER business
- Potential O&M on solar
- Behind-the-meter strategies
- Direct Load Control
- Electrification

- Full Execution
- Pilot & Implementation
- Future State





August 2018



## “Big Three” Rate Approaches Emerging

# “Big three” rate approaches emerging

## Time of Use Rates (“TOU”)

- Price for usage over broad blocks of hours is predetermined and constant

## Critical Peak Pricing (“CPP”) / Critical Peak Rewards (“CPR”)

- Increased price for usage at deemed “critical” periods of high prices or certain system conditions

## Demand Pricing

- Charges based on peak demand in previous billing period

## Hawaii Electric

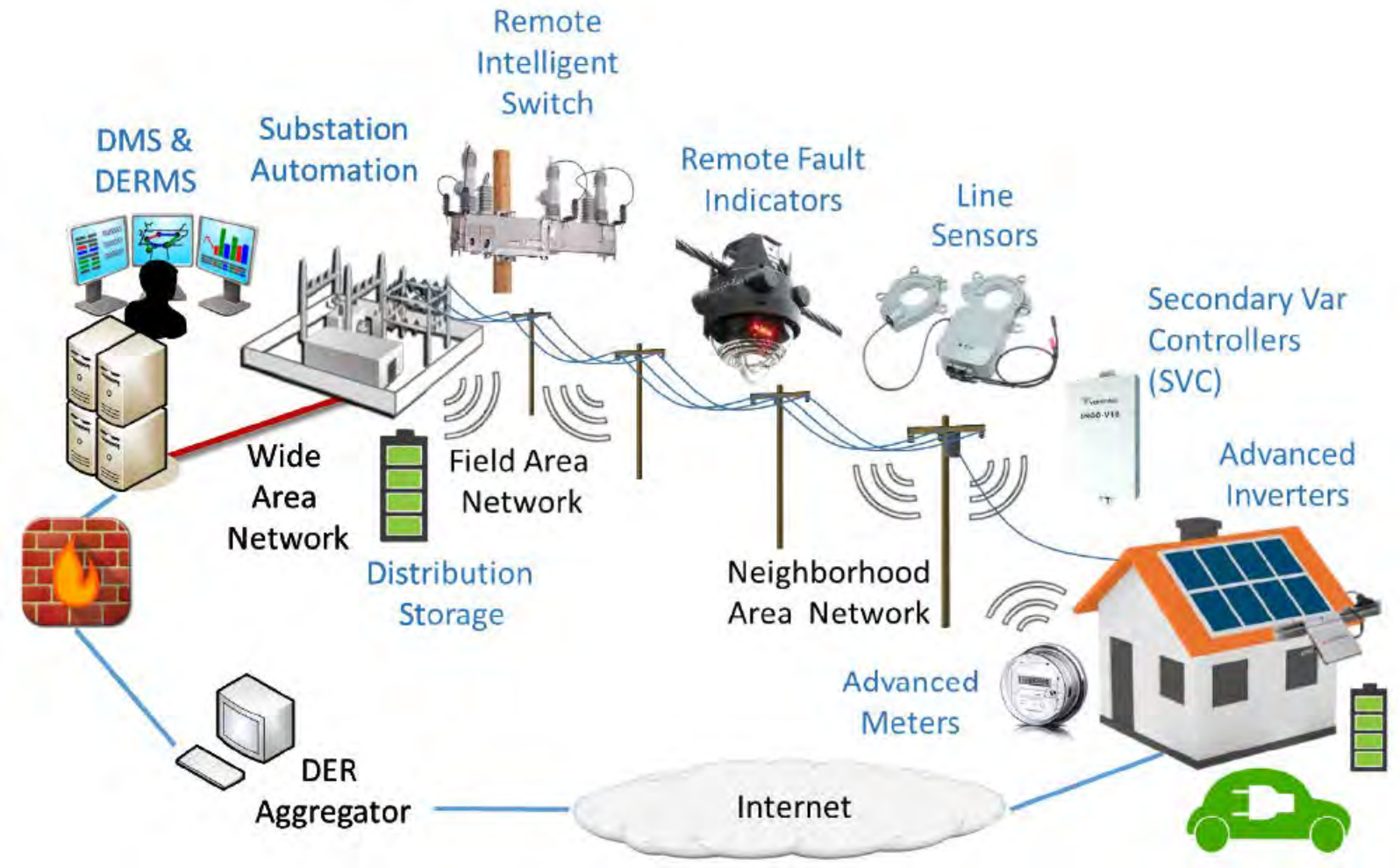
The Hawaii Electric Companies have developed a grid modernization strategy to update their energy network in the next six years.

Modernizing the electric grid will help get Hawaii off imported oil faster, use technology to predict and identify outages and to restore service more quickly, and give customers more information and more control over the energy they use.

AUGUST 2018



## Technology Components of Envisioned Modern Grid





## Customer Choices

### Customer Solar

- ❖ Solar
- ❖ Solar + Batteries

### Demand Response

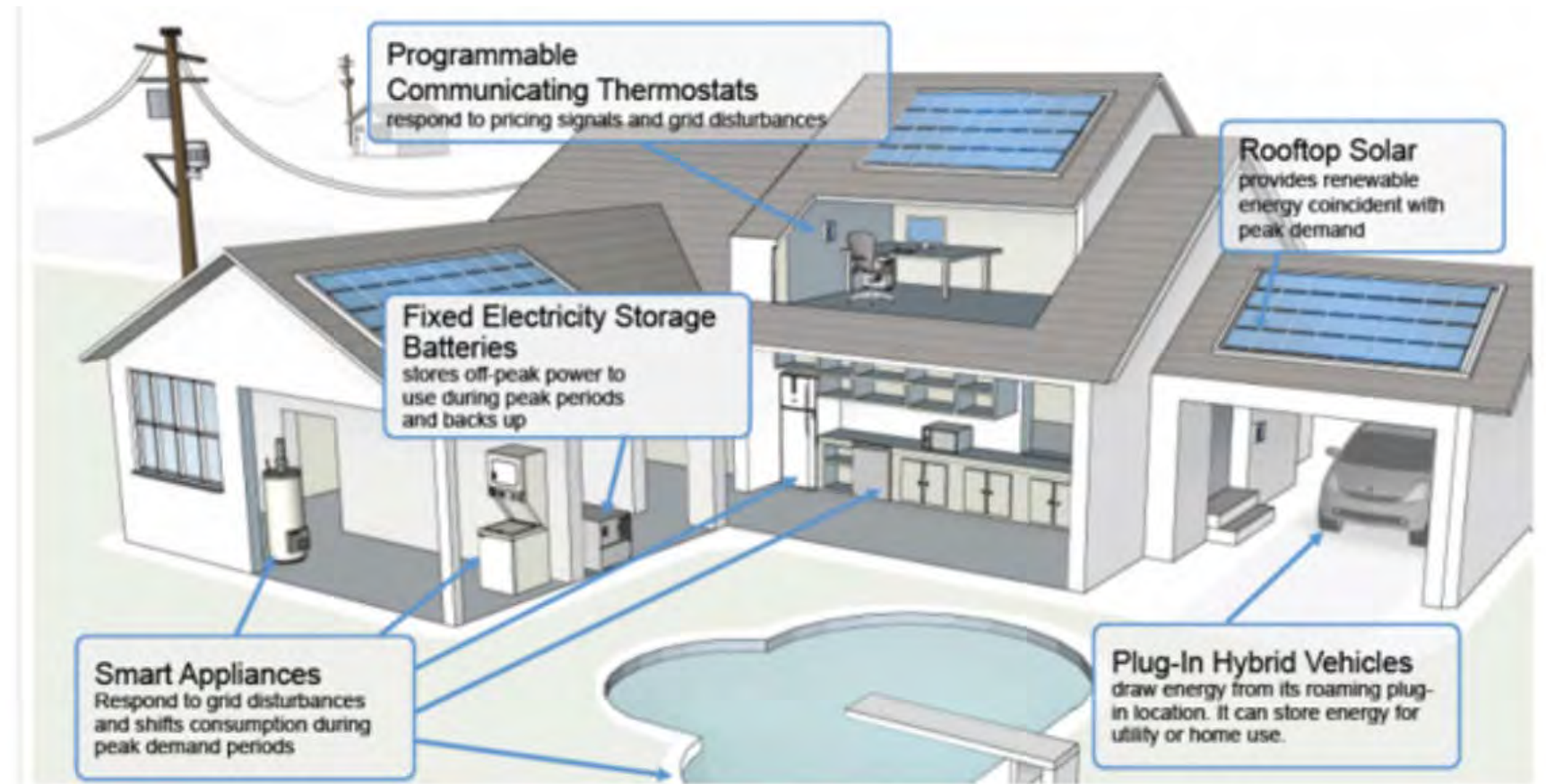
- ❖ Batteries
- ❖ Time of Use
- ❖ Electric Vehicles
- ❖ Water Heaters
- ❖ Air Conditioners
- ❖ Smart Appliances

AUGUST 2018



**iDER Tools**  
**Customer Choices**

## Grid Modernization Customer Choices



**UTILITIES ARE IN THE  
BEST POSITION TO  
CHARACTERIZE THE  
NEEDS OF THE ELECTRIC  
GRID AND IDENTIFY  
APPROPRIATE  
INVESTMENTS AND  
DEPLOYMENT**

-APPA

AUGUST 2018

 **iDER  
Potential  
Future Responses**

## **JEA is evaluating offensive and defensive strategies as part of its strategic planning, including:**

- Demand Side Management/ Demand Response
- Demand Rate
- Direct Load Control
- Vehicle to Grid (V2G) Electric Vehicle Rate
- Time of Use Rates
- Battery (Storage) Rate
- Combined Heat and Power Application
- Utility Scale Storage
- Expanded Natural Gas Offerings
- Commercial Ventures (New Business Areas)
- PhotoVoltaic Installation and Maintenance Services
- Integrated Distributed Energy Resources Package Solutions
- Full Service Provider Model



## Lucas McIntosh, MS/MBA/PE



Mr. Lucas McIntosh is our manager and business line lead for Grid Modernization Consulting and Distribution Planning at Burns & McDonnell. His team specializes in developing and evaluating grid modernization and Operational Technology upgrades across electric utility systems and substations. He has deep analysis experience as a lead consultant as well as large scale project implementation management. Study and project experience includes strategic consulting direction, distribution and DER planning, technology economic analysis and business case development, vendor RFI/RFP and selection support, and other investment justifications.

Clients range from large multi-state investor-owned utilities to smaller municipal utilities. Lucas and his team are active thought leaders in the industry and eagerly contemplate the current and upcoming transformational evolutions of the grid.

Lucas received a BS in Mechanical Engineering from Washington University in St. Louis, an MS in Mechanical Engineering and an MBA from University of Illinois at Urbana-Champaign. He is a registered Professional Engineer in Kansas.

# Integrated Distributed Energy Resources

JEA Board  
August 21, 2018



# Integrated Distributed Energy Resources



**Load  
Management**



**Price  
Incentives**



**Distributed  
Generation**



# Load Management



**Electrification**



**Energy Efficiency**



**Direct Load Control  
(Demand Response)**



**Many may complement each  
other when coordinated properly!**



**Electric  
Transportation**



**Behind the  
Meter Storage**



**Energy Controls  
and Applications**

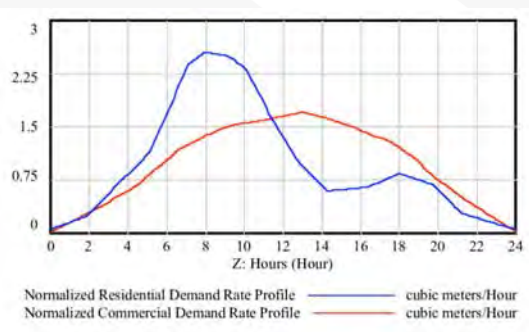
# Price Incentives



## Time of Use Rates



## Demand Rates



## Peak Time Rebates



## Locational Pricing





# Distributed Generation



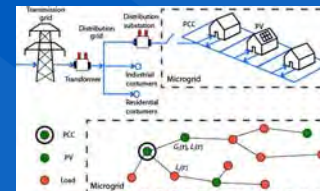
Utility-Scale PV



Rooftop PV (behind-the-meter)



Combined Heat & Power (CHP)



Microgrids

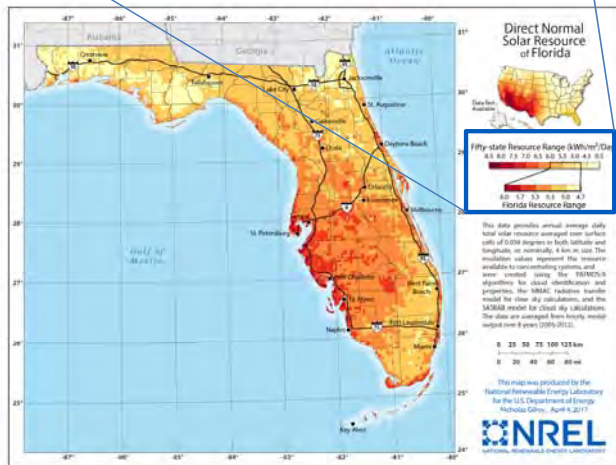
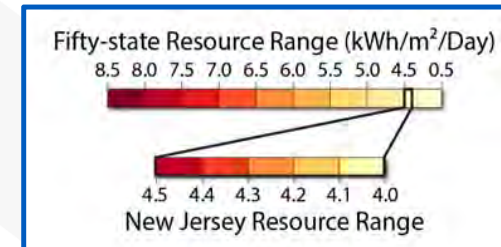
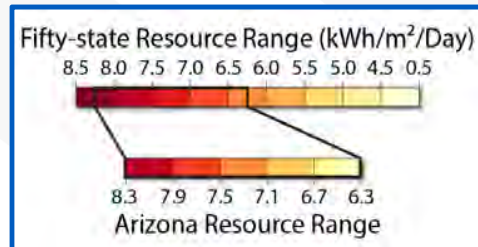
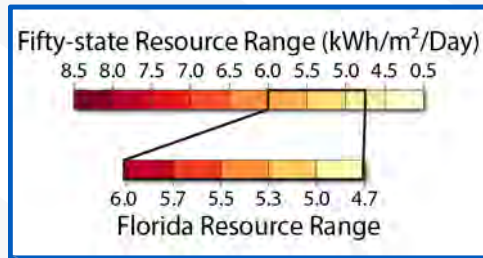


Microturbines

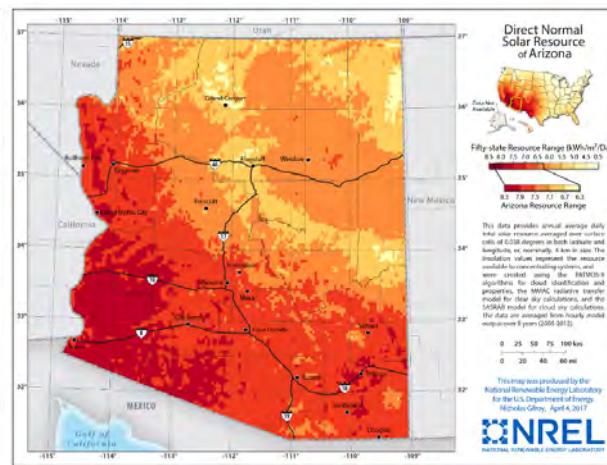


Wind

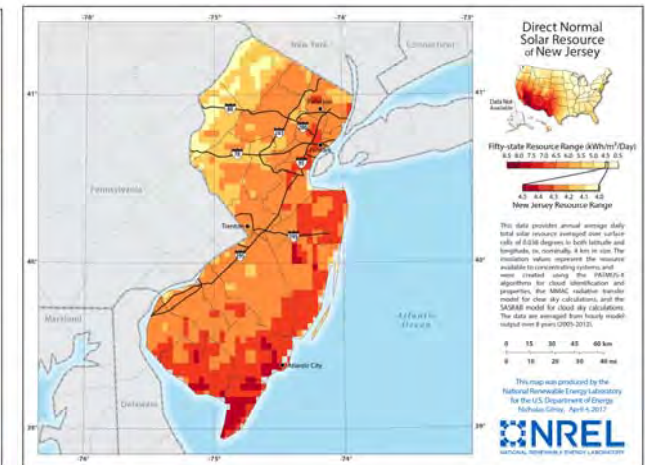
# Florida has Utility & Rooftop Solar Potential



- ▶ National Ranking: **8th** (3rd in 2017)
- ▶ Homes Powered by Solar: 221,520
- ▶ State's Electricity from Solar: **0.65%**
- ▶ Growth: **4,836 MW** next 5 years (2nd)



- ▶ National Ranking: **3rd** (7th in 2017)
- ▶ Homes Powered by Solar: 514,079
- ▶ State's Electricity from Solar: **6.09%**
- ▶ Growth: **2,574 MW** next 5 years (6th)



- ▶ National Ranking: **5th** (11th in 2017)
- ▶ Homes Powered by Solar: 381,918
- ▶ State's Electricity from Solar: **3.87%**
- ▶ Growth: **4,081 MW** next 5 years (8th)

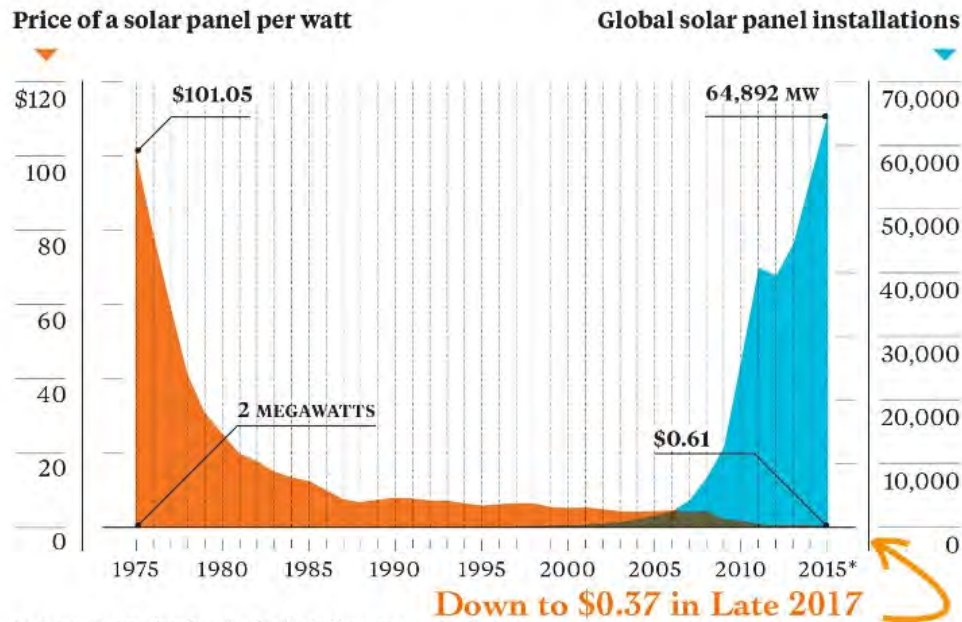


# Solar Panel Prices Have Declined



## Solar on Fire

As prices have dropped, installations have skyrocketed.



- ▶ Utility-scale PV installed costs have declined dramatically
- ▶ High electric rates on coasts
- ▶ Solar lease developers have taken advantage of favorable net metering and investment tax credits
- ▶ Growth skyrockets in an area when utilities and developers promote and facilitate adoption, customers don't pursue well on their own



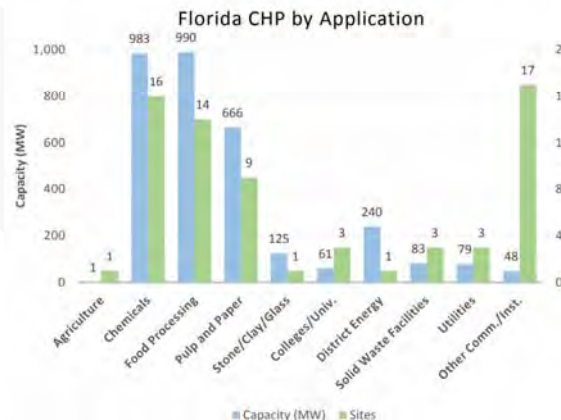
# Florida CHP



- ▶ Florida has favorable outlook and conditions for CHP
- ▶ Used widely in Industrial installations
- ▶ Few Academic installations
- ▶ Few Utility installations
- ▶ Few Commercial installations

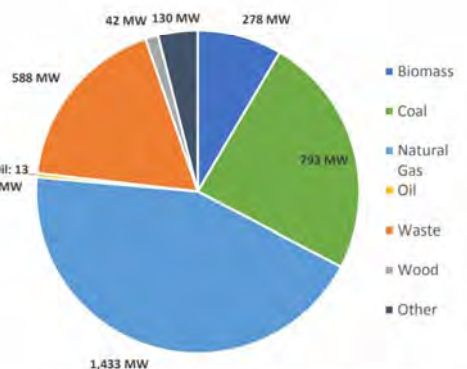
Sector	Installations	Capacity (MW)
Industrial	40	2,764
Commercial/Institutional	27	511
Other	1	1
<b>Total</b>	<b>68</b>	<b>3,276</b>

The Southeast CHP Technical Assistance Partnership has compiled information on certain illustrative CHP projects in Florida. You can access these by visiting the Department of Energy's [CHP Project Profiles Database](#).



Source: DOE CHP Installation Database (U.S. installations as of Dec. 31, 2016)

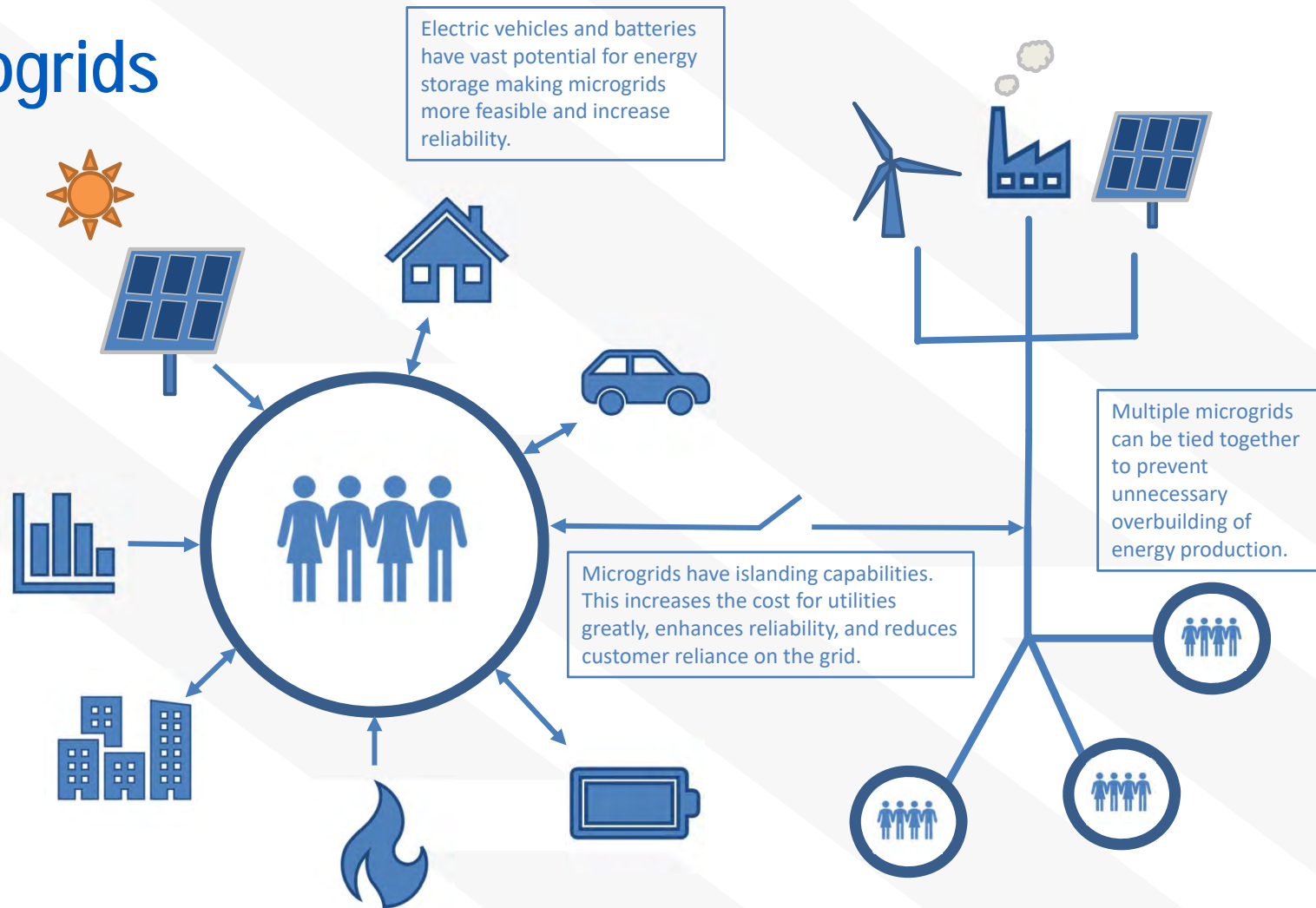
Florida CHP Capacity (MW) by Fuel Type



Source: DOE CHP Installation Database (U.S. installations as of Dec. 31, 2016)

[https://www.energy.gov/sites/prod/files/2017/11/f39/StateOfCHP-Florida\\_0.pdf](https://www.energy.gov/sites/prod/files/2017/11/f39/StateOfCHP-Florida_0.pdf)

# Microgrids



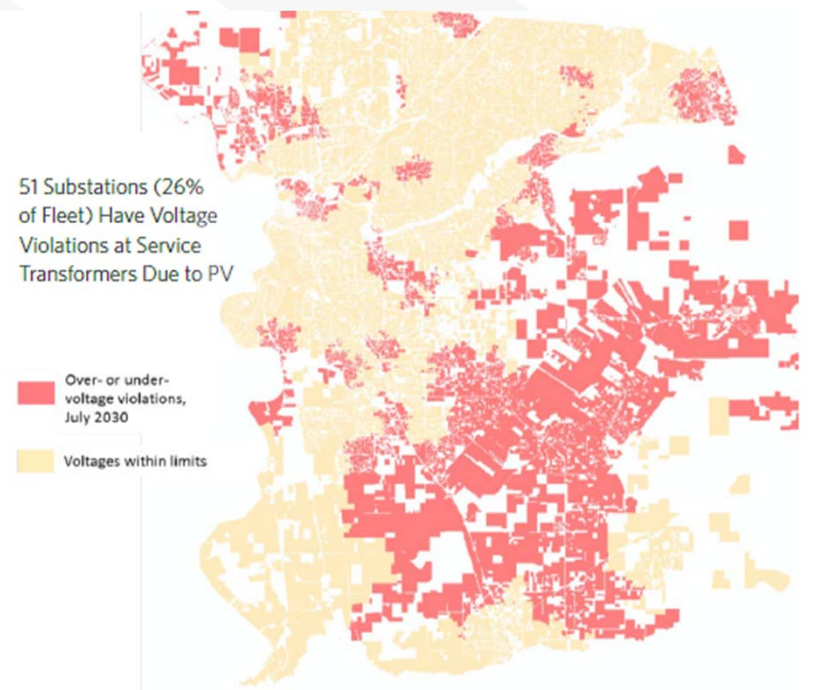
The background of the slide is a solid blue color with a pattern of overlapping, semi-transparent, light blue geometric shapes. These shapes are primarily parallelograms and trapezoids, arranged in a way that creates a sense of depth and movement, resembling a stylized architectural or abstract design.

# Utility Challenges with DERs

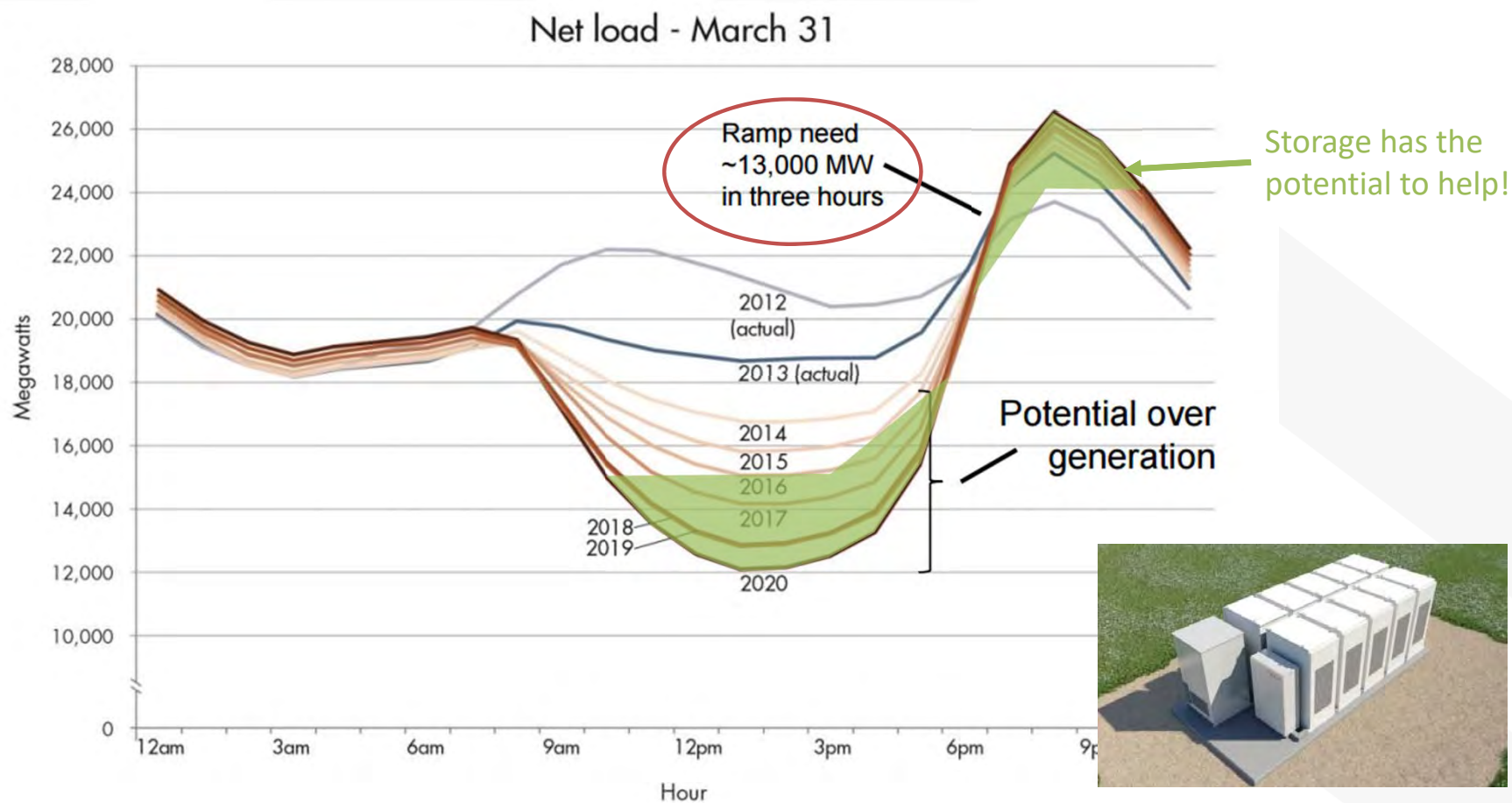
# SMUD Case Study

- ▶ Integrated DER planning study (iDER)
- ▶ 2030 analysis for:
  - Combined Heat & Power
  - Distributed Solar Photovoltaics
  - Energy Efficiency
  - Dispatchable and Nondispatchable Demand Repsonse
  - Distributed Energy Storage
  - Electric Vehicles

## Detailed Geographic Analysis



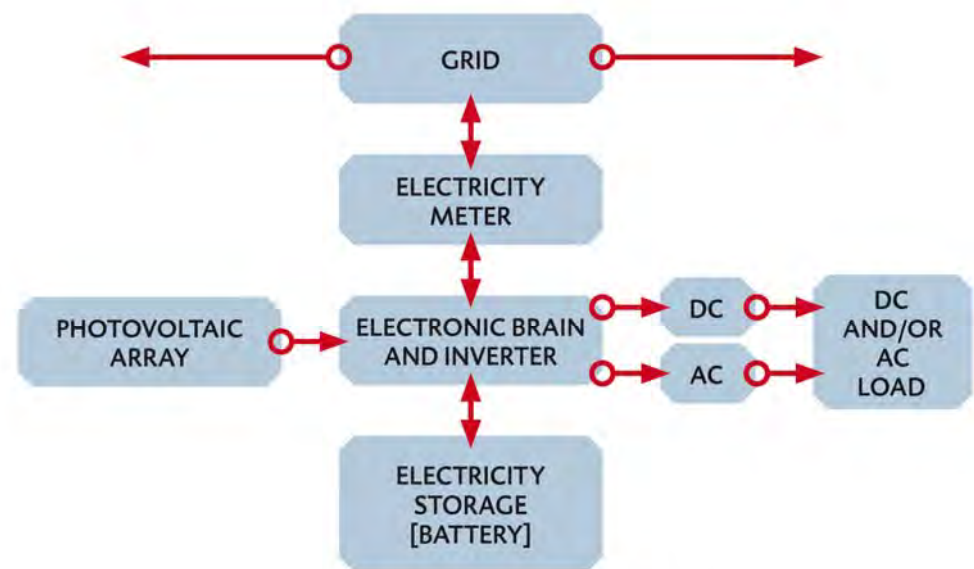
# CAISO Afternoon Ramp Challenges





# Smart Inverters

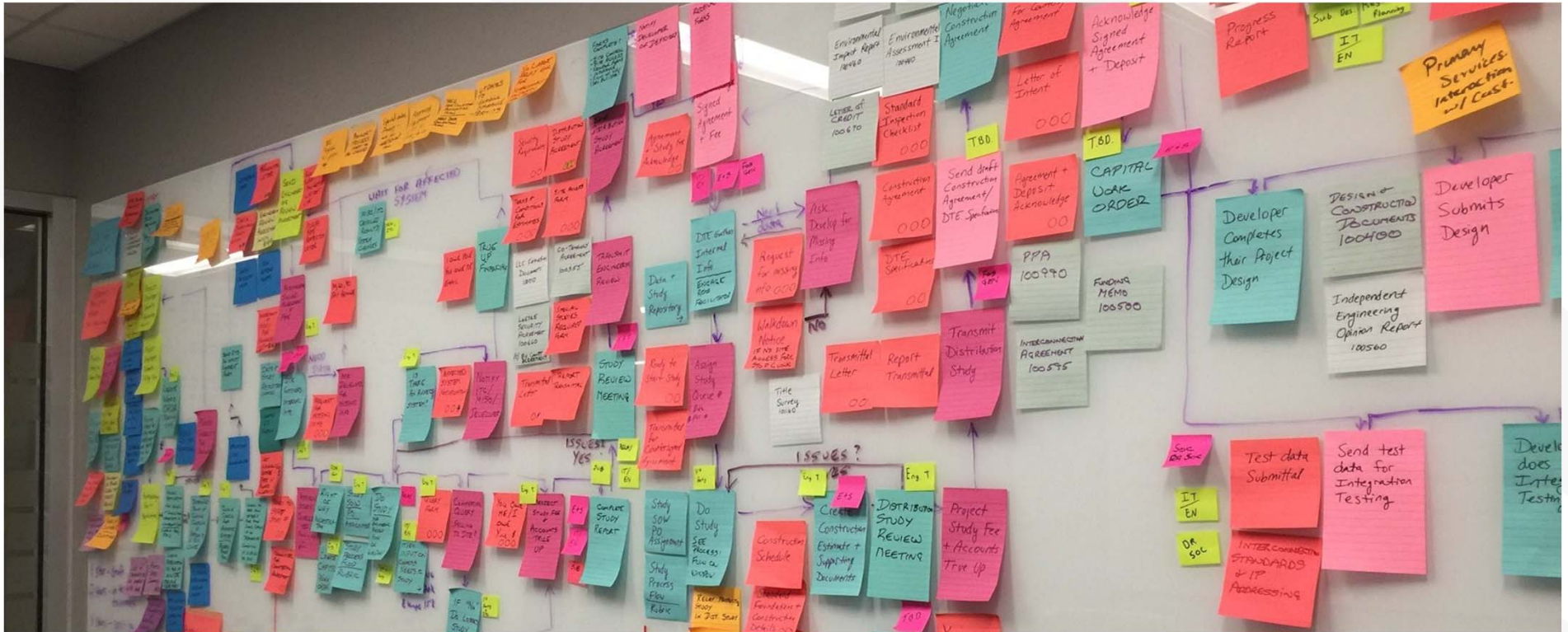
- ▶ New electronics enable utility communications and control
- ▶ Synthetic inertia potential
- ▶ May mitigate voltage and frequency fluctuations caused by DERs
- ▶ Will enable higher DER penetration!



Schematic of the "Smart PV system"

<http://energypost.eu/the-emergence-and-great-future-of-smart-pv-systems/>

# Tracking and Evaluating DERs gets Complicated



# Operational Technologies can Help Too!



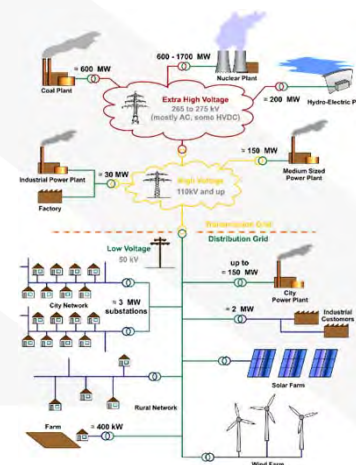
## AMI

JEA is installing smart meters now



## ADMS

JEA plans to implement OSI ADMS  
and also upgrade OMS soon



## DERMS

Might consider this to monitor and  
control DERs

# Modernization Investments

	Investment Category	Reduce Outage Impact	Optimize Demand	DER Integration	Situational Awareness
Resilient	Distribution automation (SCADA)	X		X	X
	Sensors and monitoring	X		X	X
	Substation flood mitigation	X			
	Substation physical security	X			X
	Cybersecurity	X		X	X
Integrated	Volt/VAR optimization		X	X	X
	Energy storage		X	X	X
	Integrated planning and modeling of DER	X		X	X
	Microgrids	X	X	X	
Information (Smarter)	Advanced fault indication/prediction	X			X
	Telecommunications infrastructure	X	X	X	X
	Distribution management system	X	X	X	X



CREATE AMAZING.



V. A.  
Appendix A  
Board Meeting Minutes  
July 30, 2018

**JEA**  
**BOARD MINUTES**  
July 30, 2018

**The JEA Board met in regular session on Monday, July 30, 2018, on the 19<sup>th</sup> Floor, 21 W. Church Street, Jacksonville, Florida. Present were Alan Howard, Husein Cumber, Kelly Flanagan April Green, Camille Johnson and John Campion. Frederick Newbill was absent and excused.**

**Agenda Item I – Welcome**

- A.** The meeting was **called to order** at 12:00 PM by Chair Howard.
- B.** A **Moment of Reflection** was observed by all.
- C.** The **Pledge of Allegiance** was led by Chair Howard.
- D.** **Adoption of Agenda** – The agenda was approved on **motion** by Vice Chair Cumber and second by Mr. Campion.
- E.** The **Safety Briefing** was given by Aaron Zahn, Interim Managing Director/Chief Executive Officer.
- F.** **Sunshine Law/Public Records Statement** – Jody Brooks, Office of General Counsel (OGC), stated this Board Meeting is being held in compliance with Florida's Government in the Sunshine Law, §286.011. The complete statement can be found in section I. F. of the Board package.

**Agenda Item II – Presentations and Comments**

- A.** **Comments from the Public** – None
- B.** **Council Liaison's Comments** – The Honorable Matt Schellenberg had no comments. Chair Howard recognized Council Member Anderson and thanked him for attending today's meeting.
- C.** **Office of the Mayor Liaison's Comment** – Dr. Johnny Gaffney was not in attendance.
- D.** **J.D. Power Residential Survey 2018 Final Results** – Ms. Stewart, Vice President & Chief Customer Officer, presented that in terms of Overall Satisfaction, JEA landed in the 2<sup>nd</sup> Quartile, with the industry average rising just one point, while JEA's score dropped 10 points to an index score of 737. JEA's performance placed the brand 17 points higher than the national average, ranking 44<sup>th</sup> nationally out of 138 utilities, and 5<sup>th</sup> in the South Mid-Size segment, out of 19 brands. Ms. Stewart stated the chief drivers of the year over year decline were customer perceptions of Power Reliability & Quality, Billing & Payment, and Communications; however, the last two years of the study represent a period of volatility in customer sentiment. Ms. Stewart added that customer perceptions of quality and reliability were impacted by hurricane-related outages. JEA saw a positive spike in customer sentiment after Hurricane Matthew, which was followed by fatigue after Hurricane Irma, as restoration of power didn't always match customer expectations. The study also noted that media discussion of the potential sale of JEA also played a role in customer perceptions. Ms. Stewart highlighted that JEA still placed in the 1<sup>st</sup> Quartile in Communications, including having the highest recall for website communications of any utility in the study. Despite the disappointment at this year's results, Ms. Stewart added that JEA should not lose sight of the fact that our customers continue to recognize JEA's solid performance year over year. JEA's

successes at communication and awareness of messaging contribute greatly to JEA's overall performance and help pave the way for future improvement.

**Agenda Item III – Operations (Discussion / Action)**

- A. Consent Agenda** – used for items that require no explanation, discussion or presentation and are approved by one motion and vote. On **motion** by Vice Chair Cumber and second by Ms. Green, Appendix A through D were unanimously approved and Appendix E through G were received for information.

Appendix A: Board Workshop Minutes June 19, 2018 – approved

Appendix B: Board Meeting Minutes June 19, 2018 – approved

Appendix C: St. Johns River Power Park Systems Employees' Retirement Plan – Amendment #2 to the Restated Plan Document – approved

Appendix D: Compliance Amendment to JEA 457 Deferred Compensation Plan Document – approved

Appendix E: Sole Source & Emergency Procurement/Procurement Appeals Board Report – received for information

Appendix F: Monthly Financial Statements – received for information

Appendix G: Monthly FY18 Communications & Engagement Calendar and Plan Update – received for information

- B. Monthly Financial and Operations Dashboard** – Ryan Wannemacher, Interim Chief Financial Officer, presented the newly created monthly Financial and Operations Dashboard, which will be presented to the Board on a bi-monthly basis. Mr. Wannemacher reviewed J.D. Power Customer Satisfaction index scores, safety and operational and financial metrics for electric and water/wastewater services. Board Members held discussions regarding safety, credit ratings and net revenue. Chair Howard thanked Mr. Zahn, Mr. Wannemacher and Ms. Dykes for their work, and stated staff will provide a more in-depth presentation at the August 21, 2018 meeting. This presentation was received for information.

- C. Recommendation to Call a Public Hearing to Modify the Electric Tariff Documentation** – Ryan Wannemacher, Interim Chief Financial Officer, stated in 2013, JEA established an Economic Development Program (EDP) to drive retention, expansion and recruitment of business and commercial customers to portions of Northeast Florida. Staff is proposing to extend the application period by 1 year to September 30, 2019. Mr. Wannemacher stated the economic development incentives are directed to electric services and offers discounts based on job creation thresholds and demand for new or expanded electric load. Mr. Wannemacher highlighted the discounts do not affect other JEA customer bills. Mr. Wannemacher stated the EDP has been a major value driver for JEA and the community over the past several years. The EDP has driven community impact value as a successful incentive tool for the City of Jacksonville and JAXUSA Partnership to attract and expand businesses, drive customer value by increasing asset utilization of the system, and drive financial value by increasing free cash flow and allowing rate stability. Mr. Wannemacher reported that currently there are seven businesses going through the program application process. On **motion** by Vice Chair Cumber and second by Ms. Green, Board Members held discussions and unanimously approved to call a public hearing to occur during the regularly scheduled Board meeting on August 21, 2018.

- D. Real Estate Condemnation Resolution: GEC to Bartram 230KV CT 909 ROW –** John McCarthy, Vice President & Chief Supply Chain Officer, presented Real Estate Services is requesting authorization to file condemnation actions to acquire the easement rights necessary to construct an electric transmission line in the southern portion of JEA's service territory that is experiencing rapid growth. Mr. McCarthy provided Board Members with a list of the ownership interests, along with a map of existing and future corridors. Mr. McCarthy added that condemnation authority is currently being sought for 27 parcels to ensure that any delays in negotiations or acquisitions do not jeopardize the project schedule. Vice Chair Cumber and Ms. Flanagan declared a conflict of interest and filed Form 8B Memorandum of Voting Conflict for County, Municipal, and other Local Public Officers. A signed copy is in the meeting file. Chair Howard disclosed a former client is listed as having ownership interests. On **motion** by Ms. Green and second by Ms. Johnson, the Board unanimously approved Resolution 2018-05 for Condemnation to be filed with the Court in order to obtain easements to the property, for the purposes referenced above, should negotiations prove unsuccessful. Further, the Board approved pre-suit mediation as allowed by Chapter 73.015(3), Florida Statutes, and delegated mediation settlement authority to the Managing Director/CEO or his designee and lastly the Board approved continuing negotiations with the property owners until and after any Order of Taking in order to expedite the process, control costs and provide a fair settlement between parties.
- E. Real Estate: Greenland Wastewater Treatment Plant – Land Purchase –** John McCarthy, Vice President and Chief Supply Chain Officer, presented Real Estate Services is requesting authorization to acquire vacant land for the future Greenland Wastewater Treatment Plant. Mr. McCarthy noted the project is critical for continued reliability and economic growth of JEA's water and wastewater system in the region. JEA has negotiated with Estuary, LLC for the acquisition of approximately 185 acres located east of State Road 9B. The 185 acres will be acquired in fee simple, with no less than 120 upland acres. All easements for access and utilities will be provided. The purchase price for the land is \$20 million. On **motion** by Vice Chair Cumber and second by Ms. Green, the Board unanimously approved the purchase of the Greenland Wastewater Treatment Plant site together with reasonable closing costs.

#### **Agenda Item IV – Strategy (Discussion Only)**

- A. Strategic Framework –** Aaron Zahn, Interim Managing Director/CEO presented the strategic framework conversation began with the Board on April 17, 2018 and continued with City Council Members and the Mayor's Office to obtain alignment with all major stakeholders that have influence on JEA's performance both operationally and financially. The second draft provided includes feedback provided by the Board, which creates a statement of direction from the Board to the City Council, versus the previously submitted resolution. Mr. Zahn noted over the last three months, he has been working with JEA's Senior Leadership Team on building a consensus, while including input from employees received during the Management Listening Tours. Chair Howard requested the Board to provide Mr. Zahn with input on the Strategic Framework and bring back to the Board at the August 21, 2018 meeting for action. Mr. Zahn noted the recasting of the Strategic Framework is guided by JEA's four basic Corporate Measures of value including: value to our customer, financial value, community impact value and environmental value. Mr. Zahn added that staff met with the JAXChamber for a full day to learn and discuss how JEA can be more impactful to the community. This presentation was provided for information.

- B. Corporate Headquarters – Downtown Campus Update** – Aaron Zahn, Interim Managing Director/CEO stated approximately four years ago the conversation began regarding JEA's corporate headquarters. The current downtown campus is in need of significant restoration and rebuilding. During hurricanes Matthew and Irma, JEA sustained significant damage to the facilities, including water intrusion, elevators going offline and significant roof and window damage. Mr. Zahn stated it is staff's request to obtain the Board's guidance on: 1) the timeline, 2) the selection process, and 3) the evaluation criteria. Ms. Flanagan declared a conflict of interest and filed Form 8B Memorandum of Voting Conflict for County, Municipal, and other Local Public Officers. Chair Howard introduced Nancy Kilgo, Director, Government Relations. Ms. Kilgo highlighted the process JEA underwent including conducting multiple studies in 2014 and 2016, engaged CBRE to act as JEA's owner's representative, conducted a Workplace Strategy Analysis and initial review assessments related to Emergency Operations Center, and conducted conceptual analysis on three site types for impact of site size, location test fits and massing. Ms. Kilgo stated JEA staff has identified several options to reduce the storm preparedness and business continuity risk including: City of Jacksonville Block 48 new construction, One Enterprise Center leased space, Bank of America building leased space, new development connecting the Downtown Core with the Cathedral District, and new development on Lot J. Furthermore, Ms. Kilgo stated she expected other potential sites may be available once formal process was initiated. Ms. Kilgo added JEA wishes to stay within the Downtown Investment Authority jurisdiction. Ms. Kilgo reviewed the next steps and timeline, as well as the qualitative comparison of each of these options. Board Members held discussions on the evaluation criteria and timeline. This presentation was provided for information.
- C. Southside Capital Allocation** – Chair Howard invited Council Liaison Schellenberg to the table as a guest, as this subject will integrally involve the City Council based on the current proposal from staff. Aaron Zahn, Interim Managing Director/CEO stated the Board has been provided with a letter of proposal and financial analysis that was completed at the direction of the Board. The contractual closing of the former Southside Generating Station property occurred in July. JEA received ~\$18.6 million in proceeds from this transaction. Mr. Zahn stated the proposal for the use of the proceeds touches each of JEA's four Corporate Measures of Value including 1) utilizing ~\$15 M of the proceeds to drive growth of water and sewer customer base with a 2.5% return on investment, 2) the community impact of addressing the issue of providing central water and wastewater infrastructure, which has been a decades long issue, 3) the environmental impact relative to nutrient pollution is a significant issue for the St. Johns River and 4) economic development and value to the customer by adding customers at a rate neutral perspective for our existing customers. Chair Howard called upon Council Liaison Schellenberg to provide his comments related to the one-time contribution to the City. The Council Liaison requested JEA proceed with caution and continue the conversation about additional opportunities for the use of the proceeds. Ms. Kilgo stated the 70% threshold has been met, which includes two neighborhoods, with approximately a total of 1500 homes. Board Members held discussions and requested staff to bring back information regarding other alternative uses of the proceeds, timing of the study, details on the conversion rate and cost, as well as a proposal showing how it fits with the current City of Jacksonville agreement. This presentation was received for information.
- D. Transition Plan Update** – Aaron Zahn, Interim Managing Director/CEO provided an update on the transition plan. Mr. Zahn stated he believes the plan is well underway,



with the Senior Leadership Team moving in the right direction with JEA and the community. This presentation was received for information.

#### **Agenda Item V – Subject Matter Exploration (Opportunities & Risks – Presentation)**

- A. Data Fiber Utility Services for the 22<sup>nd</sup> Century Smart City** – Paul Cosgrave, Vice President and Chief Information Officer, presented the three-step process of discussing, deliberating and finally deciding the direction of JEA’s telecommunication assets. Mr. Cosgrave noted JEA has 550 miles of dark fiber, 30+ cell towers and over 180,000 poles that are utilized for attaching third party telecom assets. Mr. Cosgrave reminded the Board that the City Council Special Committee on the Future of JEA noted in its June 27, 2018 “Final Draft Report” that stated JEA needs to consider expanding its operations into other related business lines to diversify its revenue streams and ensure continued financial health. Ryan Wannemacher, Interim Chief Financial Officer, stated leveraging JEA’s telecom assets will create value for Jacksonville by accelerating broadband assets and services in Jacksonville, creating value and improving the lives of the citizens, will be a source of financial value that can be leveraged to support funding of core utility needs and enhances and expands economic development opportunities for Jacksonville. Mr. Wannemacher introduced Jason Gredell, Head, Infrastructure Advisory Group, JP Morgan. Mr. Gredell provided an overview of communication infrastructure industry, as well as an overview on JEA’s telecom infrastructure opportunities. Mr. Zahn provided a summary of Mr. Gredell’s presentation noting that JEA will be the first city in the United States to offer a complete package of horizontal and vertical assets into the market. Board Members held discussions and at Chair Howard’s direction, Board Members should individually submit questions to Mr. Zahn. Mr. Gredell recognized and thanked Mark Widener, JP Morgan for his great work on the presentation. This presentation was provided for information

#### **Agenda Item VI – Committee Reports**

- A. CEO Search Committee Report** – Committee Chair Husein Cumber stated the CEO Search Committee met on July 16, 2018. In attendance were Board Chair Howard and Board Member Green. Mr. Cumber thanked Kay Fuhrman and Sean O’Neal with Heidrick and Struggles for their hard work. Mr. Cumber stated Council Member Schellenberg will be invited to all upcoming meetings. Committee Chair Cumber provided the timeline for the CEO search process concluding with having a permanent Managing Director/CEO in position on January 1, 2019. Mr. Cumber provided information on the various assessments and background checks candidates will need to go through.
- B. Managing Director & Chief Executive Officer Position Specification** – Committee Chair Cumber stated the Managing Director/Position Specification was included in the Board package and requires approval prior to Heidrick & Struggles posting the position specification. Committee Chair noted the CEO Search Committee made revisions to the original draft during the July 16, 2018 meeting. On **motion** by Ms. Johnson and second by Committee Chair Cumber, Board Members held discussions and unanimously approved the position specification.

#### **Agenda Item VII – Other Business**

- C. Old Business** – Board Vice Chair Cumber inquired regarding the topic of Demand Rate and requested the Board to discuss this item during the August 21, 2018 Board Meeting.

**D. Other New Business – None**

**E. Open Discussion – None**

**F. Interim Managing Director/CEO's Report** – Mr. Zahn, Interim Managing Director/CEO recognized Deryle Calhoun, JEA's new Vice President/General Manager, Water/Wastewater Systems.

**G. Chair's Report** – Chair Howard appointed Mr. Campion to the CEO Search Committee.

**Agenda Item VIII – Closing Considerations**

**A. Announcements** – Next Board Meeting – August 21, 2018

**B. Adjournment**

*With no further business claiming the attention of the Board, Chair Howard adjourned the meeting at 2:47 PM.*

APPROVED BY:

\_\_\_\_\_  
SECRETARY

DATE: \_\_\_\_\_

Board Meeting recorded by:

\_\_\_\_\_  
Melissa M. Charleroy  
Executive Assistant

V. A.

Appendix B

Monthly Financial Statements

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V. A.  
Appendix B  
08/21/2018



## Monthly Financial Statements

July 2018



# Monthly Financial Statements

July 2018

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**Statements of Net Position****(in thousands - unaudited) July 2018 and 2017**

	2018	2017
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 257,019	\$ 291,128
Investments	169,510	183,255
Customer accounts receivable, net of allowance (\$1,711 in 2018 and \$1,942 in 2017)	217,330	221,244
Miscellaneous accounts receivable	14,404	36,248
Interest receivable	3,755	2,661
Inventories:		
Fuel inventory - Electric System	43,978	64,610
Fuel inventory - Plant Scherer	6,830	3,401
Materials and supplies - Water and Sewer	54,353	48,466
Materials and supplies - Electric System	23,763	19,100
Materials and supplies - Plant Scherer	2,160	2,097
Total current assets	793,102	872,210
Noncurrent assets:		
Restricted assets:		
Cash and cash equivalents	118,663	61,294
Investments	780,083	956,557
Accounts and interest receivable	52	790
Total restricted assets	898,798	1,018,641
Costs to be recovered from future revenues	795,784	456,042
Investment in The Energy Authority	6,374	6,276
Other assets	16,943	18,948
Total noncurrent assets	1,717,899	1,499,907
Capital assets:		
Land and easements	194,437	193,512
Plant in service	11,221,491	10,921,571
Less accumulated depreciation	(6,468,271)	(5,679,665)
Plant in service, net	4,947,657	5,435,418
Construction work in progress	359,680	368,174
Net capital assets	5,307,337	5,803,592
Total assets	7,818,338	8,175,709
<b>Deferred outflows of resources</b>		
Unrealized pension contributions and losses	177,704	137,010
Unamortized deferred losses on refundings	145,614	135,796
Accumulated decrease in fair value of hedging derivatives	97,042	126,723
Unrealized asset retirement obligation	42,406	-
Total deferred outflows of resources	462,766	399,529
Total assets and deferred outflows of resources	\$ 8,281,104	\$ 8,575,238

**Statements of Net Position****(in thousands - unaudited) July 2018 and 2017**

	2018	2017
<b>Liabilities</b>		
Current liabilities:		
Accounts and accrued expenses payable	\$ 85,106	\$ 94,102
Customer deposits	59,706	56,591
City of Jacksonville payable	9,724	9,661
Utility taxes and fees payable	9,311	9,184
Compensated absences due within one year	1,423	3,527
Total current liabilities	165,270	173,065
Current liabilities payable from restricted assets:		
Debt due within one year	185,790	229,095
Renewal and replacement reserve	83,612	80,112
Interest payable	49,642	55,429
Construction contracts and accounts payable	24,185	22,459
Total current liabilities payable from restricted assets	343,229	387,095
Noncurrent liabilities:		
Net pension liability	557,665	493,346
Asset retirement obligation	35,263	-
Compensated absences due after one year	29,156	26,864
Environmental liabilities	17,647	18,556
Other liabilities	4,948	4,802
Total noncurrent liabilities	644,679	543,568
Long-term debt:		
Bonds payable and commercial paper payable, less current portion	3,813,680	4,178,295
Unamortized premium, net	157,739	117,254
Fair value of debt management strategy instruments	95,595	126,616
Total long-term debt	4,067,014	4,422,165
Total liabilities	5,220,192	5,525,893
<b>Deferred inflows of resources</b>		
Revenues to be used for future costs	232,820	465,115
Unrealized pension gains	12,955	12,683
Total deferred inflows of resources	245,775	477,798
<b>Net position</b>		
Net investment in capital assets	1,875,008	1,638,974
Restricted	589,301	594,473
Unrestricted	350,828	338,100
Total net position	2,815,137	2,571,547
Total liabilities, deferred inflows of resources, and net position	\$ 8,281,104	\$ 8,575,238

	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
<b>Assets</b>							
Current assets:							
Cash and cash equivalents	\$ 149,288	\$ 23,717	\$ -	\$ 173,005	79,861	\$ 4,153	\$ 257,019
Investments	161,075	2,047	-	163,122	6,388	-	169,510
Customer accounts receivable, net of allowance (\$1,711)	166,174	-	-	166,174	50,389	767	217,330
Miscellaneous accounts receivable	12,515	4,971	(5,195)	12,291	2,113	-	14,404
Interest receivable	2,065	4	-	2,069	1,686	-	3,755
Inventories:							
Fuel inventory - Electric System	29,168	14,810	-	43,978	-	-	43,978
Fuel inventory - Plant Scherer	6,830	-	-	6,830	-	-	6,830
Materials and supplies - Water and Sewer	-	-	-	-	54,353	-	54,353
Materials and supplies - Electric System	-	23,763	-	23,763	-	-	23,763
Materials and supplies - Plant Scherer	2,160	-	-	2,160	-	-	2,160
Total current assets	529,275	69,312	(5,195)	593,392	194,790	4,920	793,102
Noncurrent assets:							
Restricted assets:							
Cash and cash equivalents	223	115,793	-	116,016	321	2,326	118,663
Investments	431,185	10,919	-	442,104	337,979	-	780,083
Accounts and interest receivable	20	20	-	40	12	-	52
Total restricted assets	431,428	126,732	-	558,160	338,312	2,326	898,798
Costs to be recovered from future revenues	266,609	308,152	-	574,761	220,996	27	795,784
Investment in The Energy Authority	6,374	-	-	6,374	-	-	6,374
Other assets	11,788	-	-	11,788	5,152	3	16,943
Total noncurrent assets	716,199	434,884	-	1,151,083	564,460	2,356	1,717,899
Capital assets:							
Land and easements	123,511	6,660	-	130,171	61,215	3,051	194,437
Plant in service	5,420,487	1,316,043	-	6,736,530	4,428,586	56,375	11,221,491
Less accumulated depreciation	(3,042,214)	(1,312,491)	-	(4,354,705)	(2,088,419)	(25,147)	(6,468,271)
Plant in service, net	2,501,784	10,212	-	2,511,996	2,401,382	34,279	4,947,657
Construction work in progress	133,858	-	-	133,858	225,163	659	359,680
Net capital assets	2,635,642	10,212	-	2,645,854	2,626,545	34,938	5,307,337
Total assets	3,881,116	514,408	(5,195)	4,390,329	3,385,795	42,214	7,818,338
<b>Deferred outflows of resources</b>							
Unrealized pension contributions and losses	95,814	20,631	-	116,445	61,259	-	177,704
Unamortized deferred losses on refundings	86,558	4,220	-	90,778	54,640	196	145,614
Accumulated decrease in fair value of hedging derivatives	78,710	-	-	78,710	18,332	-	97,042
Unrealized asset retirement obligation	-	42,406	-	42,406	-	-	42,406
Total deferred outflows of resources	261,082	67,257	-	328,339	134,231	196	462,766
Total assets and deferred outflows of resources	\$ 4,142,198	\$ 581,665	\$ (5,195)	\$ 4,718,668	\$ 3,520,026	\$ 42,410	\$ 8,281,104

**JEA**  
**Combining Statement of Net Position**  
**(in thousands - unaudited) July 2018**

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	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
<b>Liabilities</b>							
Current liabilities:							
Accounts and accrued expenses payable	\$ 69,973	\$ 6,196	\$ (4,227)	\$ 71,942	\$ 13,131	\$ 33	\$ 85,106
Customer deposits	44,195	-	-	44,195	15,511	-	59,706
City of Jacksonville payable	7,623	-	-	7,623	2,101	-	9,724
Utility taxes and fees payable	9,311	-	-	9,311	-	-	9,311
Compensated absences due within one year	1,115	-	-	1,115	304	4	1,423
Total current liabilities	132,217	6,196	(4,227)	134,186	31,047	37	165,270
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	-	83,612	-	83,612	-	-	83,612
Interest payable	25,646	3,736	-	29,382	19,807	453	49,642
Construction contracts and accounts payable	3,629	2,254	(968)	4,915	19,218	52	24,185
Total current liabilities payable from restricted assets	159,965	91,322	(968)	250,319	90,745	2,165	343,229
Noncurrent liabilities:							
Net pension liability	330,025	16,640	-	346,665	211,000	-	557,665
Asset retirement obligation	-	35,263	-	35,263	-	-	35,263
Compensated absences due after one year	20,616	-	-	20,616	8,507	33	29,156
Environmental liabilities	17,647	-	-	17,647	-	-	17,647
Other liabilities	4,116	-	-	4,116	832	-	4,948
Total noncurrent liabilities	372,404	51,903	-	424,307	220,339	33	644,679
Long-term debt:							
Bonds payable and commercial paper payable, less current portion	2,019,350	278,885	-	2,298,235	1,480,620	34,825	3,813,680
Unamortized premium (discount), net	79,476	2,647	-	82,123	75,651	(35)	157,739
Fair value of debt management strategy instruments	77,263	-	-	77,263	18,332	-	95,595
Total long-term debt	2,176,089	281,532	-	2,457,621	1,574,603	34,790	4,067,014
Total liabilities	2,840,675	430,953	(5,195)	3,266,433	1,916,734	37,025	5,220,192
<b>Deferred inflows of resources</b>							
Revenues to be used for future costs	206,606	-	-	206,606	26,214	-	232,820
Unrealized pension gains	4,867	4,976	-	9,843	3,112	-	12,955
Total deferred inflows of resources	211,473	4,976	-	216,449	29,326	-	245,775
<b>Net position</b>							
Net investment in capital assets	543,813	47,418	-	591,231	1,285,145	(1,368)	1,875,008
Restricted	340,349	28,058	968	369,375	218,053	1,873	589,301
Unrestricted	205,888	70,260	(968)	275,180	70,768	4,880	350,828
Total net position	1,090,050	145,736	-	1,235,786	1,573,966	5,385	2,815,137
Total liabilities, deferred inflows of resources, and net position	\$ 4,142,198	\$ 581,665	\$ (5,195)	\$ 4,718,668	\$ 3,520,026	\$ 42,410	\$ 8,281,104

**JEA**  
**Combining Statement of Net Position**  
**(in thousands - unaudited) July 2017**

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	<b>Electric System and Bulk Power Supply System</b>	<b>SJRPP System</b>	<b>Elimination of Intercompany transactions</b>	<b>Total Electric Enterprise Fund</b>	<b>Water and Sewer Enterprise Fund</b>	<b>District Energy System Fund</b>	<b>Total JEA</b>
<b>Assets</b>							
Current assets:							
Cash and cash equivalents	\$ 172,082	\$ 35,645	\$ -	\$ 207,727	\$ 79,549	\$ 3,852	\$ 291,128
Investments	174,501	8,754	-	183,255	-	-	183,255
Customer accounts receivable, net of allowance (\$1,942)	182,123	-	-	182,123	38,327	794	221,244
Miscellaneous accounts receivable	27,630	26,363	(19,637)	34,356	1,892	-	36,248
Interest receivable	1,510	21	-	1,531	1,130	-	2,661
Inventories:							
Fuel inventory - Electric System	32,255	32,355	-	64,610	-	-	64,610
Fuel inventory - Plant Scherer	3,401	-	-	3,401	-	-	3,401
Materials and supplies - Water and Sewer	-	-	-	-	48,466	-	48,466
Materials and supplies - Electric System	-	19,100	-	19,100	-	-	19,100
Materials and supplies - Plant Scherer	2,097	-	-	2,097	-	-	2,097
Total current assets	595,599	122,238	(19,637)	698,200	169,364	4,646	872,210
Noncurrent assets:							
Restricted assets:							
Cash and cash equivalents	39	36,271	-	36,310	22,604	2,380	61,294
Investments	388,219	223,594	-	611,813	344,744	-	956,557
Accounts and interest receivable	48	730	-	778	12	-	790
Total restricted assets	388,306	260,595	-	648,901	367,360	2,380	1,018,641
Costs to be recovered from future revenues	240,326	6,708	-	247,034	209,008	-	456,042
Investment in The Energy Authority	6,276	-	-	6,276	-	-	6,276
Other assets	11,799	-	-	11,799	7,147	2	18,948
Total noncurrent assets	646,707	267,303	-	914,010	583,515	2,382	1,499,907
Capital assets:							
Land and easements	123,606	6,660	-	130,266	60,195	3,051	193,512
Plant in service	5,242,124	1,317,073	-	6,559,197	4,307,134	55,240	10,921,571
Less accumulated depreciation	(2,835,523)	(845,221)	-	(3,680,744)	(1,975,227)	(23,694)	(5,679,665)
Plant in service, net	2,530,207	478,512	-	3,008,719	2,392,102	34,597	5,435,418
Construction work in progress	176,221	3,815	-	180,036	186,345	1,793	368,174
Capital assets, net	2,706,428	482,327	-	3,188,755	2,578,447	36,390	5,803,592
Total assets	3,948,734	871,868	(19,637)	4,800,965	3,331,326	43,418	8,175,709
<b>Deferred outflows of resources</b>							
Unrealized pension contributions and losses	77,673	11,731	-	89,404	47,606	-	137,010
Unamortized deferred losses on refundings	79,767	11,577	-	91,344	44,247	205	135,796
Accumulated decrease in fair value of hedging derivatives	102,537	-	-	102,537	24,186	-	126,723
Total deferred outflows of resources	259,977	23,308	-	283,285	116,039	205	399,529
Total assets and deferred outflows of resources	\$ 4,208,711	\$ 895,176	\$ (19,637)	\$ 5,084,250	\$ 3,447,365	\$ 43,623	\$ 8,575,238



**JEA**  
**Combining Statement of Net Position**  
**(in thousands - unaudited) July 2017**

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	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
<b>Liabilities</b>							
Current liabilities:							
Accounts and accrued expenses payable	\$ 63,504	\$ 17,931	\$ (763)	\$ 80,672	\$ 13,398	\$ 32	\$ 94,102
Customer deposits	41,759	-	-	41,759	14,832	-	56,591
City of Jacksonville payable	7,689	-	-	7,689	1,972	-	9,661
Utility taxes and fees payable	9,184	-	-	9,184	-	-	9,184
Compensated absences due within one year	2,025	660	-	2,685	811	31	3,527
Total current liabilities	124,161	18,591	(763)	141,989	31,013	63	173,065
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	-	80,112	-	80,112	-	-	80,112
Interest payable	27,389	6,381	-	33,770	21,198	461	55,429
Construction contracts and accounts payable	3,477	20,707	(18,874)	5,310	17,008	141	22,459
Total current liabilities payable from restricted assets	165,971	148,530	(18,874)	295,627	89,226	2,242	387,095
Noncurrent liabilities:							
Net pension liability	297,819	12,993	-	310,812	182,534	-	493,346
Compensated absences due after one year	17,938	1,719	-	19,657	7,206	1	26,864
Environmental liabilities	18,556	-	-	18,556	-	-	18,556
Other liabilities	3,366	-	-	3,366	1,436	-	4,802
Total noncurrent liabilities	337,679	14,712	-	352,391	191,176	1	543,568
Long-term debt:							
Bonds payable and commercial paper payable, less current portion	2,171,305	408,885	-	2,580,190	1,561,620	36,485	4,178,295
Unamortized premium (discount), net	58,126	12,120	-	70,246	47,047	(39)	117,254
Fair value of debt management strategy instruments	102,430	-	-	102,430	24,186	-	126,616
Total long-term debt	2,331,861	421,005	-	2,752,866	1,632,853	36,446	4,422,165
Total liabilities	2,959,672	602,838	(19,637)	3,542,873	1,944,268	38,752	5,525,893
<b>Deferred inflows of resources</b>							
Revenues to be used for future costs	289,631	149,623	-	439,254	25,861	-	465,115
Unrealized pension gains	6,545	2,126	-	8,671	4,012	-	12,683
Total deferred inflows of resources	296,176	151,749	-	447,925	29,873	-	477,798
<b>Net position</b>							
Net investment in capital assets	455,165	5,279	-	460,444	1,180,162	(1,632)	1,638,974
Restricted	295,485	33,381	18,874	347,740	244,814	1,919	594,473
Unrestricted	202,213	101,929	(18,874)	285,268	48,248	4,584	338,100
Total net position	952,863	140,589	-	1,093,452	1,473,224	4,871	2,571,547
Total liabilities, deferred inflows of resources, and net position	\$ 4,208,711	\$ 895,176	\$ (19,637)	\$ 5,084,250	\$ 3,447,365	\$ 43,623	\$ 8,575,238

**JEA**  
**Schedule of Cash and Investments**  
(in thousands - unaudited) July 2018

Page 8

	Electric System and Bulk Power Supply System	SJRPP System	Total Electric Enterprise Fund	Water and Sewer Enterprise Fund	District Energy System Fund	Total JEA
<b>Unrestricted cash and investments</b>						
Operations	\$ 70,168	\$ 7,328	\$ 77,496	\$ 44,524	\$ 1,416	\$ 123,436
Rate stabilization:						
Fuel	68,746	-	68,746	-	-	68,746
Debt management	29,884	-	29,884	14,209	2,737	46,830
Environmental	41,672	-	41,672	12,005	-	53,677
Purchased Power	15,484	-	15,484	-	-	15,484
DSM/Conservation	3,986	-	3,986	-	-	3,986
Total rate stabilization funds	159,772	-	159,772	26,214	2,737	188,723
Customer deposits	44,148	-	44,148	15,511	-	59,659
General reserve	-	18,436	18,436	-	-	18,436
Self insurance reserve funds:						
Self funded health plan	8,628	-	8,628	-	-	8,628
Property insurance reserve	10,000	-	10,000	-	-	10,000
Total self insurance reserve funds	18,628	-	18,628	-	-	18,628
Environmental liability reserve	17,647	-	17,647	-	-	17,647
Total unrestricted cash and investments	\$ 310,363	\$ 25,764	\$ 336,127	\$ 86,249	\$ 4,153	\$ 426,529
<b>Restricted assets</b>						
Renewal and replacement funds	\$ 234,503	\$ 83,607	\$ 318,110	\$ 171,998	\$ 490	\$ 490,598
Debt service reserve account	65,433	11,307	76,740	102,850	-	179,590
Debt service funds	133,641	5,277	138,918	62,808	1,836	203,562
Environmental funds	-	-	-	705	-	705
Construction funds	223	-	223	320	-	543
Subtotal	433,800	100,191	533,991	338,681	2,326	874,998
Unrealized holding gain (loss) on investments	(2,392)	80	(2,312)	(381)	-	(2,693)
Other funds	-	26,441	26,441	-	-	26,441
Total restricted cash and investments	\$ 431,408	\$ 126,712	\$ 558,120	\$ 338,300	\$ 2,326	\$ 898,746

**JEA**  
**Schedule of Cash and Investments**  
(in thousands - unaudited) July 2017

	Electric System and Bulk Power Supply System	SJRPP System	Total Electric Enterprise Fund	Water and Sewer Enterprise Fund	District Energy System Fund	Total JEA
<b>Unrestricted cash and investments</b>						
Operations	\$ 28,855	\$ 21,598	\$ 50,453	\$ 38,856	\$ 1,115	\$ 90,424
Rate stabilization:						
Fuel	142,256	-	142,256	-	-	142,256
Debt management	29,884	-	29,884	20,290	2,737	52,911
Environmental	35,317	-	35,317	5,571	-	40,888
Purchased Power	27,086	-	27,086	-	-	27,086
DSM/Conservation	3,571	-	3,571	-	-	3,571
Total rate stabilization funds	238,114	-	238,114	25,861	2,737	266,712
Customer deposits	41,625	-	41,625	14,832	-	56,457
General reserve	-	22,801	22,801	-	-	22,801
Self insurance reserve funds:						
Self funded health plan	9,433	-	9,433	-	-	9,433
Property insurance reserve	10,000	-	10,000	-	-	10,000
Total self insurance reserve funds	19,433	-	19,433	-	-	19,433
Environmental liability reserve	18,556	-	18,556	-	-	18,556
Total unrestricted cash and investments	\$ 346,583	\$ 44,399	\$ 390,982	\$ 79,549	\$ 3,852	\$ 474,383
<b>Restricted assets</b>						
Renewal and replacement funds	\$ 187,083	\$ 79,909	\$ 266,992	\$ 193,059	\$ 553	\$ 460,604
Debt service reserve account	65,433	140,195	205,628	107,488	-	313,116
Debt service funds	135,052	35,150	170,202	63,437	1,827	235,466
Construction funds	39	-	39	152	-	191
Environmental funds	-	-	-	1,063	-	1,063
Subtotal	387,607	255,254	642,861	365,199	2,380	1,010,440
Unrealized holding gain (loss) on investments	651	(3,990)	(3,339)	2,149	-	(1,190)
Other funds	-	8,601	8,601	-	-	8,601
Total restricted cash and investments	\$ 388,258	\$ 259,865	\$ 648,123	\$ 367,348	\$ 2,380	\$ 1,017,851

DESCRIPTION	Electric System and Bulk Power Supply System	SJRPP System	Total Electric Enterprise Fund	Water and Sewer Enterprise Fund	District Energy System Fund	Total JEA
Unfunded pension costs	239,078	985	240,063	152,853	-	392,916
SJRPP and Scherer	9,830	305,032	314,862	-	-	314,862
Water environmental projects	-	-	-	61,284	-	61,284
Storm costs to be recovered	14,402	-	14,402	4,537	27	18,966
Debt issue costs	3,299	2,135	5,434	2,322	-	7,756
<b>Costs to be recovered from future revenues</b>	<b>266,609</b>	<b>308,152</b>	<b>574,761</b>	<b>220,996</b>	<b>27</b>	<b>795,784</b>
Fuel stabilization	68,746	-	68,746	-	-	68,746
Environmental	41,672	-	41,672	12,005	-	53,677
Debt management stabilization	29,884	-	29,884	14,209	-	44,093
SJRPP and Scherer	38,206	-	38,206	-	-	38,206
Nonfuel purchased power	15,484	-	15,484	-	-	15,484
Self-insurance medical reserve	8,628	-	8,628	-	-	8,628
Customer benefit stabilization	3,986	-	3,986	-	-	3,986
<b>Revenues to be used for future costs</b>	<b>206,606</b>	<b>-</b>	<b>206,606</b>	<b>26,214</b>	<b>-</b>	<b>232,820</b>

JEA  
Regulatory Accounting Balances  
(in thousands - unaudited) July 2017

DESCRIPTION	Electric System and Bulk Power Supply System	SJRPP System	Total Electric Enterprise Fund	Water and Sewer Enterprise Fund	District Energy System Fund	Total JFA
Unfunded pension costs	226,691	3,388	230,079	138,940	-	369,019
SJRPP and Scherer	10,948	-	10,948	-	-	10,948
Water environmental projects	-	-	-	69,835	-	69,835
Debt issue costs	2,687	3,320	6,007	233	-	6,240
<b>Costs to be recovered from future revenues</b>	<b>240,326</b>	<b>6,708</b>	<b>247,034</b>	<b>209,008</b>	<b>-</b>	<b>456,042</b>
Fuel stabilization	142,255	-	142,255	-	-	142,255
Environmental	35,317	-	35,317	5,571	-	40,888
Debt management stabilization	29,884	-	29,884	20,290	-	50,174
SJRPP and Scherer	42,084	149,623	191,707	-	-	191,707
Nonfuel purchased power	27,086	-	27,086	-	-	27,086
Self-insurance medical reserve	9,433	-	9,433	-	-	9,433
Customer benefit stabilization	3,572	-	3,572	-	-	3,572
<b>Revenues to be used for future costs</b>	<b>289,631</b>	<b>149,623</b>	<b>439,254</b>	<b>\$ 25,861</b>	<b>-</b>	<b>465,115</b>

**Statements of Revenues, Expenses and Changes in Net Position**  
**(in thousands - unaudited)**

	Month July		Year-to-Date July	
	2018	2017	2018	2017
<b>Operating revenues</b>				
Electric - base	\$ 78,421	\$ 85,512	\$ 669,671	\$ 663,665
Electric - fuel and purchased power	42,699	57,868	402,313	455,652
Water and sewer	38,143	37,941	351,884	357,183
District energy system	826	796	6,678	6,603
Other	2,966	2,815	79,929	29,554
Total operating revenues	163,055	184,932	1,510,475	1,512,657
<b>Operating expenses</b>				
Operations and maintenance:				
Fuel	38,386	48,535	332,845	368,458
Purchased power	7,417	7,824	87,462	63,119
Maintenance and other operating expenses	27,338	28,521	357,290	310,180
Depreciation	28,777	33,195	303,758	321,645
Utility taxes and fees	6,838	6,772	58,044	56,252
Recognition of deferred costs and revenues, net	891	(772)	968	(4,419)
Total operating expenses	109,647	124,075	1,140,367	1,115,235
Operating income	53,408	60,857	370,108	397,422
<b>Nonoperating revenues (expenses)</b>				
Interest on debt	(11,579)	(13,512)	(128,732)	(139,074)
Debt management strategy	(1,099)	(1,254)	(11,369)	(13,643)
Investment income, net	1,832	1,362	8,763	6,413
Allowance for funds used during construction	1,157	1,125	9,144	9,970
Other nonoperating income, net	2,295	605	8,659	4,435
Earnings from The Energy Authority	(131)	669	3,173	5,385
Other interest, net	(25)	(39)	(1,546)	(401)
Total nonoperating expenses, net	(7,550)	(11,044)	(111,908)	(126,915)
Income before contributions and special items	45,858	49,813	258,200	270,507
<b>Contributions (to) from</b>				
General Fund, City of Jacksonville, Florida	(9,719)	(9,653)	(97,184)	(96,520)
Developers and other	10,419	7,146	66,970	59,140
Reduction of plant cost through contributions	(7,278)	(5,020)	(44,395)	(38,505)
Total contributions	(6,578)	(7,527)	(74,609)	(75,885)
<b>Special items</b>				
SJRPP deferred revenues, net	-	-	451,037	-
SJRPP impairment loss	-	-	(451,037)	-
Total special items	-	-	-	-
Change in net position	39,280	42,286	183,591	194,622
Net position, beginning of period	2,775,857	2,529,261	2,631,546	2,376,925
Net position, end of period	\$ 2,815,137	\$ 2,571,547	\$ 2,815,137	\$ 2,571,547

**Combining Statement of Revenues, Expenses and Changes in Net Position**  
**(in thousands - unaudited) for the month ended July 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
<b>Operating revenues</b>								
Electric - base	\$ 78,837	\$ -	\$ -	\$ 78,837	\$ -	\$ -	\$ (416)	\$ 78,421
Electric - fuel and purchased power	43,999	1,726	(1,460)	44,265	-	-	(1,566)	42,699
Water and sewer	-	-	-	-	38,221	-	(78)	38,143
District energy system	-	-	-	-	-	922	(96)	826
Other	1,992	224	-	2,216	1,000	-	(250)	2,966
Total operating revenues	124,828	1,950	(1,460)	125,318	39,221	922	(2,406)	163,055
<b>Operating expenses</b>								
Operations and maintenance:								
Fuel	37,550	836	-	38,386	-	-	-	38,386
Purchased power	8,877	-	(1,460)	7,417	-	-	-	7,417
Maintenance and other operating expenses	17,743	(1,402)	-	16,341	12,934	469	(2,406)	27,338
Depreciation	16,760	26	-	16,786	11,787	204	-	28,777
Utility taxes and fees	5,927	-	-	5,927	911	-	-	6,838
Recognition of deferred costs and revenues, net	(227)	80	-	(147)	1,038	-	-	891
Total operating expenses	86,630	(460)	(1,460)	84,710	26,670	673	(2,406)	109,647
Operating income	38,198	2,410	-	40,608	12,551	249	-	53,408
<b>Nonoperating revenues (expenses)</b>								
Interest on debt	(6,129)	(877)	-	(7,006)	(4,459)	(114)	-	(11,579)
Debt management strategy	(876)	-	-	(876)	(223)	-	-	(1,099)
Investment income, net	1,092	215	-	1,307	514	11	-	1,832
Allowance for funds used during construction	418	-	-	418	737	2	-	1,157
Other nonoperating income, net	2,057	30	-	2,087	208	-	-	2,295
Earnings from The Energy Authority	(131)	-	-	(131)	-	-	-	(131)
Other interest, net	(24)	-	-	(24)	(1)	-	-	(25)
Total nonoperating expenses, net	(3,593)	(632)	-	(4,225)	(3,224)	(101)	-	(7,550)
Income before contributions	34,605	1,778	-	36,383	9,327	148	-	45,858
<b>Contributions (to) from</b>								
General Fund, City of Jacksonville, Florida	(7,623)	-	-	(7,623)	(2,096)	-	-	(9,719)
Developers and other	168	-	-	168	10,251	-	-	10,419
Reduction of plant cost through contributions	(168)	-	-	(168)	(7,110)	-	-	(7,278)
Total contributions	(7,623)	-	-	(7,623)	1,045	-	-	(6,578)
Change in net position	26,982	1,778	-	28,760	10,372	148	-	39,280
Net position, beginning of period	1,063,068	143,958	-	1,207,026	1,563,594	5,237	-	2,775,857
Net position, end of period	\$ 1,090,050	\$ 145,736	\$ -	\$ 1,235,786	\$ 1,573,966	\$ 5,385	\$ -	\$ 2,815,137



**Combining Statement of Revenues, Expenses and Changes in Net Position**  
**(in thousands - unaudited) for the month ended July 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
<b>Operating revenues</b>								
Electric - base	\$ 85,769	\$ -	\$ -	\$ 85,769	\$ -	\$ -	\$ (257)	\$ 85,512
Electric - fuel and purchased power	46,811	25,247	(13,225)	58,833	-	-	(965)	57,868
Water and sewer	-	-	-	-	37,970	-	(29)	37,941
District energy system	-	-	-	-	-	796	-	796
Other	2,255	-	-	2,255	750	-	(190)	2,815
Total operating revenues	134,835	25,247	(13,225)	146,857	38,720	796	(1,441)	184,932
<b>Operating expenses</b>								
Operations and maintenance:								
Fuel	30,194	18,341	-	48,535	-	-	-	48,535
Purchased power	21,049	-	(13,225)	7,824	-	-	-	7,824
Maintenance and other operating expenses	17,137	2,716	-	19,853	9,645	464	(1,441)	28,521
Depreciation	17,424	3,563	-	20,987	12,010	198	-	33,195
Utility taxes and fees	5,876	-	-	5,876	896	-	-	6,772
Recognition of deferred costs and revenues, net	(279)	(1,002)	-	(1,281)	509	-	-	(772)
Total operating expenses	91,401	23,618	(13,225)	101,794	23,060	662	(1,441)	124,075
Operating income	43,434	1,629	-	45,063	15,660	134	-	60,857
<b>Nonoperating revenues (expenses)</b>								
Interest on debt	(6,443)	(2,006)	-	(8,449)	(4,946)	(117)	-	(13,512)
Debt management strategy	(1,023)	-	-	(1,023)	(231)	-	-	(1,254)
Investment income, net	585	348	-	933	424	5	-	1,362
Allowance for funds used during construction	525	-	-	525	594	6	-	1,125
Other nonoperating income, net	364	32	-	396	209	-	-	605
Earnings from The Energy Authority	669	-	-	669	-	-	-	669
Other interest, net	(39)	-	-	(39)	-	-	-	(39)
Total nonoperating expenses, net	(5,362)	(1,626)	-	(6,988)	(3,950)	(106)	-	(11,044)
Income before contributions	38,072	3	-	38,075	11,710	28	-	49,813
<b>Contributions (to) from</b>								
General Fund, City of Jacksonville, Florida	(7,690)	-	-	(7,690)	(1,963)	-	-	(9,653)
Developers and other	33	-	-	33	7,113	-	-	7,146
Reduction of plant cost through contributions	(33)	-	-	(33)	(4,987)	-	-	(5,020)
Total contributions	(7,690)	-	-	(7,690)	163	-	-	(7,527)
Change in net position	30,382	3	-	30,385	11,873	28	-	42,286
Net position, beginning of period	922,481	140,586	-	1,063,067	1,461,351	4,843	-	2,529,261
Net position, end of period	\$ 952,863	\$ 140,589	\$ -	\$ 1,093,452	\$ 1,473,224	\$ 4,871	\$ -	\$ 2,571,547

**Combining Statement of Revenues, Expenses and Changes in Net Position**  
**(in thousands - unaudited) for the ten months ended July 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
<b>Operating revenues</b>								
Electric - base	\$ 672,618	\$ -	\$ -	\$ 672,618	\$ -	\$ -	\$ (2,947)	\$ 669,671
Electric - fuel and purchased power	383,169	84,711	(54,480)	413,400	-	-	(11,087)	402,313
Water and sewer	-	-	-	-	352,397	-	(513)	351,884
District energy system	-	-	-	-	-	7,004	(326)	6,678
Other	18,123	54,810	-	72,933	9,300	-	(2,304)	79,929
Total operating revenues	1,073,910	139,521	(54,480)	1,158,951	361,697	7,004	(17,177)	1,510,475
<b>Operating expenses</b>								
Operations and maintenance:								
Fuel	281,736	51,109	-	332,845	-	-	-	332,845
Purchased power	141,942	-	(54,480)	87,462	-	-	-	87,462
Maintenance and other operating expenses	194,173	56,149	-	250,322	120,540	3,605	(17,177)	357,290
Depreciation	170,641	10,919	-	181,560	120,201	1,997	-	303,758
Utility taxes and fees	49,319	-	-	49,319	8,725	-	-	58,044
Recognition of deferred costs and revenues, net	(2,270)	(1,627)	-	(3,897)	4,865	-	-	968
Total operating expenses	835,541	116,550	(54,480)	897,611	254,331	5,602	(17,177)	1,140,367
Operating income	238,369	22,971	-	261,340	107,366	1,402	-	370,108
<b>Nonoperating revenues (expenses)</b>								
Interest on debt	(62,849)	(18,539)	-	(81,388)	(46,200)	(1,144)	-	(128,732)
Debt management strategy	(9,163)	-	-	(9,163)	(2,206)	-	-	(11,369)
Investment income, net	5,027	777	-	5,804	2,881	78	-	8,763
Allowance for funds used during construction	2,985	-	-	2,985	6,114	45	-	9,144
Other nonoperating income, net	5,305	1,006	-	6,311	2,348	-	-	8,659
Earnings from The Energy Authority	3,173	-	-	3,173	-	-	-	3,173
Other interest, net	(1,320)	-	-	(1,320)	(226)	-	-	(1,546)
Total nonoperating expenses, net	(56,842)	(16,756)	-	(73,598)	(37,289)	(1,021)	-	(111,908)
Income before contributions	181,527	6,215	-	187,742	70,077	381	-	258,200
<b>Contributions (to) from</b>								
General Fund, City of Jacksonville, Florida	(76,227)	-	-	(76,227)	(20,957)	-	-	(97,184)
Developers and other	1,320	-	-	1,320	65,650	-	-	66,970
Reduction of plant cost through contributions	(1,320)	-	-	(1,320)	(43,075)	-	-	(44,395)
Total contributions	(76,227)	-	-	(76,227)	1,618	-	-	(74,609)
<b>Special items</b>								
SJRPP deferred revenues, net	-	451,037	-	451,037	-	-	-	451,037
SJRPP impairment loss	-	(451,037)	-	(451,037)	-	-	-	(451,037)
Total special items	-	-	-	-	-	-	-	-
Change in net position	105,300	6,215	-	111,515	71,695	381	-	183,591
Net position, beginning of year	984,750	139,521	-	1,124,271	1,502,271	5,004	-	2,631,546
Net position, end of period	\$ 1,090,050	\$ 145,736	\$ -	\$ 1,235,786	\$ 1,573,966	\$ 5,385	\$ -	\$ 2,815,137

**Combining Statement of Revenues, Expenses and Changes in Net Position**  
**(in thousands - unaudited) for the ten months ended July 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
<b>Operating revenues</b>								
Electric - base	\$ 666,456	\$ -	\$ -	\$ 666,456	\$ -	\$ -	\$ (2,791)	\$ 663,665
Electric - fuel and purchased power	361,694	218,623	(114,167)	466,150	-	-	(10,498)	455,652
Water and sewer	-	-	-	-	357,422	-	(239)	357,183
District energy system	-	-	-	-	-	6,986	(383)	6,603
Other	23,474	-	-	23,474	7,977	-	(1,897)	29,554
Total operating revenues	1,051,624	218,623	(114,167)	1,156,080	365,399	6,986	(15,808)	1,512,657
<b>Operating expenses</b>								
Operations and maintenance:								
Fuel	233,967	134,491	-	368,458	-	-	-	368,458
Purchased power	177,286	-	(114,167)	63,119	-	-	-	63,119
Maintenance and other operating expenses	171,721	37,812	-	209,533	112,854	3,601	(15,808)	310,180
Depreciation	165,219	35,628	-	200,847	118,831	1,967	-	321,645
Utility taxes and fees	47,473	-	-	47,473	8,779	-	-	56,252
Recognition of deferred costs and revenues, net	(2,787)	(10,025)	-	(12,812)	8,393	-	-	(4,419)
Total operating expenses	792,879	197,906	(114,167)	876,618	248,857	5,568	(15,808)	1,115,235
Operating income	258,745	20,717	-	279,462	116,542	1,418	-	397,422
<b>Nonoperating revenues (expenses)</b>								
Interest on debt	(68,040)	(20,065)	-	(88,105)	(49,806)	(1,163)	-	(139,074)
Debt management strategy	(10,953)	-	-	(10,953)	(2,690)	-	-	(13,643)
Investment income, net	3,373	811	-	4,184	2,199	30	-	6,413
Allowance for funds used during construction	5,513	-	-	5,513	4,439	18	-	9,970
Other nonoperating income, net	3,594	324	-	3,918	517	-	-	4,435
Earnings from The Energy Authority	5,385	-	-	5,385	-	-	-	5,385
Other interest, net	(369)	-	-	(369)	(32)	-	-	(401)
Total nonoperating expenses, net	(61,497)	(18,930)	-	(80,427)	(45,373)	(1,115)	-	(126,915)
Income before contributions	197,248	1,787	-	199,035	71,169	303	-	270,507
<b>Contributions (to) from</b>								
General Fund, City of Jacksonville, Florida	(76,893)	-	-	(76,893)	(19,627)	-	-	(96,520)
Developers and other	884	-	-	884	58,256	-	-	59,140
Reduction of plant cost through contributions	(884)	-	-	(884)	(37,621)	-	-	(38,505)
Total contributions	(76,893)	-	-	(76,893)	1,008	-	-	(75,885)
Change in net position	120,355	1,787	-	122,142	72,177	303	-	194,622
Net position, beginning of year	832,508	138,802	-	971,310	1,401,047	4,568	-	2,376,925
Net position, end of period	\$ 952,863	\$ 140,589	\$ -	\$ 1,093,452	\$ 1,473,224	\$ 4,871	\$ -	\$ 2,571,547

**Statement of Cash Flows**  
**(in thousands - unaudited)**

	<b>Year-to-Date</b>	
	<b>July</b>	
	<b>2018</b>	<b>2017</b>
<b>Operating activities</b>		
Receipts from customers	\$ 1,440,561	\$ 1,424,829
Payments to suppliers	(673,209)	(605,402)
Payments to employees	(234,093)	(213,357)
Other operating activities	86,880	27,228
Net cash provided by operating activities	620,139	633,298
<b>Noncapital and related financing activities</b>		
Contribution to General Fund, City of Jacksonville, Florida	(97,142)	(96,411)
Net cash used in noncapital financing activities	(97,142)	(96,411)
<b>Capital and related financing activities</b>		
Defeasance of debt	(993,690)	(153,210)
Proceeds from issuance of debt	821,000	90,405
Acquisition and construction of capital assets	(287,164)	(266,136)
Interest paid on debt	(177,708)	(188,722)
Repayment of debt principal	(229,095)	(181,525)
Capital contributions	22,574	20,635
Other capital financing activities	59,479	(1,249)
Net cash used in capital and related financing activities	(784,604)	(679,802)
<b>Investing activities</b>		
Purchase of investments	(889,334)	(1,487,106)
Proceeds from sale and maturity of investments	900,079	1,367,279
Investment income, net	9,448	12,999
Distributions from The Energy Authority	3,062	5,245
Net cash provided by (used in) investing activities	23,255	(101,583)
Net change in cash and cash equivalents	(238,352)	(244,498)
Cash and cash equivalents, beginning of year	614,034	596,920
Cash and cash equivalents, end of period	\$ 375,682	\$ 352,422
<b>Reconciliation of operating income to net cash provided by operating activities</b>		
Operating income	\$ 370,108	\$ 397,422
Adjustments:		
Depreciation and amortization	304,827	322,766
Recognition of deferred costs and revenues, net	968	(4,419)
Other nonoperating income, net	1,071	(1,090)
Changes in noncash assets and noncash liabilities:		
Accounts receivable	43,523	(13,214)
Accounts receivable, restricted	-	4
Inventories	11,410	(19,871)
Other assets	(758)	(1,126)
Accounts and accrued expenses payable	(39,157)	(634)
Current liabilities payable from restricted assets	(20,245)	(1,566)
Other noncurrent liabilities and deferred inflows	(51,608)	(44,974)
Net cash provided by operating activities	\$ 620,139	\$ 633,298
<b>Noncash activity</b>		
Contributions of capital assets	\$ 44,395	\$ 38,505
Unrealized losses on fair value of investments, net	\$ (1,492)	\$ (7,704)

**JEA**  
**Combining Statement of Cash Flows**  
**(in thousands - unaudited) for the ten months ended July 2018**

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	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
<b>Operating activities</b>								
Receipts from customers	\$ 1,024,127	\$ 97,153	\$ (31,562)	\$ 1,089,718	\$ 358,930	\$ 6,786	\$ (14,873)	\$ 1,440,561
Payments to suppliers	(550,998)	(81,394)	31,562	(600,830)	(86,386)	(3,170)	17,177	(673,209)
Payments to employees	(136,819)	(44,669)	-	(181,488)	(52,138)	(467)	-	(234,093)
Other operating activities	24,334	54,810	-	79,144	10,040	-	(2,304)	86,880
Net cash provided by operating activities	360,644	25,900	-	386,544	230,446	3,149	-	620,139
<b>Noncapital and related financing activities</b>								
Contribution to General Fund, City of Jacksonville, Florida	(76,293)	-	-	(76,293)	(20,849)	-	-	(97,142)
Net cash used in noncapital financing activities	(76,293)	-	-	(76,293)	(20,849)	-	-	(97,142)
<b>Capital and related financing activities</b>								
Defeasance of debt	(405,105)	(128,280)	-	(533,385)	(460,305)	-	-	(993,690)
Proceeds from issuance of debt	383,840	-	-	383,840	437,160	-	-	821,000
Acquisition and construction of capital assets	(144,720)	-	-	(144,720)	(141,672)	(772)	-	(287,164)
Interest paid on debt	(93,057)	(16,683)	-	(109,740)	(66,597)	(1,371)	-	(177,708)
Repayment of debt principal	(135,105)	(41,330)	-	(176,435)	(51,020)	(1,640)	-	(229,095)
Capital contributions	-	-	-	-	22,574	-	-	22,574
Other capital financing activities	41,706	(7,158)	-	34,548	24,931	-	-	59,479
Net cash used in capital and related financing activities	(352,441)	(193,451)	-	(545,892)	(234,929)	(3,783)	-	(784,604)
<b>Investing activities</b>								
Purchase of investments	(416,821)	(240,168)	-	(656,989)	(232,345)	-	-	(889,334)
Proceeds from sale and maturity of investments	284,128	428,653	-	712,781	187,298	-	-	900,079
Investment income (loss), net	7,169	(2,451)	-	4,718	4,652	78	-	9,448
Distributions from The Energy Authority	3,062	-	-	3,062	-	-	-	3,062
Net cash provided by (used in) investing activities	(122,462)	186,034	-	63,572	(40,395)	78	-	23,255
Net change in cash and cash equivalents	(190,552)	18,483	-	(172,069)	(65,727)	(556)	-	(238,352)
Cash and cash equivalents, beginning of year	340,063	121,027	-	461,090	145,909	7,035	-	614,034
Cash and cash equivalents, end of period	\$ 149,511	\$ 139,510	\$ -	\$ 289,021	\$ 80,182	\$ 6,479	\$ -	\$ 375,682
<b>Reconciliation of operating income to net cash provided by operating activities</b>								
Operating income	\$ 238,369	\$ 22,971	\$ -	\$ 261,340	\$ 107,366	\$ 1,402	\$ -	\$ 370,108
Adjustments:								
Depreciation and amortization	170,641	10,919	-	181,560	121,270	1,997	-	304,827
Recognition of deferred costs and revenues, net	(2,270)	(1,627)	-	(3,897)	4,865	-	-	968
Other nonoperating income, net	101	700	-	801	270	-	-	1,071
Changes in noncash assets and noncash liabilities:								
Accounts receivable	32,518	11,743	-	44,261	(521)	(217)	-	43,523
Inventories	2,022	15,405	-	17,427	(6,017)	-	-	11,410
Other assets	(1,340)	-	-	(1,340)	585	(3)	-	(758)
Accounts and accrued expenses payable	(21,981)	(12,413)	-	(34,394)	(4,711)	(52)	-	(39,157)
Current liabilities payable from restricted assets	-	(20,245)	-	(20,245)	-	-	-	(20,245)
Other noncurrent liabilities and deferred inflows	(57,416)	(1,553)	-	(58,969)	7,339	22	-	(51,608)
Net cash provided by operating activities	\$ 360,644	\$ 25,900	\$ -	\$ 386,544	\$ 230,446	\$ 3,149	\$ -	\$ 620,139
<b>Noncash activity</b>								
Contributions of capital assets	\$ 1,320	\$ -	\$ -	\$ 1,320	\$ 43,075	\$ -	\$ -	\$ 44,395
Unrealized gains (losses) on fair value of investments, net	\$ (3,142)	\$ 4,165	\$ -	\$ 1,023	\$ (2,515)	\$ -	\$ -	\$ (1,492)



**JEA**  
**Combining Statement of Cash Flows**  
**(in thousands - unaudited) for the ten months ended July 2017**

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	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
<b>Operating activities</b>								
Receipts from customers	\$ 974,161	\$ 210,038	\$ (112,765)	\$ 1,071,434	\$ 360,973	\$ 6,333	\$ (13,911)	\$ 1,424,829
Payments to suppliers	(497,435)	(159,282)	112,765	(543,952)	(73,953)	(3,305)	15,808	(605,402)
Payments to employees	(136,115)	(26,529)	-	(162,644)	(50,282)	(431)	-	(213,357)
Other operating activities	22,907	-	-	22,907	6,218	-	(1,897)	27,228
Net cash provided by operating activities	363,518	24,227	-	387,745	242,956	2,597	-	633,298
<b>Noncapital and related financing activities</b>								
Contribution to General Fund, City of Jacksonville, Florida	(76,846)	-	-	(76,846)	(19,565)	-	-	(96,411)
Net cash used in noncapital financing activities	(76,846)	-	-	(76,846)	(19,565)	-	-	(96,411)
<b>Capital and related financing activities</b>								
Defeasance of debt	(153,210)	-	-	(153,210)	-	-	-	(153,210)
Proceeds from issuance of debt	90,405	-	-	90,405	-	-	-	90,405
Acquisition and construction of capital assets	(126,748)	-	-	(126,748)	(137,468)	(1,920)	-	(266,136)
Interest paid on debt	(99,177)	(20,227)	-	(119,404)	(67,927)	(1,391)	-	(188,722)
Repayment of debt principal	(102,240)	(43,785)	-	(146,025)	(33,875)	(1,625)	-	(181,525)
Capital contributions	-	-	-	-	20,635	-	-	20,635
Other capital financing activities	(2,113)	195	-	(1,918)	669	-	-	(1,249)
Net cash used in capital and related financing activities	(393,083)	(63,817)	-	(456,900)	(217,966)	(4,936)	-	(679,802)
<b>Investing activities</b>								
Purchase of investments	(528,742)	(501,452)	-	(1,030,194)	(456,912)	-	-	(1,487,106)
Proceeds from sale and maturity of investments	501,798	479,677	-	981,475	385,804	-	-	1,367,279
Investment income, net	5,008	3,263	-	8,271	4,698	30	-	12,999
Distributions from The Energy Authority	5,245	-	-	5,245	-	-	-	5,245
Net cash provided by (used in) investing activities	(16,691)	(18,512)	-	(35,203)	(66,410)	30	-	(101,583)
Net change in cash and cash equivalents	(123,102)	(58,102)	-	(181,204)	(60,985)	(2,309)	-	(244,498)
Cash and cash equivalents, beginning of year	295,223	130,018	-	425,241	163,138	8,541	-	596,920
Cash and cash equivalents, end of period	\$ 172,121	\$ 71,916	\$ -	\$ 244,037	\$ 102,153	\$ 6,232	\$ -	\$ 352,422
<b>Reconciliation of operating income to net cash provided by (used in) operating activities</b>								
Operating income	\$ 258,745	\$ 20,717	\$ -	\$ 279,462	\$ 116,542	\$ 1,418	\$ -	\$ 397,422
Adjustments:								
Depreciation and amortization	165,219	35,628	-	200,847	119,952	1,967	-	322,766
Recognition of deferred costs and revenues, net	(2,787)	(10,025)	-	(12,812)	8,393	-	-	(4,419)
Other nonoperating income (loss), net	27	-	-	27	(1,117)	-	-	(1,090)
Changes in noncash assets and noncash liabilities:								
Accounts receivable	(2,988)	(8,585)	-	(11,573)	(988)	(653)	-	(13,214)
Accounts receivable, restricted	-	-	-	-	4	-	-	4
Inventories	846	(17,080)	-	(16,234)	(3,637)	-	-	(19,871)
Other assets	(1,057)	-	-	(1,057)	(67)	(2)	-	(1,126)
Accounts and accrued expenses payable	(4,470)	4,541	-	71	(610)	(95)	-	(634)
Current liabilities payable from restricted assets	-	(1,566)	-	(1,566)	-	-	-	(1,566)
Other noncurrent liabilities and deferred inflows	(50,017)	597	-	(49,420)	4,484	(38)	-	(44,974)
Net cash provided by operating activities	\$ 363,518	\$ 24,227	\$ -	\$ 387,745	\$ 242,956	\$ 2,597	\$ -	\$ 633,298
<b>Noncash activity</b>								
Contributions of capital assets	\$ 884	\$ -	\$ -	\$ 884	\$ 37,621	\$ -	\$ -	\$ 38,505
Unrealized losses on fair value of investments, net	\$ (2,292)	\$ (2,468)	\$ -	\$ (4,760)	\$ (2,944)	\$ -	\$ -	\$ (7,704)

## Electric System and Plant Scherer

## Changes in Debt Service, R &amp; R and Construction Funds

(in thousands - unaudited) for the ten months ended July 2018 and July 2017

	July 2018			July 2017		
	Debt service funds	Renewal and replacement funds	Construction funds	Debt service funds	Renewal and replacement funds	Construction funds
Beginning balance	\$ 239,961	\$ 225,985	\$ -	\$ 210,066	\$ 193,947	\$ -
Additions:						
R & R and OCO	-	156,674	-	-	156,832	-
Revenue transfers for debt service	173,727	-	-	176,528	-	-
Debt issuance	-	-	805	-	-	430
Proceeds from property sales	-	19,012	-	-	2,000	-
Total additions	173,727	175,686	805	176,528	158,832	430
Deductions:						
Debt service payments	214,614	-	-	186,109	-	-
Increase in utility plant	-	133,351	-	-	120,286	-
Debt service reserve releases	-	-	-	-	37,200	-
Decrease in accounts payable	-	12,593	-	-	6,438	-
Debt issue costs and discounts	-	-	582	-	-	391
Total deductions	214,614	145,944	582	186,109	163,924	391
Ending balance	\$ 199,074	\$ 255,727	\$ 223	\$ 200,485	\$ 188,855	\$ 39
Recap:						
Renewal and replacement fund:						
Cash & investments	\$ 234,503			\$ 187,083		
Storm costs to be recovered	14,402			-		
Accounts / notes receivable:						
Accounts receivable	6,802			1,724		
Street light & other customer loans	20			48		
	<u>\$ 255,727</u>			<u>\$ 188,855</u>		
Construction fund:						
Generation projects		\$ 110			\$ 32	
T&D and other capital projects		113			7	
		<u>\$ 223</u>			<u>\$ 39</u>	

## Water and Sewer System

## Changes in Debt Service, R &amp; R and Construction Funds

(in thousands - unaudited) for the ten months ended July 2018 and July 2017

	July 2018				July 2017			
	Debt service funds	Renewal and replacement funds	Construction funds	Environmental funds	Debt service funds	Renewal and replacement funds	Construction funds	Environmental funds
Beginning balance	\$ 189,696	\$ 155,284	\$ 15	\$ 1,838	\$ 173,496	\$ 179,513	\$ 152	\$ 2,659
Additions:								
R & R and OCO	-	134,194	-	-	-	121,726	-	-
Revenue transfers for debt service	94,636	-	-	-	95,667	-	-	-
Contribution in aid of construction	-	22,574	-	-	-	20,635	-	-
Debt issuance	-	-	894	-	-	-	-	-
Proceeds from property sales	-	234	-	-	-	-	-	-
Septic tank phase out fees	-	-	-	-	-	86	-	-
Total additions	94,636	157,002	894	-	95,667	142,447	-	-
Deductions:								
Debt service payments	114,036	-	-	-	97,640	-	-	-
Increase in utility plant	-	117,801	-	-	-	118,441	(167)	-
Debt service reserve releases	4,638	-	-	-	598	-	-	-
Decrease in accounts payable	-	17,883	-	1,133	-	9,975	167	1,596
Debt issue costs and discounts	-	-	589	-	-	-	-	-
Total deductions	118,674	135,684	589	1,133	98,238	128,416	-	1,596
Ending balance	\$ 165,658	\$ 176,602	\$ 320	\$ 705	\$ 170,925	\$ 193,544	\$ 152	\$ 1,063
Renewal and replacement fund:								
Cash & investments	\$	171,998			\$	193,059		
Storm costs to be recovered		4,537				-		
Accounts / notes receivable:								
Accounts receivable		55				473		
Notes receivable		12				12		
	\$	176,602			\$	193,544		
Construction fund:								
Project funds			\$ 320				\$ 152	
			\$ 320				\$ 152	
Environmental fund:								
Cash & investments			\$ 705				\$ 1,063	
			\$ 705				\$ 1,063	

<b>Electric System</b>		<b>Month</b>				<b>Prior Year Month</b>	
<b>Budget vs. Actual</b>	<b>ANNUAL BUDGET</b>	<b>BUDGET</b>	<b>ACTUAL</b>	<b>Variance</b>		<b>ACTUAL</b>	<b>Variance</b>
<b>July 2018 and 2017</b>	<b>2017-18</b>	<b>2017-18</b>	<b>2017-18</b>	<b>%</b>		<b>2016-17</b>	<b>%</b>
<b>Fuel Related Revenues &amp; Expenses</b>							
Fuel Rate Revenues	\$ 417,649,053	\$ 41,970,741	\$ 37,713,614	-10.14%		\$ 41,908,581	-10.01%
Fuel Expense and Purchased Power:							
Fuel Expense - Electric System	315,411,659	32,553,363	34,053,646			26,688,692	
Fuel Expense - SJRPP	37,886,015	-	517,252			11,048,525	
Other Purchased Power	96,315,996	10,381,707	9,393,314			8,919,724	
Subtotal Energy Expense	449,613,670	42,935,070	43,964,212	-2.40%		46,656,941	5.77%
Transfer to (from) Rate Stabilization, Net	(32,799,915)	-	(6,310,679)			(4,810,980)	
Fuel Related Uncollectibles	835,298	52,206	60,081			62,620	
Total	417,649,053	42,987,276	37,713,614	12.27%		41,908,581	10.01%
Fuel Balance	-	(1,016,535)	-			-	
<b>Nonfuel Related Revenues</b>							
Base Rate Revenues	802,292,405	80,624,646	71,978,001			79,264,815	
Conservation Charge Revenue	1,000,000	100,510	111,870			145,768	
Environmental Charge Revenue	7,942,200	798,134	716,423			795,911	
Investment Income	6,714,534	559,544	1,090,607			583,933	
Natural Gas Revenue Pass Through	2,383,913	198,659	47,964			36,399	
Other Revenues	30,551,894	2,545,991	2,294,163			2,556,177	
Total	850,884,946	84,827,484	76,239,028	-10.12%		83,383,003	-8.57%
<b>Nonfuel Related Expenses</b>							
Non-Fuel O&M	216,333,937	18,572,415	14,750,066			15,224,177	
DSM / Conservation O&M	7,892,054	651,385	658,087			481,970	
Environmental O&M	2,050,500	170,875	116,477			18,252	
Rate Stabilization - DSM	(382,054)	(31,838)	69,050			272,614	
Rate Stabilization - Environmental	5,891,700	490,975	599,946			777,659	
Natural Gas Expense Pass Through	2,290,414	190,086	53,534			47,798	
Debt Principal - Electric System	124,185,000	10,348,750	10,433,929			12,775,325	
Debt Interest - Electric System	94,262,937	7,855,245	7,275,779			7,699,966	
Bond Buy-Back Principal - Electric System	10,110,614	842,551	-			-	
R&R - Electric System	65,608,800	5,467,400	5,467,400			5,183,192	
Operating Capital Outlay	139,586,200	24,000,000	24,000,000			27,000,000	
City Contribution Expense	91,471,795	7,622,650	7,622,650			7,689,224	
Taxes & Uncollectibles	1,210,993	118,318	118,866			120,361	
Emergency Reserve	5,000,000	-	-			-	
Nonfuel Purchased Power:							
* SJRPP D/S Principal	7,812,969	651,081	143,333			2,208,073	
* SJRPP D/S Interest	12,150,065	1,012,505	903,151			1,317,009	
** Other Non-Fuel Purchased Power	65,409,021	5,689,752	3,384,501			1,491,057	
Total Nonfuel Expenses	850,884,946	83,652,150	75,596,769	9.63%		82,306,677	8.15%
Non-Fuel Balance	-	1,175,334	642,259			1,076,326	
<b>Total Balance</b>	-	158,799	642,259			1,076,326	
<b>Total Revenues</b>	<b>1,268,533,999</b>	<b>126,798,225</b>	<b>113,952,642</b>	<b>-10.13%</b>		<b>125,291,584</b>	<b>-9.05%</b>
<b>Total Expenses</b>	<b>1,268,533,999</b>	<b>126,639,426</b>	<b>113,310,383</b>	<b>10.53%</b>		<b>124,215,258</b>	<b>8.78%</b>
<b>KWH Sold - Territorial</b>	<b>13,020,000,000</b>	<b>1,308,416,840</b>	<b>1,170,995,686</b>	<b>-10.50%</b>		<b>1,298,608,000</b>	<b>-9.83%</b>
<b>KWH Sold - Off System</b>	<b>-</b>	<b>-</b>	<b>1,038,000</b>			<b>2,983,000</b>	
	<b>13,020,000,000</b>	<b>1,308,416,840</b>	<b>1,172,033,686</b>	<b>-10.42%</b>		<b>1,301,591,000</b>	<b>-9.95%</b>

\* Gross debt service

\*\* Includes transmission capacity, SJRPP and Scherer R &amp; R, O &amp; M and Investment Income.

## Electric System

Budget vs. Actual July 2018 and 2017	Year-to-Date				Prior Year-to-Date	
	ANNUAL BUDGET 2017-18	BUDGET 2017-18	ACTUAL 2017-18	Variance %	ACTUAL 2016-17	Variance %
<b>Fuel Related Revenues &amp; Expenses</b>						
Fuel Rate Revenues	\$ 417,649,053	\$ 339,100,718	\$ 319,422,645	-5.80%	\$ 319,718,996	-0.09%
Fuel Expense and Purchased Power:						
Fuel Expense - Electric System	315,411,659	257,680,263	260,083,978		203,080,751	
Fuel Expense - SJRPP	37,886,015	37,886,015	33,192,445		81,501,079	
Other Purchased Power	96,315,996	76,330,678	88,777,019		72,883,728	
Subtotal Energy Expense	449,613,670	371,896,956	382,053,442	-2.73%	357,465,558	-6.88%
Transfer to (from) Rate Stabilization, Net	(32,799,915)	-	(62,969,863)		(37,859,735)	
Fuel Related Uncollectibles	835,298	522,061	339,066		113,173	
Total	417,649,053	372,419,017	319,422,645	14.23%	319,718,996	0.09%
Fuel Balance	-	(33,318,299)	-		-	
<b>Nonfuel Related Revenues</b>						
Base Rate Revenues	802,292,405	651,403,203	614,261,612		599,728,696	
Conservation Charge Revenue	1,000,000	811,916	678,976		442,844	
Environmental Charge Revenue	7,942,200	6,448,490	6,075,523		5,968,654	
Investment Income	6,714,534	5,595,445	8,157,252		5,640,408	
Natural Gas Revenue Pass Through	2,383,913	1,986,594	463,819		413,146	
Other Revenues	30,551,894	25,459,912	21,124,270		88,037,736	
Total	850,884,946	691,705,560	650,761,452	-5.92%	700,231,484	-7.06%
<b>Nonfuel Related Expenses</b>						
Non-Fuel O&M	216,333,937	169,626,129	156,123,107		149,367,630	
DSM / Conservation O&M	7,892,054	6,589,284	5,332,895		5,191,996	
Environmental O&M	2,050,500	1,708,750	821,074		626,184	
Rate Stabilization - DSM	(382,054)	(318,378)	290,593		55,984	
Rate Stabilization - Environmental	5,891,700	4,909,750	5,254,449		5,342,470	
Natural Gas Expense Pass Through	2,290,414	1,910,242	558,269		516,513	
Debt Principal - Electric System	124,185,000	103,487,500	104,112,143		104,349,350	
Debt Interest - Electric System	94,262,937	78,552,448	74,718,406		79,300,359	
Bond Buy-Back Principal - Electric System	10,110,614	8,425,512	-		69,099,658	
Rate Stabilization - Debt Management	-	-	-		(12,242,000)	
R&R - Electric System	65,608,800	54,674,000	54,674,000		51,831,917	
Operating Capital Outlay	139,586,200	102,000,000	102,000,000		105,000,000	
City Contribution Expense	91,471,795	76,226,496	76,226,496		76,892,243	
Taxes & Uncollectibles	1,210,993	1,183,181	814,029		381,117	
Emergency Reserve	5,000,000	-	-		-	
Nonfuel Purchased Power:						
* SJRPP D/S Principal	7,812,969	6,510,807	7,526,302		22,080,739	
* SJRPP D/S Interest	12,150,065	10,125,055	9,976,308		13,170,092	
** Other Non-Fuel Purchased Power	65,409,021	54,029,517	50,682,900		27,451,638	
Total Nonfuel Expenses	850,884,946	679,640,293	649,110,970	4.49%	698,415,890	7.06%
Non-Fuel Balance	-	12,065,267	1,650,482		1,815,594	
<b>Total Balance</b>	-	(21,253,032)	1,650,482		1,815,594	
<b>Total Revenues</b>	<b>1,268,533,999</b>	<b>1,030,806,278</b>	<b>970,184,097</b>	<b>-5.88%</b>	<b>1,019,950,480</b>	<b>-4.88%</b>
<b>Total Expenses</b>	<b>1,268,533,999</b>	<b>1,052,059,310</b>	<b>968,533,615</b>	<b>7.94%</b>	<b>1,018,134,886</b>	<b>4.87%</b>
<b>KWH Sold - Territorial</b>	<b>13,020,000,000</b>	<b>10,571,295,084</b>	<b>9,918,688,709</b>	<b>-6.17%</b>	<b>9,737,550,342</b>	<b>1.86%</b>
<b>KWH Sold - Off System</b>	<b>-</b>	<b>-</b>	<b>34,090,000</b>	<b>-</b>	<b>123,592,000</b>	<b>-</b>
	<b>13,020,000,000</b>	<b>10,571,295,084</b>	<b>9,952,778,709</b>	<b>-5.85%</b>	<b>9,861,142,342</b>	<b>0.93%</b>

\* Gross debt service

\*\* Includes transmission capacity, SJRPP and Scherer R &amp; R, O &amp; M and Investment Income.



## Water and Sewer System

Water and Sewer System		Month			Prior Year Month	
Budget vs. Actual July 2018 and 2017	ANNUAL BUDGET 2017-18	BUDGET 2017-18	ACTUAL 2017-18	Variance %	ACTUAL 2016-17	Variance %
REVENUES						
Water & Sewer Revenues	\$ 456,850,720	\$ 41,491,850	\$ 37,452,829		\$ 37,801,555	
Capacity & Extension Fees	21,000,000	2,028,173	3,140,384		2,120,587	
Capital Contributions	-	-	-		4,960	
Investment Income	4,854,301	404,525	512,992		421,202	
Other Income	34,091,486	2,142,331	2,544,956		961,421	
Total	516,796,507	46,066,879	43,651,161	-5.24%	41,309,725	5.67%
EXPENSES						
O & M Expenses	154,316,393	13,322,532	12,868,749		9,553,678	
Debt Principal - Water & Sewer	51,720,000	4,310,000	4,310,000		4,251,667	
Debt Interest - Water & Sewer	69,402,632	5,783,552	5,415,412		5,631,896	
Rate Stabilization - Environmental	-	-	90,859		673,889	
R&R - Water & Sewer	24,473,800	2,039,483	2,039,483		1,897,242	
Operating Capital Outlay	151,801,519	12,063,751	12,063,751		13,712,602	
Operating Capital Outlay - Capacity/Extension	21,000,000	1,750,000	3,140,384		2,120,588	
Operating Capital Outlay - Contributions	-	-	-		4,960	
Operating Capital Outlay - Environmental	17,248,866	1,514,267	1,037,588		509,378	
City Contribution Expense	25,148,020	2,095,668	2,095,668		1,962,688	
Uncollectibles & Fees	685,277	57,106	52,000		53,000	
Emergency Reserve	1,000,000	-	-		-	
Total Expenses	516,796,507	42,936,359	43,113,894	-0.41%	40,371,588	-6.79%
Total Balance	\$ -	\$ 3,130,520	\$ 537,267		\$ 938,137	
Sales kials						
Water	42,000,000	4,060,703	3,132,893	-22.85%	3,479,584	-9.96%
Sewer	34,650,000	3,292,011	2,487,527	-24.44%	2,830,198	-12.11%
Total	76,650,000	7,352,714	5,620,420	-23.56%	6,309,782	-10.93%

	Year-To-Date				Prior Year to Date	
Budget vs. Actual July 2018 and 2017	ANNUAL BUDGET 2017-18	BUDGET 2017-18	ACTUAL 2017-18	Variance %	ACTUAL 2016-17	Variance %
REVENUES						
Water & Sewer Revenues	\$ 456,850,720	\$ 378,470,030	\$ 350,955,072		\$ 352,684,208	
Capacity & Extension Fees	21,000,000	17,344,691	22,529,439		20,609,941	
Capital Contributions	-	-	44,638		24,799	
Investment Income	4,854,301	4,045,251	5,373,031		5,105,039	
Other Income	34,091,486	28,021,333	29,306,841		9,643,904	
Total	516,796,507	427,881,305	408,209,021	-4.60%	388,067,891	5.19%
EXPENSES						
O & M Expenses	154,316,393	126,612,801	117,710,616		111,335,777	
Debt Principal - Water & Sewer	51,720,000	43,100,000	43,100,000		42,516,667	
Debt Interest - Water & Sewer	69,402,632	57,835,527	54,903,815		57,039,608	
Rate Stabilization - Environmental	-	-	6,791,729		3,785,839	
R&R - Water & Sewer	24,473,800	20,394,833	20,394,833		18,972,417	
Operating Capital Outlay	151,801,519	113,798,819	113,798,819		102,753,157	
Operating Capital Outlay - Capacity/Extension	21,000,000	17,500,000	22,529,439		20,609,941	
Operating Capital Outlay - Contributions	-	-	44,638		24,799	
Operating Capital Outlay - Environmental	17,248,866	14,220,333	4,864,658		8,479,093	
City Contribution Expense	25,148,020	20,956,683	20,956,683		19,626,882	
Uncollectibles & Fees	685,277	571,063	491,056		163,573	
Interlocal Agreements	-	-	346,727		287,373	
Emergency Reserve	1,000,000	-	-		-	
Total Expenses	516,796,507	414,990,059	405,933,013	2.18%	385,595,126	-5.27%
Total Balance	\$ -	\$ 12,891,246	\$ 2,276,008		\$ 2,472,765	
Sales kials						
Water	42,000,000	34,816,309	29,855,739	-14.25%	31,204,285	-4.32%
Sewer	34,650,000	28,557,081	24,371,863	-14.66%	25,100,951	-2.90%
Total	76,650,000	63,373,390	54,227,602	-14.43%	56,305,236	-3.69%

Budget vs. Actual July 2018 and 2017	Month				Prior Year Month	
	ANNUAL BUDGET 2017-18	BUDGET 2017-18	ACTUAL 2017-18	Variance %	ACTUAL 2016-17	Variance %
<b>REVENUES</b>						
Revenues	\$ 9,125,828	\$ 924,690	\$ 921,924		\$ 796,476	
Investment Income	-	-	11,128		5,425	
Total	9,125,828	924,690	933,052	0.90%	801,901	16.36%
<b>EXPENSES</b>						
O & M Expenses	5,139,991	506,556	471,352		464,606	
Debt Principal - DES	1,660,000	138,333	138,333		136,667	
Debt Interest - DES	1,359,084	113,257	113,257		115,204	
R&R - DES	440,362	36,697	36,404		36,471	
Operating Capital Outlay	526,391	43,866	-		200,000	
Total Expenses	9,125,828	838,709	759,346	9.46%	952,948	20.32%
<b>Total Balance</b>	<b>\$ -</b>	<b>\$ 85,981</b>	<b>\$ 173,706</b>		<b>\$ (151,047)</b>	

Budget vs. Actual July 2018 and 2017	Year-To-Date				Prior-Year-to-Date	
	ANNUAL BUDGET 2017-18	BUDGET 2017-18	ACTUAL 2017-18	Variance %	ACTUAL 2016-17	Variance %
<b>REVENUES</b>						
Revenues	\$ 9,125,828	\$ 7,293,754	\$ 7,003,507		\$ 6,986,005	
Investment Income	-	-	78,276		30,468	
Total	9,125,828	7,293,754	7,081,783	-2.91%	7,016,473	0.93%
<b>EXPENSES</b>						
O & M Expenses	5,139,991	3,972,813	3,610,341		3,614,561	
Debt Principal - DES	1,660,000	1,383,333	1,383,333		1,366,667	
Debt Interest - DES	1,359,084	1,132,570	1,132,570		1,152,045	
R&R - DES	440,362	366,969	364,042		364,708	
Operating Capital Outlay	526,391	438,660	-		200,000	
Total Expenses	9,125,828	7,294,345	6,490,286	11.02%	6,697,981	3.10%
<b>Total Balance</b>	<b>\$ -</b>	<b>\$ (591)</b>	<b>\$ 591,497</b>		<b>\$ 318,492</b>	

## Electric System

## Schedule of Debt Service Coverage

(in thousands - unaudited)

	Month July		Year-to-Date July	
	2018	2017	2018	2017
<b>Revenues</b>				
Electric	\$ 116,199	\$ 127,871	\$ 988,658	\$ 976,132
Investment income <sup>(1)</sup>	976	465	6,916	4,482
Earnings from The Energy Authority	(131)	669	3,173	5,385
Other, net <sup>(2)</sup>	2,006	2,262	18,210	23,498
Plus: amount paid from the rate stabilization fund into the revenue fund	7,964	6,242	79,595	65,454
Less: amount paid from the revenue fund into the rate stabilization fund	(1,327)	(1,533)	(12,466)	(13,436)
Total revenues	125,687	135,976	1,084,086	1,061,515
<b>Operating expenses <sup>(3)</sup></b>				
Fuel	34,053	26,689	260,084	203,080
Purchased power <sup>(4)</sup>	15,235	26,749	204,107	232,313
Other operations and maintenance	15,759	15,790	162,464	156,039
Utility taxes and fees	5,824	5,777	48,245	46,499
Total operating expenses	70,871	75,005	674,900	637,931
<b>Net revenues</b>	\$ 54,816	\$ 60,971	\$ 409,186	\$ 423,584
<b>Debt service</b>	\$ 5,928	\$ 5,959	\$ 59,747	\$ 59,611
Less: investment income on sinking fund	(115)	(122)	(1,253)	(1,185)
Less: Build America Bonds subsidy	(126)	(126)	(1,267)	(1,263)
Debt service requirement	\$ 5,687	\$ 5,711	\$ 57,227	\$ 57,163
<b>Senior debt service coverage <sup>(5)</sup></b>	9.64 x	10.68 x	7.15 x	7.41 x
<b>Net revenues (from above)</b>	\$ 54,816	\$ 60,971	\$ 409,186	\$ 423,584
<b>Debt service requirement (from above)</b>	\$ 5,687	\$ 5,711	\$ 57,227	\$ 57,163
Plus: aggregate subordinated debt service on outstanding subordinated bonds	10,808	13,401	107,810	111,087
Less: Build American Bonds subsidy	(170)	(173)	(1,704)	(1,725)
Total debt service requirement and aggregate subordinated debt service	\$ 16,325	\$ 18,939	\$ 163,333	\$ 166,525
<b>Senior and subordinated debt service coverage <sup>(6)</sup></b>	3.36 x	3.22 x	2.51 x	2.54 x
<b>Fixed charge coverage <sup>(7)</sup></b>	2.70 x	2.48 x	1.90 x	1.86 x

<sup>(1)</sup> Excludes investment income on sinking funds.<sup>(2)</sup> Excludes the Build America Bonds subsidy.<sup>(3)</sup> Excludes depreciation and recognition of deferred costs and revenues, net.<sup>(4)</sup> 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.<sup>(5)</sup> Net revenues divided by debt service requirement. Minimum annual coverage is 1.20x.<sup>(6)</sup> Net revenues divided by total debt service requirement and aggregate subordinated debt service. Minimum annual coverage is 1.15x.<sup>(7)</sup> Net revenues plus JEA's share of SJRPP's and Bulk Power Supply System's debt service less city contribution divided by the sum of the adjusted debt service requirement and JEA's share of SJRPP's and Bulk Power Supply System's debt service.

**JEA**  
**Bulk Power Supply System**  
**Schedule of Debt Service Coverage**  
**(in thousands - unaudited)**

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	Month July		Year-to-Date July	
	2018	2017	2018	2017
<b>Revenues</b>				
Operating	\$ 6,359	\$ 5,699	\$ 62,165	\$ 55,026
Investment income	35	19	127	114
Total revenues	6,394	5,718	62,292	55,140
<b>Operating expenses <sup>(1)</sup></b>				
Fuel	3,497	3,505	21,652	30,887
Other operations and maintenance	1,246	1,186	15,020	12,201
Total operating expenses	4,743	4,691	36,672	43,088
<b>Net revenues</b>	\$ 1,651	\$ 1,027	\$ 25,620	\$ 12,052
<b>Aggregate debt service</b>	\$ 829	\$ 806	\$ 8,286	\$ 8,066
Less: Build America Bonds subsidy	(56)	(58)	(556)	(583)
Aggregate debt service	\$ 773	\$ 748	\$ 7,730	\$ 7,483
<b>Debt service coverage <sup>(2)</sup></b>	2.14 x	1.37 x	3.31 x	1.61 x

<sup>(1)</sup> Excludes all current expenses paid or accrued to the extent that such expenses are to be paid from revenues.

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

**JEA**  
**St. Johns River Power Park System**  
**Schedule of Debt Service Coverage - 1st Resolution**  
**(in thousands - unaudited)**

	Month July		Year-to-Date July	
	2018	2017	2018	2017
<b>Revenues</b>				
JEA	\$ -	\$ 12,178	\$ 98,013	\$ 108,514
FPL	-	12,022	28,360	104,456
Investment income	-	334	(4,289)	3,083
Total revenues	-	24,534	122,084	216,053
<b>Operating expenses <sup>(1)</sup></b>				
Fuel	-	18,341	48,858	134,491
Other operations and maintenance	-	2,221	11,877	32,862
Total operating expenses	-	20,562	60,735	167,353
<b>Net revenues</b>	\$ -	\$ 3,972	\$ 61,349	\$ 48,700
<b>Aggregate debt service</b>	\$ -	\$ 3,960	\$ 11,260	\$ 39,600
<b>Debt service coverage <sup>(2)</sup></b>	N/A x	1.00 x	5.45 x	1.23 x

<sup>(1)</sup> Excludes depreciation and recognition of deferred costs and revenues, net.

<sup>(2)</sup> Net revenues divided by aggregate debt service. Semiannual minimum coverage was 1.25x, however, there is currently no debt outstanding under the resolution and the resolution has been discharged and satisfied in accordance with its terms.

**St. Johns River Power Park System**  
**Schedule of Debt Service Coverage - 2nd Resolution**  
**(in thousands - unaudited)**

	Month July		Year-to-Date July	
	2018	2017	2018	2017
<b>Revenues</b>				
Operating	\$ 2,085	\$ 1,047	\$ 13,789	\$ 11,975
Investment income	216	14	902	196
Total revenues	2,301	1,061	14,691	12,171
<b>Operating expenses</b>	837	-	2,323	-
<b>Net revenues</b>	\$ 1,464	\$ 1,061	\$ 12,368	\$ 12,171
<b>Aggregate debt service</b>	\$ 1,077	\$ 1,079	\$ 10,771	\$ 10,792
Less: Build America Bonds subsidy	(31)	(32)	(306)	(324)
Aggregate debt service	\$ 1,046	\$ 1,047	\$ 10,465	\$ 10,468
<b>Debt service coverage <sup>(1)</sup></b>	1.40 x	1.01 x	1.18 x	1.16 x

<sup>(1)</sup> Net revenues divided by aggregate debt service. Semiannual minimum coverage is 1.15x.

**JEA**  
**Water and Sewer**  
**Schedule of Debt Service Coverage**  
**(in thousands - unaudited)**

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	Month July		Year-to-Date July	
	2018	2017	2018	2017
<b>Revenues</b>				
Water	\$ 15,508	\$ 15,319	\$ 142,449	\$ 146,325
Water capacity fees	1,089	748	7,837	7,373
Sewer	22,804	23,325	216,740	214,969
Sewer capacity fees	2,052	1,373	14,693	13,237
Investment Income	513	424	5,395	5,143
Other <sup>(1)</sup>	999	750	9,569	7,977
Plus: amounts paid from the rate stabilization fund into the revenue fund	1,953	1,375	12,908	16,222
Less: amounts paid from the revenue fund into the rate stabilization fund	(2,044)	(2,049)	(19,700)	(20,094)
Total revenues	42,874	41,265	389,891	391,152
<b>Operating expenses</b>				
Operations and maintenance <sup>(2)</sup>	13,845	10,541	129,265	121,633
Total operating expenses	13,845	10,541	129,265	121,633
<b>Net revenues</b>	\$ 29,029	\$ 30,724	\$ 260,626	\$ 269,519
<b>Aggregate debt service</b>	\$ 7,939	\$ 8,146	\$ 79,846	\$ 81,400
Less: Build America Bonds subsidy	(208)	(208)	(2,079)	(2,083)
Aggregate debt service	\$ 7,731	\$ 7,938	\$ 77,767	\$ 79,317
<b>Senior debt service coverage <sup>(3)</sup></b>	3.75 x	3.87 x	3.35 x	3.40 x
<b>Net revenues (from above)</b>	\$ 29,029	\$ 30,724	\$ 260,626	\$ 269,519
<b>Aggregate debt service (from above)</b>	\$ 7,731	\$ 7,938	\$ 77,767	\$ 79,317
Plus: aggregate subordinated debt service on outstanding subordinated debt	1,490	1,471	15,022	14,664
Total aggregate debt service and aggregate subordinated debt service	\$ 9,221	\$ 9,409	\$ 92,789	\$ 93,981
<b>Senior and subordinated debt service coverage excluding capacity fees <sup>(4)</sup></b>	2.81 x	3.04 x	2.57 x	2.65 x
<b>Senior and subordinated debt service coverage including capacity fees <sup>(4)</sup></b>	3.15 x	3.27 x	2.81 x	2.87 x
<b>Fixed charge coverage</b>	2.92 x	3.06 x	2.58 x	2.66 x

<sup>(1)</sup> Excludes the Build America Bonds subsidy.

<sup>(2)</sup> Excludes depreciation and recognition of deferred costs and revenues, net.

<sup>(3)</sup> Net revenues divided by aggregate debt service. Minimum annual coverage is 1.25x.

<sup>(4)</sup> 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).

**District Energy System**  
**Schedule of Debt Service Coverage**  
**(in thousands - unaudited)**

	Month July		Year-to-Date July	
	2018	2017	2018	2017
<b>Revenues</b>				
Service revenues	\$ 922	\$ 796	\$ 7,004	\$ 6,986
Investment income	11	5	78	30
Total revenues	933	801	7,082	7,016
<b>Operating expenses <sup>(1)</sup></b>				
Operations and maintenance	469	464	3,605	3,601
Total operating expenses	469	464	3,605	3,601
<b>Net revenues</b>	\$ 464	\$ 337	\$ 3,477	\$ 3,415
<b>Aggregate debt service <sup>(2)</sup></b>	\$ 252	\$ 252	\$ 2,516	\$ 2,519
<b>Debt service coverage <sup>(3)</sup></b>	1.84 x	1.34 x	1.38 x	1.36 x

<sup>(1)</sup> Excludes depreciation.

<sup>(2)</sup> 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.

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

Electric System, St. Johns River Power Park System and Scherer  
Principal Amount of Debt Outstanding and Average Interest Rates  
July 2018

Issue/Average Coupon Rate	Interest Rates	Principal Payment Dates	Par Amount Principal Outstanding	Current Portion of Long-Term Debt
<b>Electric System - Fixed Rate Bonds</b>				
Series Three 2004 A	5.000%	2039	\$ 5,000	\$ -
Series Three 2005 B	4.750%	2033	100,000	-
Series Three 2009 D - BABs	6.056%	2033-2044	45,955,000	-
Series Three 2010 A	4.000%	2018-2019	10,065,000	4,995,000
Series Three 2010 C	4.125 - 4.500%	2026-2031	1,950,000	-
Series Three 2010 D	4.250 - 5.000%	2018-2038	7,210,000	6,005,000
Series Three 2010 E - BABs	5.350 - 5.482%	2028-2040	34,255,000	-
Series Three 2012A	4.000 - 4.500%	2023-2033	16,995,000	-
Series Three 2012B	2.000 - 5.000%	2019-2039	85,615,000	-
Series Three 2013A	3.000 - 5.000%	2018-2026	74,865,000	9,100,000
Series Three 2013B	3.000 - 5.000%	2026-2038	7,500,000	-
Series Three 2013C	4.000 - 5.000%	2018-2030	19,335,000	4,295,000
Series Three 2014A	3.400 - 5.000%	2018-2034	12,870,000	2,060,000
Series Three 2015A	2.750 - 5.000%	2018-2041	69,975,000	145,000
Series Three 2015B	3.375 - 5.000%	2018-2031	23,900,000	6,675,000
Series Three 2017A	5.000%	2019	18,670,000	-
Series Three 2017B	3.375 - 5.000%	2026-2039	198,095,000	-
<b>Total Fixed Rate Senior Bonds</b>			<b>627,360,000</b>	<b>33,275,000</b>
2009 Series D	5.000%	2018	11,660,000	11,660,000
2009 Series E	4.000%	2018	295,000	295,000
2009 Series F - BABs	4.800 - 6.406%	2018-2034	63,670,000	1,515,000
2009 Series G	4.000 - 5.000%	2018-2019	16,090,000	1,425,000
2010 Series B	4.000 - 5.000%	2018-2024	4,605,000	925,000
2010 Series D - BABs	4.000 - 5.582%	2018-2027	44,125,000	2,075,000
2012 Series A	3.250 - 5.000%	2018-2033	62,440,000	5,950,000
2012 Series B	3.250 - 5.000%	2018-2037	52,995,000	2,580,000
2013 Series A	3.000 - 5.000%	2018-2030	44,585,000	1,530,000
2013 Series B	3.000 - 5.000%	2018-2026	21,275,000	2,740,000
2013 Series C	1.375 - 5.000%	2018-2038	78,330,000	1,175,000
2013 Series D	4.000 - 5.250%	2018-2035	88,660,000	14,125,000
2014 Series A	4.000 - 5.000%	2018-2039	121,320,000	10,990,000
2017 Series A	3.000 - 5.000%	2018-2019	31,790,000	30,500,000
2017 Series B	3.375 - 5.000%	2018-2034	185,745,000	795,000
<b>Total Fixed Rate Subordinated Bonds</b>			<b>827,585,000</b>	<b>88,280,000</b>
<b>Total Fixed Rate Electric System Bonds/4.543%</b>			<b>1,454,945,000</b>	<b>121,555,000</b>
<b>Electric System - Variable Rate Bonds</b>				
	Current Interest Rates (1)			
Series Three 2008 A	1.402%	2027-2036	51,680,000	-
Series Three 2008 B-1	1.834%	2018-2040	60,020,000	400,000
Series Three 2008 B-2	1.402%	2025-2040	41,900,000	-
Series Three 2008 B-3	1.402%	2024-2036	37,000,000	-
Series Three 2008 B-4	1.834%	2018-2036	49,410,000	400,000
Series Three 2008 C-1	1.440%	2024-2034	44,145,000	-
Series Three 2008 C-2	1.440%	2024-2034	43,900,000	-
Series Three 2008 C-3	1.830%	2030-2038	25,000,000	-
Series Three 2008 D-1	1.834%	2018-2036	108,900,000	2,625,000
<b>Total Variable Rate Senior Bonds</b>			<b>461,955,000</b>	<b>3,425,000</b>
Series 2000 A	1.345%	2021-2035	30,965,000	-
Series 2000 F-1	1.658%	2026-2030	37,200,000	-
Series 2000 F-2	1.357%	2026-2030	24,800,000	-
Series 2008 D	1.186%	2024-2038	39,455,000	-
<b>Total Variable Rate Subordinated Bonds</b>			<b>132,420,000</b>	-
<b>Total Variable Rate Bonds</b>			<b>594,375,000</b>	<b>3,425,000</b>
<b>Total Electric System Bonds</b>			<b>2,049,320,000</b>	<b>124,980,000</b>
<b>St. Johns River Power Park - Fixed Rate Bonds</b>				
Issue 3 Series 1	4.500%	2037	100,000	-
Issue 3 Series 2	5.000%	2034-2037	29,370,000	-
Issue 3 Series 4 - BABs	4.200 - 5.450%	2018-2028	22,410,000	1,720,000
Issue 3 Series 6	2.375 - 5.000%	2019-2037	91,330,000	-
Issue 3 Series 7	2.000 - 5.000%	2019-2033	79,500,000	-
Issue 3 Series 8	2.000 - 5.000%	2019-2039	57,895,000	-
<b>Total Fixed Rate St. Johns River Power Park Bonds/4.012%</b>			<b>280,605,000</b>	<b>1,720,000</b>
<b>Bulk Power Supply System, Scherer 4 Project - Fixed Rate Bonds</b>				
Series 2010A - BABs	4.250 - 5.920%	2018-2030	37,400,000	3,045,000
Series 2014A	2.000 - 5.000%	2018-2038	63,320,000	2,665,000
<b>Total Fixed Rate Bulk Power Supply System Bonds/4.311%</b>			<b>100,720,000</b>	<b>5,710,000</b>
<b>Weighted Average Cost(2) / Total Outstanding Debt</b>		3.411%	<b>\$ 2,430,645,000</b>	<b>\$ 132,410,000</b>

(1) Current month interest rate excluding variable debt fees.

(2) Weighted Average Cost of debt is net of BABs subsidy, original issue premiums/discounts and excludes variable debt liquidity/restructuring fees and interest rate swap payments.

	Current YTD	Prior YTD	Year End Target
• Debt Ratio - Electric Enterprise Fund	74.1%	66.0%	71.1%
	Electric System	Power Park	Issue Three
• Remaining New Money Authorization	\$ 465,160,992	103,865,000	
• Remaining Senior Refunding Authorization	\$ 1,022,837,381	250,810,000	
• Remaining Subordinated Refunding Authorization	\$ 634,898,000	n/a	



## Water and Sewer System

Principal Amount of Debt Outstanding and Average Interest Rates  
July 2018

Issue/Average Coupon Rate	Interest Rates	Principal Payment Dates	Par Amount Principal Outstanding	Current Portion of Long-Term Debt
<b>Fixed Rate Bonds</b>				
2009 Series B	3.750 - 5.000%	2018-2019	\$ 18,295,000	\$ 9,380,000
2010 Series A - BABs	6.210 - 6.310%	2026-2044	83,115,000	-
2010 Series B - Taxable	4.700 - 5.700%	2018-2025	13,840,000	1,730,000
2010 Series C	5.000%	2020	3,000,000	-
2010 Series D	4.000 - 5.000%	2018-2039	42,525,000	3,900,000
2010 Series E	4.000 - 5.000%	2021-2039	11,865,000	-
2010 Series F - BABs	3.750 - 5.887%	2018-2040	44,275,000	2,180,000
2012 Series A	3.000 - 5.000%	2019-2041	162,430,000	-
2012 Series B	2.000 - 5.000%	2018-2037	76,380,000	1,780,000
2013 Series A	4.500 - 5.000%	2018-2027	63,660,000	11,940,000
2014 Series A	2.000 - 5.000%	2018-2040	217,790,000	4,830,000
2017 Series A	3.125 - 5.000%	2020-2041	378,220,000	-
<b>Total Fixed Rate Senior Bonds</b>			<b>1,115,395,000</b>	<b>35,740,000</b>
2010 Series A	5.000%	2018-2022	8,275,000	2,655,000
2010 Series B	3.000 - 5.000%	2020-2025	3,255,000	-
2012 Series A	3.000%	2021	1,440,000	-
2012 Series B	3.250 - 5.000%	2030-2043	29,685,000	-
2013 Series A	2.125 - 5.000%	2018-2029	37,435,000	5,705,000
2017 Series A	2.750 - 5.000%	2021-2034	58,940,000	-
<b>Total Fixed Rate Subordinated Bonds</b>			<b>139,030,000</b>	<b>8,360,000</b>
<b>Total Fixed Rate Bonds/4.509%</b>			<b>1,254,425,000</b>	<b>44,100,000</b>
<b>Variable Rate Bonds</b>				
	Current Interest Rates (1)			
2006 Series B - CPI Bonds	3.046% (2)	2018-2022	30,370,000	5,520,000
2008 Series A-2	1.098%	2028-2042	51,820,000	-
2008 Series B	1.087%	2023-2041	85,290,000	-
<b>Total Variable Rate Senior Bonds</b>			<b>167,480,000</b>	<b>5,520,000</b>
2008 Series A-1	0.917%	2018-2038	50,950,000	2,100,000
2008 Series A-2	1.085%	2030-2038	25,600,000	-
2008 Series B-1	1.119%	2030-2036	30,885,000	-
<b>Total Variable Rate Subordinated Bonds</b>			<b>107,435,000</b>	<b>2,100,000</b>
<b>Total Variable Rate Bonds</b>			<b>274,915,000</b>	<b>7,620,000</b>
<b>Other Obligations</b>				
Revolving Credit Agreement	3.243%	2021	3,000,000	-
<b>Total Other Obligations</b>			<b>3,000,000</b>	<b>-</b>
<b>Weighted Average Cost(3) / Total Outstanding Debt</b>		<b>3.546%</b>	<b>\$ 1,532,340,000</b>	<b>\$ 51,720,000</b>

(1) Current month interest rate excluding variable debt fees.

(2) Designated swap obligation. The rate shown is the weighted average of the variable CPI Index rates for the 6 month re-set period.

(3) Weighted Average Cost of debt is net of BABs subsidy, original issue premiums/discounts and excludes variable debt liquidity/remarketing fees and interest rate swap payments.

	Current YTD	Prior YTD	Year End Target
• Debt Ratio - Water and Sewer	50.7%	54.8%	49.0%
• Remaining New Money Authorization	\$ 218,078,023		
• Remaining Refunding Authorization	\$ 794,813,942		

## JEA

## District Energy System

Principal Amount of Debt Outstanding and Average Interest Rates  
July 2018

Issue/Average Coupon	Interest Rates	Principal Payment Dates	Par Amount Principal Outstanding	Current Portion of Long-Term Debt
<b>Fixed Rate Bonds</b>				
2013 Series A/4.036%	1.725 - 4.538%	2018-2034	\$ 36,485,000	\$ 1,660,000
<b>Weighted Average Cost(1) / Total Outstanding Debt</b>		<b>4.141%</b>	<b>\$ 36,485,000</b>	<b>\$ 1,660,000</b>

(1) Weighted Average Cost of debt is net of original issue premiums/discounts.

• Remaining New Money Authorization	\$ 54,321,245
• Remaining Refunding Authorization	\$ 106,670,000

**JEA**  
**INVESTMENT PORTFOLIO REPORT**  
**July 2018**  
**All Funds**

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<b>INVESTMENT</b>	<b>BOOK VALUE</b>	<b>YIELD</b>	<b>% OF TOTAL</b>	<b>LAST MONTH</b>	<b>6 MONTH AVERAGE</b>
* Treasuries	\$ 196,275,647	2.01%	14.83%	13.47%	12.87%
Agencies					
Federal Farm Credit Bank	77,634,240	1.65%	5.86%	6.97%	7.81%
Federal Home Loan Bank	258,478,477	1.86%	19.52%	19.44%	20.14%
Total	336,112,717	1.81%	25.39%	26.40%	27.95%
Municipal Bonds	227,578,068	2.55%	17.19%	17.25%	17.27%
Commercial Paper	217,180,213	2.24%	16.41%	15.72%	14.38%
U.S. Treasury Money Market Funds (1)	96,791,445	1.81%	7.31%	8.01%	7.25%
Agency Money Market Funds (2)	19,425,000	1.83%	1.47%	1.74%	1.21%
FEITF Money Market Fund	45,000,000	2.14%	3.40%	3.48%	3.37%
Florida Prime Fund	73,000,000	2.20%	5.51%	5.65%	5.68%
Wells Fargo Bank Accounts (3)					
Electric, Scherer	49,912,453	1.95%	3.77%	2.17%	2.52%
SJRPP	58,105,736	1.95%	4.39%	5.28%	6.21%
Water & Sewer, DES	4,469,328	1.95%	0.34%	0.83%	1.30%
Total Portfolio	\$ 1,323,850,608	2.08%	100.00%	100.00%	100.00%

\* Backed by Full Faith and Credit of U. S. Government

Weighted Avg. Annual Yield for July 2018, Excluding Bank & Money Market Funds: 2.12%

Weighted Avg. Annual Yield for July 2018, Including Bank & Money Market Funds: 2.08%

Some investments listed above may be classified as Cash Equivalents on the Statements of Net Position in accordance with generally accepted accounting principles.

- (1) Fidelity Treasury Fund
- (2) State Street Government Fund
- (3) Month-end bank balances

**JEA**  
**Interest Rate Swap Position Report**  
**July 2018**

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**JEA Debt Management Swaps Variable to Fixed**

ID	Dealer	Effective Date	Termination Date	Electric System Allocation	Water/Sewer Allocation	Fixed Rate	Floating Rate (1)	Spread	Rate Cap	Index
1	Goldman Sachs	9/18/2003	9/18/2033	\$ 84,800,000	\$ -	3.717	1.423	2.294	n/a	68% 1 mth Libor
3	Morgan Stanley	1/27/2005	10/1/2039	82,575,000	-	4.351	1.086	3.265	n/a	SIFMA
4	JPMorgan	1/27/2005	10/1/2035	85,600,000	-	3.661	1.423	2.238	n/a	68% 1 mth Libor
6	JPMorgan	1/27/2005	10/1/2037	39,175,000	-	3.716	1.423	2.293	n/a	68% 1 mth Libor
7	Morgan Stanley	10/31/2006	10/1/2022	-	30,370,000	4.025	3.046	0.979	n/a	CPI
8	Morgan Stanley	1/31/2007	10/1/2031	62,980,000	-	3.907	1.086	2.821	n/a	SIFMA
9	Merrill Lynch	3/8/2007	10/1/2041	-	85,290,000	3.895	1.086	2.809	n/a	SIFMA
10	Goldman Sachs	1/31/2008	10/1/2036	51,680,000	-	3.836	1.086	2.750	n/a	SIFMA
Total				<u>\$ 406,810,000</u>	<u>\$ 115,660,000</u>	Wtd Avg Spread		2.554		

Note: (1) The "Floating Rate" column is the average of the floating rate for each instrument for this month.

	Month July			Year-to-Date July		
	2018	2017	Variance	2018	2017	Variance
<b>Electric revenues sales (000's omitted):</b>						
Residential	\$ 61,461	\$ 67,282	-8.65%	\$ 491,413	\$ 465,150	5.65%
Commercial	35,422	38,968	-9.10%	317,134	318,646	-0.47%
Industrial	18,333	18,750	-2.22%	165,006	164,554	0.27%
Public street lighting	1,080	1,069	1.03%	10,724	10,928	-1.87%
Sales for resale - territorial	48	1,823	-97.37%	4,267	12,915	-66.96%
Electric revenues - territorial	116,344	127,892	-9.03%	988,544	972,193	1.68%
Sales for resale - off system	28	146	-80.82%	1,069	4,202	-74.56%
Electric revenues	116,372	128,038	-9.11%	989,613	976,395	1.35%
Less: rate stabilization & recovery	6,637	4,709	-40.94%	67,129	52,018	-29.05%
Less: allowance for doubtful accounts	(173)	(167)	3.59%	(955)	(263)	263.12%
<b>Net electric revenues</b>	<b>122,836</b>	<b>132,580</b>	<b>-7.35%</b>	<b>1,055,787</b>	<b>1,028,150</b>	<b>2.69%</b>
<b>MWh sales</b>						
Residential	542,182	597,456	-9.25%	4,294,877	4,057,180	5.86%
Commercial	368,895	409,657	-9.95%	3,258,807	3,259,611	-0.02%
Industrial	255,124	263,422	-3.15%	2,276,719	2,252,613	1.07%
Public street lighting	4,794	4,968	-3.50%	49,646	55,865	-11.13%
Sales for resale - territorial	-	23,105	-100.00%	38,640	112,284	-65.59%
Total MWh sales - territorial	1,170,995	1,298,608	-9.83%	9,918,689	9,737,553	1.86%
Sales for resale - off system	1,038	2,983	-65.20%	34,090	123,592	-72.42%
Total MWh sales	1,172,033	1,301,591	-9.95%	9,952,779	9,861,145	0.93%
<b>Number of accounts (1)</b>						
Residential	412,133	405,129	1.73%	409,370	402,622	1.68%
Commercial	52,535	51,992	1.04%	52,324	51,824	0.96%
Industrial	197	202	-2.48%	197	204	-3.43%
Public street lighting	3,795	3,759	0.96%	3,769	3,721	1.29%
Sales for resale	1	2	-50.00%	1	2	-50.00%
<b>Total average accounts</b>	<b>468,661</b>	<b>461,084</b>	<b>1.64%</b>	<b>465,661</b>	<b>458,373</b>	<b>1.59%</b>
<b>Residential averages</b>						
Revenue per account - \$	149.13	166.08	-10.21%	1,200.41	1,155.30	3.90%
kWh per account	1,316	1,475	-10.78%	10,491	10,077	4.11%
Revenue per kWh - ¢	11.34	11.26	0.71%	11.44	11.46	-0.17%
<b>Degree days</b>						
Heating degree days	-	-	-	1,103	782	321
Cooling degree days	534	557	(23)	2,075	1,981	94
<b>Total degree days</b>	<b>534</b>	<b>557</b>	<b>(23)</b>	<b>3,178</b>	<b>2,763</b>	<b>415</b>
Degree days - 30 year average	536			3,097		

(1) The year-to-date column represents a fiscal year-to-date average.

	Month July			Year-to-Date July		
	2018	2017	Variance	2018	2017	Variance
<b>Water</b>						
<i>Revenues (000's omitted):</i>						
Residential	\$ 8,418	\$ 8,062	4.42%	\$ 76,772	\$ 77,313	-0.70%
Commercial and industrial	4,234	4,202	0.76%	39,293	38,552	1.92%
Irrigation	2,875	3,077	-6.56%	26,579	30,526	-12.93%
Total water revenues	15,527	15,341	1.21%	142,644	146,391	-2.56%
Less: rate stabilization	(1,245)	(1,238)	0.57%	(11,792)	(12,164)	-3.06%
Less: allowance for doubtful accounts	(19)	(22)	-13.64%	(195)	(66)	195.45%
Net water revenues	\$ 14,263	\$ 14,081	1.29%	\$ 130,657	\$ 134,161	-2.61%
<i>Kgal sales (000s omitted)</i>						
Residential	1,453,081	1,619,451	-10.27%	14,053,656	14,822,904	-5.19%
Commercial and industrial	1,217,867	1,324,529	-8.05%	11,473,307	11,081,978	3.53%
Irrigation	461,945	535,604	-13.75%	4,328,776	5,299,403	-18.32%
Total kgals sales	3,132,893	3,479,584	-9.96%	29,855,739	31,204,285	-4.32%
<i>Number of accounts (1):</i>						
Residential	287,621	280,889	2.40%	284,765	278,265	2.34%
Commercial and industrial	25,811	25,504	1.20%	25,679	25,401	1.09%
Irrigation	37,161	36,974	0.51%	37,033	36,704	0.90%
Total average accounts	350,593	343,367	2.10%	347,477	340,370	2.09%
<i>Residential averages:</i>						
Revenue per account - \$	29.27	28.70	1.99%	269.60	277.84	-2.97%
Kgals per account	5.05	5.77	-12.48%	49.35	53.27	-7.36%
Revenue per kgals - \$	5.79	4.98	16.27%	5.46	5.22	4.60%
<b>Sewer</b>						
<i>Revenues (000's omitted):</i>						
Residential	\$ 12,421	\$ 12,307	0.93%	\$ 116,190	\$ 117,010	-0.70%
Commercial and industrial	9,104	9,818	-7.27%	89,629	87,301	2.67%
Total sewer revenues	21,525	22,125	-2.71%	205,819	204,311	0.74%
Less: rate stabilization	1,154	564	104.61%	5,000	8,292	-39.70%
Less: allowance for doubtful accounts	(32)	(32)	0.00%	(295)	(98)	201.02%
Net sewer revenues	22,647	22,657	-0.04%	210,524	212,505	-0.93%
<i>Kgal sales (000s omitted)</i>						
Residential	1,257,217	1,378,704	-8.81%	12,159,711	12,788,320	-4.92%
Commercial and industrial	960,763	1,101,278	-12.76%	9,673,797	9,514,159	1.68%
Total kgals sales	2,217,980	2,479,982	-10.56%	21,833,508	22,302,479	-2.10%
<i>Number of accounts (1):</i>						
Residential	254,652	248,171	2.61%	251,923	245,636	2.56%
Commercial and industrial	18,391	18,198	1.06%	18,328	18,134	1.07%
Total average accounts	273,043	266,369	2.51%	270,251	263,770	2.46%
<i>Residential averages:</i>						
Revenue per account - \$	48.78	49.59	-1.63%	461.21	476.36	-3.18%
kgals per account	4.94	5.56	-11.15%	48.27	52.06	-7.28%
Revenue per kgals - \$	9.88	8.93	10.64%	9.56	9.15	4.48%
<b>Reuse</b>						
<i>Revenues (000's omitted):</i>						
Reuse revenues	\$ 1,311	\$ 1,232	6.41%	\$ 11,216	\$ 10,756	4.28%
<i>Kgal sales (000s omitted)</i>						
Reuse sales (kgals)	269,547	350,216	-23.03%	2,538,355	2,798,472	-9.29%
<i>Number of accounts (1):</i>						
Reuse accounts	12,174	9,946	22.40%	11,290	9,226	22.37%
<b>Rainfall</b>						
	Diff in inches			Diff in inches		
Normal	6.55	6.55		37.40	37.40	
Actual	8.86	10.91	(2.05)	46.32	50.47	(4.15)
Rain Days	20	13		93	74	

(1) The year-to-date column represents a fiscal year-to-date average.

	Month July			Year-to-Date July		
	2018	2017	Variance	2018	2017	Variance
<b>Generated power:</b>						
<b>Steam:</b>						
<i>Fuel oil</i>						
Fuel expense	\$ -	\$ -		\$ 4,163,527	\$ 339,833	1125.17%
Barrels #6 oil consumed	-	-		38,482	3,142	1124.76%
\$/ per barrel consumed	\$ -	\$ -		\$ 108.19	\$ 108.16	0.03%
kWh oil generated (1)	-	-		23,686,188	376,100	6197.84%
Cost per MWh - oil	\$ -	\$ -		\$ 175.78	\$ 903.57	-80.55%
<i>Natural gas units #1-3</i>						
Gas expense - variable	\$ 7,403,907	\$ 7,687,175	-3.68%	\$ 44,363,523	\$ 36,278,601	22.29%
MMBTU's consumed	1,946,990	2,165,142	-10.08%	13,373,698	10,636,952	25.73%
\$/ per MMBTU consumed	\$ 3.80	\$ 3.55	7.11%	\$ 3.32	\$ 3.41	-2.74%
kWh - gas generated (1)	175,909,609	199,739,234	-11.93%	1,226,034,820	978,574,750	25.29%
Cost per MWh - gas	\$ 42.09	\$ 38.49	9.36%	\$ 36.18	\$ 37.07	-2.40%
Cost per MWh - gas & oil - steam	\$ 42.09	\$ 38.49	9.36%	\$ 38.83	\$ 37.41	3.81%
<i>Coal</i>						
Coal expense	\$ 3,584,428	\$ 1,612,677	122.27%	\$ 23,471,195	\$ 11,917,215	96.95%
kWh generated	112,992,706	49,157,928	129.86%	714,482,249	395,117,967	80.83%
Cost per MWh - coal	\$ 31.72	\$ 32.81	-3.30%	\$ 32.85	\$ 30.16	8.92%
<i>Pet coke and limestone</i>						
Expense	\$ 9,147,490	\$ 3,178,397	187.80%	\$ 48,208,392	\$ 24,168,495	99.47%
kWh generated	214,055,225	94,211,313	127.21%	1,220,951,612	722,491,946	68.99%
Cost per MWh - pet coke and limestone	\$ 42.73	\$ 33.74	26.67%	\$ 39.48	\$ 33.45	18.03%
Cost per MWh - coal & petcoke - steam	\$ 38.93	\$ 33.42	16.49%	\$ 37.04	\$ 32.29	14.70%
<b>Combustion turbine:</b>						
<i>Fuel oil</i>						
Fuel expense	\$ 180,020	\$ 68,258	163.73%	\$ 3,525,216	\$ 694,935	407.27%
Barrels #2 oil consumed	1,473	588	150.51%	36,759	5,622	553.84%
\$/ per barrel consumed	\$ 122.21	\$ 116.09	5.28%	\$ 95.90	\$ 123.61	-22.42%
kWh - oil generated	659,970	159,579	313.57%	14,422,350	1,661,607	767.98%
Cost per MWh - oil	\$ 272.77	\$ 427.74	-36.23%	\$ 244.43	\$ 418.23	-41.56%
<i>Natural gas (includes landfill)</i>						
Gas expense Kennedy & landfill - variable	\$ 391,342	\$ 111,274	251.69%	\$ 2,553,918	\$ 1,050,153	143.19%
MMBTU's consumed	101,467	31,640	220.69%	751,817	312,733	140.40%
\$/ per MMBTU consumed	\$ 3.86	\$ 3.52	9.67%	\$ 3.40	\$ 3.36	1.16%
kWh - gas generated (1)	8,961,065	2,291,770	291.01%	62,565,946	23,717,777	163.79%
Cost per MWh - gas	\$ 43.67	\$ 48.55	-10.06%	\$ 40.82	\$ 44.28	-7.81%
Gas expense BB simple - variable	\$ 301,553	\$ 172,818	74.49%	\$ 2,681,361	\$ 2,202,584	21.74%
MMBTU's consumed	\$ 117,311	\$ 60,142	95.06%	\$ 903,234	\$ 715,336	26.27%
\$/ per MMBTU consumed	\$ 2.57	\$ 2.87	-10.54%	\$ 2.97	\$ 3.08	-3.59%
kWh - gas generated (1)	10,429,614	5,332,875	95.57%	78,095,730	62,877,985	24.20%
Cost per MWh - gas simple	\$ 28.91	\$ 32.41	-10.78%	\$ 34.33	\$ 35.03	-1.98%
Gas expense BB combined - variable	\$ 6,556,922	\$ 7,743,083	-15.32%	\$ 71,627,024	\$ 71,567,491	0.08%
MMBTU's consumed	2,545,453	2,584,550	-1.51%	24,267,162	22,912,190	5.91%
\$/ per MMBTU consumed	\$ 2.58	\$ 3.00	-14.02%	\$ 2.95	\$ 3.12	-5.51%
kWh - gas generated (1)	357,955,543	369,240,551	-3.06%	3,448,248,468	3,265,590,130	5.59%
Cost per MWh - gas combined	\$ 18.32	\$ 20.97	-12.65%	\$ 20.77	\$ 21.92	-5.22%
Gas expense GEC simple - variable	\$ 1,149,492	\$ 731,157	57.22%	\$ 9,351,508	\$ 4,702,442	98.86%
MMBTU's consumed	374,122	330,658	13.14%	2,383,443	1,659,817	43.60%
\$/ per MMBTU consumed	\$ 3.07	\$ 2.21	38.95%	\$ 3.92	\$ 2.83	38.49%
kWh - gas generated	33,960,707	29,273,119	16.01%	211,995,138	151,120,987	40.28%
Cost per MWh - gas simple	\$ 33.85	\$ 24.98	35.52%	\$ 44.11	\$ 31.12	41.76%
Cost per MWh - gas & oil ct	\$ 20.83	\$ 21.72	-4.14%	\$ 23.52	\$ 22.89	2.77%
Natural gas expense - fixed	\$ 3,448,345	\$ 3,530,152	-2.32%	\$ 32,337,831	\$ 31,039,057	4.18%
<b>Total generated power:</b>						
Fuels expense	\$ 32,163,499	\$ 24,834,991	29.51%	\$ 242,283,495	\$ 183,960,806	31.70%
kWh generated	914,924,439	749,406,369	22.09%	7,000,482,501	5,601,529,249	24.97%
Cost per MWh	\$ 35.15	\$ 33.14	6.08%	\$ 34.61	\$ 32.84	5.38%

(1) Allocation of kWh generated is based upon a ratio of gas MBTU's (adjusted to oil equivalent - 95.5%) and oil MBTU's.

**Cost of fuels**

Fuel oil #6	\$ -	\$ -	\$ 4,163,527	\$ 339,833
Natural gas units #1-3 with landfill - variable	7,403,907	7,687,175	44,363,523	36,278,601
Coal	3,584,428	1,612,677	23,471,195	11,917,215
Petcoke	9,147,490	3,178,397	48,208,392	24,168,495
Fuel oil #2	180,020	68,258	3,525,216	694,935
Natural gas - simple cycle (BB & GEC) - variable	1,842,387	1,015,249	14,586,787	7,955,179
Natural gas - combined (BB) - variable	6,556,922	7,743,083	71,627,024	71,567,491
Natural gas - fixed	3,448,345	3,530,152	32,337,831	31,039,057
Total	\$ 32,163,499	\$ 24,834,991	\$ 242,283,495	\$ 183,960,806



	Month July			Year-to-Date July		
	2018	2017	Variance	2018	2017	Variance
<b>Production Statistics (Continued)</b>						
<b>Purchased power:</b>						
<i>Plant Scherer</i>						
Purchases	\$ 5,585,493	\$ 4,950,996	12.82%	\$ 54,435,175	\$ 47,543,020	14.50%
kWh purchased	132,524,000	128,519,000	3.12%	853,419,000	1,157,107,000	-26.25%
Cost per MWh	\$ 42.15	\$ 38.52	9.41%	\$ 63.78	\$ 41.09	55.24%
<i>TEA &amp; other</i>						
Purchases	\$ 7,416,248	\$ 7,824,595	-5.22%	\$ 87,461,635	\$ 63,119,180	38.57%
kWh purchased	181,748,662	174,719,247	4.02%	1,933,777,314	1,372,598,255	40.88%
Cost per MWh	\$ 40.80	\$ 44.78	-8.88%	\$ 45.23	\$ 45.99	-1.65%
<i>SJRPP</i>						
Purchases	\$ 1,460,320	\$ 13,224,640	-88.96%	\$ 54,480,316	\$ 114,167,111	-52.28%
kWh purchased	-	275,906,000	-100.00%	539,759,000	2,046,419,000	-73.62%
Cost per MWh		\$ 47.93		\$ 100.93	\$ 55.79	80.92%
<b>Total purchased power:</b>						
Purchases	\$ 14,462,061	\$ 26,000,231	-44.38%	\$ 196,377,126	\$ 224,829,311	-12.66%
kWh purchased	314,272,662	579,144,247	-45.73%	3,326,955,314	4,576,124,255	-27.30%
Cost per MWh	\$ 46.02	\$ 44.89	2.50%	\$ 59.03	\$ 49.13	20.14%
Subtotal - generated and purchased power:	\$ 46,625,560	\$ 50,835,222	-8.28%	\$ 438,660,621	\$ 408,790,117	7.31%
Fuel interchange sales	(27,934)	(145,917)	-80.86%	(1,068,778)	(4,201,679)	-74.56%
Earnings of The Energy Authority	130,654	(669,063)	-119.53%	(3,178,011)	(3,710,188)	-14.34%
EPA Allowance Purchases	-	-		-	233,775	-100.00%
Realized and Unrealized (Gains) Losses	(638,820)	-		(3,414,320)	301,200	-1233.57%
Fuel procurement and handling	1,167,192	833,708	40.00%	9,870,472	9,143,949	7.95%
By product reuse	1,361,775	1,019,992	33.51%	11,344,331	9,441,020	20.16%
<b>Total generated and net purchased power:</b>						
Cost, net	48,618,427	51,873,942	-6.28%	452,214,315	419,998,194	7.67%
kWh generated and purchased	1,229,197,101	1,328,550,616	-7.48%	10,327,437,815	10,177,653,504	1.47%
Cost per MWh	\$ 39.55	\$ 39.05	1.30%	\$ 43.79	\$ 41.27	6.11%
<b>Reconciliation:</b>						
Generated and purchased power per above	\$ 48,618,427	\$ 39.55		\$ 452,214,315	\$ 43.79	
<b>SJRPP operating expenses:</b>						
SJRPP O & M	81,197	0.07		(5,192,401)	(0.50)	
SJRPP debt service	(849,852)	(0.69)		(20,681,585)	(2.00)	
SJRPP R & R	(174,414)	(0.14)		4,586,114	0.44	
<b>SCHERER operating expenses:</b>						
Scherer power production	(671,576)	(0.55)		(8,996,562)	(0.87)	
Scherer R & R	(841,868)	(0.68)		(17,762,581)	(1.72)	
Scherer transmission	(472,291)	(0.38)		(4,950,455)	(0.48)	
Scherer taxes	(103,051)	(0.08)		(1,073,434)	(0.10)	
Florida and other capacity	(626,173)	(0.51)		(6,385,028)	(0.62)	
MEAG	(996,186)	(0.81)		(9,704,941)	(0.94)	
Rounding	(1)	(0.00)		-	-	
Energy expense per budget page	\$ 43,964,212	\$ 35.77		\$ 382,053,442	\$ 36.99	

	Month July		Year-to-Date July	
	2018	2017	2018	2017
<b>MWh sales</b>				
JEA	-	275,906	539,759	2,046,419
FPL saleback	-	181,455	332,467	1,327,421
FPL direct portion	-	114,340	218,056	843,460
Total MWh sales	-	571,701	1,090,282	4,217,300
<b>Fuel costs</b>	\$ 523,235	\$ 11,063,694	\$ 33,247,286	\$ 81,577,848
(Includes fuel handling expenses)				
Less interest credits: inventory bank	(5,930)	(17,427)	(59,501)	(88,810)
Plus (less): true-up interest	(53)	2,258	4,659	12,041
Total	517,252	11,048,525	33,192,444	81,501,079
Cost per MWh		\$ 40.04	\$ 61.49	\$ 39.83
<b>Operating and maintenance expenses</b>	(75,514)	913,282	5,162,944	20,017,680
Less: operations bank interest	(5,683)	(3,239)	(27,082)	(16,279)
Less: annual variable o & m true-up	-	-	3,444	(36,136)
Total	(81,197)	910,043	5,139,306	19,965,265
Cost per MWh		\$ 3.30	\$ 9.52	\$ 9.76
<b>Debt service contribution</b>				
Principal	143,333	2,208,073	7,526,302	22,080,739
Interest	933,773	1,349,442	10,282,520	13,494,423
Less credits:				
Reserve Issue 2	-	(195,756)	4,082,537	(2,032,939)
Reserve Issue 3	(32,087)	(11,931)	(225,118)	(131,641)
Debt service Issue 2	-	(29,460)	43,365	(60,000)
Debt service Issue 3	(2,901)	(289)	(17,119)	(9,195)
Bond proceeds COB	-	(8,020)	(35,522)	(71,643)
General reserve Issue 2	(19,661)	(15,515)	(167,053)	(134,571)
General reserve Issue 3	(11,452)	(1,068)	(67,897)	(54,757)
Build America Bonds subsidy	(30,621)	(32,433)	(306,212)	(324,331)
Inventory carrying costs	-	(62,486)	(323,456)	(668,518)
Total	980,384	3,200,557	20,792,347	32,087,567
Cost per MWh		\$ 11.60	\$ 38.52	\$ 15.68
<b>R &amp; R contribution</b>	174,414	309,387	2,100,619	3,093,867
Less: interest credit	(130,533)	(62,872)	(57,666)	(668,871)
Less: cumulative capital recovery amount	-	(2,181,000)	(6,686,734)	(21,811,796)
Total	43,881	(1,934,485)	(4,643,781)	(19,386,800)
Cost per MWh		\$ (7.01)	\$ (8.60)	\$ (9.47)
<b>Debt service coverage</b>	-	-	2,022,000	6,322,000
Transfer to JEA	-	-	(2,022,000)	(6,322,000)
Total	-	-	-	-
Cost per MWh		\$ -	\$ -	\$ -
Total	\$ 1,460,320	\$ 13,224,640	\$ 54,480,316	\$ 114,167,111
kWh purchased	-	275,906,000	539,759,000	2,046,419,000
Cost per MWh		\$ 47.93	\$ 100.93	\$ 55.79

V. A.

## Appendix C

### Monthly FY18 Communications & Engagement Calendar and Plan Update

## JEA Community Engagement Calendar - July - October 2018

*(Events highlighted in blue are either JEA corporate or partner events)*

Date	Event/Activity	Location	Time	Type
<b>Jul-18</b>				
7/3/2018	LIFT Support Group	850 Lane Ave. S	12pm	Ambassador Speaker
7/5/2018	July 5th Beaches Cleanup	Multiple Beach locations	7am	Volunteer Activity
7/5/2018	Morton Salt	NGS Tour	8am	Ambassador Facility Tour
7/6/2018	JaxPark Summer Program	Palmetto Regional Park	9am	Volunteer Activity
7/9/2018	Barnabas Food Pantry	1303 Jasmine St	9:30am	Volunteer Activity
7/9/2018	Arlington CPAC	San Pablo Library	6pm	Ambassador Speaker
7/10/2018	Bright Horizons Summer Camp	9000 Southside Blvd.	9:30am	Ambassador Instructor
7/11/2018	Osher Lifelong Learning	Main St. Lab Tour	9:30am	Ambassador Facility Tour
7/11/ - 12/2018	PACE Center for Girls	2933 University Blvd.	9am	Volunteer Activity
7/12/2018	New To You	930 S 14th St	12:30pm	Volunteer Activity
7/13/2018	JaxPark Summer Program	Hanna Park	9am	Volunteer Activity
7/13/2018	Lutheran Services Head Start	1095 A Philip Randoiph	9am	Volunteer Activity
7/13/2018	Arlington Rotary Club	Blue Sky Golf Club	7am	Ambassador Speaker
7/16/2018	USO	2560 Mayport Rd.	10am	Volunteer Activity
7/16/2018	Specila Needs Steering Comm.	DOH - University Blvd.	10am	Ambassador Speaker
7/18/2018	YMCA Thingamajig	Prime Osborn	9am	Ambassador Event
7/18/2018	ARC Jax	1050 N Davis St	1pm	Ambassador Speaker
7/18/2018	JEA Senior Day	JEA Lobby	10am	Ambassador Event
7/19/2018	Berry Good Farms	223 Mill Creek Rd.	9am	Volunteer Activity
7/19/2018	YMCA 1 - Hour Power Pals	Raines High School	9am	Ambassador Instructor
7/19/2018	Cathedral Terrace Café	Newnan St.	11am	Volunteer Activity
7/19/2018	Farm Share	Jessie St.	9am	Volunteer Activity
7/19/2018	JEA Youth Energy Academy	NGS Tour	9am	Ambassador Facility Tour
7/19/2018	Jax Chamber	Jacksonville Zoo	8am	Ambassador Speaker
7/20/2018	Hope at Hand	3886 Atlantic Blvd.	1:00pm	Volunteer Activity
7/20/2018	ReStore	Beach Blvd.	9:30am - 4:30pm	Volunteer Activity
7/20/2018	YMCA First Coast Kids Challenge	UNF Hodges Stadium	3pm	Volunteer Activity
7/20/2018	Kids Summer Jam - 1 - Hour Power Pals	1726 E Church St.	1pm	Ambassador Instructor
7/20/2018	Tulsa Welding	Jax Solar	9am	Ambassador Facility Tour
7/23/2018	Callahan Food Distribution	Nassau Co. Extension Office	11:30am	Volunteer Activity

## JEA Community Engagement Calendar - July - October 2018

*(Events highlighted in blue are either JEA corporate or partner events)*

Date	Event/Activity	Location	Time	Type
7/24/2018	Power Plant Group	Brandy Branch Tour	9am	Ambassador F
7/25/2018	Catholic Charities Food Pantry	Church St.	9am	Volunteer Activity
7/25/2018	COJ Tree Commission	City Hall	11am	Ambassador Speaker
7/26/2018	BEAM	850 6th Ave.	1pm	Volunteer Activity
7/26/2018	COJ Summer Camp	Legends Center	9am	Ambassador Instructor
7/26/2018	Berry Good Farms	223 Mill Creek Rd.	9am	Volunteer Activity
7/26/2018	JEA Youth Energy Academy	Main St. Lab Tour	9am	Ambassador Facility Tour
7/27/2018	Feeding NE FL Food Bank	1116 Edgewood Ave.	8:30am	Volunteer Activity
7/27/2018	Groundworks	Main St. Lab Tour	9:30am	Ambassador Facility Tour
7/27/2018	Senior Roundtable	Elder Source	4pm	Ambassador Speaker
7/30/2018	Eden Gardens	9179 Garden St.	8am	Volunteer Activity
<b>Aug-18</b>				
8/1 - 8/4/2018	Back to School with BEAM	TBD	9am	Volunteer Activity
8/3/2018	Senior Prom	Prime Osborne	11am	Volunteer Activity
8/3/2018	JaxPark Summer Program	Castaway Island Preserve	9am	Volunteer Activity
8/4/2018	Back to School Rally	Edward Waters College	9am	Ambassador Event
8/4/2018	Touch a Truck Duval	Regency Square Mall Parking Lot	9am	Ambassador Event
8/6/2018	Barnabas Food Pantry	1303 Jasmine St.	9:30am	Volunteer Activity
8/7/2018	National Night Out	3151 Lenox Ave.	6pm	Ambassador Event
8/8/2018	Girl Scout Brownies	Main St Lab Tour	2pm	Ambassador Facility Tour
8/9/2018	On Campus Transition The ARC	UNF	10am	Ambassador Speaker
8/11/2018	Back to School Jamboree	Emmett Reed Center	10am	Ambassador Event
8/12/2018	Touch a Truck Springfield	Corner 7th & Main St.	4pm	Ambassador Event
8/13/2018	USO	2560 Mayport Rd.,	10am	Volunteer Activity
8/16/2018	Farm Share	Jessie St.	9am	Volunteer Activity
8/16/2018	Veterans Group	Veteran Affairs - Jefferson St	11am	Ambassador Speaker
8/22/2018	Tech Coast Conference	Prime Osborne	8am	Volunteer Activity
8/22/2018	Tech Coast Conference	Prime Osborne	8am	Ambassador Event
8/23/2018	BEAM	850 6th Ave.	1pm	Volunteer Activity
8/24/2018	Feeding NE FL Food Bank	1116 Edgewood Ave.	8:30am	Volunteer Activity

## JEA Community Engagement Calendar - July - October 2018

*(Events highlighted in blue are either JEA corporate or partner events)*

Date	Event/Activity	Location	Time	Type
8/31/2018	Regency Library Group	Regency Square Library	11am	Ambassador Speaker
<b>Sep-18</b>				
9/7/2018	UNF IEEE Group	NGS Tour	12pm	Ambassador Facility Tour
9/22/2018	Community Health & Wellness Fair	Solid Rock Church - 1418 Van Buren	10am	Ambassador Event
9/27- 30/2018	Fall Home & Patio Show	Prime Osborn	10am - 9pm	Ambassador Event
<b>Oct-18</b>				
10/1/2018	JU Conservation Ecology Class	Arlington East Wastewater Plant Tour	1:30pm	Ambassador Facility Tour
10/8/2018	JU Conservation Ecology Class	Jax Solar Tour	2pm	Ambassador Facility Tour
10/12/2018	Lighthouse Christian School	6801 merrill Rd.	9am	Ambassador Speaker
10/18 - 21/2018	Southern Womens Show	Prime Osborn	10am - 9pm	Ambassador Event
10/22/2018	JU Conservation Ecology Class	NGS Tour	2pm	Ambassador Facility Tour





## **FY18 Customer & Community Engagement Overview and August Update**

Each month, we update the board on Customer & Community Engagement activities for the previous and current months. The purpose is to keep you apprised on these activities so that you are knowledgeable about JEA's efforts to keep our customers informed, assist them in the management of their utility services and be a good corporate citizen.

### **Customer Communications**

#### **Restoration 1-2-3**

JEA's Restoration 1-2-3 educational campaign continued into August. This messaging reached more than 11 million customers in July through TV, radio, online and digital billboards as well as social media, print ads and JEA bill inserts. The Restoration 1-2-3 campaign was designed to help customers understand JEA's process for restoring power after a major storm and what they can do to help. The campaign also encourages customers to update their JEA account information and sign up for alerts so that JEA may communicate with them directly should a major storm cause extended power outages.



### **Community Engagement**

JEA employees participated in numerous Ambassador events and Volunteer activities throughout the month of July, with Ambassadors participating in 20 activities and volunteers serving 511 hours in the community.

#### **JEA Ambassadors**

JEA Ambassadors participated in the YMCA's Annual Thingamajig event, educating more than 1,000 youth campers about the importance of conservation and energy efficiency. Ambassadors also taught the 1-hour JEA Power Pals Program to kids participating in both YMCA and City of Jacksonville camps, and participated in the Youth Energy Academy Day of Learning.



**JEA Ambassadors participate in  
YMCA's Annual Thingamajig event.**

Upon request, Ambassadors delivered presentations to ARC Jacksonville and the LIFT Club, and conducted tours of JEA facilities for the Tulsa Welding School, Osher Lifelong Learners of UNF and Groundworks Jax Youth Camp.

### **Employee Volunteerism**

In July, 126 JEA employees volunteered in the community, connecting with customers and assisting with numerous nonprofit projects and activities. From volunteering at Farm Share to helping to clean our community's beaches, JEA employees gave generously of their time and talents for the benefit of our community.

Last month, JEA employee volunteers assisted Lutheran Services Florida, Head Start, Feeding Northeast Florida Food Bank, Barkin' Biscuits Camp, Barnabas Food Pantry, JaxParks Summer Program, Aging True, PACE Center for Girls, Eden Gardens, Berry Good Farms Camp, Hope at Hand, Callahan Food Distribution, Catholic Charities Food Pantry, BEAM, ReStore, New to You and the USO's No Dough Dinner.



**Member from JEA's Finance Department  
volunteer together at Farm Share.**

JEA employees take great pride in the Ambassador and Volunteer programs, which are a tangible demonstration for our customers and our community of the "Heart of JEA."

<b>Communications Contacts* Generated Year to Date</b>	<b>152,177,942</b>
• Number of Paid Communications Contacts (Radio, Television, Out of Home, Online, Print)	101,195,078
• Number of Other Communications Contacts (Bill Insert, Bill Envelop, Brochure, etc.)	10,826,750
• Number of E-communications Contacts (jea.com Visitors, Email, Social Media, Videos)	39,374,548
• Number of Community Engagement Communications Contacts (Events, Public Speaking, Presentations, Training, Workshops, etc.)	781,566

\*Communications Contacts are the opportunities JEA has to communicate information to our customers.

## VIII. A.

### Finance & Audit Committee Report

**REVISED - August 10, 2018**

**Removed II.D.3. – Direct Purchase of Variable Rate Electric System Series Three 2008A, 2008B-2, 2008B-3 and 2008C-3 Bonds**

**DATE:** August 13, 2018  
**TIME:** 8:00 – 10:00 AM  
**PLACE:** 21 W. Church Street  
8<sup>th</sup> Floor Conference Room

			Responsible Person	Action (A) Info (I)	Total Time
<b>I.</b>	<b>OPENING CONSIDERATIONS</b>		Kelly Flanagan		
	A.	Call to Order			
	B.	Adoption of Agenda		A	
	C.	Approval of Minutes – May 7, 2018	La'Trece Bartley	A	
<b>II.</b>	<b>NEW BUSINESS</b>				
	A.	Audit Services			
	1.	Approval of Annual Internal Audit Plan	Steve Tuten/Lee Montanez	A	15 mins.
	2.	Annual Approval of Internal Audit Charter	Steve Tuten	A	5 mins.
	3.	Quarterly Audit Services Update	Steve Tuten/Frank DiBenedetto/Lee Montanez	I	10 mins.
	B.	Ethics Officer Quarterly Report	Walette Stanford	I	5 mins.
	C.	Ernst & Young FY2018 Annual Financial Audit Plan	John DiSanto	A	20 mins.
	D.	Treasury			
	1.	Electric System and Water and Sewer System Reserve Fund Quarterly Report	Joe Orfano	I	5 mins.
	2.	JEA Investment Policy – Revision to Authorized Investments	Joe Orfano	A	5 mins.
	E.	JEA Energy Market Risk Management Policy Report	Steve McInall	I	5 mins.
	F.	Announcements			
	1.	Next Meeting, December 3, 2018, 8:00 – 10:00 AM			
	G.	Committee Discussion Sessions			
	1.	Ernst & Young	John DiSanto	I	5 mins.
	2.	Director, Audit Services	Steve Tuten	I	5 mins.
	3.	Council Auditor's Office	Jeff Rodda	I	5 mins.
	H.	Adjournment			



VIII. A. 1.

Approval of Minutes – May 7, 2018





JEA FINANCE & AUDIT COMMITTEE MINUTES  
May 7, 2018

The Finance & Audit Committee of JEA met on Monday, May 7, 2018, in the 8<sup>th</sup> Floor Conference Room, JEA Plaza Tower, 21 W. Church Street, Jacksonville, Florida.

**Agenda Item I – Opening Considerations**

- A. Call to Order – Committee Chair Kelly Flanagan attended telephonically and called the meeting to order at 8:00 AM. Member Husein Cumber in attendance. Board Chair Alan Howard attended in observance. Others in attendance were Aaron Zahn, Melissa Dykes, Brian Roche, Mike Brost, Angie Hiers, Ted Hobson, Kerri Stewart, Jody Brooks, Steve Tuten, Joe Orfano, Walette Stanford, Janice Nelson, Ryan Wannemacher, Steve McInall, Kristina Quarterman, Juli Crawford, Laure Whitmer, Jeff Rodda, Council Auditors office and Russ Jeans, Ernst & Young.
- B. Adoption of Agenda – The agenda was adopted on **motion** by Mr. Cumber and second by Committee Chair Flanagan.
- C. Approval of Minutes – The March 12, 2018 Minutes were unanimously approved on **motion** by Mr. Cumber and second by Committee Chair Flanagan.

**Agenda Item II – New Business**

- A. FY2019 Budget Presentation – Ryan Wannemacher, Interim Chief Financial Officer, presented and reviewed the FY2019 draft budget and process. Staff requested the Committee provide feedback and direction regarding the key strategic issues and major budget assumptions used in preparing the FY2019 operating and capital budget including revenue, O&M expense levels, interest rates and debt structure, financial metrics and regulatory accounting items. The proposed budgets include considerable internal funding for the capital program in an effort to support the “pay-go” philosophy for all recurring capital expenditures. The proposed budgets address key strategic initiatives to support the quality of service delivery, climate change, Total Water Resource Plan, regulatory compliance, workforce readiness, communications, conservation, sewer resiliency, septic tank phase-out, and customer satisfaction initiatives. Mr. Wannemacher stated the budget includes a record high contribution to the City of Jacksonville General Fund in the amount of \$118.0 million. Staff also recommended that the Finance and Audit Committee provide feedback and direction, in its report or staff presentation to the Board at the May 15, 2018 meeting, for final Board approval at the June 19, 2018 meeting. This presentation was received for information, advice and direction.
- B. Quarterly Audit Services Update – Steve Tuten, Director, Audit Services, provided an update to the Committee regarding the progress of the FY18 Internal Audit Plan, open audit and investigation report issues, Enterprise Risk Management (ERM) highlights, risks and trend report, and the Ethics Hotline Report. This presentation was received for information.
- C. Ethics Officer Quarterly Report – Walette Stanford, Ethics Officer and Director, Workforce Strategies, provided an update regarding ethics inquiries, FY17/18 gift registry, Business Ethics Training Survey results and information on a new platform to track ethics inquiries from employees. This presentation was received for information.
- D. Electric System and Water and Sewer System Reserve Fund Quarterly Report – Joe Orfano, Treasurer, reviewed the Electric System and Water and Sewer System Reserve Fund Quarterly Report, which was received for information.

- E. JEA Energy Market Risk Management Policy Report – Mike Brost, Vice President/General Manager, Electric Systems, reviewed the Energy Market Risk Management Policy Report, which was received for information.
- F. Annual Disclosure Report – Aaron Zahn, Interim CEO, provided the Committee with time to discuss the Annual Disclosure Report. Mr. Cumber provided several comments regarding Plant Vogtle in the Annual Disclosure Report. Staff will provide an amended Annual Disclosure Report for review and presentation at the May 15, 2018 Board meeting.
- G. Announcements
  - 1. The next Finance and Audit Committee meeting will be held on August 13, 2018, at 8:00 AM.
- H. Committee Discussion Sessions
  - 1. Ernst & Young – At 9:55 AM, Committee Chair Flanagan dismissed staff and the Committee held a general conversation with Russ Jeans.
  - 2. Council Auditor's Office – Jeff Rodda, The Council Auditor's Office, had no comments.
  - 3. Director, Audit Services – At 10:05 AM, Committee Chair Flanagan and the Committee held a general conversation with Steve Tuten, Director, Audit Services.

**Closing Considerations**

With no further business claiming the attention of this Committee, the meeting was declared adjourned at 10:06 AM.

APPROVED BY:

\_\_\_\_\_  
Kelly Flanagan, Committee Chair  
Date: \_\_\_\_\_

Submitted by:

\_\_\_\_\_  
La'Trece Bartley  
Executive Assistant

## VIII. A. 2.

### Approval of Annual Internal Audit Plan



August 1, 2018

<b>SUBJECT:</b>	<b>APPROVAL OF ANNUAL INTERNAL AUDIT PLAN</b>
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<b>Purpose:</b>	<input type="checkbox"/> Information Only	<input checked="" type="checkbox"/> Action Required	<input type="checkbox"/> Advice/Direction
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**Issue:** The Internal Audit Plan provides the JEA Board of Directors with information on the audit plan for the upcoming year.

**Significance:** The Internal Audit Group reviews internal control processes and ensures that departments maintain compliance with all procedures and regulations.

**Effect:** JEA is able to manage risks and monitor controls, identifying issues to reduce and/or prevent impact to business operations.

**Cost or Benefit:** The benefits to the organization are seen in risk avoidance or management and the knowledge that the business is in compliance with rules and regulations.

**Recommended Board action:** Staff recommends that the Finance & Audit Committee and the Board approve the Annual Internal Audit Plan for FY19.

**For additional information, contact:** Steven V. Tuten – Director, Audit Services, 904-665-5206

Submitted by: AFZ/TEH/SVT



#### Commitments to Action

- 1 Earn Customer Loyalty
- 2 Deliver Business Excellence
- 3 Develop an Unbeatable Team







**JEA**®



# FY19 Internal Audit Plan

# Planning Guidance

- A cornerstone of our annual planning process is conducting a risk assessment of the identified auditable entities within JEA.
- We rely on the guidance of the Institute of Internal Auditors (IIA), the global authoritative body for the internal audit profession. This includes the International Standards for the Professional Practice of Internal Auditing, which presents the professional requirements for risk assessments conducted by internal auditors.

August 2018



**FY19 Internal Audit  
Plan**

# Risk Assessment & Audit Planning Approach

- The following approach was taken in creating the Audit Plan:



- The JEA auditable entities structure was updated to reflect the organizational changes made after the introduction of new JEA leadership on April 17, 2018.
- Interviews with the Senior Leadership Team, combined with risk assessment meetings with department Directors and Managers were used to identify perceived areas of risk and potential internal audits.
- This information was developed into an audit plan designed to address critical risks in achieving JEA's objectives, as well as operational and regulatory requirements.

August 2018

**FY19 Internal Audit Plan**

# Risk Assessment Questionnaire

- The risk assessment questionnaire consisted of fourteen questions (four yes/no and ten open questions), designed for management to help identify and document risk factors related to their business objectives. These risk factors included:
  - Key Committee of Sponsoring Organizations of the Treadway Commission (COSO) objectives of operational, compliance and reporting risk
  - Qualitative measures (process complexity, governance matters and degree of change)
  - Potential impact risks (financial and reputational)
- Internal Audit met with management to discuss these risks in each of the 101 identified areas of JEA's auditable entities. We then compiled the scores to determine the highest risk areas for JEA.
- A copy of the questionnaire is shown on Appendix pp. A4-A5.

August 2018



**FY19 Internal Audit  
Plan**

# Audit Plan Integration with ERM and Ethics & Investigations Audit

Internal Audit risk assessment surveys include detailed information on JEA's Top Corporate Risks (TCRs), and results and statistics from investigative cases. The Audit Plan includes specific information on any Tier 1 and 2 TCRs applicable to each auditable entity.



August 2018

**FY19 Internal Audit Plan**

For FY2019, Internal Audit will evaluate select key Enterprise Risk Management (ERM) Top Corporate Risks (TCRs), by applying COSO's ERM framework to the TCRs and their corresponding mitigating activities.



# Description of Scheduled Audits

- The final plan has twenty-three (23) audits and projects scheduled:
  - Nine (9) new audits based on the FY2019 risk assessment process
  - Four (4) special projects
  - One (1) recurring project related to Performance Pay
  - One (1) JEA-led external audit of The Energy Authority (TEA)
  - One (1) Agreed-Upon Procedures Engagement audit
  - Three (3) follow-up audits due to “Needs Improvement” audit report ratings
  - Four (4) carry-over audits from FY2018.
- The proposed timeline for these audits is shown on p.7.
- A detailed list of these audits/projects, which includes an entity description and mapping to the relevant top corporate risks, is shown on Appendix pp. A1-A3.

August 2018



**FY19 Internal Audit Plan**

# Proposed Timeline

Audit/Project	Budgeted Hours	Auditor-in-Charge	Estimated Draft Report Date	FY 2019											
				Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
2018 Electric Production Engineering and Outages	60	Laurie Gaughan (LG)	10/31/18												
2018 W/WW Reuse and Treatment	75	David Arnold (DA)	10/31/18												
2018 Information Security Follow-Up	160	Rashid Brittain (RB)	11/15/18												
2018 Response and Environmental Programs	160	Troy England (TE)	11/15/18												
Recruitment Services	400	Andrew Shelley (AS)	12/31/18												
TEA Audit	725	LG, RB & TE	12/31/18												
JEA FY2018 Performance Pay Audit	100	TE	11/31/18												
Customer Solutions & Market Development	400	DA	1/31/19												
Contract Administration	375	TE	2/28/19												
MEAG Special Project	250	LG	2/28/19												
Branch Follow-Up	330	AS	3/31/19												
Procurement Inventory Control	525	DA & RB	4/30/19												
Water Supply Management/Long Term Planning Top Corporate Risk COSO Special Project	250	TE	5/31/19												
Byproducts	400	LG	5/31/19												
Green-e Agreed-Upon Procedures Engagement	200	Lee Montanez	6/1/19												
Cybersecurity Top Corporate Risk COSO Special Project	300	RB	6/30/19												
Payroll Services Follow-Up	330	AS	6/30/19												
Staffing Top Corporate Risk COSO Special Project	275	DA	7/31/19												
Electric Systems Asset Management	400	LG	9/30/19												
Project Management Office	400	RB	9/30/19												
District Energy Operations	400	TE	9/30/19												
Corporate Records Compliance	400	AS	9/30/19												
Meter Operations Follow-Up	300	DA	9/30/19												
FY2019 Action Plan Follow-Up	470	All Staff	N/A												
FY2020 Annual Risk Assessments	340	All Staff	N/A												

August 2018



**FY19 Internal Audit Plan**



In-Progress FY18 Audit

Scheduled FY19 Audit or Special Project

Audit Administration

## Appendix

- The following supplemental documents are included in the Appendix, and were cross-referenced in the preceding presentation:
  - A1-A3 – Proposed FY19 Internal Audit Plan with Details Pp. 6-7.
  - A4-A5 – Risk Assessment Survey for FY19 Internal Audit Plan Pp. 4.

August 2018



JEA AUDIT SERVICES  
PROPOSED FY2019 INTERNAL AUDIT PLAN  
WITH ENTITY DESCRIPTION & MAPPING TO ERM TOP CORPORATE RISKS  
(SEE PP. 6 IN PRESENTATION)

<u>Title</u>	<u>Entity Description</u>	<u>Top Corporate Risks</u>
<b><u>Electric Systems</u></b>		
Byproducts (Audit)	Responsible for handling the byproducts from Northside Generating Station in a safe, environmentally appropriate, low-risk, and cost-effective manner.	<b><u>Tier 2</u></b> By Product Management (E12)
Electric Systems Asset Management (Audit)	Collaborates with all Electric System Departments to maintain a mature organizational level based on the Publicly Available Specification (PAS 55) published by the British Standards Institution in 2004 (ISO 55001), by proper tracking of assets throughout the asset lifecycle matrix, which strengthens the overall EAM Strategy.	<b><u>Tier 2</u></b> Infrastructure Maintenance – Electric System Assets (E11)
MEAG Purchase Power Agreement (Special Project)	Agreement between JEA and the Municipal Electric Authority of Georgia (MEAG), for projected power purchase. Follow-up from FY12 internal audit, and addressing any additional Management requests.	<b><u>Tier 1</u></b> Carbon Emission Mitigation – Clean Power Plan (E01) Long-term Planning/Load Forecast (E06) Revenues and Expenses Management (F01)
<b><u>Water / Wastewater Systems</u></b>		
District Energy Operations (Audit)	Provides chilled water services to various City of Jacksonville entities, and hospitals.	<b><u>Tier 2</u></b> Public and Employee Safety (H03)
Water Supply Management/Long Term Planning Top Corporate Risk COSO (Special Project)	Application of COSO ERM model to the accurate long-term planning of water supply risks related to the reclaimed water infrastructure, Consumptive Use Permit (CUP) management and future water needs.	<b><u>Tier 1</u></b> Water Supply Management/Long Term Planning (W01)
<b><u>Compliance</u></b>		
Corporate Records Compliance (Audit)	Responsible for fulfilling public records requests, discovery and subpoena compliance, and attesting to records compliance in the State of Florida.	<b><u>Tier 2</u></b> Records Management (C05)

**JEA AUDIT SERVICES  
PROPOSED FY2019 INTERNAL AUDIT PLAN  
WITH ENTITY DESCRIPTION & MAPPING TO ERM TOP CORPORATE RISKS  
(SEE PP. 6 IN PRESENTATION)**

<u>Title</u>	<u>Entity Description</u>	<u>Top Corporate Risks</u>
<b><u>Human Resources</u></b>		
Payroll Services Follow-Up (Audit)	Manages the payroll process for all JEA employees. Follow-up on issues from FY17 audit.	None.
Recruitment Services (Audit)	Responsible for identifying and recruiting qualified talent, both internally and externally, to ensure recruitment fairness and equitability.	<b><u>Tier 1</u></b> Staffing (H02)
Staffing Top Corporate Risk COSO (Special Project)	Application of COSO ERM model to Staffing risks related to the recruitment and retention of adequate and qualified personnel to enable JEA to meet current and future objectives.	<b><u>Tier 1</u></b> Staffing (H02)
<b><u>Logistical Services</u></b>		
Procurement Inventory Control (Audit)	Partners with JEA business entities to identify inventory needs, provide quantity analysis based on lead times and vendor, maintains adequate inventory levels as reflected in Oracle.	<b><u>Tier 2</u></b> Infrastructure Maintenance – Electric System Assets (E11) Infrastructure Maintenance – Water/Waste Water Systems (W04)
Contract Administration (Audit)	Primarily works with Procurement to establish or maintain contract files, and assist business units on any vendor protest, contract dispute, certificates of insurance and contract negotiation.	None.
<b><u>Customer Relationships</u></b>		
Water Meter Services Follow-Up (Audit)	Maintains JEA's residential, commercial and industrial water meters and systems to ensure accurate readings for billing purposes. Follow-up on issues from FY17 audit.	<b><u>Tier 1</u></b> Customer Relationship Management (C01)
Branch Follow-Up (Audit)	Responsible for the customer-facing activities at the Customer Center, such as start-stop and bill pay services. Follow-up on issues from FY17 audit.	<b><u>Tier 1</u></b> Customer Relationship Management (C01)
Customer Solutions & Market Development (Audit)	Responsible for the customer rebate program, and strategies related to electric and water conservation, peak reduction and Demand Site Management (DSM).	<b><u>Tier 1</u></b> Customer Relationship Management (C01)

**JEA AUDIT SERVICES  
PROPOSED FY2019 INTERNAL AUDIT PLAN  
WITH ENTITY DESCRIPTION & MAPPING TO ERM TOP CORPORATE RISKS  
(SEE PP. 6 IN PRESENTATION)**

<u>Title</u>	<u>Entity Description</u>	<u>Top Corporate Risks</u>
<b><u>Information Technology</u></b> Project Management Office (Audit)	Responsible for managing the delivery of projects within time, scope and cost parameters as defined and tracked in the overall capital portfolio of projects.	<b><u>Tier 2</u></b> Technology Infrastructure Reliability (T01)  <b><u>Tier 2</u></b> Cyber Security Information Protection (T02) Cyber Security Business Disruption (T03)
Cybersecurity Top Corporate Risk COSO (Special Project)	Application of COSO ERM model to Cyber Security risks related to the unauthorized intrusion into JEA's critical systems resulting in a disruption of service and/or loss of data.	
<b><u>Environmental Services, Financial Services &amp; Public Affairs</u></b> None.		
<b><u>Recurring Audits / Projects</u></b> JEA Performance Pay (Audit)	Determine if achieved levels of performance were calculated in conformance with the incentive plan approved by JEA's Board of Directors.	
The Energy Authority (TEA) (Audit)	Year 1 (of 3) of JEA-led audit of TEA's Operations performed by a team of representatives from several member utilities.	
Annual Risk Assessments (Audit Administration)	Identifying and prioritizing risks to the business. The FY2020 audit plan will be developed from these assessments.	
Action Plan Follow-Up & Reporting (Audit Administration)	Ensure that management's action plans are being implemented and are working effectively to mitigate internal control deficiencies reported in internal audits and investigations reports.	
Green-e Renewable Energy Credits (REC) (Audit)	Green-e request of a one-time agreed-upon procedures audit of the Jacksonville Solar facility for REC certification.	





# Audit Services FY2019 Risk Assessment Questionnaire

Department:				Date:
Director/Manager Name:		Cost Center:		Completed By:

1. Describe the operations performed by this department. Has there been any significant changes during the past year or are there any proposed for the next fiscal year?

2. During the last twelve months, has this department:

		Yes	No	Comments
a.	Updated/Reviewed its written procedures?	<input type="checkbox"/>	<input type="checkbox"/>	
b.	Updated/Reviewed the Business Continuity Plan?	<input type="checkbox"/>	<input type="checkbox"/>	
c.	Updated/Reviewed Succession Planning documentation?	<input type="checkbox"/>	<input type="checkbox"/>	
d.	Developed Key Metrics? <i>(if Yes, list applicable metrics)</i>	<input type="checkbox"/>	<input type="checkbox"/>	
e.	Provided training to its employees? <i>(if Yes, list training courses)</i>	<input type="checkbox"/>	<input type="checkbox"/>	
f.	Outsourced any of its functions? <i>(if Yes, list outsourced functions)</i>	<input type="checkbox"/>	<input type="checkbox"/>	

3. How many employees have retired or resigned from your department to date in FY2018? Has this increased or decreased in comparison with FY2016 and FY2017?

4. How many temporary employees (Randstad/Aerotek) and contractors are assigned to this department? Are security (badge) attestations performed regularly? *(If yes, when was the last one completed?)*

5. Related to Technology:

		Yes	No	Comments
a.	Do Corporate IT systems fully support your business processes?	<input type="checkbox"/>	<input type="checkbox"/>	
b.	Are there any hardware and/or software applications not supported by Corporate IT? <i>(if Yes, please list)</i>	<input type="checkbox"/>	<input type="checkbox"/>	
c.	Is there a planned hardware or software project for FY2019? <i>(if Yes, please list)</i>	<input type="checkbox"/>	<input type="checkbox"/>	
d.	Are badge and application attestations performed periodically?	<input type="checkbox"/>	<input type="checkbox"/>	

6. Related to Data/Information:

		Yes	No	Comments
a.	Does incorrect/inaccurate data have an effect on the department's operations?	<input type="checkbox"/>	<input type="checkbox"/>	
b.	Does this department produce or handle confidential data?	<input type="checkbox"/>	<input type="checkbox"/>	
c.	Do other JEA entities depend on this department's data? <i>(if Yes, please list)</i>	<input type="checkbox"/>	<input type="checkbox"/>	
d.	Do other external entities depend on this department's data? <i>(if Yes, please list)</i>	<input type="checkbox"/>	<input type="checkbox"/>	

7. Does this department need to comply with Federal or State regulations? If so, have there been any fines or penalties assessed or levied in the past year?

8. Which of the Top Corporate Risks (TCRs) identified by Enterprise Risk Management (ERM) are applicable to this department? Are you responsible for any mitigation activities related to the risk(s)? Do you consider them effective? If more than one TCR is mentioned, which one is the most concerning and why?

9. Has this department been externally audited/reviewed in the past three years? If so, what were the results?  
*(Auditor only: List internal audit reports for the past 3 years)*

Fiscal Year	Internal	External	Report Rating	Comments
	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>		

10. If your department is selected for an audit in FY19, do you foresee obstacles regarding its timing? *(if yes, explain)*

11. Select the most approximate range/level:

Budget	O&M	FY2018	<\$500K	\$500K to \$1MM		>\$1MM
		FY2019 <i>(proposed)</i>	<\$500K	\$500K to \$1MM		>\$1MM
	Capital	FY2018	0	<\$1MM	\$1M to \$3MM	>\$3MM
		FY2019 <i>(proposed)</i>	0	<\$1MM	\$1M to \$3MM	>\$3MM

Inventory?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<\$500K	\$500K to \$1MM	>\$1MM
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Revenues?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<\$500K	\$500K to \$1MM	>\$1MM
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12. Which activities in your department could negatively increase JEA's reputation?

13. For any ethics investigations during the past year, what were the recommendations and have these been implemented?

14. Do you have any additional information or comments about this or any other JEA department?

### VIII. A. 3.

## Annual Approval of Internal Audit Charter



August 1, 2018

**SUBJECT:** ANNUAL APPROVAL OF INTERNAL AUDIT CHARTER

**Purpose:**

☐ Information Only

☒ Action Required

☐ Advice/Direction

**Issue:** The Internal Audit Charter provides the JEA Board of Directors with information on the authority of the audit staff, the key roles and responsibilities of Audit Services and the outline of Audit Services' Quality Assurance program. Key changes in the charter include renaming the charter from "Audit Services Charter" and reflecting recent changes in the Senior Leadership Titles.

**Significance:** The Internal Audit Group reviews internal control processes and ensures that departments maintain compliance with all procedures and regulations.

**Effect:** JEA is able to manage risks and monitor controls, identifying issues to reduce and/or prevent impact to business operations.

**Cost or Benefit:** The benefits to the organization are seen in risk avoidance or management and the knowledge that the business is in compliance with rules and regulations.

**Recommended Board action:** Staff recommends that the Finance & Audit Committee and the Board approve the Internal Audit Charter.

**For additional information, contact:** Steven V. Tuten – Director, Audit Services, 904-665-5206

Submitted by: AFZ/TEH/svt



#### Commitments to Action

- 1 Earn Customer Loyalty
- 2 Deliver Business Excellence
- 3 Develop an Unbeatable Team





II. A. 2.

8/13/2018

(F&A)

Return to  
Agenda

VIII. A. 3.

08/21/2018



# Internal Audit Charter



# Internal Audit Charter

Steve Tuten – Director, Audit Services

August 2018



Internal Audit Charter

## Summary of Changes to Charter

- Name changed from “Audit Services Charter” to “Internal Audit Charter”, as the Charter specifically addresses internal auditing responsibilities and accountabilities, rather than the Audit Services Group as a whole.
- Addresses recent changes in Senior Leadership Team (SLT) titles.
- Transfer Charter to Corporate Records Compliance’s new Organizational Policy and Procedures template.
- The updated Internal Audit Charter...

August 2018





<b>OPP:</b>	<b>COMP</b>	<b>Corporate Policy Ref:</b>
		<b>Internal Audit Charter</b>

**POLICY STATEMENT:**

The purpose of JEA's internal audit function is to provide independent and objective assurance and consulting services designed to add value and improve JEA's operations. Internal Audit helps JEA to accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of internal control, compliance, and governance processes.

The IIA's Mission of Internal Audit is "To enhance and protect organizational value by providing risk-based and objective assurance, advice, and insight." The specific mission of JEA's Internal Audit is to perform comprehensive, objective audits (assurance services) and consulting reviews (consulting services) that fulfill the purpose outlined above, while conforming to the IIA's Standard Practices, Code of Ethics, Definition of Internal Auditing, and Mission of Internal Audit.

**GENERAL DESCRIPTION of PROCEDURE:**

This procedure is intended to:

1. Address the authority of the Director, Audit Services and the Internal Audit Staff.
2. Describe the key roles and responsibilities of Internal Audit.
3. Outline Internal Audit's Quality Assurance program.

**ASSIGNMENT of RESPONSIBILITY:**

The Director, Audit Services or designee shall establish, maintain, and disseminate this Charter and any related supporting documentation.

**DEFINITIONS:**

**Internal Auditing** – The Institute of Internal Auditors' (IIA) definition of internal auditing is "An independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes. Also enhances and protects organizational value by providing risk-based and objective assurance, advice, and insight."

**Assurance Services** – An objective examination of evidence for the purpose of providing an independent assessment on governance, risk management, and control processes for the organization. Examples may include financial, performance, compliance, system security, and due diligence engagements. A key part of Internal Audit's responsibilities.

**Consulting Services** – Advisory and related client service activities, the nature and scope of which are agreed with the client, are intended to add value and improve an organization's governance, risk management, and control processes without the internal auditor assuming management responsibility. Examples include counsel, advice, facilitation, and training. A key part of Internal Audit's responsibilities.

**Quality Assurance** – A program based on an IIA Standard, which is designed to enable an evaluation of Internal Audit's conformance with the IIA's Definition of Internal Auditing and the Standards and an evaluation of whether internal auditors apply the Code of Ethics. The program also assesses the efficiency and effectiveness of Internal Audit and identifies opportunities for improvement. Adequate supervision and quality assurance will be performed and documented for each auditor and each audit assignment as defined in Internal Audit's Quality Assurance Improvement Program (QAIP) Procedure ASC0500QA, which includes external peer reviews as required by the IIA, at least every five years (beginning in 2005).



<b>OPP:</b>	<b>COMP</b>	<b>Corporate Policy Ref:</b>
		<b>Internal Audit Charter</b>

## PROCEDURE:

### A. Roles & Responsibilities

Responsibility	Action
Director, Audit Services	Oversees the execution of a program of Internal Audit projects as necessary to fulfill the purpose and mission of the department, including an annual risk assessment and development of an annual audit plan. Is also the organization's Chief Audit Executive (CAE).
VP & Chief Compliance Officer (CCO)	To whom the Director, Audit Services and Internal Audit reports administratively.
Managing Director / Chief Executive Officer (CEO) and/or President / Chief Operating Officer (COO)	To whom the Director, Audit Services reports when Internal Audit conducts audits of Compliance Department functions. Meets quarterly with the Director, Audit Services.
JEA Management	<p>Although the role of Internal Audit is to assess internal controls, systems, procedures, risks, etc., JEA management retains full responsibility for ensuring that JEA maintains an appropriate framework of controls to reduce business risks to an acceptable level.</p> <p>Management also has the responsibility and accountability for addressing weaknesses and inefficiencies identified in both External and Internal Audit Reports and for taking the necessary corrective action. If JEA management decides to accept a level of risk that Internal Audit believes is imprudent and improper, and this difference of opinion cannot be resolved, the CAE has the option to refer the matter to the Enterprise Compliance &amp; Risk Committee (ECRC) for discussion and resolution, as stated in the ECRC Charter.</p> <p>Management should immediately inform the CAE of any significant internal control problems, thefts, frauds, or unauthorized transactions.</p>
Internal Audit Staff	<p>Executes the program of Internal Audit projects, including the annual audit plan. Internal Audit's authority and key responsibilities are described as follows:</p> <p><b>Authority</b></p> <ul style="list-style-type: none"> <li>To have access to all JEA records, assets, properties, plants, computers, personnel, etc., with strict and absolute accountability for safekeeping and confidentiality while conducting their internal audit duties.</li> </ul> <p><b>Annual Risk Assessment and Audit Plan Activities</b></p> <ul style="list-style-type: none"> <li>Perform annual risk assessment activities and develop an annual audit plan. The Director, Audit Services will present the annual audit plan to the Finance &amp; Audit Committee for review and approval.</li> </ul> <p><b>Assurance/Audit Activities</b></p>

<b>OPP:</b>	<b>COMP</b>	<b>Corporate Policy Ref:</b>
		<b>Internal Audit Charter</b>

	<ul style="list-style-type: none"> <li>• Evaluate the effectiveness of controls over the reliability and integrity of management information. Ascertain the level of compliance with policies, procedures, laws and regulations.</li> <li>• Review operations to evaluate whether established objectives and goals are being achieved.</li> <li>• Assist management in identifying operational, financial, regulatory and reputational risks, and assess JEA's ability to adequately mitigate these risks.</li> <li>• Conduct objective reviews of company business activities, operations, internal controls and performance management systems, and report results to JEA management.</li> <li>• The audit scope will be based on Internal Audit's assessment of risk. Audit coverage will focus on high risk areas as defined in the annual risk assessment process.</li> <li>• Proactively consult with internal customers on recommendations and the implementation of action plans, and monitor results.</li> <li>• Perform engagement level audit planning and risk control assessment.</li> <li>• Perform action plan follow-up.</li> </ul> <p><b>Consulting Activities</b></p> <ul style="list-style-type: none"> <li>• Provide consulting services where the level of risk warrants our involvement. However, Internal Audit does not act in an operating capacity, and cannot be part of the approval process.</li> </ul> <p><b>Reporting</b></p> <ul style="list-style-type: none"> <li>• Detailed written reports will be prepared and issued to management following the completion of each audit. The contents will be discussed with auditee management before the reports are finalized, except in cases of fraud.</li> <li>• Reports will generally be distributed to the Chief/Vice President and Director/Manager of the area being audited, along with the Managing Director/Chief Executive Officer and/or the President/ Chief Operating Officer, as well as the Chief Risk and Compliance Officer. Final audit reports are also submitted to the City of Jacksonville's Council Auditor's office and the Office of the Inspector General. Quarterly summaries of audit results are presented to the Finance &amp; Audit Committee of the Board of Directors.</li> </ul> <p><b>Team Assignment Restrictions</b></p> <ul style="list-style-type: none"> <li>• Auditors will not be assigned to audits or projects in areas where they previously worked within the past 24 months, or where their degree of independence could be questioned in any other way.</li> </ul>
Finance and Audit Committee of JEA's Board of Directors	Meets quarterly with the Director, Audit Services. Annual review and approval of Charter.
JEA's External Auditors	Primary auditor of JEA's financial statements. To minimize duplication of efforts, Audit Services will not audit JEA's financial statements.

<b>OPP:</b>	<b>COMP</b>	<b>Corporate Policy Ref:</b>
		<b>Internal Audit Charter</b>

**SIGNED:**

**Title:** VP & Chief Compliance Officer

**Effective Date:** August 13, 2018

Revised Dates: August 13, 2018

Origination Date: October 5, 2004, with ten (10) of a series of annual subsequent revisions / presentations / approvals, most recently on August 7, 2017.

**Keywords:** internal audit, assurance, consulting, quality assurance

## VIII. A. 4.

### Quarterly Audit Services Update



August 1, 2018

**SUBJECT:** QUARTERLY AUDIT SERVICES UPDATE

**Purpose:** ☒ Information Only ☐ Action Required ☐ Advice/Direction

**Issue:** The Quarterly Audit Update provides the JEA Board of Directors with information on the current Internal Audit, Enterprise Risk Management and Ethics Investigations & Audit activities.

**Significance:** The Internal Audit Group reviews internal control processes and ensures that departments maintain compliance with all procedures and regulations. JEA's Enterprise Risk Management (ERM) Program identifies, assesses, measures, monitors and actively manages risk. The Ethics Investigations and Audit Group conducts internal investigations of confidential reports into JEA's Ethics Hotline (EHL) and from other sources.

**Effect:** JEA is able to manage risks and monitor controls, identifying issues to reduce and/or prevent impact to business operations.

**Cost or Benefit:** The benefits to the organization are seen in risk avoidance or management and the knowledge that the business is in compliance with rules and regulations.

**Recommended Board action:** No action required. The Quarterly Audit Services Update is for information only.

**For additional information, contact:** Steven V. Tuten – Director, Audit Services, 904-665-5206

Submitted by: AFZ/TEH/svt



#### Commitments to Action

- 1 Earn Customer Loyalty
- 2 Deliver Business Excellence
- 3 Develop an Unbeatable Team





II. A. 3.  
8/13/2018  
(F&A)

Return to  
Agenda

VIII. A. 4.  
08/21/2018



# Audit Services 3Q FY18 Report



August 2018



## Audit Services 3Q FY18 Report

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Ethics Investigations & Audit	15-18

# Internal Audit Report

Lee Montanez – Manager, Audit Services

August 2018



**Audit Services**  
**3Q FY18 Report**

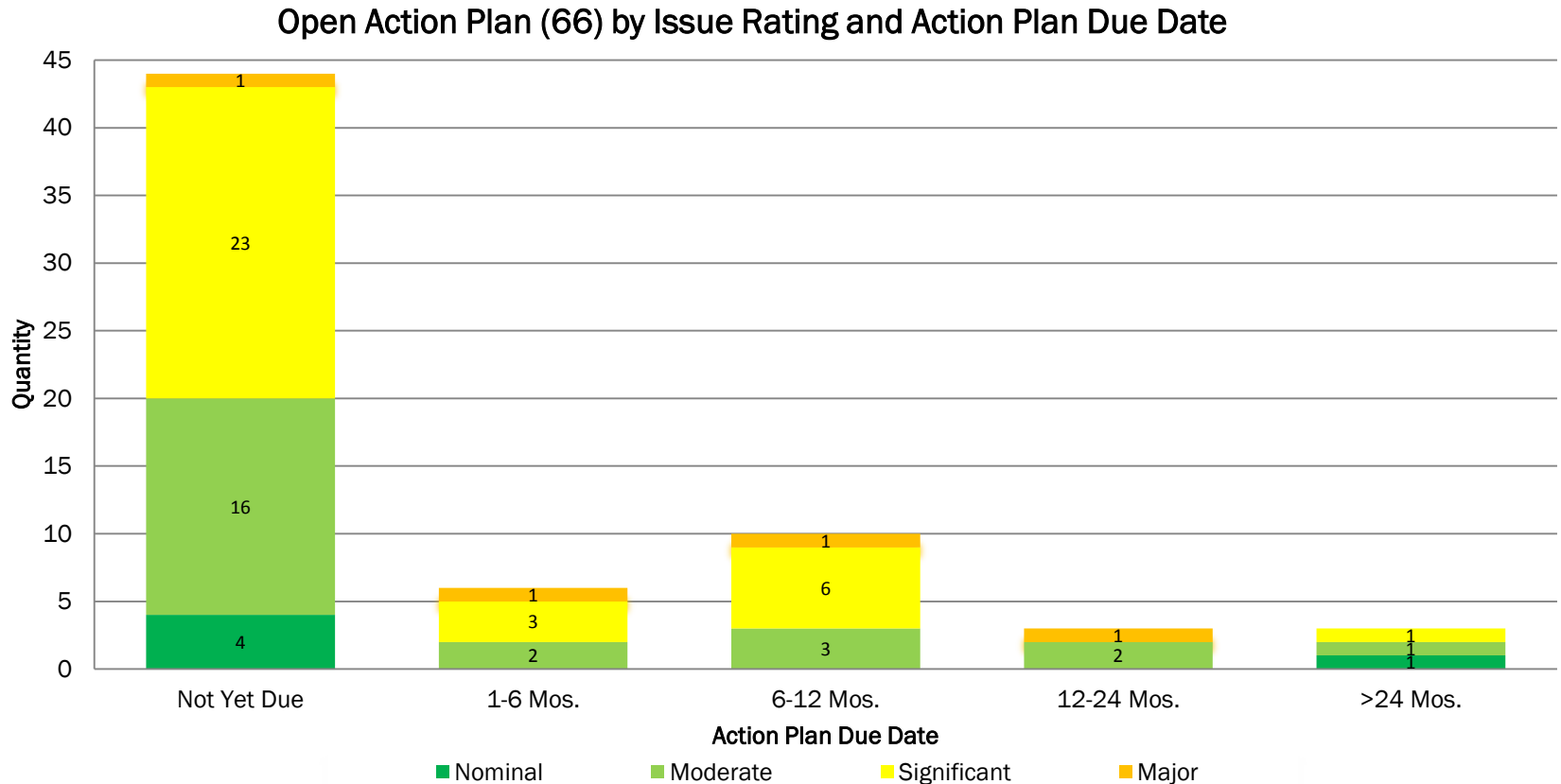
## Internal Audit Team Highlights

- **FY18 Internal Audit Plan** - We are on track to complete the Plan. One planned audit was postponed due to action plan timing issues. The current timeline and details regarding the FY18 Plan is shown on page 6.
- **Open Audit and Investigation Report Issues** - As of 6/30/18, there were 66 open issues requiring management's corrective action plans. This represents an increase of 13 open items since our last report. However, this is primarily a timing issue due to the recent issuance of several audit reports. See pg. 5 for the distribution of these issues by issue rating and action plan due date.

August 2018



# Open Audit and Investigations Report Issues



August 2018



# FY18 Internal Audit Plan Schedule

Audit/Project	Auditor-in-Charge	Planning Memo Date	Status	Budgeted Hours (adjusted)	Actual Hours	Will Meet/Met Budget	Comments	Final Draft Report Date	Final Report Date (Sent to City)	Audit Report Rating
2017 Safety and Health	David Arnold	8/10/2017	Final Report Issued	350	330	●	Slightly delayed due to Hurricane Irma.	2/1/2018	6/5/2018	Satisfactory
2017 Customer Revenue - Branch	Rashid Brittain	9/27/2017	Final Report Issued	300	267	●	Slightly delayed due to Hurricane Irma.	12/20/2017	3/29/2018	Needs Improvement
2017 Permitting and Regulatory Conformance	Troy England / Andrew Shelley	11/3/2017	Final Report Issued	400	597	●	New Auditor was paired with experienced JEA Auditor for training purposes.	4/25/2018	7/25/2018	Excellent
JEA/SJRPP Performance Pay Audit	TE	N/A	Completed	200	131	●	Incentive Pay Review memos issued on: (SJRP) - 11/8/2017 / (JEA) - 11/22/17	-	-	-
TEA Audit	Laurie Gaughan /RB	N/A	Completed	300	271	●	TEA Audit Report was presented to the TEA Board on February 27, 2018.	-	-	-
W/W/W Project Engineering & Construction	TE/AS	2/27/2018	First Draft Issued	500	780	●	Audit testing and reporting coordinating challenges with PEC Management due to PEC projects.			Satisfactory
T&D Electric Transmission Planning	LG	12/5/2017	Final Report Issued	450	459	●		4/5/2018	7/25/2018	Satisfactory
Personnel Out Process (POP)	DA	12/11/2017	Final Draft Issued	310	469	●	Complex audit with possible major issues. Audit work coordinated with various business units.	6/5/2018		Needs Improvement
Telecommunications & Support	RB	12/19/2017	Final Draft Issued	450	470	●		6/19/2018		Satisfactory
Customer Experience Centers + Strategy Support	DA	5/2/2018	Reporting	400	388	●	Original audit estimate due date did not consider time used in June for the annual risk assessments.			
Transmission and Substation Maintenance	LG	4/2/2018	First Draft Issued	450	430	●				Satisfactory
Technology Infrastructure	RB	5/9/2018	Testing	500	327	●				
Utility Locate Services/3rd. Party Claims	TE	6/1/2018	Testing	350	221	●				
Benefit Services	AS	7/11/2018	Testing	400	299	●	Additional work with W/W/W PEC audit has delayed due date.			
Electric Production Engineering and Outages	LG		Planning	450	17	●				
W/W/W Reuse and Treatment	DA		Planning	400	17	●				
Disaster Recovery Follow-Up	RB		Planning	250	0	●				
Information Security Follow-Up	RB		Planning	275	0	●				
New Auditor Training	AS		Completed	150	170	●				
FY2018 Action Plan Follow-Up	All Staff		Ongoing	625	490	●				
FY2019 Audit Plan	All Staff		Completed	300	311	●				

August 2018



**Audit Services**  
**3Q FY18 Report**

●	Audit will be/has been completed within estimated hours.
●	Audit will be/has been completed slightly above estimated hours. <i>(No more than a 10% variance)</i>
●	Audit will be/has been completed significantly above estimated hours. <i>(10%+ variance)</i>

# Enterprise Risk Management Report

Frank DiBenedetto– Manager, Enterprise Risk Management

August 2018



**Audit Services**  
**3Q FY18 Report**



# ERM Structure

- Enterprise Risk Management is an internal program designed to identify, assess, and mitigate potential and actual risk events that can have a significant negative impact.
- Risk management processes are corporate-wide, but are managed at the Senior Leadership Team level.
- Risks are prioritized through a scoring methodology, which assesses the probability of the risk event occurring, and the severity of its impact. The program has been effective in reducing both, due to improved processes and risk mitigation efforts.
- Over the last eight years, although the number of identified risks has increased from 40 to the current 54, the average risk score has decreased from 9.9 to the current 8.2.

August 2018



**Audit Services**  
**3Q FY18 Report**

# ERM Corporate Risk Heat Map

<u>Top Corporate Risks</u>		<u>Score</u>						<u>Impact x Likelihood</u>	
Tier 1		10-25							
Tier 2		5-9							
Tier 3		1-4							
Likelihood	Almost Certain >90%	5	5	10	15	20	25	15-25	Red
	Likely 65-90%	4	4	8	12	16	20	10-14	Orange
	Possible 35-65%	3	3	6	9	12	15	8-9	Yellow
	Unlikely 5-35%	2	2	4	6	8	10	4-6	Light Green
	Rare <5%	1	1	2	3	4	5	1-3	Dark Green
			1	2	3	4	5		
			Minor	Moderate	Significant	Major	Severe		
Impact									

August 2018



**Audit Services**  
**3Q FY18 Report**

The risk score is a factor of the risk impact x likelihood which helps us evaluate the criticality of the risks and the need for mitigation.

# ERM - Tier 1 Top Corporate Risk Trends

Risk E= Electric, W= Water/Wastewater, F= Financial, H= Human Resources, T= Technology, C= Corporate-wide. Risks are in order by risk score within Business Function	FY16				FY17				FY18			Long Term Risk Exposure Trend (> 5 Years)	Change
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3		
E05 - Cooling Water Intake Structures 316(b)	10	10	10	20	20	20	20	20	20	20	20	↔ Stable	
F01 - Revenues and Expenses Management	16	16	16	16	16	16	16	16	16	16	16	↑ Increasing	
H01 - Pensions	20	20	20	20	20	20	16	16	16	16	16	↔ Stable	
W01 - Water Supply Management/Long Term Planning	15	15	15	15	15	15	15	15	15	15	15	↑ Increasing	
C16 - Weather & Climate Change Impact		15	15	15	15	15	15	15	15	15	15	↑ Increasing	
E01 - Carbon Emission Mitigation - Clean Power Plan	25	25	25	25	25	25	20	15	15	15	15	↔ Stable	
E03 - Coal Combustion Residual Rule (CCR)	10	10	10	15	15	15	15	15	15	15	15	↔ Stable	
H02 Staffing	9	9	9	9	9	9	9	9	9	12	12	↑ Increasing	
C02 - Physical Security (Facilities Infrastructure Security and Regulatory Compliance)	12	12	12	12	12	12	12	12	12	12	12	↑ Increasing	
C03 - New Technology	12	12	12	12	12	12	12	12	12	12	12	↑ Increasing	
E04 - Adverse Electric Commodity Supply and Pricing	12	12	12	12	12	12	12	12	12	12	12	↔ Stable	
C01 - Customer Relationship Management	12	12	12	12	12	12	12	12	12	12	12	↔ Stable	
W03 - Sanitary Sewer Overflow Management	8	8	8	8	12	12	12	12	12	12	12	↓ Decreasing	
E06 - Long-term Planning/Load Forecast - Electric	10	10	10	10	10	10	10	10	10	10	10	↑ Increasing	
E07 - Critical Infrastructure Protection (CIP) Compliance	10	10	10	10	10	10	10	10	10	10	10	↑ Increasing	

These risks pose the greatest potential impacts to JEA. Most are due to external factors including economic factors, inherent risk and/or increased regulatory requirements

August 2018



**Audit Services**  
**3Q FY18 Report**

## ERM - Tier 2 Top Corporate Risk Trends

Risk E= Electric, W= Water/Wastewater, F= Financial, H= Human Resources, T= Technology, C= Corporate-wide. Risks are in order by risk score within Business Function	FY16				FY17				FY18			Long Term Risk Exposure Trend (> 5 Years)	Change
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3		
E10 - Nuclear Power Portfolio	8	8	8	8	8	9	9	9	9	9	9	↑ Increasing	
C06 - Fraud Risk Management	9	9	9	9	9	9	9	9	9	9	9	↑ Increasing	
T02 - Cyber Security Information Protection	9	9	9	9	9	9	9	9	9	9	9	↑ Increasing	
T05 - Technology Services Resource Optimization	9	9	9	9	9	9	9	9	9	9	9	↑ Increasing	
W02 - Operations Technology Management - Water/Wastewater Systems	9	9	9	9	9	9	9	9	9	9	9	↔ Stable	
C05 - Records Management	9	9	9	9	9	9	9	9	9	9	9	↔ Stable	
H03 - Public and Employee Safety	9	9	9	9	9	9	9	9	9	9	9	↔ Stable	
T03 - Cyber Security Business Disruption	8	8	8	8	8	8	8	8	8	8	8	↑ Increasing	
E02 - Effluent Limitation Guidelines	16	16	16	20	20	15	8	8	8	8	8	↔ Stable	
E09 - FERC/NERC (Section 693) O&P Reliability & Compliance	8	8	8	8	8	8	8	8	8	8	8	↔ Stable	
T01 - Technology Infrastructure Reliability	4	8	8	8	8	8	8	8	8	8	8	↔ Stable	
T04 - Technology Services Disaster Recovery/Business Continuity	8	8	8	8	8	8	8	8	8	8	8	↔ Stable	
C07 - Disaster Recovery/Business Continuity	8	8	8	8	8	8	8	8	8	8	8	↔ Stable	
C08 - Black Swan (High Impact - Low probability event)	8	8	8	8	8	8	8	8	8	8	8	↔ Stable	
C04 - External Influence on Policy	10	8	8	8	8	8	8	8	8	8	8	↔ Stable	
W06 - Water Quality Management			8	8	8	8	8	8	8	8	8	↔ Stable	
E11 - Infrastructure Maintenance - Electric Systems Assets	6	6	6	6	6	6	6	6	6	6	6	↔ Stable	
E20 - Operations Technology Management - Electric	6	6	6	6	6	6	6	6	6	6	6	↔ Stable	
E12 - By Product Management	6	6	6	6	6	6	6	6	6	6	6	↔ Stable	
E13 - Infrastructure Destruction Due to Severe Weather	6	6	6	6	6	6	6	6	6	6	6	↔ Stable	
W04 - Infrastructure Maintenance - Water/Waste Water Systems	6	6	6	6	6	6	6	6	6	6	6	↔ Stable	
F03 - Credit Availability/Cost	6	6	6	6	6	6	6	6	6	6	6	↔ Stable	
C09 - Other Regulatory Compliance	6	6	6	6	6	6	6	6	6	6	6	↔ Stable	
E08 - SJRPP	9	9	9	9	9	9	6	6	6	6	6	↓ Decreasing	
F04 - Counterparty Risk	5	5	5	5	5	5	5	5	5	5	5	↔ Stable	

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Audit Services  
3Q FY18 Report

These risks are primarily operational in nature. Although the impact can still be significant, JEA has more flexibility in mitigating the risks.

# ERM Initiatives

## Risk Tolerance Matrix & Risk Profile Scoring

- Focus risk scoring on the two primary criteria: (1) Financial Impact; and (2) Potential Reputational Impact, if the risk event occurs.
- The metrics can be the basis for developing Key Process and Key Risk Indicators (KPIs / KRIs).
- Total risk score would be a factor of both the Financial and Reputational Impact/Probability scores.

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## ERM Initiatives (concluded)

### Training

Because risk management is an enterprise-wide effort, expand current training to provide all employees with a better understanding of risk management and internal controls practices, skills, and tools.

1. Risk Management/Internal Control Computer-Based Training (CBT):

- Short course (20-30 minutes) required for all JEA employees
- Provides overview of key concepts.

2. Detailed Risk Management Training:

- Full day (Eight-hour class) required for all Directors, Managers and selected appointed employees
- Provides an overview of JEA's risk management program and Top Corporate Risks
- Teaches skills and provides tools in identifying, assessing and mitigating risk through effective internal controls
- Participants are required to complete a risk assessment for their individual business function(s).

August 2018







# Ethics Investigations & Audit Report

Steve Tuten - Director, Audit Services

August 2018



**Audit Services**  
**3Q FY18 Report**

## INVESTIGATIVE CASE STATISTICS – Q3 FY18

Open Cases 3/31/2018	Cases Opened Q3 FY18	Cases Closed Q3 FY18	Open Cases 6/30/2018
14	8	11	11
Categories For Cases Opened During Q3 FY18			
Fraud/Waste/Abuse			4
Conflict of Interest/Ethics Matters			2
Discrimination/Harassment			2
Total			8

AUGUST 2018

## SUMMARY OF CLOSED INVESTIGATIVE CASES – Q3 FY18

Reporting Source	Allegation	Investigation Results
EHL	JEA-17-08-0001 – The caller alleged an employee was charging JEA for upgrade pay that was not warranted.	We determined managerial approval was obtained for the upgrade pay due to the employee performing some supervisory duties. A review of the upgrade payments revealed the employee was overpaid by \$64.29, which has since been reimbursed to JEA. As a result of this case, violations of JEA's Acceptable Use and Secondary Employment Policies were also noted and reported to Labor Relations for disposition.
EHL	JEA- 17-08-0002 – A worker reported being harassed by an employee working in a supervisory role. Additionally, the caller reported another employee may be falsifying time sheet hours.	The information provided by the complainant did not contain enough detail to locate any evidence to confirm or deny the allegation of harassment. Regarding the allegation of time sheet falsification, no evidence was found to substantiate the claim; however, our investigation revealed violations of JEA Fleet Policy relating to driving out of the way for a meal break and making personal stops using a JEA vehicle. Policy violations were reported to Management for disposition.
EHL	JEA-17-12-0001 and JEA-17-12-0002 – SJRPP employees were concerned the money they paid for their SJRPP gym memberships could have been embezzled by the SJRPP employee who controlled the bank account.	A joint investigation with law enforcement resulted in the arrest of the SJRPP employee for theft of SJRPP Employee Athletic Association funds in the amount of \$8,500. The employee was officially charged with grand theft and paid restitution through a Felony Pretrial Intervention Program.

## SUMMARY OF CLOSED INVESTIGATIVE CASES – Q3 FY18 (CONTINUED)

Reporting Source	Allegation	Investigation Results
EHL	JEA-18-02-0002 – The caller alleged two members of JEA's Senior Leadership Team refused to disclose any information about the company's future plans. The caller indicated this was a violation of the Sunshine Laws.	Because the allegation involved members of JEA's Senior Leadership Team, the case was turned over to the City of Jacksonville's Office of the Inspector General (OIG) as required by a Letter of Understanding between JEA and the OIG. The OIG reached out to the caller through JEA's Ethics Hotline, but having heard no response from the caller, the OIG closed the case.
EHL	JEA-18-03-0001 and JEA-18-03-0002 – The anonymous callers alleged a JEA Team Leader instructed employees to complete certain tasks that were not in accordance with JEA's safety procedures.	The safety concerns involving the Team Leader were discussed with Senior Management and Labor Relations. After counseling the employee, Management added an additional safety responsibility to the employee as Team Lead and conveyed the expectations of working safely, using PPE when required, and following procedures.
EHL	JEA-18-03-0003 – A customer complained about not being able to pay a JEA bill online with a third party vendor's website because the vendor's software was not compatible with the customer's reading device for the blind.	As a result of this complaint, a JEA Business Analyst worked with JEA's billing contractor who agreed to update their website to allow the customer to use the reading device to make payments.

AUGUST 2018

**Audit Services**  
**3Q FY18 Report**

## SUMMARY OF CLOSED INVESTIGATIVE CASES – Q3 FY18 (CONCLUDED)

Reporting Source	Allegation	Investigation Results
External	JEA-18-04-0001 – The complainant reported a JEA truck was speeding excessively and following vehicles too close to be safe.	We determined JEA's new GPS system had not yet been installed on the vehicle for the date indicated in the complaint, thus we were unable to confirm the allegation. However, once GPS was installed on the vehicle, we reviewed three consecutive days of GPS data and did not find any excessive violations of the speed limit during the employee's daily travels. Our review did result in several minor violations of the posted speed limit of which the employee was counseled by Management.
External	JEA-18-04-0002 – A complainant alleged a JEA employee accessed family member's JEA accounts, removed balances, and transferred the amounts to an unknown customer's account.	A review was conducted of JEA account adjustments made by the employee since 2016, and no evidence was found to substantiate the allegation.
Internal	JEA-18-04-0003 – In assisting Labor Relations and Management with gathering video and badging data for an upcoming employee fact-finding, the Senior Ethics Auditor noted inconsistencies concerning work hours which indicated the employee may not be working hours as reported.	An analysis was conducted and discrepancies were noted between the time reported on the employee's timecard and the calculation of time worked. Prior to the employee's scheduled fact finding and finalizing the analysis, the employee suddenly retired. The case was closed due to the employee's resignation.

AUGUST 2018

**Audit Services**  
**3Q FY18 Report**



## VIII. A. 5.

### Ethics Officer Quarterly Report





July 27, 2018

<b>SUBJECT:</b>	<b>ETHICS OFFICER QUARTERLY REPORT</b>
-----------------	--

<b>Purpose:</b>	<input checked="" type="checkbox"/> Information Only	<input type="checkbox"/> Action Required	<input type="checkbox"/> Advice/Direction
-----------------	--	--	---

**Issue:** The Ethics Officer Quarterly Report provides the JEA Board of Directors with information on the current ethics inquiries, hotline activity and training.

**Significance:** JEA's Ethics Officer ensures information is shared and advice given regarding issues and questions.

**Effect:** JEA is able to manage ethical concerns for the organization, ensuring compliance with business and governmental regulations.

**Cost or Benefit:** JEA fosters an environment that ensures ethical behaviors.

**Recommended Board action:** This item is for information only.

**For additional information, contact:** Walette Stanford, 904-665-4282

Submitted by: AFZ/TH/WS



#### Commitments to Action

- 1 Earn Customer Loyalty
- 2 Deliver Business Excellence
- 3 Develop an Unbeatable Team



## “Creating an Ethical Culture”

JEA will conduct its business fairly, impartially, in an ethical and proper manner, and in full compliance with all applicable laws and regulations.

August 2018

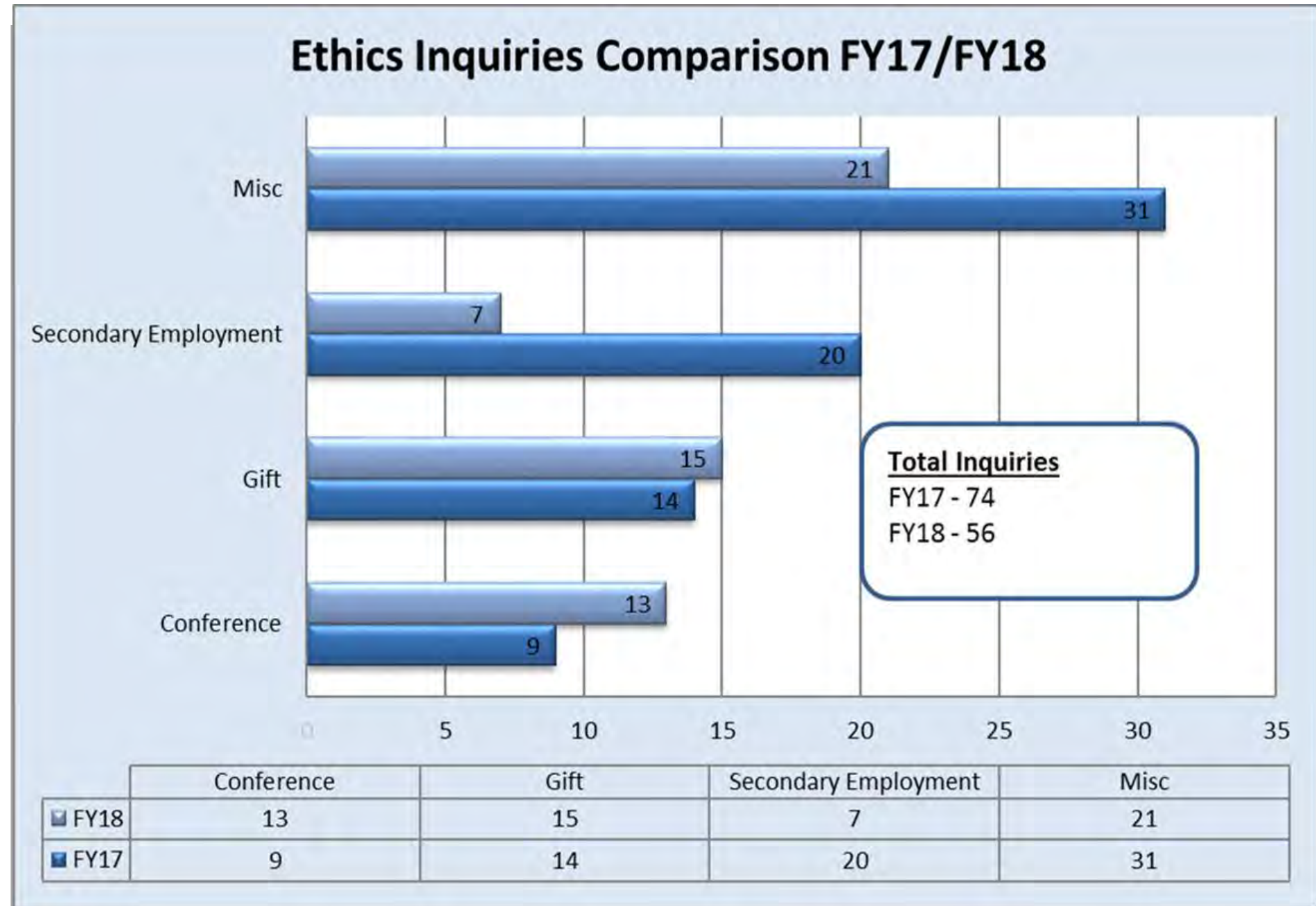


 **Ethics Officer Report  
Walette Stanford**

August 2018



## Ethics Officer Quarterly Report



August 2018



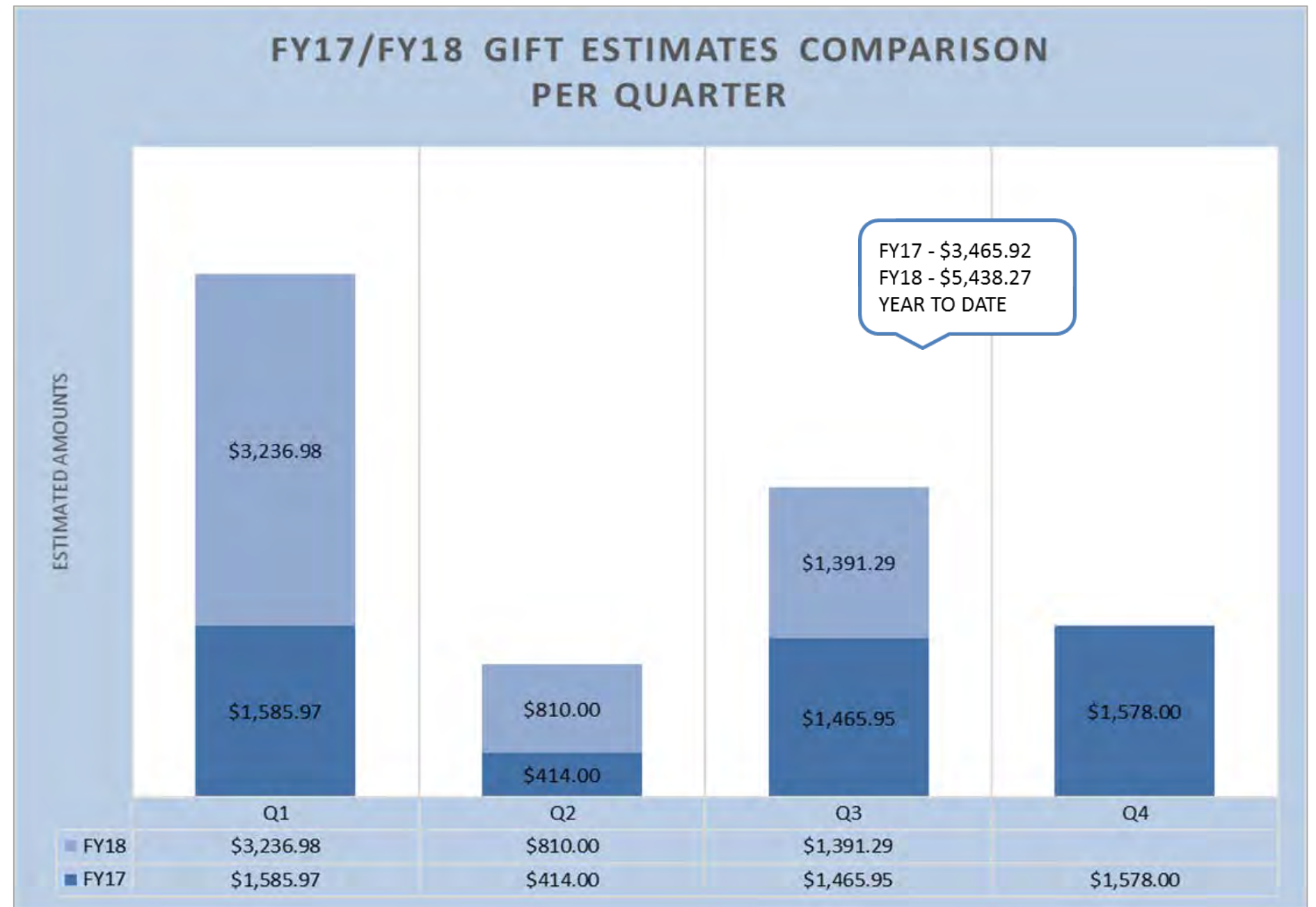
## Ethics Officer Quarterly Report



August 2018



## Ethics Officer Quarterly Report

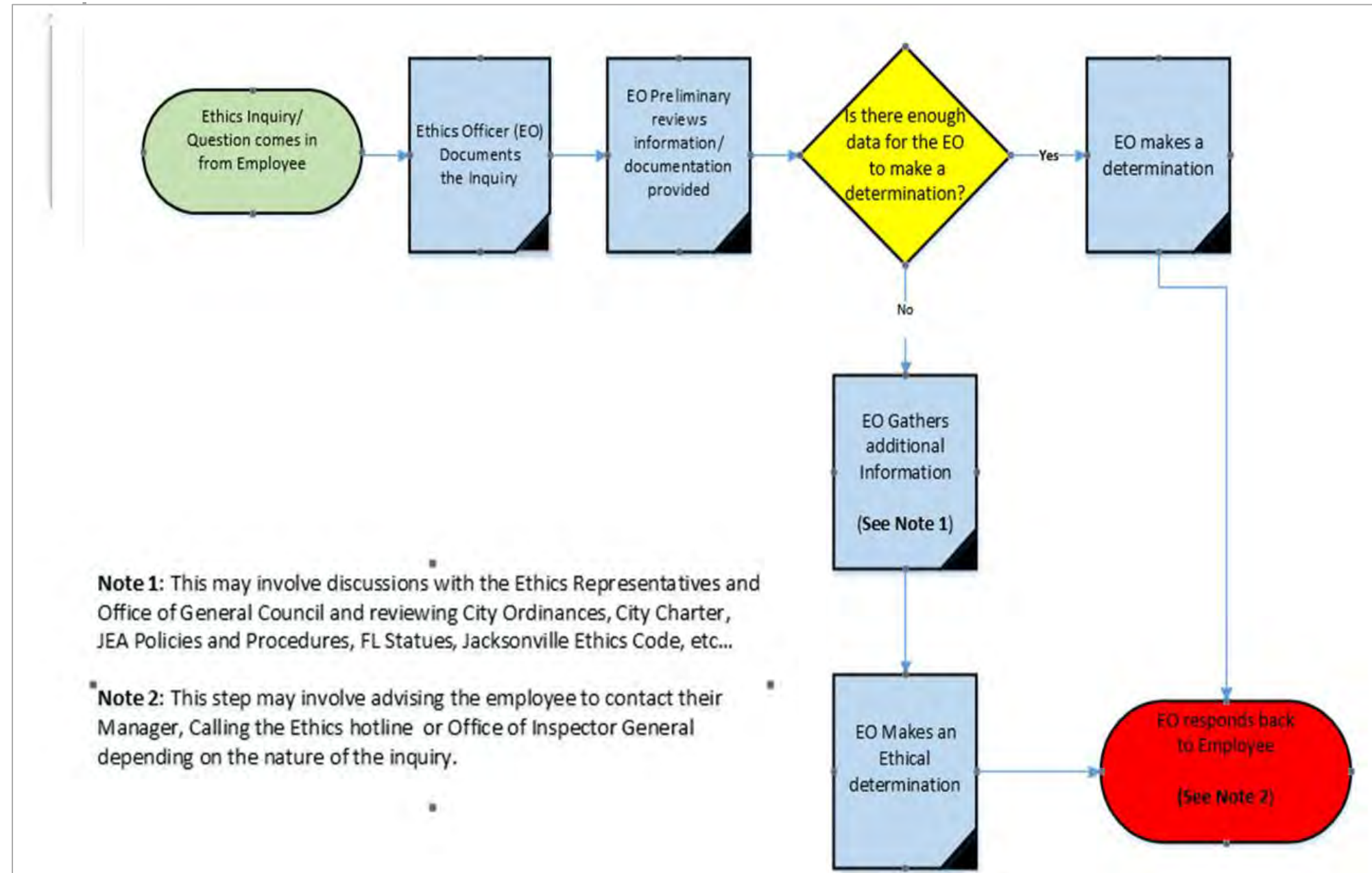


**Food Items:** Business lunches/dinners, donuts, swag hats  
**Misc:** Visa gift cards, canvas bags, water bottles



August 2018

## Ethics Officer Quarterly Report

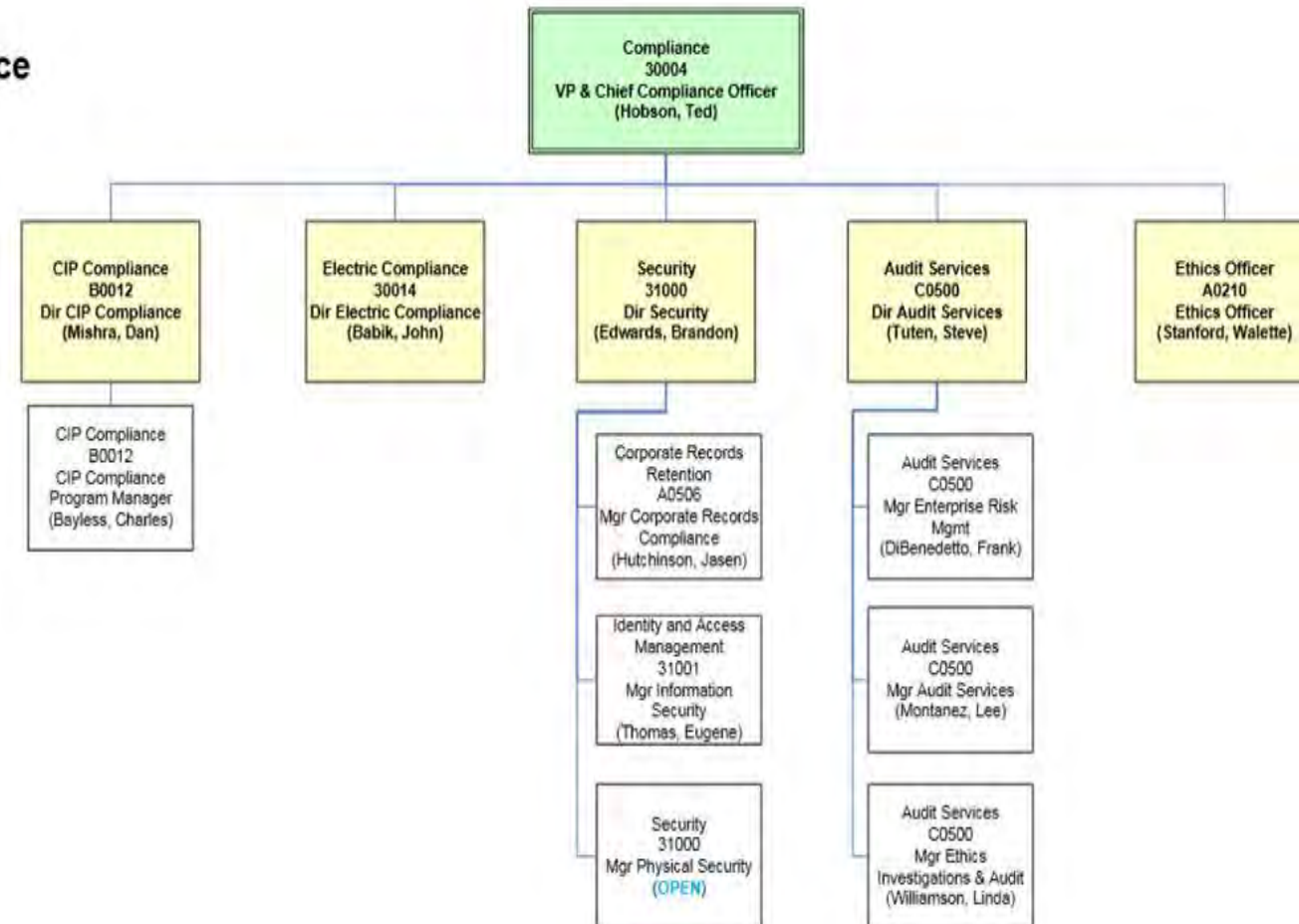


- Updated all Ethics Policies and Procedures and placed them in the New JEA policies and procedures template
  - *Secondary Employment/Gifts/Nepotism/Ethical Guideline/Exit Interviews*
- Met with Ethics Representatives in July to discuss Current Cases and New Employee Orientation CBT Enhancements
- Created the Job Description for Full time Ethics Officer position – Benchmarked with peers in City Government
- Partnering with Governmental Affairs to put out a Political Activity FAQs in September 2018.
- Ethics Officer Role moved from Human Resources to Compliance on April 23, 2018



## Compliance

FY18 June, Q3



August 2018



## Ethics Officer Quarterly Report

VIII. A. 6.

Ernst & Young FY2018 Annual Financial  
Audit Plan



July 24, 2018

**SUBJECT:** ERNST & YOUNG FY2018 ANNUAL FINANCIAL AUDIT PLAN

**Purpose:**

☐ Information Only

☒ Action Required

☐ Advice/Direction

**Issue:** Ernst & Young (E&Y) has been invited to attend the August 13, 2018 Finance & Audit Committee (FAC) meeting to review the FY2018 annual financial audit scope and approach. At that meeting, they will outline the scope of their services, identify the E&Y team that will perform the audit and present the key considerations that will affect the FY2018 audit.

**Significance:** Auditing standards require the auditors to communicate certain matters, to the governing board, that may assist the Board in overseeing management's financial reporting process.

**Effect:** To keep in compliance with the Finance and Audit Committee Operating Policy, a formal approval of the annual audit plan is required. The effect of the formal approval is to demonstrate that the governing board has reviewed and is in agreement with the plan. In addition, meeting with auditors to discuss the audit plan assist the Board in overseeing management's financial reporting process.

**Cost or Benefit:** There is no cost. See effect above for benefits.

**Recommended Board action:** Staff recommends that the Finance and Audit Committee and Board approve the attached FY2018 Annual Audit Plan.

**For additional information, contact:** Janice Nelson

Submitted by: AFZ/WRF/JRN



**Commitments to Action**

- 1 Earn Customer Loyalty**
- 2 Deliver Business Excellence**
- 3 Develop an Unbeatable Team**





II. C.  
8/13/2018  
(F&A)

Return to  
Agenda

VIII. A. 6.  
08/21/2018

# JEA

## 2018 Audit Plan

August 13, 2018



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# Executive summary: 2018 audit plan

## 2018 audit plan\*

### Audit timeline

- ▶ We will perform our interim procedures during the months of April through August and our year end procedures during the months of October through December.

### Audit strategy, including significant risks identified

- ▶ Our audit strategy, including significant risks identified, for the 2018 audit is outlined in the [Areas of audit emphasis](#).

### Involvement of council auditors

- ▶ We plan to use the work of the city council auditors in selected areas of our 2018 audit. Refer to the [Involvement of council auditors](#).

## Important updates\*

- ▶ [Cybersecurity](#)
- ▶ [Analytics and the digital audit](#)
- ▶ GASB 75 - OPEB
- ▶ GASB 83 - ARO

## Significant 2018 considerations

- ▶ SJRPP Decommissioning
- ▶ New GASB 75 OPEB Standard
- ▶ Plant Vogtle
- ▶ Analytics Implementation
- ▶ SJRPP Pension Plan
- ▶ Uniform Guidance audit required (FEMA)

## Inquiries

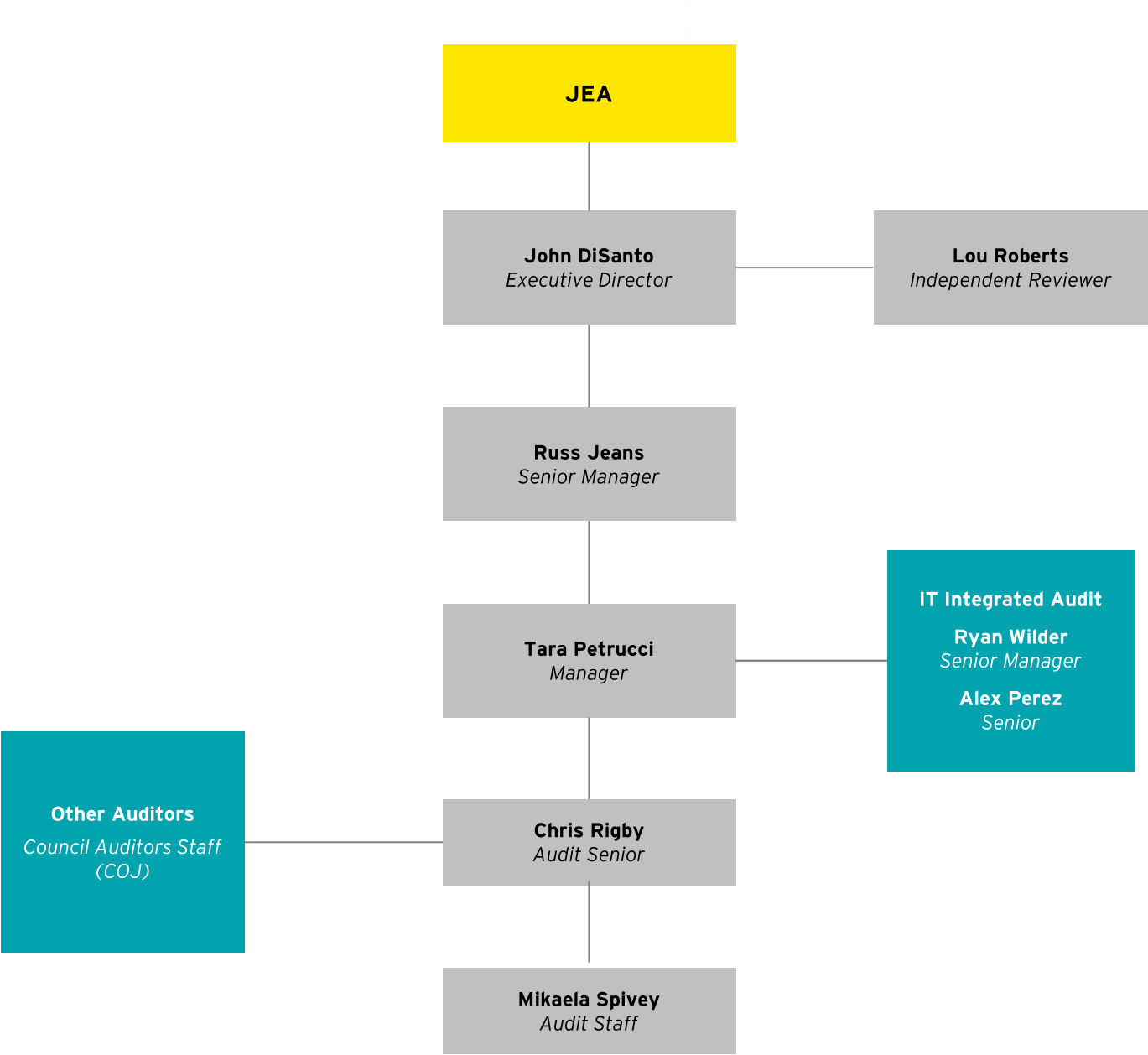
We inquire of those charged with governance regarding your awareness of matters relevant to the audit, including:

- ▶ Your views about the risks of material misstatements due to fraud, including the risks of management override of controls.
- ▶ Your knowledge of any actual, alleged or suspected fraud.
- ▶ Your awareness of tips or complaints regarding JEA's financial reporting (including those received through the "whistleblower" program), other matters relevant to the audit (such as violations or possible violations of laws or regulations) or any significant unusual transactions.
- ▶ How you exercise oversight over the JEA's assessment of fraud risks and the establishment of controls to address these risks.
- ▶ Your understanding of relationships and transactions with related parties that are significant to the JEA and any concerns related to those relationships or transactions.

\* These matters are addressed on the following pages within our presentation.

Note: This report is intended solely for the information and use of the those charged with governance, Board of Directors and management. It is not intended to be, and should not be, used by anyone other than these specified parties.

# Client service team





II. C.  
8/13/2018  
(F&A)

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## 2018 audit plan



Executive  
Summary



# 2018 audit plan: Areas of audit emphasis

Our audit procedures emphasize testing those processes, accounts, contracts or transactions where we believe there is the greatest risk of material misstatement to the financial statements, whether due to error or fraud. We consider the effects of current market risk factors on JEA, and also place emphasis on those areas requiring subjective determinations by management. We will reassess our risk assessment and other internal and external factors influencing JEA throughout our audit, and communicate to you any changes to our initial plan, as necessary. Our areas of audit emphasis, including areas with identified significant risks, are as follows. Our proposed audit plan to address specific areas of emphasis is detailed beginning on page 14.

## Areas of audit emphasis

- Revenue recognition
- Allowance for doubtful accounts
- Regulatory assets
- Legal reserves
- Derivative instruments and hedging activities
- Asset retirement obligations (SJPPP Decommissioning)
- Other post retirement benefits liabilities (OPEB)
- Pension accounting, including valuation of pension assets
- Investments
- Capital asset leases
- Asset impairments

# 2018 audit plan: Involvement of council auditors

As required by AICPA standards, we have evaluated the competence and objectivity of the city council auditors and its application of a systematic and disciplined approach, including its quality control processes. We have also considered whether, and to what extent, we can use the work of council auditors in our 2018 audit. We have discussed with city council auditors their 2018 audit involvement. The table below represents the areas where we plan to use city council auditors in the 2018 audit.

We will work with city council auditors in a direct assistance model, which involves us performing:

- On-site direction and supervision
- Detailed review of working papers

Areas/significant class of transactions where EY is planning to use the work of the council auditors
--

Council auditors
------------------

- |  |
|--|
| <ul style="list-style-type: none"><li>▸ Test of transactions</li></ul>   |
| <hr/>  |
| <ul style="list-style-type: none"><li>▸ Substantive procedures for certain audit areas (including cash and investments, AR, capital assets, AP, taxes)</li></ul> |



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## Important updates



Executive  
Summary





# Important update: GASB 75 - Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions

JEA adopted and implemented GASB 75 in the current year which will impact its financial reporting and application of accounting policies.

## Observations related to management's implementation

Key changes regarding GASB 75 include:

- ▶ Net or total OPEB liability is now recorded in Statement of Net Position (\$34.5 million as of September 30, 2017)
- ▶ Strictly prescribed actuarial methodology & discounting guidance will produce a different (often higher) OPEB liability than GASB 45
- ▶ Annual measurement dates are now required using either annual or biennial valuations. Triennial valuations no longer allowed
- ▶ Expense volatility is likely due to claims volatility, discount rate volatility & more frequent plan changes
- ▶ More robust note disclosure & required supplementary information (RSI) is required

## Summary of planned audit procedures related to the implementation

- ▶ We will review the Actuary's Report and ensure that disclosures, Required Supplementary Information, and funding for the OPEB liability are in accordance with requirements of the new standard.
- ▶ We will review significant assumptions used by the actuary for reasonableness and test data provided by JEA used in the actuary's calculations, if the liability is significant at September 30, 2018.
- ▶ We will engage and work with EY internal specialists to assist the audit team with the review of the actuarial assumptions used in order to estimate JEA's OPEB liability.
- ▶ We will audit the assets of Plan held by the Florida Municipal Pension Trust Fund.
- ▶ We will review the note disclosure and required supplementary information to ensure it is complete and accurate.

Relevant materials are available in Accounting Link ([www.ey.com/us/accountinglink](http://www.ey.com/us/accountinglink))

# Important update: GASB 83 - Certain Asset Retirement Obligations

JEA adopted and implemented GASB 83 in the current year which will impact the liability recorded related to the SJRPP Decommissioning.

## Observations related to management's implementation

- ▶ Asset Retirement Obligation ("ARO") recorded related to the SJRPP Decommissioning after shutdown in January of 2018. (Recorded ARO is \$68.1 million)
- ▶ The amount of liability recorded represents the best estimate of the current value of outlays expected to be incurred and is offset by a deferred outflow.
- ▶ Disclosure requirements include:
  - General description of AROs and related assets
  - Methods/assumptions used
  - Any restricted assets set aside for ARO

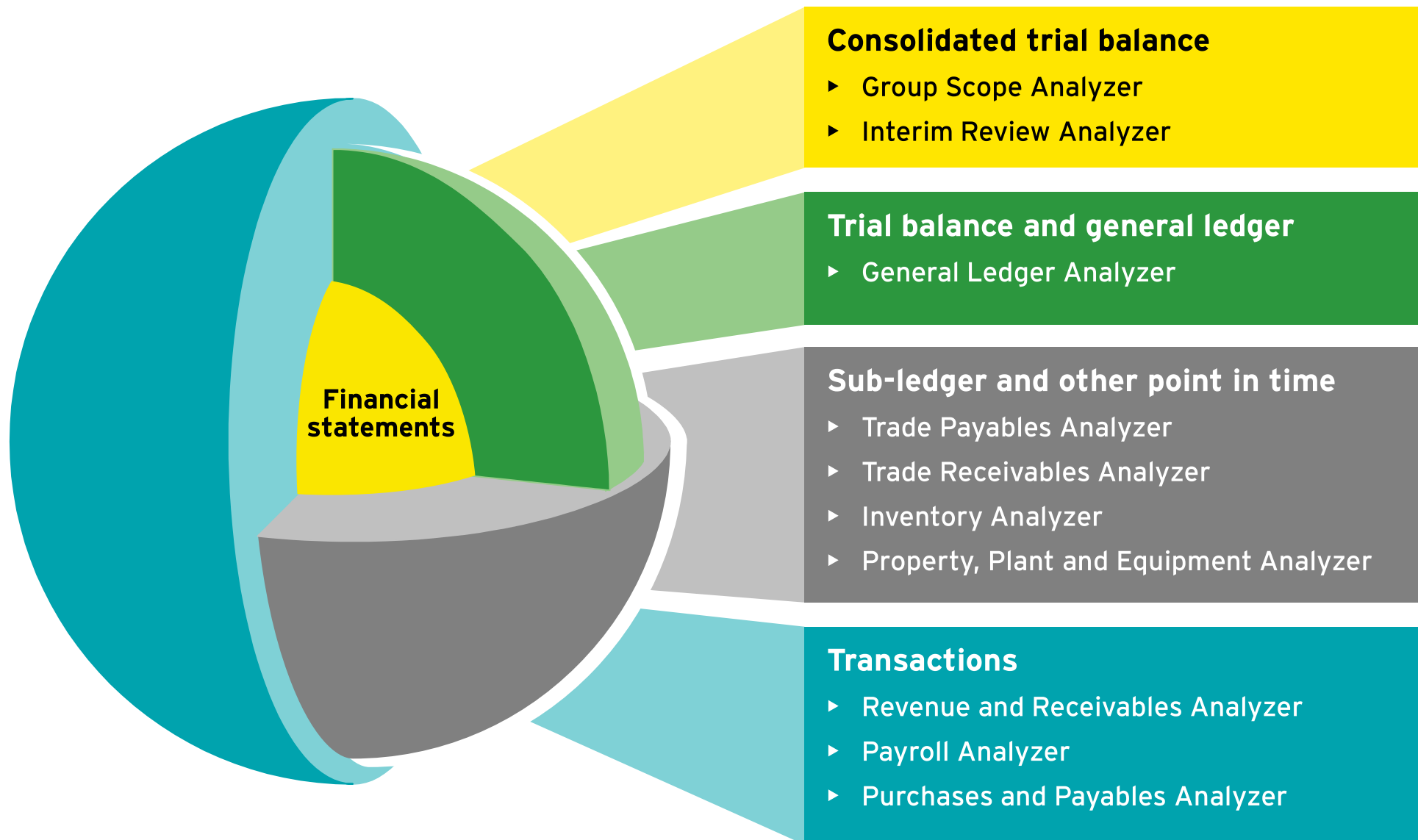
## Summary of planned audit procedures related to the implementation

- ▶ We will engage and work with EY internal specialists to assist the audit team with the review of assumptions and other inputs used in order to estimate JEA's ARO liability.
- ▶ As part of our review of the financial statements we will assess any required disclosures in accordance with GASB 83.
- ▶ We will vouch cash receipts from FPL and cash disbursements made for bond defeasances.
- ▶ We will perform testing to validate amounts for inventory at shutdown.
- ▶ We will obtain and inspect executed agreements to test that effects are properly accounted.
- ▶ We will perform flux analyses from SJRPP's audited financial data as of September 30, 2017 to data as of the shutdown date to assess reasonableness of changes.

Relevant materials are available in Accounting Link ([www.ey.com/us/accountinglink](http://www.ey.com/us/accountinglink))

# Important update: Leveraging analytics as part of the digital audit

With data analytics, we can analyze the flow of transactions, reducing the burden on the business and highlighting unusual items to better focus our work and inquiries of management. This diagram provides an overview of EY Helix Analyzers available to us which will require us to work with management in identifying next steps to automate data capture for our 2018 audit.



Powered by EY Helix

# Impact of analytics on the audit

EY Helix, our suite of analytics, enables us to deliver a high quality audit by:

- ▶ Allowing us a deeper understanding of your business by analyzing larger populations of audit relevant data, to present a fuller picture of what happened and identify relevant risks.
- ▶ Identifying trends and anomalies in your processes to help direct our audit efforts in the right areas.
- ▶ Using complete data populations to obtain higher quality audit evidence within areas of higher risk.
- ▶ Delivering relevant feedback and insights during the audit, so you can optimize your business processes and controls.
- ▶ Saving JEA valuable time and effort through our repeatable data capture process using globally-integrated data extraction tools and processes

Our audit procedures utilizing analytics will seek to create audit efficiencies within testing for the following key areas.

## Areas of audit efficiencies

- ▶ Revenue transaction testing
- ▶ Accounts receivable testing
- ▶ Fixed assets testing
- ▶ Payroll testing

# Important update: Cybersecurity is a prominent business risk

## Effect of cybersecurity risk on an audit

We are required by professional standards to:

- ▶ Perform risk assessment procedures that are sufficient to provide a reasonable basis for identifying and assessing the risks of material misstatement of the financial statements, whether due to error or fraud, and
- ▶ Design and execute audit procedures responsive to those risks.

We consider whether cybersecurity risk (like other business risks) represents a risk of a material misstatement of the financial statements. If we determine that cybersecurity risk represents a risk of material misstatement, we design and implement appropriate responses to address the identified risks.

We start the risk assessment process during audit planning and re-evaluate it throughout the audit.

## Audit risk assessment procedures related to cybersecurity

To understand and assess an entity's exposure due to cybersecurity risk, we:

- ▶ Obtain an understanding, primarily via inquiry, of the entity's processes and controls to manage cybersecurity risks
- ▶ Consider the information obtained to assess the risk of material misstatement of the financial statements
- ▶ Communicate observations for strengthening the control environment to management and the Committee

Our procedures are not designed to provide any assurance as to the adequacy of the cybersecurity control environment.

## Board of Directors considerations

The National Association of Corporate Directors (NACD), in conjunction with AIG, Inc. and the Internet Security Alliance, has identified five steps boards should consider for enhancing their oversight of cyber risks:

1. Directors need to understand and approach cybersecurity as an enterprise-wide risk management issue, not just an IT issue.
2. Directors should understand the legal implications of cyber risk as they relate to their company's specific circumstances.
3. Boards should have adequate access to cybersecurity expertise, and discussions about cyber-risk management should be given regular and adequate time on board meeting agendas.
4. Directors should set the expectation that management will establish an enterprise-wide, cyber-risk management framework with adequate staffing and budget.
5. Board-management discussions about cyber risk should include identification of which risks to avoid, which to accept, and which to mitigate or transfer through insurance, as well as specific plans associated with each approach.<sup>(1)</sup>

Currently, there are no regulatory or legislative requirements that require an organization to provide information regarding its cybersecurity management program to boards and other stakeholders. The American Institute of Certified Public Accountants (AICPA) has developed criteria that provide a comprehensive and business-aligned evaluation of an organization's cybersecurity risk management program, as well as optional reporting guidance if the organization decides to issue an attestation report on the effectiveness of its program. The AICPA's SOC for Cybersecurity framework may provide boards with greater insight into your organization's cybersecurity risk management program.

<sup>(1)</sup> NACD Cyber-Risk Oversight, Director's Handbook Series, January 2017

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## Appendices

- A Areas of audit emphasis: Detail
- B 2018 EY services
- C Required communications







# Appendix A

Areas of audit emphasis: Detail



## Areas of audit emphasis

Area of emphasis	Summary of planned audit procedures
<p><b>Revenue recognition</b></p> <p>JEA recognizes revenues for estimated services provided on its electric and water and sewer infrastructure. Unbilled revenue relates to services that have not yet been billed to the end customer at fiscal period-end. The calculation is based upon approved rates and historical consumption trends.</p> <p>JEA is a member of The Energy Authority (TEA), a municipal power marketing and risk management joint venture. In addition to providing its members with wholesale power marketing and resource management services, TEA also assists JEA with natural gas procurement and related gas hedging activities. JEA records energy marketing activity in the period when the energy is delivered.</p> <p>Intergovernmental revenues are recognized when the applicable eligibility requirements, including time requirements, are met. Resources remitted before the eligibility requirements are met should, under most circumstances, be reported as deferred revenue. JEA receives revenue from various federal and state-assisted grant programs.</p> <p>Programs are generally reimbursement-based, and JEA records revenue once expenditures for allowable purposes are made or upon compliance with the terms and conditions of grant agreements and applicable regulations.</p>	<ul style="list-style-type: none"> <li>▶ Review calculation of unbilled revenue</li> <li>▶ Test contractual arrangements, including unique terms and conditions, to obtain reasonable assurance of compliance with the applicable accounting standards</li> <li>▶ Test timing of revenue recognition based on the terms of the arrangement</li> <li>▶ Confirm terms and conditions with both customers and management as considered necessary</li> <li>▶ Test account reconciliations to determine timely completion and review</li> <li>▶ Perform detailed analytical review procedures, by system, including predictive analytics based on verifiable consumption and production data</li> <li>▶ Perform detailed tests over a sample of revenue transactions to assess the appropriateness and accuracy of recorded amounts</li> <li>▶ Through the use of data analytics we will analyze 100% of the revenue data within the general ledger and perform a correlation analysis between revenue, AR and cash</li> </ul>
<p><b>Allowance for doubtful accounts</b></p> <p>An allowance for doubtful accounts is established based on JEA's best estimate of billed amounts that will not be collected from its customers.</p>	<ul style="list-style-type: none"> <li>▶ Test allowance for doubtful accounts calculation, including the aging of receivables</li> <li>▶ Validate assumptions based on retrospective review of prior estimates</li> <li>▶ Evaluate the appropriateness of the financial statement presentation and disclosure</li> </ul>

## Areas of audit emphasis

Area of emphasis	Summary of planned audit procedures
<b>Regulatory accounts</b>	
<p>Regulatory accounts are recorded when either future revenues are expected to recover incurred expenses or when amounts have been collected through rates in advance. JEA's regulatory accounts are associated with the Electric, Waster &amp; Sewer, SJRPP and Bulk power systems pursuant to 3rd party agreements, and generally relate to the timing differences between recognition of capital asset and other costs (depreciation) and amounts collected in rates to cover debt service requirements.</p>	<ul style="list-style-type: none"> <li>▸ Test approval of any new regulatory assets/liabilities</li> <li>▸ Verify that amortization and expense recognition are consistent with rate recovery</li> <li>▸ Vouch significant activity</li> <li>▸ Test account reconciliations</li> <li>▸ Perform projection tests to determine that regulatory accounts will be recovered/amortized over the remaining maturities/useful lives of related debt and capital assets</li> </ul>
<b>Legal reserves</b>	
<p>Accruals are recorded for regulatory and legal proceedings that arise in the ordinary course of business when probable and subject to reasonable estimation.</p> <p>Many factors are considered in making an assessment of a contingency, including history and stage of litigation. Estimates are based upon consultation with legal counsel (in-house and/or external). Legal fees are generally expensed as incurred.</p>	<ul style="list-style-type: none"> <li>▸ Interview management and in-house legal counsel regarding all litigation</li> <li>▸ Obtain external letters from counsel</li> <li>▸ Review legal accruals and expenses for appropriateness based on management inquiry and responses from outside counsel</li> </ul>
<b>Derivative instruments and hedging activities</b>	
<p>JEA uses derivative contracts to manage its exposure to changes in energy commodity prices and interest rates. Derivative contracts are accounted for in accordance with GASB 53. The gains and losses from the change in fair market value of JEA's derivative instruments are deferred if hedge effectiveness is maintained.</p>	<ul style="list-style-type: none"> <li>▸ Test assessment of hedge effectiveness documentation, including re-performance where quantitative methods are used</li> <li>▸ Confirm instruments with counterparties</li> <li>▸ Test recorded market values using independently developed estimates</li> <li>▸ Test fuel hedge contract settlements</li> <li>▸ Evaluate disclosures</li> <li>▸ Reconsider normal purchase/normal sales assumptions for commodity contracts</li> </ul>

## Areas of audit emphasis

Area of emphasis	Summary of planned audit procedures
<p><b>Asset retirement obligations (SJRPP Decommissioning)</b></p> <p>In accordance with GASB 83, JEA records an asset retirement obligation liability that represents their best estimate of the current value of outlays expected to be incurred and is offset by a deferred outflow.</p> <p>► Disclosure requirements include:</p> <ul style="list-style-type: none"> <li>• General description of AROs and related assets</li> <li>• Methods/assumptions used</li> <li>• Any restricted assets set aside for ARO</li> </ul>	<ul style="list-style-type: none"> <li>► We will engage and work with EY internal specialists to assist the audit team with the review of assumptions and other inputs used in order to estimate JEA's ARO liability.</li> <li>► As part of our review of the financial statements we will assess any required disclosures in accordance with GASB 83.</li> <li>► We will vouch cash receipts from FPL and cash disbursements made for bond defeasances.</li> <li>► We will perform testing to validate amounts for inventory at shutdown.</li> <li>► We will obtain and inspect executed agreements to test that effects are properly accounted.</li> <li>► We will perform flux analyses from SJRPP's audited financial data as of September 30, 2017 to data as of the shutdown date to assess reasonableness of changes.</li> </ul>
<p><b>Other postretirement benefits liabilities</b></p> <p>JEA has adopted and implemented GASB 75.</p> <p>JEA engages an actuary to calculate the liability related to the other post-employment benefit liability.</p> <p>JEA's benefit obligations recognizable under these standards are significantly affected by certain assumptions, among which are the discount rate, long-term rate of return on plan assets, life expectancies and the assumed health care cost trend rate assumption.</p>	<ul style="list-style-type: none"> <li>► We will review the Actuary's Report and ensure that disclosures, Required Supplementary Information, and funding for the OPEB liability are in accordance with requirements of the new standard.</li> <li>► We will review significant assumptions used by the actuary for reasonableness and test data provided by JEA used in the actuary's calculations, if the liability is significant at September 30, 2018.</li> <li>► We will engage and work with EY internal specialists to assist the audit team with the review of the actuarial assumptions used in order to estimate JEA's OPEB liability.</li> <li>► We will audit Plan assets held by the Florida Municipal Pension Trust Fund.</li> <li>► We will review the note disclosure and required supplementary information to ensure it is complete and accurate.</li> </ul>

## Areas of audit emphasis

Area of emphasis	Summary of planned audit procedures
<b>Pension plan accounting and reporting – COJ Plan</b>	
In accordance with GASB 68 JEA is required to record a liability for it's share of unfunded pension obligations for the City of Jacksonville (COJ) cost-sharing multi employer pension plan.	<ul style="list-style-type: none"> <li>▸ Review actuary reports for reasonableness of assumptions and methodology</li> <li>▸ For cost sharing plan (City Plan) obtain audited allocation schedule to determine the City's liabilities, expenses, deferred inflows and outflows</li> <li>▸ In accordance with AU-C 805, obtain a report on elements from CRI</li> <li>▸ Census data testing for JEA plan participants</li> <li>▸ Assess reasonableness of require disclosures</li> </ul>
<b>Pension plan accounting and reporting – SJRPP Plan</b>	
In accordance with GASB 68 JEA is required to record a liability for it's unfunded pension obligations for the SJRPP single employer pension plan.	<ul style="list-style-type: none"> <li>▸ Review actuary reports for reasonableness of assumptions and methodology</li> <li>▸ For single employer plan, obtain actuary's reports and procedures performed by plan auditors</li> <li>▸ Census data testing for JEA plan participants</li> <li>▸ Assess reasonableness of required disclosures</li> <li>▸ Test plan assets</li> </ul>
<b>Investments</b>	
All investments are stated at fair value based on quoted market prices or other observable market inputs (e.g., matrix pricing for fixed income securities).	<ul style="list-style-type: none"> <li>▸ Assess estimation uncertainty for significant classes of securities in JEA's portfolio</li> <li>▸ Confirm investments with custodial institutions and managers</li> <li>▸ Test valuation for selected securities using alternative pricing sources</li> <li>▸ Test selected transactions</li> <li>▸ Evaluate GASB 40 risk disclosures</li> <li>▸ Evaluate GASB 72 fair market value disclosures</li> </ul>

## Areas of audit emphasis

Area of emphasis	Summary of planned audit procedures
<b>Capital assets</b>	
<p>Property and equipment is carried at historical cost. Depreciation is determined using the straight-line method over the estimated useful lives of the related assets ranging from 5 to 50 years.</p>	<ul style="list-style-type: none"> <li>▸ Review expenses to determine expenses should be capitalized versus expensed</li> <li>▸ Test selection of assets added during fiscal year</li> <li>▸ Review depreciation for reasonableness</li> </ul>
<b>Asset impairments</b>	
<p>JEA assesses recoverability of long-lived assets as indicators of impairment become known, as required by GASB Statement No. 42. If an indicator or change in circumstance affecting the value of the asset has occurred, JEA would evaluate the need for an impairment charge by determining whether the carrying value is recoverable based on expected future cash flows of the asset. The assets are reduced to reflect their fair value if they are determined to be unrecoverable.</p>	<ul style="list-style-type: none"> <li>▸ Review and evaluate impairment indicators through inquiries and review of other records and meeting minutes</li> <li>▸ Discuss and understand management's assessment if a change in circumstance potentially effects the value of an asset</li> <li>▸ If applicable, test impairment computations and disclosures</li> </ul>
<b>Plant Vogtle</b>	
<p>Management will continue to monitor the developments of the nuclear power plant construction at Plant Vogtle to evaluate the possible impact on JEA's financial statements including any possible contingent liabilities and required disclosures.</p>	<ul style="list-style-type: none"> <li>▸ As part of our procedures we will continue to inquire of management, and evaluate the possible impact on JEA's financial statements including possible contingent liabilities and required disclosures</li> </ul>





# Appendix B

2018 EY Services

# 2018 EY services

## Services and deliverables

### Audit and audit-related services

- Express an opinion on, and report to the Finance and Audit Committee, the results of our audit of:
  - The financial statements of JEA - the audit will meet the requirements of Florida Statutes and Rules of the Auditor General of the State of Florida and will be conducted in accordance with auditing standards related to financial statement audits as set forth in the US Government Accountability Offices Government Auditing Standards.
- JEA's Electric System, Water and Sewer System, Bulk Power Supply, and St. John's River Power Park System schedules of debt service coverage
- Other reports:
  - Issue a report on internal control over financial reporting compliance with certain provisions of laws, regulations, contracts, and grants and other matters.
  - Issue a report on compliance with requirements applicable to each major federal awards program and internal control over compliance in accordance with the Uniform Guidance
  - Issue a management letter including recommendations for improvements of internal controls and other opportunities based on observations made during the course of the audit
  - Report on other matters as required by Chapter 10.550, Rules of the Auditor General, which govern the conduct of local government entity audits in Florida

### Other services

- Prepare a schedule of findings and questioned costs pursuant to the Uniform Guidance
- Issue reports on compliance with debt covenants as required by JEA credit agreements
- Issue a summary results report to the Audit Committee
- Provide comfort and consent letters for bond offerings, if applicable
- Provide agreed upon procedures reports related to FDEP, if applicable
- Uniform Guidance grant compliance audit (FEMA)





# Appendix C

Required communications with audit committees

## Summary of required communications

Provided below is a summary of required communications between the audit team and those charged with governance.

Services and deliverables	Communicate when event occurs	Communicate on a timely basis, at least annually
Overview of the planned scope and timing of the audit		X
Auditor's responsibility under generally accepted auditing standards, including discussion of the type of auditor's report we are issuing and if there are any events or conditions that cause us to conclude that there is substantial doubt about the entity's ability to continue as a going concern		X
Our views about the qualitative aspects of the entity's significant accounting practices, including:		
▸ Accounting policies		X
▸ Additional views		X
Uncorrected misstatements, related to accounts and disclosures, considered by management to be immaterial		X
Material corrected misstatements, related to accounts and disclosures		X
Significant deficiencies and material weaknesses in internal control	X	X
Our responsibility, any procedures performed and the results relating to other information in documents containing audited financial statements		X
Fraud and non-compliance with laws and regulations (illegal acts)	X	
Independence matters		X
Representations we are requesting from management		X
Changes to the terms of the audit with no reasonable justification for the change	X	
Significant findings and issues arising during the audit relating to related parties	X	
Significant findings or issues, if any, arising from the audit that were discussed, or the subject of correspondence, with management	X	
Significant difficulties encountered during the audit	X	
Disagreements with management	X	
Management's consultations with other accountants	X	
Findings regarding external confirmations	X	
AICPA ethics ruling regarding third-party service providers		X
Other findings or issues regarding the oversight of the financial reporting process	X	

**About EY**

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

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**About EY's Assurance Services**

Our assurance services help our clients meet their reporting requirements by providing an objective and independent examination of the financial statements that are provided to investors and other stakeholders. Throughout the audit process, our teams provide a timely and constructive challenge to management on accounting and reporting matters and a robust and clear perspective to audit committees charged with oversight.

The quality of our audits starts with our 60,000 assurance professionals, who have the breadth of experience and ongoing professional development that comes from auditing many of the world's leading companies.

For every client, we assemble the right multidisciplinary team with the sector knowledge and subject matter knowledge to address your specific issues. All teams use our Global Audit Methodology and latest audit tools to deliver consistent audits worldwide.



## VIII. A. 7.

### Electric System and Water and Sewer System Reserve Fund Quarterly Report



July 24, 2018

**SUBJECT:** ELECTRIC SYSTEM AND WATER AND SEWER SYSTEM RESERVE FUND  
QUARTERLY REPORT

**Purpose:** ☒ Information Only ☐ Action Required ☐ Advice/Direction

**Issue:** Electric System and Water and Sewer System Reserve Fund Quarterly Report as of June 30, 2018. This report is provided for transparency into JEA's reserve fund accounts and various cash balances.

**Significance:** High. JEA's liquidity position is an important balance between operating security and flexibility, financial metrics, and carrying cost of cash.

**Effect:** JEA operational needs, bond resolution requirements, and credit ratings.

**Cost or Benefit:** JEA's reserves are an important component of operating security and flexibility, a critical credit ratings factor.

**Recommended Board action:** No action required; provided for information only.

**For additional information, contact:** Joe Orfano, Treasurer, 665-4541

Submitted by: AFZ/RFW/JEO/BHG



#### Commitments to Action

- 1 Earn Customer Loyalty
- 2 Deliver Business Excellence
- 3 Develop an Unbeatable Team





**INTER-OFFICE MEMORANDUM**

July 24, 2018

**SUBJECT:** **ELECTRIC SYSTEM AND WATER AND SEWER SYSTEM RESERVE  
FUND QUARTERLY REPORT**

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**FROM:** Aaron F. Zahn, Interim Managing Director/CEO

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**TO:** JEA Finance and Audit Committee

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Kelly Flanagan, Chair  
Husein Cumber

**BACKGROUND:**

At the May 7, 2012 Finance and Audit Committee meeting, JEA staff presented schedules reflecting historical and projected activity in JEA's Electric System and Water and Sewer System unrestricted and restricted fund balances. Many of these reserves are required under the respective System's bond resolutions or under Board approved policies such as Pricing Policy or Debt Management Policy. JEA staff also stated that these schedules would be provided to the JEA Board on a quarterly basis beginning in August 2012.

**DISCUSSION:**

Attached are the reserve fund schedules referenced above for the period ending June 30, 2018.

**RECOMMENDATION:**

No action required; provided for information only.

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Aaron F. Zahn, Interim Managing Director/CEO

AFZ/RFW/JEO/BHG

**Electric System and Water & Sewer System Reserve and Fund Balances (1)**

For the Year Ending September 30  
(In Thousands of Dollars)

	<u>Fiscal Year</u> <u>FY 2015</u>	<u>Fiscal Year</u> <u>FY 2016</u>	<u>Fiscal Year</u> <u>FY 2017</u>	<u>Forecast</u> <u>Fiscal Year</u> <u>FY 2018</u>	<u>Detail</u> <u>Page #</u>
<b><u>Electric System</u></b>					
<b>Unrestricted</b>					
Operations/Revenue Fund	\$ 46,624	\$ 56,665	\$ 54,800	\$ 56,274	
Debt Management Strategy Reserve	-	-	-	-	
Self Insurance Reserve Fund					
• Property	10,000	10,000	10,000	10,000	3
• Employee health insurance	10,937	11,179	9,214	10,998	4
Rate Stabilization					
• Fuel	150,742	180,115	131,716	65,911	5
• DSM/conservation	2,886	3,515	3,695	4,040	6
• Environmental	23,430	29,975	36,417	42,742	7
• Debt Management	42,126	42,126	29,884	29,884	8
• Non-Fuel Purchased Power	38,000	34,400	25,189	53,544	9
Environmental	18,662	18,556	17,672	17,647	10
Customer Deposits	42,389	41,084	42,105	44,079	11
<b>Total Unrestricted</b>	<b>385,796</b>	<b>427,615</b>	<b>360,692</b>	<b>335,119</b>	
<b>Days of Cash on Hand (2)</b>	<b>225</b>	<b>270</b>	<b>234</b>	<b>221</b>	
<b>Restricted</b>					
Debt Service Funds (Sinking Funds)	134,927	136,232	167,087	159,605	12
Debt Service Reserve Funds	64,595	60,582	60,582	60,582	13
Renewal and Replacement Funds/OCO (3)	145,711	192,179	201,368	197,848	14
Construction Funds	-	-	-	51	15
<b>Total Restricted</b>	<b>345,233</b>	<b>388,993</b>	<b>429,037</b>	<b>418,086</b>	
<b>Total Electric System</b>	<b>\$ 731,029</b>	<b>\$ 816,608</b>	<b>\$ 789,729</b>	<b>\$ 753,205</b>	
<b><u>Water and Sewer System</u></b>					
<b>Unrestricted</b>					
Operations/Revenue Fund	\$ 22,588	\$ 42,948	\$ 69,232	\$ 48,831	
Rate Stabilization					
• Debt Management	20,290	20,290	14,209	14,209	16
• Environmental		1,699	5,214	11,019	17
Customer Deposit	13,255	13,910	15,086	15,446	18
<b>Total Unrestricted</b>	<b>56,133</b>	<b>78,847</b>	<b>103,741</b>	<b>89,505</b>	
<b>Days of Cash on Hand (2)</b>	<b>466</b>	<b>528</b>	<b>496</b>	<b>488</b>	
<b>Restricted</b>					
Debt Service Funds (Sinking Funds)	67,720	65,410	82,208	81,381	19
Debt Service Reserve Funds	108,849	108,086	107,488	69,850	20
Renewal and Replacement Funds					
• R&R/OCO (4)	76,020	76,020	54,699	85,595	21
• Capacity Fees/State Revolving Loans	90,912	103,411	95,620	64,553	22
• Environmental	19,245	2,659	1,839	2,276	23
Construction Funds	664	152	15	-	24
<b>Total Restricted</b>	<b>363,410</b>	<b>355,738</b>	<b>341,869</b>	<b>303,655</b>	
<b>Total Water &amp; Sewer System</b>	<b>\$ 419,543</b>	<b>\$ 434,585</b>	<b>\$ 445,610</b>	<b>\$ 393,160</b>	

(1) This report does not include Scherer, SJRPP, DES or funds held on behalf of the City of Jacksonville.

(2) Days of Cash on Hand includes R&R Fund in the cash balances, and includes the Contribution to the City of Jacksonville General Fund with the Operating Expenses net of Depreciation.

(3) Balance includes \$47,000 of Electric System Renewal and Replacement Reserve for MADS calculation.

(4) Balance includes \$20,000 of Water & Sewer System Renewal and Replacement Reserve for MADS calculation.

**Funds Established Per the Bond Resolutions**

<b>Fund/Account Description</b>	<b>Electric System</b>	<b>Water and Sewer System</b>
Revenue Fund	Net Revenues (i.e. Revenues minus Cost of Operation and Maintenance), pledged to bondholders, balance available for any lawful purpose after other required payments under the bond resolution have been made.	Pledged to bondholders; balance available for any lawful purpose after other required payments under the bond resolution have been made, however, revenues representing impact fees may only be used to finance costs of expanding the system or on the debt service on bonds issued for such expansion purposes.
Rate Stabilization Fund	Not pledged to bondholders; available for any lawful purpose.	Pledged to bondholders; able to transfer to any other fund or account established under the resolution or use to redeem Bonds.
Subordinated Rate Stabilization Fund	Pledged to bondholders; available for any lawful purpose.	Pledged to bondholders; available for any lawful purpose.
Debt Service Account	Pledged to bondholders; used to pay debt service on bonds.	Pledged to bondholders; used to pay debt service on bonds.
Debt Service Reserve Account	Pledged to bondholders; used to pay debt service on bonds in the event revenues were insufficient to make such payments.	Pledged to bondholders; used to pay debt service on bonds in the event revenues were insufficient to make such payments.
Renewal and Replacement Fund	Not pledged to bondholders but required amounts deposited into this Fund pursuant to the bond resolution are limited as to what they can be spent on (e.g. capital expenditures and, bond redemptions) .	Pledged to bondholders; but required amounts deposited into this Fund pursuant to the bond resolution are limited as to what they can be spent on (e.g. capital expenditures and, bond redemptions).
Construction Fund	Pledged to bondholders; applied to the payment of costs of the system.	Pledged to bondholders; applied to the payment of costs of the system.
Subordinated Construction Fund	Pledged to bondholders; applied to the payment of costs of the system	Pledged to bondholders; applied to the payment of costs of the system
Construction Fund - Construction Reserve Account	Pledged to bondholders; applied to fund downgraded reserve fund sureties.	Pledged to bondholders; applied to fund downgraded debt service reserve fund sureties.
General Reserve Fund	Not pledged to bondholders; available for any lawful purpose.	n/a

Regardless of whether the Funds/Accounts are designated as pledged, in the event that monies in the Debt Service Account are insufficient to pay debt service on the bonds, pursuant to the respective bond resolutions, amounts in the various Funds/Accounts are required to be transferred to the respective Debt Service Accounts and used to pay debt service.

(F&A)

## Electric System Debt Management Reserve

VIII. A. 7.  
08/21/2018

For the Fiscal Quarter Ending June 30, 2018

Reserve/Fund Authorization: Debt Management Policy

Metric: One-half percent of the par amount of outstanding variable debt (adjusted for variable to fixed rate long term swaps). Capped at 3% of the par amount of outstanding variable debt

Definitions and Goals: For the period FY 04 through FY 09, an annual budgeted reserve contribution for variable rate debt was made. The calculation was based upon one half percent of the par amount of outstanding variable rate debt (adjusted for variable rate to fixed rate long term swaps). The budget reserve was capped at three percent of the par amount of the outstanding variable rate debt. The reserve can be used for any lawful purpose including debt service, debt repayment, and capital outlay and must be approved in writing by the CEO.

	Actual as of 06/30/2018		Full Year			Projection		
	Current Quarter	Year -to-Date	2018 Forecast	2018 Budget	Prior Year Actual	2019	2020	2021
(In Thousands)								
Opening Balance	\$ -	\$ -	\$ -	N/A	\$ -	\$ -	\$ -	\$ -
Additions:								
Contributions				N/A	-			
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Withdrawals			-	N/A	-			
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ending Balance	\$ -	\$ -	\$ -	N/A	\$ -	\$ -	\$ -	\$ -

	Historical					Statistical			
	2013	2014	2015	2016	2017	Low	Median	Mean	High
Opening Balance	\$ 12,257	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,451	\$ 12,257
Additions:									
Contributions	-	-	-	-	-	-	-	-	-
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	-	-	-	-
Withdrawals	12,257					12,257	12,257	12,257	12,257
Sub-total	\$ 12,257	\$ -	\$ -	\$ -	\$ -	-	-	-	-
Ending balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

### Observations:

- This reserve fund discontinued contributions in FY 2009 due to adoption of new policy. Reserve activity reflected in RSF - Debt Management for that year.
- A portion of this reserve was used to pay on interest rate swap terminations in connection with a refunding of variable rate debt in February 2013, and the remainder was used in Sept 2013 for a defeasance.

## Electric System Self Insurance - Property

For the Fiscal Quarter Ending June 30, 2018

Reserve/Fund Authorization: Budget Appropriation

Metric: Budgeted Deposit = \$10 million

Definitions and Goals: JEA's self-insurance fund is for catastrophic damage to JEA's electric lines (transmission and distribution) caused by the perils of hurricanes, tornadoes, and ice storms. This fund was established in October, 1992, as an alternative to JEA's procurement of commercial property insurance.

(In Thousands)	Actual as of 06/30/2018		Full Year			Projection		
	Current Quarter	Year -to-Date	2018 Forecast	2018 Budget	Prior Year Actual	2019	2020	2021
Opening Balance	\$ 10,000	\$ 10,000	\$ 10,000	N/A	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Additions:								
Reserve Contribution				N/A	-			
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Deductions:								
Reserve Withdrawal				N/A				
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ending Balance	\$ 10,000	\$ 10,000	\$ 10,000	N/A	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000

	Historical					Statistical			
	2013	2014	2015	2016	2017	Low	Median	Mean	High
Opening Balance	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Additions:									
Reserve Contribution						-	-	-	-
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	-	-	-	-
Deductions:									
Reserve Withdrawal						-	-	-	-
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	-	-	-	-
Ending balance	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000

## Electric System Self Insurance - Employee Health Insurance

**For the Fiscal Quarter Ending June 30, 2018**

Reserve/Fund Authorization: Florida Statute for self insured government plans

Metric: An actuary calculates amount annually

Definitions and Goals: This reserve fund is a requirement under Florida Statute 112.08 that requires self insured government plans to have enough money in a reserve fund to cover the Incurred But Not Reimbursed (IBNR) claims and a 60 day surplus of claims. The IBNR claims are claims that would still need to be paid if the company went back to a fully insured plan or dropped coverage all together. An actuary calculates this amount annually.

	Actual as of 06/30/2018		Full Year			Projection		
	Current Quarter	Year -to-Date	2018 Forecast	2018 Budget	Prior Year Actual	2019	2020	2021
<i>(In Thousands)</i>								
Opening Balance	\$ 10,838	\$ 9,214	\$ 9,214	N/A	\$ 11,179	\$ 9,214	\$ 9,214	\$ 9,214
Additions:								
Employee Contributions	1,544	4,627	5,861	N/A	5,862	6,154	6,462	6,785
Retiree & Other Contributions	1,973	5,284	6,693		6,443	7,095	7,520	7,971
Employer Contributions	4,548	13,826	19,356		19,004	21,051	22,918	24,944
Sub-total	\$ 8,065	\$ 23,737	\$ 31,910	\$ -	\$ 31,309	\$ 34,300	\$ 36,900	\$ 39,700
Deductions:								
Payments for Claims	7,543	20,647	30,169	N/A	30,994	32,506	35,053	37,798
Actuary & Other Payments	362	1,306	1,741		2,280	1,794	1,847	1,902
Sub-total	\$ 7,905	\$ 21,953	\$ 31,910	\$ -	\$ 33,274	\$ 34,300	\$ 36,900	\$ 39,700
Ending Balance	\$ 10,998	\$ 10,998	\$ 9,214	N/A	\$ 9,214	\$ 9,214	\$ 9,214	\$ 9,214

	Historical					Statistical			
	2013	2014	2015	2016	2017	Low	Median	Mean	High
<i>(In Thousands)</i>									
Opening Balance	\$ 15,440	\$ 15,914	\$ 10,749	\$ 10,937	\$ 11,179	\$ 10,749	\$ 11,179	\$ 12,844	\$ 15,914
Additions:									
Employee Contributions	5,893	4,573	5,447	5,460	5,862	4,573	5,460	5,447	5,893
Retiree & Other Contributions	5,701	5,188	5,141	5,694	6,443	5,141	5,694	5,633	6,443
Employer Contributions	20,629	14,252	22,220	24,231	19,004	14,252	20,629	20,067	24,231
Sub-total	\$ 32,223	\$ 24,013	\$ 32,808	\$ 35,385	\$ 31,309				
Deductions:									
Payments for Claims	29,354	27,157	30,408	32,946	30,994	27,157	30,408	30,172	32,946
Actuary & Other Payments	2,395	2,021	2,212	2,197	2,280	2,021	2,212	2,221	2,395
Sub-total	\$ 31,749	\$ 29,178	\$ 32,620	\$ 35,143	\$ 33,274				
Ending balance	\$ 15,914	\$ 10,749	\$ 10,937	\$ 11,179	\$ 9,214	\$ 9,214	\$ 10,937	\$ 11,599	\$ 15,914

**Observations:**

- Self Insurance for Employee Health Insurance began in July 2009.
  - Projections are using the 8% rate of increase based on information obtained from the Actuarial Memorandum and Report.
- Calendar year data is presented above in fiscal year format.

## Electric System Rate Stabilization - Fuel Management

**For the Fiscal Quarter Ending June 30, 2018**

Reserve/Fund Authorization: Bond Resolution and Pricing Policy

Metric: Targeted 15% of total annual projected energy costs

Definitions and Goals: The Electric System Bond Resolution authorizes the establishment of a Rate Stabilization Fund in which contributions or withdrawals shall be made as set forth in the current annual budget or an amount otherwise determined by an authorized officer of JEA. The Rate Stabilization Fund provides a means to minimize the year-to-year impact to customer charges and support financial metrics by providing consistent revenue collection for expenditures impacted by external factors such as fuel, debt management and regulatory requirements or initiatives. Established pursuant to the section VII and Section IX of the Pricing Policy, the Fuel Reserve target is 15% of the greater of (a) the maximum 12-month historical fuel cost or (b) the projected 12-month fuel cost. Withdrawals from the Rate Stabilization Fund for fuel stabilization are limited to the following purposes: (a) to reduce the variable fuel rate charge to the customers for a determined period of time; (b) to reduce the excess of the actual fuel and purchased power expense for the fiscal year over the variable fuel rate revenues; (c) to be rebated back to the customers as a credit against the electric bill; and/or (d) to reimburse the costs associated with any energy risk management activities.

	Actual as of 06/30/2018		Full Year			Projection		
	Current Quarter	Year -to-Date	2018 Forecast	2018 Budget	Prior Year Actual	2019	2020	2021
(In Thousands)								
Opening Balance	\$ 82,761	\$ 131,716	\$ 131,716	N/A	\$ 180,115	\$ 65,911	\$ 51,992	\$ 68,884
Additions:								
Contributions			-		2,845		16,893	18,297
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ 2,845	\$ -	\$ 16,893	\$ 18,297
Withdrawals	7,705	56,660	65,805	32,800	51,244	13,919		
Customer Fuel Rebate Credit				-	-			
Sub-total	\$ 7,705	\$ 56,660	\$ 65,805	\$ 32,800	\$ 51,244	\$ 13,919	\$ -	\$ -
Ending Balance	\$ 75,056	\$ 75,056	\$ 65,911	N/A	\$ 131,716	\$ 51,992	\$ 68,884	\$ 87,181

	Historical					Statistical			
	2013	2014	2015	2016	2017	Low	Median	Mean	High
Opening Balance	\$ 92,362	\$ 108,289	\$ 105,457	\$ 150,742	\$ 180,115	\$ 92,362	\$ 108,289	\$ 127,393	\$ 180,115
Additions:									
Contributions	52,523	22,496	95,224	85,979	2,845	2,845	52,523	51,813	95,224
Sub-total	\$ 52,523	\$ 22,496	\$ 95,224	\$ 85,979	\$ 2,845	-	-	-	-
Deductions:									
Withdrawals					51,244	51,244	51,244	51,244	51,244
Fuel Rebate Credit	36,596	25,328	49,939	56,606		25,328	43,268	42,117	56,606
Sub-total	\$ 36,596	\$ 25,328	\$ 49,939	\$ 56,606	\$ 51,244	-	-	-	-
Ending balance	\$ 108,289	\$ 105,457	\$ 150,742	\$ 180,115	\$ 131,716	\$ 105,457	\$ 131,716	\$ 135,264	\$ 180,115

Observations:

- Actual and historical numbers reflect fuel recovery contributions and withdrawals on a gross basis. Forecast and projected numbers reflected on a net basis. The fuel recovery charge ended 12/31/11.



## Electric System Rate Stabilization - Demand Side Management (DSM)

**For the Fiscal Quarter Ending June 30, 2018**

Reserve/Fund Authorization: Bond Resolution and Pricing Policy

Metric: \$0.50 per 1,000 kWh plus \$0.01 per kWh residential conservation charge for consumption greater than 2,750 kWh monthly

Definitions and Goals: The Electric System Bond Resolution authorizes the establishment of a Rate Stabilization Fund in which contributions or withdrawals shall be made as set forth in the current annual budget or an amount otherwise determined by an authorized officer of JEA. The Rate Stabilization Fund provides a means to minimize the year-to-year impact to customer charges and support financial metrics by providing consistent revenue collection for expenditures impacted by external factors such as fuel, debt management and regulatory requirements or initiatives. Pursuant to section VII of the Pricing Policy, \$0.50 per 1,000 kWh plus \$0.01 per kWh residential conservation charge for consumption greater than 2,750 kWh monthly. These revenue sources are to fund demand side management and conservation programs.

	Actual as of 06/30/2018		Full Year			Projection		
	Current Quarter	Year -to-Date	2018 Forecast	2018 Budget	Prior Year Actual	2019	2020	2021
<i>(In Thousands)</i>								
Opening Balance	\$ 4,158	\$ 3,695	\$ 3,695	N/A	\$ 3,515	\$ 4,040	\$ 4,266	\$ 4,492
Additions:								
Contributions	1,646	4,941	7,019	7,515	6,685	6,855	6,855	6,855
Other								
Sub-total	\$ 1,646	\$ 4,941	\$ 7,019	\$ 7,515	\$ 6,685	\$ 6,855	\$ 6,855	\$ 6,855
Withdrawals	1,887	4,719	6,674	8,126	6,505	6,629	6,629	6,629
Sub-total	\$ 1,887	\$ 4,719	\$ 6,674	\$ 8,126	\$ 6,505	\$ 6,629	\$ 6,629	\$ 6,629
Ending Balance	\$ 3,917	\$ 3,917	\$ 4,040	N/A	\$ 3,695	\$ 4,266	\$ 4,492	\$ 4,718

	Historical					Statistical			
	2013	2014	2015	2016	2017	Low	Median	Mean	High
Opening Balance	\$ 6,912	\$ 3,891	\$ 3,570	\$ 2,886	\$ 3,515	\$ 2,886	\$ 3,570	\$ 4,155	\$ 6,912
Additions:									
Contributions	6,683	6,929	7,059	7,232	6,685	6,683	6,929	6,918	7,232
Transfer from Rev Fd						-	-	-	-
Sub-total	\$ 6,683	\$ 6,929	\$ 7,059	\$ 7,232	\$ 6,685	-	-	-	-
Deductions:									
Withdrawals	9,704	7,250	7,743	6,603	6,505	6,505	7,250	7,561	9,704
Sub-total	\$ 9,704	\$ 7,250	\$ 7,743	\$ 6,603	\$ 6,505	-	-	-	-
Ending balance	\$ 3,891	\$ 3,570	\$ 2,886	\$ 3,515	\$ 3,695	\$ 2,886	\$ 3,570	\$ 3,511	\$ 3,891

Observations:

- Rate Stabilization Fund for Demand Side Management began in April 2009.

## Electric System Rate Stabilization - Environmental

**For the Fiscal Quarter Ending June 30, 2018**

Reserve/Fund Authorization: Bond Resolution and Pricing Policy

Metric: \$0.62 per 1,000 kWh

Definitions and Goals: The Electric System Bond Resolution authorizes the establishment of a Rate Stabilization Fund in which contributions or withdrawals shall be made as set forth in the current annual budget or an amount otherwise determined by an authorized officer of JEA. The Rate Stabilization Fund provides a means to minimize the year-to-year impact to customer charges and support financial metrics by providing consistent revenue collection for expenditures impacted by external factors such as fuel, debt management and regulatory requirements or initiatives. Deposits to this fund began in fiscal year 2010 for amounts representing the Electric System Environmental Charge (\$0.62 per 1000 kWh). Withdrawals from this reserve will represent payments for regulatory initiatives such as the premium cost of renewable energy generation which is considered available for JEA's capacity plans.

	Actual as of 06/30/2018		Full Year			Projection		
	Current Quarter	Year -to-Date	2018 Forecast	2018 Budget	Prior Year Actual	2019	2020	2021
<i>(In Thousands)</i>								
Opening Balance	\$ 39,672	\$ 36,417	\$ 36,417	N/A	\$ 29,975	\$ 42,742	\$ 48,846	\$ 53,726
Additions:								
Contributions	1,855	5,359	7,542	7,942	7,384	8,040	7,320	7,320
Sub-total	\$ 1,855	\$ 5,359	\$ 7,542	\$ 7,942	\$ 7,384	\$ 8,040	\$ 7,320	\$ 7,320
Withdrawals	456	705	1,217	2,051	942	1,936	2,440	3,660
Sub-total	\$ 456	\$ 705	\$ 1,217	\$ 2,051	\$ 942	\$ 1,936	\$ 2,440	\$ 3,660
Ending Balance	\$ 41,071	\$ 41,071	\$ 42,742	N/A	\$ 36,417	\$ 48,846	\$ 53,726	\$ 57,386

	Historical					Statistical			
	2013	2014	2015	2016	2017	Low	Median	Mean	High
Opening Balance	\$ 5,343	\$ 10,023	\$ 16,639	\$ 23,430	\$ 29,975	\$ 5,343	\$ 16,639	\$ 17,082	\$ 29,975
Additions:									
Contributions	5,650	7,395	7,586	7,700	7,384	5,650	7,395	7,143	7,700
Sub-total	\$ 5,650	\$ 7,395	\$ 7,586	\$ 7,700	\$ 7,384	-	-	-	-
Deductions:									
Withdrawals	970	779	795	1,155	942	779	942	928	1,155
Sub-total	\$ 970	\$ 779	\$ 795	\$ 1,155	\$ 942	-	-	-	-
Ending balance	\$ 10,023	\$ 16,639	\$ 23,430	\$ 29,975	\$ 36,417	\$ 10,023	\$ 23,430	\$ 23,297	\$ 36,417

Observations:

- Rate Stabilization Fund for Environmental began in June 2010.

## Electric System Rate Stabilization - Debt Management

**For the Fiscal Quarter Ending June 30, 2018**

Reserve/Fund Authorization: Bond Resolution and Pricing Policy

Metric: Difference in actual interest rates for interest expense on the unhedged variable rate debt as compared to the budgeted assumptions for interest expense on unhedged variable rate debt

Definitions and Goals: The Electric System Bond Resolution authorizes the establishment of a Rate Stabilization Fund in which deposits or withdrawals shall be made as set forth in the current annual budget or an amount otherwise determined by an authorized officer of JEA. The Rate Stabilization Funds provide a means to minimize the year-to-year impact to customer charges and support financial metrics by providing consistent revenue collection for expenditures impacted by external factors such as fuel, debt management and regulatory requirements or initiatives. Deposits are made to this Rate Stabilization Fund for the purpose of managing JEA's debt portfolio. Deposits to this reserve reflect the difference in the actual interest rates for interest expense on the unhedged variable rate debt as compared to the budgeted assumptions for interest expense on the unhedged variable rate debt. Additionally, deposits can be made from excess debt service budget over the actual debt service expense for any fiscal year. However, the total amounts deposited (in addition to actual debt service costs for the fiscal year) cannot exceed the total amount of the budgeted debt service for any fiscal year. At a minimum, 50% of the calculated reserve contribution, if any, will be recorded and deposited each fiscal year. Debt and Investment Committee will review and record at their option an additional contribution amount, up to the full value of the calculated reserve contribution (the remaining 50%). The reserve contributions will be calculated on a system by system basis; however, based on the calculation, any mandatory deposit will exclude the District Energy System. The reserve contributions shall cease in the event the reserve balance exceeds the cap of five percent of the par amount of the total outstanding variable rate debt of all systems. Withdrawals from the Rate 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, or to fund variable interest costs in excess of budget.

	Actual as of 06/30/2018		Full Year			Projection		
	Current Quarter	Year -to-Date	2018 Forecast	2018 Budget	Prior Year Actual	2019	2020	2021
(In Thousands)								
Opening Balance	\$ 29,884	\$ 29,884	\$ 29,884	N/A	\$ 42,126	\$ 29,884	\$ 29,884	\$ 29,884
Additions:								
Contributions				N/A	-			
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Withdrawals					12,242			
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ 12,242	\$ -	\$ -	\$ -
Ending Balance	\$ 29,884	\$ 29,884	\$ 29,884	N/A	\$ 29,884	\$ 29,884	\$ 29,884	\$ 29,884

	Historical					Statistical			
	2013	2014	2015	2016	2017	Low	Median	Mean	High
Opening Balance	\$ 41,611	\$ 42,126	\$ 42,126	\$ 42,126	\$ 42,126	\$ 41,611	\$ 42,126	\$ 42,023	\$ 42,126
Additions:									
Contributions	6,581					6,581	6,581	6,581	6,581
Sub-total	\$ 6,581	\$ -	\$ -	\$ -	\$ -	-	-	-	-
Deductions:									
Withdrawals	6,066				12,242	6,066	9,154	9,154	12,242
Sub-total	\$ 6,066	\$ -	\$ -	\$ -	\$ 12,242	-	-	-	-
Ending balance	\$ 42,126	\$ 42,126	\$ 42,126	\$ 42,126	\$ 29,884	\$ 29,884	\$ 42,126	\$ 39,678	\$ 42,126

Observations:

- Rate Stabilization Fund for Debt Management began in May 2009.

## Electric System Rate Stabilization - Non-Fuel Purchased Power

**For the Fiscal Quarter Ending June 30, 2018**

Reserve/Fund Authorization: Bond Resolution and Pricing Policy

Metric: Difference in actual interest rates for interest expense on the unhedged variable rate debt as compared to the budgeted assumptions for interest expense on unhedged variable rate debt

Definitions and Goals: The Electric System Bond Resolution authorizes the establishment of a Rate Stabilization Fund in which deposits or withdrawals shall be made as set forth in the current annual budget or an amount otherwise determined by an authorized officer of JEA. The Rate Stabilization Funds provide a means to minimize the year-to-year impact to customer charges and support financial metrics by providing consistent revenue collection for expenditures impacted by external factors such as fuel, debt management and regulatory requirements or initiatives. Deposits to the Rate Stabilization Fund for Non-Fuel Purchased Power Stabilization during the fiscal year are made with the approval of the CEO or CFO, provided such deposits are not in excess of JEA's total operating budget for the current fiscal year. Withdrawals from the Rate Stabilization Fund for Non-Fuel Purchased Power are to reimburse the costs associated with any non-fuel purchased power activities. Withdrawals can be made as necessary during the fiscal year and requires the approval of the CEO or the CFO.

	Actual as of 06/30/2018		Full Year			Projection		
	Current Quarter	Year -to-Date	2018 Forecast	2018 Budget	Prior Year Actual	2019	2020	2021
<i>(In Thousands)</i>								
Opening Balance	\$ 19,459	\$ 25,189	\$ 25,189	N/A	\$ 34,400	\$ 53,544	\$ 56,847	\$ 36,847
Additions:								
Contributions			40,000	-	-	17,630		
Sub-total	\$ -	\$ -	\$ 40,000	\$ -	\$ -	\$ 17,630	\$ -	\$ -
Withdrawals	2,979	8,709	11,645	11,745	9,211	14,327	20,000	24,194
Sub-total	\$ 2,979	\$ 8,709	\$ 11,645	\$ 11,745	\$ 9,211	\$ 14,327	\$ 20,000	\$ 24,194
Ending Balance	\$ 16,480	\$ 16,480	\$ 53,544	N/A	\$ 25,189	\$ 56,847	\$ 36,847	\$ 12,653

	Historical					Statistical			
	2013	2014	2015	2016	2017	Low	Median	Mean	High
Opening Balance	\$ -	\$ -	\$ 12,000	\$ 38,000	\$ 34,400	\$ -	\$ 12,000	\$ 16,880	\$ 38,000
Additions:									
Contributions		12,000	26,000			12,000	19,000	19,000	26,000
Sub-total	\$ -	\$ 12,000	\$ 26,000	\$ -	\$ -	-	-	-	-
Deductions:									
Withdrawals				3,600	9,211	3,600	6,406	6,406	9,211
Sub-total	\$ -	\$ -	\$ -	\$ 3,600	\$ 9,211	-	-	-	-
Ending balance	\$ -	\$ 12,000	\$ 38,000	\$ 34,400	\$ 25,189	\$ -	\$ 25,189	\$ 21,918	\$ 38,000

Observations:

- The Non-Fuel Purchased Power Rate Stabilization Fund began in FY 2014.

## Electric System Environmental Reserve

**For the Fiscal Quarter Ending June 30, 2018**

Reserve/Fund Authorization: Pricing Policy

Metric: Target equals the balance in the environmental liability account

Definitions and Goals: This reserve represents the initial amounts collected from the Electric System Environmental Charge and will be deposited until the balance in this reserve equals the balance in the environmental liability account. Withdrawals from this account will represent payments for these liabilities.

	Actual as of 06/30/2018		Full Year			Projection		
	Current Quarter	Year -to-Date	2018 Forecast	2018 Budget	Prior Year Actual	2019	2020	2021
<i>(In Thousands)</i>								
Opening Balance	\$ 17,647	\$ 17,672	\$ 17,672	N/A	\$ 18,556	\$ 17,647	\$ 17,647	\$ 17,647
Additions:								
Contributions			-	N/A	-			
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Withdrawals		25	25	N/A	884			
Sub-total	\$ -	\$ 25	\$ 25	\$ -	\$ 884	\$ -	\$ -	\$ -
Ending Balance	\$ 17,647	\$ 17,647	\$ 17,647	N/A	\$ 17,672	\$ 17,647	\$ 17,647	\$ 17,647

	Historical					Statistical			
	2013	2014	2015	2016	2017	Low	Median	Mean	High
Opening Balance	\$ 18,359	\$ 18,662	\$ 18,662	\$ 18,662	\$ 18,556	\$ 18,359	\$ 18,662	\$ 18,580	\$ 18,662
Additions:									
Contributions	970					970	970	970	970
						-	-	-	-
						-	-	-	-
Sub-total	\$ 970	\$ -	\$ -	\$ -	\$ -				
Deductions:									
Withdrawals	667			106	884	106	667	552	884
						-	-	-	-
						-	-	-	-
Sub-total	\$ 667	\$ -	\$ -	\$ 106	\$ 884				
Ending balance	\$ 18,662	\$ 18,662	\$ 18,662	\$ 18,556	\$ 17,672	\$ 17,672	\$ 18,662	\$ 18,443	\$ 18,662

Observations:

- The Environmental Reserve began in FY 2008.

## Electric System Customer Deposits

**For the Fiscal Quarter Ending June 30, 2018**

Reserve/Fund Authorization: Management Directive 302 Credit and Collections and Internal Procedure CR40400 MBC302

Metric: Internal procedure CR40400 MBC302 Credit and Collections

Definitions and Goals: Pursuant to internal procedure CR40400 MBC302 Credit and Collections, JEA accesses customers a deposit that may be used to offset any future unpaid amounts during the course of providing utility service to a customer.

	Actual as of 06/30/2018		2018 Forecast	Full Year		Projection		
	Current Quarter	Year -to-Date		2018 Budget	Prior Year Actual	2019	2020	2021
<i>(In Thousands)</i>								
Opening Balance	\$ 43,512	\$ 42,105	\$ 42,105	N/A	\$ 41,084	\$ 44,079	\$ 44,079	\$ 44,079
Additions:								
Net Customer Activity	567	1,974	1,974	N/A	1,021			
Loan Repayment to ES Revenue Fund					-			
Sub-total	\$ 567	\$ 1,974	\$ 1,974	\$ -	\$ 1,021	\$ -	\$ -	\$ -
Net Customer Activity					-			
Loan to ES Revenue Fund				N/A	-			
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ending Balance	\$ 44,079	\$ 44,079	\$ 44,079	N/A	\$ 42,105	\$ 44,079	\$ 44,079	\$ 44,079

	Historical					Statistical			
	2013	2014	2015	2016	2017	Low	Median	Mean	High
Opening Balance	\$ 43,454	\$ 44,882	\$ 42,688	\$ 42,389	\$ 41,084	\$ 41,084	\$ 42,688	\$ 42,899	\$ 44,882
Additions:									
Net Customer Activity	1,430				1,021	1,021	1,226	1,226	1,430
Loan Repayment to ES Revenue Fund						-	-	-	-
Sub-total	\$ 1,430	\$ -	\$ -	\$ -	\$ 1,021	-	-	-	-
Deductions:									
Net Customer Activity	2	2,194	299	1,305		2	802	950	2,194
Loan to ES Revenue Fund						-	-	-	-
Sub-total	\$ 2	\$ 2,194	\$ 299	\$ 1,305	\$ -				
Ending balance	\$ 44,882	\$ 42,688	\$ 42,389	\$ 41,084	\$ 42,105	\$ 41,084	\$ 42,389	\$ 42,630	\$ 44,882

Observations:

- JEA is in the process of implementing a prepaid meter program which could reduce customer deposits starting in Fiscal Year 2014.

## Electric System Debt Service Sinking Fund

**For the Fiscal Quarter Ending June 30, 2018**

Reserve/Fund Authorization: Bond Resolution

Metric: Accrued interest and principal currently payable on fixed and variable rate bonds pursuant to the Bond Resolutions

Definitions and Goals: JEA is required monthly to fund from revenues an amount equal to the aggregate of the Debt Service Requirement for senior and subordinated bonds for such month into this account. On or before such interest payment date, JEA shall pay out of this account to the paying agents the amount required for the interest and principal due on such date.

(In Thousands)	Actual as of 06/30/2018		Full Year			Projection		
	Current Quarter	Year -to-Date	2018 Forecast	2018 Budget	Prior Year Actual	2019	2020	2021
Opening Balance	\$ 93,026	\$ 167,087	\$ 167,087	N/A	\$ 136,232	\$ 159,605	\$ 150,471	\$ 92,613
Additions:								
Revenue Fund Deposits	50,644	150,820	201,292		209,450	198,989	141,056	136,439
Bond funded interest					-			
Sub-total	\$ 50,644	\$ 150,820	\$ 201,292	\$ -	\$ 209,450	\$ 198,989	\$ 141,056	\$ 136,439
Principal and Int Payments	32,338	206,575	208,774	N/A	178,595	208,123	198,914	139,464
Sub-total	\$ 32,338	\$ 206,575	\$ 208,774	\$ -	\$ 178,595	\$ 208,123	\$ 198,914	\$ 139,464
Ending Balance	\$ 111,332	\$ 111,332	\$ 159,605	N/A	\$ 167,087	\$ 150,471	\$ 92,613	\$ 89,588

	Historical					Statistical			
	2013	2014	2015	2016	2017	Low	Median	Mean	High
Opening Balance	\$ 107,754	\$ 101,305	\$ 120,458	\$ 134,927	\$ 136,232	\$ 101,305	\$ 120,458	\$ 120,135	\$ 136,232
Additions:									
Revenue Fund Deposits	159,072	167,340	181,006	177,847	209,450	159,072	177,847	178,943	209,450
Bond funded interest						-	-	-	-
Sub-total	\$ 159,072	\$ 167,340	\$ 181,006	\$ 177,847	\$ 209,450	-	-	-	-
Deductions:									
Principal and Int Payments	165,521	148,187	166,537	176,542	178,595	148,187	166,537	167,076	178,595
Sub-total	\$ 165,521	\$ 148,187	\$ 166,537	\$ 176,542	\$ 178,595	-	-	-	-
Ending balance	\$ 101,305	\$ 120,458	\$ 134,927	\$ 136,232	\$ 167,087	\$ 101,305	\$ 134,927	\$ 132,002	\$ 167,087

**Observations:**

- September 30th ending balances are used to pay the October 1st interest and principal payments.
- This report does not include any Scherer debt service sinking funds.
- Timing differences occur due to the accrual of debt service during one fiscal year and the payment in the following fiscal year (primarily fixed rate principal and interest on October 1st of the following fiscal year).



## Electric System Debt Service Reserve Account

**For the Fiscal Quarter Ending June 30, 2018**

Reserve/Fund Authorization: Bond Resolution

Metric: Maximum interest payable on outstanding senior Electric System bonds as required by the Bond Resolutions

Definitions and Goals: This reserve will be funded, maintained and held for the benefit of bondholders as specified in the Supplemental Resolution authorizing the sale of the bonds to pay principal and/or interest on the bonds should revenues from operations not be sufficient for such purpose in accordance with the appropriate bond resolution. It is JEA's current practice to fund this reserve account with cash from the sale of bonds; however, revenues may be utilized to fund this reserve if necessary.

(In Thousands)	Actual as of 06/30/2018		Full Year Budget Amounts			Projection		
	Current Quarter	Year -to-Date	2018 Forecast	2018 Budget	Prior Year Actual	<u>2019</u>	<u>2020</u>	<u>2021</u>
Opening Balance	\$ 60,582	\$ 60,582	\$ 60,582	N/A	\$ 60,582	\$ 60,582	\$ 60,582	\$ 60,582
Additions:								
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Release to Revenue Fund				N/A	-			
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ending Balance	\$ 60,582	\$ 60,582	\$ 60,582	N/A	\$ 60,582	\$ 60,582	\$ 60,582	\$ 60,582

	Historical Actuals					Statistical			
	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	Low	Median	Mean	High
Opening Balance	\$ 72,226	\$ 64,841	\$ 64,841	\$ 64,595	\$ 60,582	\$ 60,582	\$ 64,841	\$ 65,417	\$ 72,226
Additions:									
Proceeds from Bonds				-	-	-	-	-	-
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	-	-	-	-
Deductions:									
Defeasance	7,385		246	4,013		246	4,013	3,881	7,385
Sub-total	\$ 7,385	\$ -	\$ 246	\$ 4,013	\$ -	-	-	-	-
Ending balance	\$ 64,841	\$ 64,841	\$ 64,595	\$ 60,582	\$ 60,582	60,582	64,595	63,088	64,841

**Observations:**

- This report does not include any Scherer debt service reserves.
- In FY 2007, the debt service reserve requirement was satisfied 100% by the use of debt service reserve surety policies. In accordance with the bond resolution, beginning in FY 2008, cash/investments replaced the downgraded sureties due to their downgrade by the rating agencies. Sureties of \$67.6 million are still outstanding but are not eligible to be utilized as debt service reserve deposits per the Bond Resolutions.
- The debt service reserve account balance is currently in excess of the the debt service reserve requirement under the bond resolution by \$8.0 million. The excess will be used, if needed, to (1) fund an increase in the reserve requirement caused by a future issuance of new money bonds and/or variable to fixed refunding bonds, (2) help satisfy cash reserve targets instituted by the rating agencies, and/or (3) redeem bonds, in accordance with applicable tax laws.

## Electric Renewal and Replacement (R&R) / Operating Capital Outlay (OCO)

**For the Fiscal Quarter Ending June 30, 2018**

Reserve/Fund Authorization: Bond Resolution, Article 21 of the City of Jacksonville Charter and Pricing Policy

Metric: Renewal and Replacement required to deposit from the revenue fund annually 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 per JEA's Electric System bond resolutions. Operating Capital Outlay - by 2013 the goal is to fund all non-capacity capital expenditures.

Definitions and Goals: Pursuant to the Electric System bond resolution and Article 21 of the City of Jacksonville Charter, JEA is required to deposit from the revenue fund annually an amount for Renewal and Replacement of system assets. According to the bond resolutions the amount is equal to the greater of 10% of the prior year defined annual net revenues or 5% of the prior year defined gross revenues. The funds shall be used for the purposes of paying the cost of extensions, enlargements or additions to, or the replacement of capital assets of the Electric System. In addition, as a portion of the base rate, JEA will recover from current revenue a formula driven amount for capital expenditures which is referred to as Operating Capital Outlay. This amount is calculated separately from the R&R deposit and may be allocated for use between capacity or non-capacity related expenditures based on the most beneficial economic and tax related financing structure incorporating the use of internal and bond funding.

(In Thousands)	Actual as of 06/30/2018		Full Year			Projection		
	Current Quarter	Year -to-Date	2018 Forecast	2018 Budget	Prior Year Actual	2019	2020	2021
Opening Balance	\$ 190,282	\$ 201,368	\$ 201,368	N/A	\$ 192,179	\$ 197,848	\$ 47,840	\$ 29,706
Additions:								
R&R/OCO Contribution	42,402	127,205	146,957		196,589	157,181	250,490	255,286
Loans betw Capital Fds				-	-			
Other	9,194	15,873	38,418	-	5,074	13,724	2,000	2,000
Sub-total	\$ 51,596	\$ 143,078	\$ 185,375	\$ -	\$ 201,663	\$ 170,905	\$ 252,490	\$ 257,286
Deductions:								
Capital Expenditures	45,022	133,627	188,895		113,987	320,913	270,624	151,737
Transfers betw Capital Fds				-	37,200			
R&R/OCO Contribution								
Debt Defeasance				-	41,287			
Other	-	13,963						
Sub-total	\$ 45,022	\$ 147,590	\$ 188,895	\$ -	\$ 192,474	\$ 320,913	\$ 270,624	\$ 151,737
Ending Balance	\$ 196,856	\$ 196,856	\$ 197,848	N/A	\$ 201,368	\$ 47,840	\$ 29,706	\$ 135,255

	Historical					Statistical			
	2013	2014	2015	2016	2017	Low	Median	Mean	High
Opening Balance	\$ 105,235	\$ 140,486	\$ 146,910	\$ 145,711	\$ 192,179	\$ 105,235	\$ 145,711	\$ 146,104	\$ 192,179
Additions:									
R&R/OCO Contribution	124,630	85,639	110,351	200,692	196,589	85,639	124,630	143,580	200,692
Loans betw Capital Fds	-	-				-	-	-	-
Other	2,423	4,014	970	3,744	5,074	970	3,744	3,245	5,074
Sub-total	\$ 127,053	\$ 89,653	\$ 111,321	\$ 204,436	\$ 201,663				
Deductions:									
Capital Expenditures	91,802	82,889	112,483	157,201	113,987	82,889	112,483	111,672	157,201
Bond Buy Back				2		2	2	2	2
Transfer to Scherer									
Loans betw Capital Fds		340	37	765	37,200				
Other		-		-	41,287	-	-	13,762	41,287
Sub-total	\$ 91,802	\$ 83,229	\$ 112,520	\$ 157,968	\$ 192,474				
Ending balance	\$ 140,486	\$ 146,910	\$ 145,711	\$ 192,179	\$ 201,368	\$ 140,486	\$ 146,910	\$ 165,331	\$ 201,368

Observations:

- Other includes the Oracle Financing and Sale of Property.
- Includes \$47 million for Maximum Annual Debt Service calculation.

## Electric Construction / Bond Fund

**For the Fiscal Quarter Ending June 30, 2018**

Reserve/Fund Authorization: Bond Resolution

Metric: Target = Capital expenditures per year minus internal funding available

Definitions and Goals: JEA maintains a senior and subordinated construction fund of which bonds proceeds are deposited and used for the payment of the costs of additions, extensions and improvements to the Electric System. The senior construction fund is limited to the costs of additions, extension and improvements relating to non-generation capital expenditures. The subordinated construction fund is used for capital projects relating to all categories of capital expenditures but primarily targeted to fund generation capital expenditures.

(In Thousands)	Actual as of 06/30/2018		2018 Forecast	Full Year		Projection		
	Current Quarter	Year -to-Date		2018 Budget	Prior Year Actual	2019	2020	2021
Opening Balance	\$ 223	\$ -	\$ -	N/A	\$ -	\$ 51	\$ -	\$ -
Additions:								
Bond Proceeds	-	805	805	-	429			150,000
Line of Credit				-	-			
Transfers b/w Capital Fds	-			-	-			
Other				-	-			
Sub-total	\$ -	\$ 805	\$ 805	\$ -	\$ 429	\$ -	\$ -	\$ 150,000
Deductions:								
Capital Expenditures	-				-	-	-	150,000
Bond Funded Interest				-	-			
Transfers b/w Capital Fds					-	51		
Other		582	754	-	429			
Sub-total	\$ -	\$ 582	\$ 754	\$ -	\$ 429	\$ 51	\$ -	\$ 150,000
Ending Balance	\$ 223	\$ 223	\$ 51	N/A	\$ -	\$ -	\$ -	\$ -

(In Thousands)	Historical					Statistical			
	2013	2014	2015	2016	2017	Low	Median	Mean	High
Opening Balance	\$ 40,034	\$ 5,184	\$ 42	\$ 4	\$ -	\$ -	\$ 133	\$ 7,581	\$ 40,034
Additions:									
Bond Proceeds	1,550				429	429	990	990	1,550
Line of Credit						-	-	-	-
Transfers b/w Capital Fds		3,091				3,091	3,091	3,091	3,091
Other	34	340	37	2		2	36	103	340
Sub-total	\$ 1,584	\$ 3,431	\$ 37	\$ 2	\$ 429				
Deductions:									
Capital Expenditures	35,253	4,821	75	6		6	2,448	10,039	35,253
Bond Funded Interest						-	-	-	-
Line of Credit									
Transfers b/w Capital Fds	35	3,091				35	1,563	1,563	3,091
Other	1,146	661			429	429	661	745	1,146
Sub-total	\$ 36,434	\$ 8,573	\$ 75	\$ 6	\$ 429				
Ending balance	\$ 5,184	\$ 42	\$ 4	\$ -	\$ -	\$ -	\$ 4	\$ 1,046	\$ 5,184

Observations:

- JEA's philosophy has been to borrow bond funds on a "just-in-time" basis. Staff has used line of credit borrowings and loans between capital funds to decrease borrowing costs.
- No new debt issues for the FY 2017 - 2019 projection period.

## Water and Sewer Rate Stabilization Debt Management

**For the Fiscal Quarter Ending June 30, 2018**

Reserve/Fund Authorization: Bond Resolution and Pricing Policy

Metric: Difference in actual interest rates for interest expense on the unhedged variable rate debt as compared to the budgeted assumptions for interest expense on unhedged variable rate debt.

Definitions and Goals: The Water & Sewer System Bond Resolution authorizes the establishment of a Rate Stabilization Fund in which deposits or withdrawals shall be made as set forth in the current annual budget or an amount otherwise determined by an authorized officer of JEA. The Rate Stabilization Funds provide a means to minimize the year-to-year impact to customer charges and support financial metrics by providing consistent revenue collection for expenditures impacted by external factors such as fuel, debt management and regulatory requirements or initiatives. Deposits are made to this Rate Stabilization Fund for the purpose of managing JEA's debt portfolio. Deposits to this reserve reflect the difference in the actual interest rates for interest expense on the unhedged variable rate debt as compared to the budgeted assumptions for interest expense on the unhedged variable rate debt. Additionally, deposits can be made from excess debt service budget over the actual debt service expense for any fiscal year. However, the total amounts deposited (in addition to actual debt service costs for the fiscal year) cannot exceed the total amount of the budgeted debt service for any fiscal year. At a minimum, 50% of the calculated reserve contribution, if any, will be recorded and deposited each fiscal year. Debt and Investment Committee will review and record at their option an additional contribution amount, up to the full value of the calculated reserve contribution (the remaining 50%). The reserve contributions will be calculated on a system by system basis; however, based on the calculation, any mandatory deposit will exclude the District Energy System. The reserve contributions shall cease in the event the reserve balance exceeds the cap of five percent of the par amount of the total outstanding variable rate debt of all systems. Withdrawals from the Rate 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, or to fund variable interest costs in excess of budget.

	Actual as of 06/30/2018		Full Year			Projection		
	Current Quarter	Year-to-Date	2018 Forecast	2018 Budget	Prior Year Actual	2019	2020	2021
<i>(In Thousands)</i>								
Opening Balance	\$ 14,209	\$ 14,209	\$ 14,209	N/A	\$ 20,290	\$ 14,209	\$ 14,209	\$ 14,209
Additions:								
Contributions	-	-	-	N/A	-			
Financial Statement Rounding								
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Deductions:								
Withdrawals					6,081			
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ 6,081	\$ -	\$ -	\$ -
Ending Balance	\$ 14,209	\$ 14,209	\$ 14,209	N/A	\$ 14,209	\$ 14,209	\$ 14,209	\$ 14,209

	Historical					Statistical			
	2013	2014	2015	2016	2017	Low	Median	Mean	High
Opening Balance	\$ 20,290	\$ 20,290	\$ 20,290	\$ 20,290	\$ 20,290	\$ 20,290	\$ 20,290	\$ 20,290	\$ 20,290
Additions:									
Contributions						-	-	-	-
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	-	-	-	-
Deductions:									
Withdrawals					6,081	6,081	6,081	6,081	6,081
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ 6,081	-	-	-	-
Ending balance	\$ 20,290	\$ 20,290	\$ 20,290	\$ 20,290	\$ 14,209	\$ 14,209	\$ 20,290	\$ 19,074	\$ 20,290

Observations:

- Contributions began in June 2009.

## Water & Sewer System Rate Stabilization - Environmental

**For the Fiscal Quarter Ending June 30, 2018**

Reserve/Fund Authorization: Bond Resolution and Pricing Policy

Definitions and Goals: The Water & Sewer System Bond Resolution authorizes the establishment of a Rate Stabilization Fund in which contributions or withdrawals shall be made as set forth in the current annual budget or an amount otherwise determined by an authorized officer of JEA. The Rate Stabilization Fund provides a means to minimize the year-to-year impact to customer charges and support financial metrics by providing consistent revenue collection for expenditures impacted by external factors such as debt management and regulatory requirements or initiatives.

	Actual as of 06/30/2018		Full Year			Projection		
	Current Quarter	Year -to-Date	2018 Forecast	2018 Budget	Prior Year Actual	<u>2019</u>	<u>2020</u>	<u>2021</u>
<i>(In Thousands)</i>								
Opening Balance	\$ 10,243	\$ 5,214	\$ 5,214	N/A	\$ 1,699	\$ 11,019	\$ 11,019	\$ 11,019
Additions:								
Contributions	6,089	17,656	24,853		24,362			
Regulatory Receivable								
Sub-total	\$ 6,089	\$ 17,656	\$ 24,853	\$ -	\$ 24,362	\$ -	\$ -	\$ -
Deductions:								
Withdrawals	4,418	10,956	19,048		20,847			
Regulatory Receivable								
Sub-total	\$ 4,418	\$ 10,956	\$ 19,048	\$ -	\$ 20,847	\$ -	\$ -	\$ -
Ending Balance	\$ 11,914	\$ 11,914	\$ 11,019	N/A	\$ 5,214	\$ 11,019	\$ 11,019	\$ 11,019

	Historical					Statistical			
	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	Low	Median	Mean	High
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 1,699	\$ -	\$ -	\$ 340	\$ 1,699
Additions:									
Contributions				23,635	24,362	23,635	23,999	23,999	24,362
						-	-	-	-
						-	-	-	-
Sub-total	\$ -	\$ -	\$ -	\$ 23,635	\$ 24,362				
Deductions:									
Withdrawals				21,936	20,847	20,847	21,392	21,392	21,936
						-	-	-	-
						-	-	-	-
Sub-total	\$ -	\$ -	\$ -	\$ 21,936	\$ 20,847				
Ending balance	\$ -	\$ -	\$ -	\$ 1,699	\$ 5,214	\$ -	\$ -	\$ 1,383	\$ 5,214

Observations:

- Rate Stabilization Fund for Environmental began in June 2010.

(F&A)

## Water and Sewer System Customer Deposits

For the Fiscal Quarter Ending June 30, 2018

Reserve/Fund Authorization: Management Directive 302 Credit and Collections and Internal Procedure CR40400 MBC302

Metric: Internal procedure CR40400 MBC302 Credit and Collections

Definitions and Goals: Pursuant to internal procedure CR40400 MBC302 Credit and Collections, JEA accesses customers a deposit that may be used to offset any future unpaid amounts during the course of providing utility service to a customer.

	Actual as of 06/30/2018		Full Year			Projection		
	Current Quarter	Year -to-Date	2018 Forecast	2018 Budget	Prior Year Actual	2019	2020	2021
(In Thousands)								
Opening Balance	\$ 15,218	\$ 15,086	\$ 15,086	N/A	\$ 13,910	\$ 15,446	\$ 15,446	\$ 15,446
Additions:								
Allocated from Electric Loan Repayment	228	360	360	N/A	1,176			
Sub-total	\$ 228	\$ 360	\$ 360	\$ -	\$ 1,176	\$ -	\$ -	\$ -
Deductions:								
Allocated from Electric Loan to W&S Operations			-	N/A	-			
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ending Balance	\$ 15,446	\$ 15,446	\$ 15,446	N/A	\$ 15,086	\$ 15,446	\$ 15,446	\$ 15,446

	Historical					Statistical			
	2013	2014	2015	2016	2017	Low	Median	Mean	High
Opening Balance	\$ 12,627	\$ 13,860	\$ 12,787	\$ 13,255	\$ 13,910	\$ 12,627	\$ 13,255	\$ 13,288	\$ 13,910
Additions:									
Allocated from Electric Loan Repayment	1,233		468	655	1,176	468	655	766	1,176
Sub-total	\$ 1,233	\$ -	\$ 468	\$ 655	\$ 1,176	-	-	-	-
Deductions:									
Allocated from Electric Loan to W&S Operations		1,073				-	-	-	-
Sub-total	\$ -	\$ 1,073	\$ -	\$ -	\$ -	-	-	-	-
Ending balance	\$ 13,860	\$ 12,787	\$ 13,255	\$ 13,910	\$ 15,086	\$ 12,787	\$ 13,860	\$ 13,780	\$ 15,086

Observations:

- JEA is in the process of implementing a prepaid meter program which could reduce customer deposits at some future date.

## Water and Sewer Debt Service Sinking Fund

**For the Fiscal Quarter Ending June 30, 2018**

Reserve/Fund Authorization: Bond Resolution

Metric: Accrued interest and principal currently payable on fixed and variable rate bonds pursuant to the Bond Resolutions

Definitions and Goals: JEA is required monthly to fund from revenues an amount equal to the aggregate of the Debt Service Requirement for senior and subordinated bonds for such month into this account. On or before such interest payment date, JEA shall pay out of this account to the paying agents the amount required for the interest and principal due on such date.

(In Thousands)	Actual as of 06/30/2018		2018 Forecast	Full Year		Projection		
	Current Quarter	Year -to-Date		2018 Budget	Prior Year Actual	2019	2020	2021
Opening Balance	\$ 50,910	\$ 82,208	\$ 82,208	N/A	\$ 65,410	\$ 81,381	\$ 85,606	\$ 86,181
Additions:								
Revenue fund deposits	28,473	85,223	113,946		114,873	119,748	120,110	120,310
Sub-total	\$ 28,473	\$ 85,223	\$ 113,946	\$ -	\$ 114,873	\$ 119,748	\$ 120,110	\$ 120,310
Deductions:								
Principal and interest payments	25,708	113,756	114,773	N/A	98,075	115,523	119,535	118,867
Sub-total	\$ 25,708	\$ 113,756	\$ 114,773	\$ -	\$ 98,075	\$ 115,523	\$ 119,535	\$ 118,867
Ending Balance	\$ 53,675	\$ 53,675	\$ 81,381	N/A	\$ 82,208	\$ 85,606	\$ 86,181	\$ 87,624

(In Thousands)	Historical					Statistical			
	2013	2014	2015	2016	2017	Low	Median	Mean	High
Opening Balance	\$ 81,675	\$ 80,317	\$ 75,019	\$ 67,720	\$ 65,410	\$ 223	\$ 71,370	\$ 61,727	\$ 81,675
Additions:									
Revenue fund deposits	119,535	117,444	102,789	97,077	114,873	97,077	114,873	110,344	119,535
Bond funded interest						-	-	-	-
Sub-total	\$ 119,535	\$ 117,444	\$ 102,789	\$ 97,077	\$ 114,873	-	-	-	-
Deductions:									
Principal and interest payments	120,893	122,742	110,088	99,387	98,075	98,075	110,088	110,237	122,742
Sub-total	\$ 120,893	\$ 122,742	\$ 110,088	\$ 99,387	\$ 98,075	-	-	-	-
Ending balance	\$ 80,317	\$ 75,019	\$ 67,720	\$ 65,410	\$ 82,208	\$ 65,410	\$ 75,019	\$ 74,135	\$ 82,208

Observations:

- September 30th ending balances are used to pay Oct 1st interest and principal payments.
- Timing differences occur due to the accrual of debt service during one fiscal year and the payment in the following fiscal year (primarily fixed rate principal and interest on Oct 1st of the following fiscal year).



## Water and Sewer Debt Service Reserve Account

**For the Fiscal Quarter Ending June 30, 2018**

Reserve/Fund Authorization: Bond Resolution

Metric: 125% of average annual debt service on outstanding senior fixed and variable rate bonds plus subordinated fixed rate bonds as required by the Bond Resolutions

Definitions and Goals: This reserve will be funded, maintained and held for the benefit of bondholders as specified in the Supplemental Resolution authorizing the sale of the bonds to pay principal and/or interest on the bonds should revenues from operations not be sufficient for such purpose in accordance with the appropriate bond resolution. It is JEA's current practice to fund this reserve account with cash from the sale of bonds; however, revenues may be utilized to fund this reserve if necessary.

	Actual as of 06/30/2018		2018 Forecast	Full Year		Projection		
	Current Quarter	Year -to-Date		2018 Budget	Prior Year Actual	<u>2019</u>	<u>2020</u>	<u>2021</u>
(In Thousands)								
Opening Balance	\$ 102,850	\$ 107,488	\$ 107,488	N/A	\$ 108,086	\$ 69,850	\$ 69,850	\$ 69,850
Additions:								
Construction reserve fund/bond issues				N/A	-			
Revenue fund				N/A	-			
Rounding								
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Deductions:								
Revenue fund		4,638	7,036		598			
Construction fund			30,602					
Sub-total	\$ -	\$ 4,638	\$ 37,638	\$ -	\$ 598	\$ -	\$ -	\$ -
Ending Balance	\$ 102,850	\$ 102,850	\$ 69,850	N/A	\$ 107,488	\$ 69,850	\$ 69,850	\$ 69,850

	Historical					Statistical			
	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	Low	Median	Mean	High
Opening Balance	\$ 119,131	\$ 119,915	\$ 116,829	\$ 108,849	\$ 108,086	\$ 108,086	\$ 116,829	\$ 114,562	\$ 119,915
Additions:									
Construction reserve fund/bond issues	784					784	784	784	784
Revenue fund	3,821					3,821	3,821	3,821	3,821
Sub-total	\$ 4,605	\$ -	\$ -	\$ -	\$ -	-	-	-	-
Deductions:									
Revenue fund	3,821	3,086	7,980	763	598	598	3,086	3,250	7,980
Sub-total	\$ 3,821	\$ 3,086	\$ 7,980	\$ 763	\$ 598	-	-	-	-
Ending balance	\$ 119,915	\$ 116,829	\$ 108,849	\$ 108,086	\$ 107,488	\$ 107,488	\$ 108,849	\$ 112,233	\$ 119,915

**Observations:**

- In 2008, debt service reserve sureties downgraded and JEA began replacing those downgraded sureties with cash/investments as required by the bond resolutions. Sureties of \$149.8 million are still outstanding but are not eligible to be utilized as debt service reserve deposits per the Bond Resolutions.
- 2018 Bond Resolution amendment will allow the use of \$33 million AA+ rated Berkshire Hathaway Assurance surety policy to be included in Debt Service Reserve Fund funding calculation which allows the release of \$33 million (\$2.4 million to the Revenue Fund and \$30.6 million to the Construction Fund).

## Water and Sewer Renewal and Replacement (R&R) / Operating Capital Outlay (OCO)

**For the Fiscal Quarter Ending June 30, 2018**

Reserve/Fund Authorization: Bond Resolution, Article 21 of the City of Jacksonville Charter and Pricing Policy

Metric: Renewal and Replacement required to deposit from the revenue fund annually 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 per JEA's Water and Sewer System bond resolutions. Operating Capital Outlay - by 2013 the goal is to fund all non-capacity capital expenditures.

Definitions and Goals: Pursuant to the Water and Sewer System bond resolutions and Article 21 of the City of Jacksonville Charter, JEA is required to deposit from the revenue fund annually an amount for Renewal and Replacement of system assets. According to the bond resolutions the amount is equal to the greater of 10% of the prior year defined annual net revenues or 5% of the prior year defined gross revenues. The funds shall be used for the purposes of paying the cost of extensions, enlargements or additions to, or the replacement of capital assets of the Electric System. In addition, as a portion of the base rate, JEA will recover from current revenue a formula driven amount for capital expenditures which is referred to as Operating Capital Outlay. This amount is calculated separately from the R&R deposit. In accordance with the Pricing Policy, by 2013, the objective is to fund an amount equal to all non-capacity capital expenditures with current year internally generated funds.

(In Thousands)	Actual as of 06/30/2018		Full Year			Projection		
	Current Quarter	Year -to-Date	2018 Forecast	2018 Budget	Prior Year Actual	2019	2020	2021
Opening Balance	\$ 74,510	\$ 54,699	\$ 54,699	N/A	\$ 76,020	\$ 85,595	\$ 83,691	\$ 46,368
Additions:								
R&R/OCO Contribution	39,363	115,815	156,425	-	108,119	155,138	129,545	132,384
Transfer from Capital Fds				-	137			
Other	2,057	4,662	9,100	-	8,050	11,111	11,544	9,051
Sub-total	\$ 41,420	\$ 120,477	\$ 165,525	\$ -	\$ 116,306	\$ 166,249	\$ 141,089	\$ 141,435
Deductions:								
Capital Expenditures	35,112	94,358	134,629	-	132,588	167,503	177,762	164,161
Transfer to Capacity Fund				-	86			
Transfer to Construction Fund				-				
Other				-	4,953	650	650	
Sub-total	\$ 35,112	\$ 94,358	\$ 134,629	\$ -	\$ 137,627	\$ 168,153	\$ 178,412	\$ 164,161
Ending Balance	\$ 80,818	\$ 80,818	\$ 85,595	N/A	\$ 54,699	\$ 83,691	\$ 46,368	\$ 23,642

	Historical					Statistical			
	2013	2014	2015	2016	2017	Low	Median	Mean	High
Opening Balance	\$ 64,260	\$ 78,689	\$ 59,295	\$ 37,337	\$ 76,020	\$ 37,337	\$ 64,260	\$ 63,120	\$ 78,689
Additions:									
R&R/OCO Contribution	91,245	48,373	62,793	124,574	108,119	48,373	91,245	87,021	124,574
Loans betw Capital Fds	-		22		137	-	22	53	137
Other (incl septic tank)	1,539	1,614	653	30,889	8,050	653	1,614	8,549	30,889
Sub-total	\$ 92,784	\$ 49,987	\$ 63,468	\$ 155,463	\$ 116,306				
Deductions:									
Capital Expenditures	68,355	67,488	85,426	116,674	132,588	67,488	85,426	94,106	132,588
Loan Repayment	-	-			86	-	-	29	86
Transfer to Constr. Fund	10,000	1,893		106		106	1,893	4,000	10,000
Other (incl septic tank)	-	-	-	-	4,953	-	-	991	4,953
Sub-total	\$ 78,355	\$ 69,381	\$ 85,426	\$ 116,780	\$ 137,627				
Ending balance	\$ 78,689	\$ 59,295	\$ 37,337	\$ 76,020	\$ 54,699	\$ 37,337	\$ 59,295	\$ 61,208	\$ 78,689

Observations:

- Other includes the Septic Tank Phase-out project, Sale of Property, and the transfer of RSF - Environmental in FY 2016 - 2019
- Includes \$20 million for Maximum Annual Debt Service calculation.
- \$57 million is projected to be withdrawn from this capital balance in FY 2016-2017 to support the capital program with lower Net Revenues as planned with the June 2012 approved reduction in the October 1, 2012 rate increase.

## Water and Sewer Capacity Fees / State Revolving Fund Loans

**For the Fiscal Quarter Ending June 30, 2018**

Reserve/Fund Authorization: Florida Statute and Rate Tariff

Metric: Tariff rate

Definitions and Goals: Capacity fees are charged to customers as a one- time fee for a new connection to the Water System and a one- time fee for a new connection to the Sewer System. Capacity charges may be used and applied for the purpose of paying costs of expansion of the Water and Sewer System or paying or providing for the payment of debt that was issued for the same purpose. In addition, the Water and Sewer System has received funds from the State Revolving Fund (SRF) program for the construction of water and wastewater treatment facilities. SRF loans are subordinated to all Water and Sewer System Revenue Bonds and Water and Sewer System Subordinated Revenue Bonds.

(In Thousands)	Actual as of 06/30/2018		Full Year			Projection		
	Current Quarter	Year -to-Date	2018 Forecast	2018 Budget	Prior Year Actual	2019	2020	2021
Opening Balance	\$ 87,161	\$ 95,620	\$ 95,620	N/A	\$ 103,411	\$ 64,553	\$ 52,097	\$ 44,668
Additions:								
Capacity Fees	7,732	19,389	25,073	-	24,777	21,641	21,959	22,287
State Revolving Fd Loan				-	-			
Transfer from R&R/OCO Fund			-	-	-	650	650	
Other				-	86			
Sub-total	\$ 7,732	\$ 19,389	\$ 25,073	\$ -	\$ 24,863	\$ 22,291	\$ 22,609	\$ 22,287
Deductions:								
Capital Expenditures	7,650	27,742	56,128	-	32,654	34,747	30,038	51,959
Other				-	-			
		24	12	-	-			
Sub-total	\$ 7,650	\$ 27,766	\$ 56,140	\$ -	\$ 32,654	\$ 34,747	\$ 30,038	\$ 51,959
Ending Balance	\$ 87,243	\$ 87,243	\$ 64,553	N/A	\$ 95,620	\$ 52,097	\$ 44,668	\$ 14,996

(In Thousands)	Historical					Statistical			
	2013	2014	2015	2016	2017	Low	Median	Mean	High
Opening Balance	\$ 45,454	\$ 60,360	\$ 76,887	\$ 90,912	\$ 103,411	\$ 45,454	\$ 76,887	\$ 75,405	\$ 103,411
Additions:									
Capacity Fees	17,394	18,298	19,579	21,995	24,777	17,394	19,579	20,409	24,777
State Revolving Fd Loan	-	-				-	-	-	-
Loan Repayments	-	-	246	145		-	73	98	246
Other	12	-	5	7	86	-	7	22	86
Sub-total	\$ 17,406	\$ 18,298	\$ 19,830	\$ 22,147	\$ 24,863				
Deductions:									
Capital Expenditures	2,270	1,758	5,805	9,648	32,654	1,758	5,805	10,427	32,654
Loans betw Capital Fds						-	-	-	-
Other	230	13				13	122	122	230
	-	-	-	-					
Sub-total	\$ 2,500	\$ 1,771	\$ 5,805	\$ 9,648	\$ 32,654				
Ending balance	\$ 60,360	\$ 76,887	\$ 90,912	\$ 103,411	\$ 95,620	\$ 60,360	\$ 90,912	\$ 85,438	\$ 103,411

Observations:

## Water and Sewer Environmental

**For the Fiscal Quarter Ending June 30, 2018**

Reserve/Fund Authorization: Pricing Policy

Metric: Unit tariff rates times consumption

Definitions and Goals: The Environmental Charge will be applied to all water, sewer, irrigation and non bulk user reclaimed consumption. The environmental charge revenue will be collected from customers to partially offset current and future environmental and regulatory needs as specified in the Pricing Policy for specific environmental and regulatory programs.

(In Thousands)	Actual as of 06/30/2018		Full Year			Projection		
	Current Quarter	Year -to-Date	2018 Forecast	2018 Budget	Prior Year Actual	<u>2019</u>	<u>2020</u>	<u>2021</u>
Opening Balance	\$ 815	\$ 1,839	\$ 1,839	N/A	\$ 2,659	\$ 2,276	\$ 1,000	\$ 1,000
Additions:								
Environmental Contributions	1,822	4,349	9,892	-	12,394	18,145	9,421	4,696
Loans betw Capital Fds				-	-			
Other				-	-			
Sub-total	\$ 1,822	\$ 4,349	\$ 9,892	\$ -	\$ 12,394	\$ 18,145	\$ 9,421	\$ 4,696
Deductions:								
Capital Expenditures	2,230	5,781	9,455	-	13,214	19,421	9,421	4,696
Septic Tank Phase Out				-	-			
Other	-			-	-			
Sub-total	\$ 2,230	\$ 5,781	\$ 9,455	\$ -	\$ 13,214	\$ 19,421	\$ 9,421	\$ 4,696
Ending Balance	\$ 407	\$ 407	\$ 2,276	N/A	\$ 1,839	\$ 1,000	\$ 1,000	\$ 1,000

(In Thousands)	Historical					Statistical			
	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	Low	Median	Mean	High
Opening Balance	\$ (8,158)	\$ (9,857)	\$ 5,299	\$ -	\$ 2,659	\$ (9,857)	\$ -	\$ (2,011)	\$ 5,299
Additions:									
Environmental Contributions	21,193	21,018	22,056	15,539	12,394	12,394	21,018	18,440	22,056
Loans betw Capital Fds	-	-				-	-	-	-
Other						-	-	-	-
Sub-total	\$ 21,193	\$ 21,018	\$ 22,056	\$ 15,539	\$ 12,394				
Deductions:									
Capital Expenditures	22,892	5,862	7,318	12,880	13,214	5,862	12,880	12,433	22,892
Septic Tank Phase Out			203			203	203	203	203
Other			19,834			19,834	19,834	19,834	19,834
Sub-total	\$ 22,892	\$ 5,862	\$ 27,355	\$ 12,880	\$ 13,214				
Ending balance	\$ (9,857)	\$ 5,299	\$ -	\$ 2,659	\$ 1,839	\$ (9,857)	\$ 1,839	\$ (12)	\$ 5,299

Observations:

## Water and Sewer Construction / Bond Fund

For the Fiscal Quarter Ending June 30, 2018

Reserve/Fund Authorization: Bond Resolution

Metric: Capital expenditures per year minus internal funding available

Definitions and Goals: JEA maintains a senior and subordinated construction fund of which bonds proceeds are deposited and used for the payment of the costs of additions, extensions and improvements to the Water and Sewer System.

(In Thousands)	Actual as of 06/30/2018		Full Year			Projection		
	Current Quarter	Year -to-Date	2018 Forecast	2018 Budget	Prior Year Actual	2019	2020	2021
Opening Balance	\$ 324	\$ 15	\$ 15	N/A	\$ 152	\$ -	\$ -	\$ -
Additions:								
Bond Proceeds		894	894	-	-			
Line of Credit			-	-	-			
Transfer from R&R/OCO Fund				-	-			
Other				-	-			
Sub-total	\$ -	\$ 894	\$ 894	\$ -	\$ -	\$ -	\$ -	\$ -
Deductions:								
Capital Expenditures	4	587	894	-	-			
Bond Proceeds				-	-			
Other		2	15	-	137			
Sub-total	\$ 4	\$ 589	\$ 909	\$ -	\$ 137	\$ -	\$ -	\$ -
Ending Balance	\$ 320	\$ 320	\$ -	N/A	\$ 15	\$ -	\$ -	\$ -

(In Thousands)	Historical					Statistical			
	2013	2014	2015	2016	2017	Low	Median	Mean	High
Opening Balance	\$ 7,419	\$ 2,305	\$ 326	\$ 664	\$ 152	\$ 152	\$ 664	\$ 2,173	\$ 7,419
Additions:									
Bond Proceeds	486	-				-	243	243	486
Line of Credit	-	-				-	-	-	-
Loans/trnsf btw CapFds	10,000	1,893				1,893	5,947	5,947	10,000
Other	3	476	344	17		3	181	210	476
Sub-total	\$ 10,489	\$ 2,369	\$ 344	\$ 17	\$ -				
Deductions:									
Capital Expenditures	14,855	3,784	6			6	3,784	6,215	14,855
Bond Proceeds	411	48				48	230	230	411
Line of Credit	-	-				-	-	-	-
Loans/trnsf btw CapFds	337	516				337	427	427	516
Other	-	-		529	137	-	69	167	529
Sub-total	\$ 15,603	\$ 4,348	\$ 6	\$ 529	\$ 137				
Ending balance	\$ 2,305	\$ 326	\$ 664	\$ 152	\$ 15	\$ 15	\$ 326	\$ 692	\$ 2,305

**Observations:**

- JEA's philosophy has been to borrow bond funds on a "just-in-time" basis. Staff has used line of credit borrowings and loans between capital funds to decrease borrowing costs.
- No new debt issues for the FY 2017-2019 projection.



## VIII. A. 8.

### JEA Investment Policy – Revision to Authorized Investments





July 16, 2018

**SUBJECT:** JEA INVESTMENT POLICY – REVISION TO AUTHORIZED INVESTMENTS

**Purpose:**

☐ Information Only

☒ Action Required

☐ Advice/Direction

**Issue:** The JEA Investment Policy includes Exhibits that list the authorized investments for each of the JEA systems. Staff recommends deleting the Exhibit for the St. Johns River Power Park (SJRPP) First Bond Resolution to take into account the recent plant closure. Also recommended are revisions to the Water and Sewer System to reflect amendments to the Bond Resolution for that System. The primary change recommended for the Water and Sewer System would allow investments in government agency debt. In addition, staff is recommending an increase in the percentage limit for intergovernmental pools from 10% to 15%. Other changes include minor edits to update the Policy and the deletion of redundant or obsolete investment types listed in the Exhibits. Both clean and redlined drafts of the proposed Investment Policy revisions are attached.

**Significance:** High. Revisions to the Investment Policy require Board authorization.

**Effect:** The revisions would affect investment income and the composition of the investment portfolio.

**Cost or Benefit:** Improved portfolio diversification, providing for the opportunity to improve the investment portfolio yield.

**Recommended Board action:** Staff recommends that the Finance and Audit Committee and the Board approve the attached revisions to the Investment Policy.

**For additional information, contact:** Joe Orfano, 665-4541

Submitted by: AFZ/RFW/JEO/TPD



**Commitments to Action**

- 1** Earn Customer Loyalty
- 2** Deliver Business Excellence
- 3** Develop an Unbeatable Team





**INTER-OFFICE MEMORANDUM**

July 16, 2018

**SUBJECT:** JEA INVESTMENT POLICY - REVISIONS TO AUTHORIZED INVESTMENTS

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**FROM:** Aaron Zahn, Interim Managing Director/CEO

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**TO:** JEA Finance and Audit Committee

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Kelly Flanagan, Chair  
Husein Cumber

**BACKGROUND:**

Section 218.415 of the Florida Statutes requires that investment activity by a unit of local government be consistent with a written policy adopted by the governing body of such unit of local government. In September 1995, the JEA Board approved an Investment Policy that satisfied this statutory requirement. Since that time, on several occasions the JEA Board has amended the JEA Investment Policy to take into account revisions to the statute, changes to JEA system bond resolutions, and to incorporate current industry practices. The most recent revisions to the Policy were approved by the JEA Board at the May 2017 Board meeting.

**DISCUSSION:**

Section 5.0, Authorized Investments, refers to Exhibits included in the Policy that list the eligible investments for each of JEA's systems. The eligible investments are based primarily on the investments allowed per each system's bond resolution. The closure of the St. Johns River Power Park (SJRPP) has led to the elimination of the First Bond Resolution for SJRPP, and the most recent bond issuance by the Water and Sewer System has resulted in the adoption of an amended bond resolution for that system. The primary revisions proposed are to delete the Exhibit for the SJRPP First Bond Resolution and to update the Exhibit for the Water and Sewer System.

The bond resolution currently in effect for the Water and Sewer System provides that eligible investments are those that are permitted by Florida law. The Florida statutes provide that authorized investments include those that have been approved by a resolution of the entity, e.g. a Board resolution. This means that the JEA Board is able to approve the eligible investments for the Water and Sewer System. This provision is identical to that found in the bond resolutions for the Electric System and the District Energy System (DES). The revised Exhibit for the Water and Sewer System will be identical to that of the Electric System and DES. The primary change recommended for the Exhibit for the Water and Sewer System would delete the AAA ratings requirement for government agency bonds. Agency bonds are currently rated AA+ by S&P and Aaa by Moody's.

In addition, staff is proposing an increase to the percentage limit for intergovernmental pools from 10% to 15% of the investment portfolio. Benefits of increasing the limit for this investment option would include diversification and incremental yield compared with money market funds currently permitted and other short-term investment options. Both of the intergovernmental pools that JEA uses are rated AAA.

Staff is also proposing the elimination of redundant or obsolete items in the lists of Authorized Investments.

**RECOMMENDATION:**

Staff recommends that the Finance and Audit Committee and the Board approve the attached revisions to the Investment Policy.

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Aaron F. Zahn, Interim Managing Director/CEO

AFZ/RFW/JEO/TPD

**JEA  
TREASURY SERVICES  
INVESTMENT POLICY  
AS OF AUGUST 21, 2018**

**1.0 SCOPE**

The statement of investment policy and guidelines applies to funds under control of JEA in excess of those required to meet short-term expenses.

This investment policy applies to financial assets including funds related to the issuance of debt by JEA, including the Electric System, the Water and Sewer System, St. Johns River Power Park (SJRPP), the Bulk Power Supply System, the District Energy System (DES), and any other entity created and approved by JEA's Board. Furthermore, this investment policy applies to customer deposit monies held by JEA. This policy shall not apply to investments of the SJRPP Employees' Retirement Plan or investments of the Other Post-Employment Benefits (OPEB) Trust, which are covered by separate investment policies or authorizing resolutions.

**2.0 INVESTMENT OBJECTIVES**

JEA's investment portfolio shall be managed with the primary objective of safety of capital. The investment strategy will provide sufficient liquidity to meet anticipated cash flow requirements.

JEA will strive to obtain the highest possible yields consistent with safety of capital, liquidity of the portfolio and prudent investment principles.

Investments are made with the intention of holding the securities to maturity. However, investments may be sold from time to time to meet cash flow requirements, for the purpose of restructuring the average duration of the portfolio and taking advantage of market opportunities to record capital gains.

**3.0 PERFORMANCE MEASUREMENT**

JEA seeks to optimize the return on investment within the constraints of safety and liquidity. The investment portfolio shall be designed to attain a market yield consistent with the investment risk, maturity and liquidity constraints as discussed in this policy. A benchmark index will be used to evaluate the performance of the portfolio and the index will be periodically reviewed by the Chief Financial Officer to determine its appropriateness and to recommend changes as needed.

#### **4.0 PRUDENCE AND ETHICAL STANDARDS**

The standard of prudence to be applied by JEA shall be the “Prudent Person” rule, which states: “Investments shall be made with judgment and care under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived from the investment.” The “Prudent Person” rule shall be applied in the context of managing the overall portfolio.

Employees of JEA involved in the investment process shall not transact personal business activity that could or could appear to conflict with State Statutes, City Ordinances, JEA Management Directives, proper execution of the investment program or which could impair their ability to make impartial investment decisions.

#### **5.0 AUTHORIZED INVESTMENTS**

Refer to Exhibits I through V for a complete listing of the “Authorized Investments”. The bond resolutions for the Electric System, the Water and Sewer System and for DES allow any investment that is permitted by Florida law. Further, the Florida statutes provide that authorized investments include those that have been authorized by a resolution of the entity, e.g. a Board resolution. Thus, the JEA Board can amend the list of Authorized Investments for the Electric System, the Water and Sewer System, and for DES. The Authorized Investments for the other JEA systems are specifically listed in their respective bond resolutions and thus can only be changed by a change in the resolution.

Money market funds are specifically included in the list of Authorized Investments for the Electric System, the Water and Sewer System, and DES. However, the term “money market funds” is not specifically noted in the list of Authorized Investments for the SJRPP Second Bond Resolution or the Bulk Power Supply System. The listings for those systems include as Authorized Investments the shares of an investment company organized under the Investment Company Act of 1940, as amended. Money market funds which are organized and registered under the Investment Company Act of 1940, as amended, fall under this definition and are thus included as eligible investments. For all JEA systems, money market funds must be rated AAA by Standard and Poor’s or Aaa by Moody’s Investors Service.

JEA does not speculate on the future movement of interest rates and is not permitted to utilize reverse repurchase agreements or other forms of debt leverage in the management of its investment portfolio. Floating rate notes, inflation-indexed notes, and other adjustable rate securities are permitted types of securities. Inverse floaters, however, are prohibited.

JEA is permitted to use interest rate swap agreements for asset/liability management. For its assets, JEA utilizes interest rate swaps in a 100% asset matched strategy with JEA’s revolving fund balances. JEA is also permitted to engage in the practice of securities



lending, whereby a fee is paid to JEA in exchange for lending securities that are fully collateralized by securities listed as Authorized Investments. JEA's investment professionals have developed sufficient understanding of the investment vehicles listed above and have the expertise to manage them.

## **6.0 MATURITY AND LIQUIDITY REQUIREMENTS**

The investment portfolio shall be structured in such manner as to provide sufficient liquidity to pay obligations as they come due. To the extent possible, investment maturities will be matched with known cash needs and anticipated cash flow requirements.

Additionally, maturity limitations for funds related to the issuance of debt are outlined in the Bond Resolution relating to those bond issues.

## **7.0 PORTFOLIO COMPOSITION**

The investment portfolio may be structured to have limits on certain types of securities, issuers, and maturities. Refer to Table 1 for specific limitations.

Investments in commercial paper, certificates of deposit or bankers acceptances shall have the following restrictions: Nine months maximum maturity, \$12,500,000 limit per issuer, and limited to 25% of the entire portfolio (including money market and repurchase agreements). Exceeding the 25% limit is permitted when including investments for the debt service sinking funds and escrows relating to the economic defeasance of debt. In addition, commercial paper must be rated in the highest whole rating category (i.e. A-1 by Standard and Poor's, P-1 by Moody's Investors Service or F1 by Fitch) by at least 2 nationally recognized rating agencies and be issued by a Fortune 500 company, a Fortune Global 500 company with significant operations in the U.S. (in U.S. dollar-denominated securities), or the governments of Canada or Canadian provinces (in U.S. dollar-denominated securities). The ratings outlook for the commercial paper must be positive or stable at the time of the investment.

## **8.0 RISK AND DIVERSIFICATION**

Assets held shall be diversified to control the risk of loss resulting from over concentration of assets in a specific maturity, issuer, instrument, dealer, or bank through which these instruments are bought and sold. Diversification strategies shall be reviewed and revised periodically as necessary by the appropriate management staff. A diversity of treasury and agency issues shall be maintained to avoid a concentration in any one issue or maturity. Refer to Table 1 for detailed investment limitations. Such limitations will be periodically reviewed by the Chief Financial Officer to determine their appropriateness and to recommend changes as needed.

## **9.0 AUTHORIZED INVESTMENT INSTITUTIONS AND DEALERS**

JEA shall only execute US Treasury and Agency investment transactions and repurchase agreements with primary securities dealers as designated by the Federal Reserve Bank of New York and commercial banks within JEA's geographical service area who are member banks of the Federal Reserve System and have capital stock, surplus and undivided earnings aggregating at least \$25,000,000 and have a rating on short-term bank deposits of at least P-1 by Moody's Investors Service. Commercial paper transactions, CDs and BAs can be executed with primary securities dealers and firms considered to be "Direct Issuers". Municipal securities transactions can be executed with primary securities dealers or municipal securities firms having a significant presence in Florida or firms owning a specific JEA bond issue and only on a delivery versus payment basis. Investment Agreements can be purchased directly from the issuing insurance company or financial institution. Money market mutual funds can be purchased from commercial banks meeting the requirements discussed above, from primary dealers, or directly from the money market mutual fund. All other investments can only be purchased from primary dealers.

## **10.0 THIRD-PARTY CUSTODIAL AGREEMENTS**

All securities purchased by, and all collateral obtained by, JEA under this section shall be properly designated as an asset of JEA and held in safekeeping by a third party custodial bank or other third party custodial institution, except as noted below.

All securities purchased and sold by JEA under this section shall be executed using the "delivery versus payment procedure." Collateral requirements for Repurchase Agreements and Securities Lending Agreements will be contained in the Master Repurchase Agreement/Custodial Undertaking and Securities Lending Agreement, respectively, executed between JEA and the broker/dealer or bank.

The safekeeping institution shall issue a safekeeping receipt to JEA listing the specific instrument, par value, rate, maturity and any other pertinent information. In the case of securities purchased or sold, the "confirmation" received from the dealer or safekeeping institution should be attached to the internally generated trade ticket. In the case of repurchase agreements, collateral safekeeping receipts should be compared on a daily basis to ensure compliance with collateral requirements and investment limitations.

No withdrawal of securities, in whole or in part, shall be made from safekeeping, except by an authorized staff member of JEA.

An exception to third party custody of assets would be the safekeeping of collateral for repurchase agreements entered into between JEA and its primary bank for the purpose of conducting day to day cash management functions. Collateral will be held by that bank but not in JEA's name. The bank will issue a safekeeping receipt indicating the collateral pledged to JEA.

## **11.0 MASTER REPURCHASE AGREEMENT**

JEA shall require all institutions and dealers transacting repurchase agreements to execute and perform as stated in the Master Repurchase Agreement that is signed by both parties. All repurchase agreement transactions shall adhere to the requirements of the Master Repurchase Agreement.

Repurchase Agreements can only be entered into with authorized investment institutions and dealers as defined in Section 9.0 of this policy. In addition, all repurchase agreements must adhere to the provisions as defined in Section 5.0 of this policy relating to Authorized Investments and Section 10.0 of this policy regarding third-party custodial agreements. Collateral requirements must adhere to those outlined in the appropriate bond resolution. Tri Party Repurchase Agreements are preferred to “conventional” (delivery of collateral versus wire transfer of the amount invested) Repurchase Agreements due to significant cost savings derived from safekeeping the collateral at the same custodian utilized by the dealer. Due to the costs associated with transferring Repurchase Agreements on a daily basis, the interest rate paid to JEA will be compared on a daily basis to the market (using Bloomberg or a similar source) and when appropriate, the Repurchase Agreement will be re-executed with a different institution based on the rate comparison.

## **12.0 BID REQUIREMENT**

Staff shall determine the approximate maturity date based on cash flow needs and market conditions, analyze and select one or more optimal types of investment, and competitively bid the security in question when feasible and appropriate.

Competitive bids or offerings shall be obtained from at least three dealers on all sales or purchases except in situations where:

- a. the security involved is a “new issue” and/or can be purchased “at the auction”;
- b. the security involved has a fixed, “posted scale” rate;
- c. the security involved is available through direct issue, private placement (e.g., direct issue commercial paper);
- d. the security involved is of particular special interest to JEA (e.g. Florida General Obligation bonds or other municipal bonds) and dealer competition could have an adverse impact with respect to the price and/or availability of the security to JEA;
- e. a dealer or institution brings to JEA an unsolicited swap proposal deemed advantageous to JEA.

Although direct investments in equity securities are not Authorized Investments, such securities are received by JEA from time to time as payment for customer liabilities in lieu

of the receipt of cash. Competitive bids are not required on the sale of such securities in order that the sale may take place in an expeditious manner.

The requirement for competitive bids does not apply to JEA purchases of JEA bonds in the secondary market, or to investments in money market mutual funds, the State of Florida Local Government Surplus Funds Trust Fund ( “Florida Prime”), or intergovernmental investment pools. Money market funds shall be rated AAA by Standard and Poor’s or Aaa by Moody’s Investors Service and will be selected on the basis of a fund’s yield, ranking versus peers, expenses, portfolio composition, assets under management, etc. Investments in money market mutual funds or in Florida Prime or an intergovernmental pool will be reviewed on a periodic basis for appropriateness.

### **13.0 INTERNAL CONTROLS**

The Chief Financial Officer and/or the Treasurer will maintain a system of internal controls, which will be documented in writing and made part of operational procedures in Treasury Services. The internal controls will be reviewed by independent auditors as part of any financial audit periodically required of JEA.

The internal controls should be designed to prevent losses of funds which might arise from fraud, employee error, misrepresentation by third parties, or imprudent actions by employees of JEA.

### **14.0 REPORTING**

Treasury Services shall generate monthly reports for management purposes. The reports shall include securities in the portfolio by class or type, book value, and yield earned during the period. Market values are reported quarterly in JEA’s financial statements. Treasury Services shall provide other such reports and information as deemed reasonable, upon request, from other internal and external sources.

### **15.0 CONTINUING EDUCATION**

JEA staff responsible for making investment decisions must annually complete 8 hours of continuing education in subjects of study related to investment practices and products. This requirement can be met through a variety of methods including, but not limited to, seminars, conferences, college courses, and CPA continuing education.

### **16.0 AUDITS**

Certified public accountants conducting audits of JEA pursuant to section 218.39, Florida Statutes, shall report, as part of the audit, whether or not JEA has complied with this section 218.415, Florida Statutes.

## **17.0 SALE OF SECURITIES**

When the invested funds are needed in whole or in part for the purposes originally intended or for more optimal investments, JEA may sell such investments at the “market” and place the proceeds in the proper account or fund.

## **18.0 AUTHORIZATIONS**

JEA investment accounts may be opened or continued at registered broker/dealers or banks. The Managing Director and Chief Executive Officer (CEO), or his designee, is authorized to open such accounts and to 1) purchase and sell authorized investments and to 2) sell securities received as payment for customer liabilities in lieu of the receipt of cash. A detailed listing of individuals in authorized positions and their specific authorities and signatures will be maintained in an “Authorization for the Opening and Continuing of Certain Investment Accounts and Signatories Therefor.”

## **19.0 PRIORITY OF DOCUMENTS**

This JEA Investment Policy shall be the governing document when conflicting or otherwise inconsistent with the JEA Procurement Code.

## **20.0 INVESTMENT POLICY APPROVAL**

The authority to approve, modify, or amend this Investment Policy rests with the JEA Finance and Audit Committee and the JEA Board. The JEA Chief Financial Officer or Treasurer may submit recommendations for changes to the Investment Policy as deemed necessary.



EXHIBIT 1  
JEA ELECTRIC SYSTEM AUTHORIZED INVESTMENTS

"Authorized Investments" shall mean and include any of the following securities, if and to the extent the same are at the time legal for investment of JEA's funds:

- (i) any bonds or other obligations which constitute direct obligations of, or as to principal and interest are unconditionally guaranteed by, the United States of America, including obligations of any of the Federal agencies set forth in clause (iii) below to the extent unconditionally guaranteed by the United States of America;
- (ii) bonds, debentures, or other evidences of indebtedness issued or guaranteed by an agency or corporation which has been or may hereafter be created pursuant to an Act of Congress as an agency or instrumentality of the United States of America;
- (iii) obligations of any state of the United States of America or any political subdivision thereof or an agency or instrumentality of any state or political subdivision, provided at the time of their purchase hereunder such obligations are rated in either of the two highest rating categories by two nationally recognized rating agencies;
- (iv) any agreements or contracts with insurance companies or other financial institutions, which agreements or contracts (a) shall be rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies, or (b) are issued and entered into by (i) an insurance company whose claim paying ability shall be rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies or (ii) an insurance company or other financial institution that has issued and outstanding senior unsecured indebtedness rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies, and whereby under each such agreement or contract the insurance company or other financial institution shall be absolutely and unconditionally obligated to repay the moneys invested by JEA and interest thereon, without any right of recoupment, counterclaim or set off. Right of assignment is permitted, if approved by JEA;
- (v) direct and general obligations of the State of Florida for the payment of the principal of and interest on which the full faith and credit of said State are pledged, or any bonds or other obligations which as to principal and interest are unconditionally guaranteed by the State of Florida;
- (vi) certificates that evidence ownership of the right to payments of principal and/or interest on obligations described in clause (i) and (iii) of this definition, provided that such obligations shall be held in trust by a bank or trust company or a national banking association authorized to exercise corporate trust powers and subject to supervision or examination by federal, state, territorial or District of Columbia authority and having a combined capital, surplus and undivided profits of not less than \$50,000,000;
- (vii) certificates of deposit, whether negotiable or non-negotiable, and banker's acceptances issued by any bank, trust company or national banking association, in each case, having a combined capital, surplus and undivided profits of not less than \$100,000,000, provided at the time of their purchase hereunder such instruments are (a) rated not lower than the second highest rating category by two nationally recognized rating agencies, (b) issued by a bank, trust company or national banking association (1) which bank, trust company or



national banking association's deposit obligations have been issued the highest possible rating (giving effect to any refinement or graduation of ratings by a numerical modifier or otherwise) by (x) Moody's Investors Service or (y) two nationally recognized rating agencies or (2) which bank, trust company or national banking association has issued and outstanding senior unsecured indebtedness rated not lower than the second highest whole rating category by two nationally recognized rating agencies; provided that, if after the purchase of any such certificates of deposit, the ratings thereon or with respect to the issuer thereof, as the case may be, shall fall below the requirement set forth in clause (a) or (b) hereof, JEA shall sell such certificates of deposit, or (c) fully insured by the FDIC or secured, to the extent not insured by the FDIC, by such securities as described in clause (i) of this definition which securities shall at all times have a market value at least equal to the principal amount of such certificates of deposit or banker's acceptances;

- (viii) commercial paper that, at the date of investment, is rated "P-1" by Moody's Investors Service and "A-1" by Standard & Poor's Rating Group or their respective successors or if not so rated by both such rating agencies, then rated "P-1" by Moody's Investors Service or "A-1" by Standard & Poor's Ratings Group or "F-1" by Fitch Investors Service and rated with the highest possible rating (giving effect to any refinement or graduation of ratings with a numerical or symbolic modifier or otherwise) by one other nationally recognized rating agency;
- (ix) any repurchase agreement with any bank or trust company organized under the laws of any state of the United States of America or any national banking association or government bond dealer reporting to, trading with, and recognized as a primary dealer by the Federal Reserve Bank of New York, which agreement relates to the sale and repurchase of any of the securities described in clauses (i) and (iii) above and which, in the judgement of JEA, conforms as to terms and conditions with the then prevailing prudent standards in the financial markets;
- (x) shares of an investment company organized under the Investment Company Act of 1940, as amended, including money market mutual funds, which invests its assets exclusively in obligations of the type described in the other clauses of this definition which shares shall be rated AAA if rated by Standard & Poor's Rating Group and or Aaa if rated by Moody's Investors Service; and
- (xi) the State of Florida Local Government Surplus Funds Trust Fund or any intergovernmental investment pool authorized pursuant to the Florida Interlocal Cooperation Act of 1969, as provided in s. 163.01.

EXHIBIT II  
SJRPP AUTHORIZED INVESTMENTS – SECOND BOND RESOLUTION

“Authorized Investments” shall mean and include each of the following securities, obligations and investments if and to the extent that at the time the same shall be legal for investment of JEA’s funds:

- (i) any bonds or other obligations which constitute direct obligations of, or as to principal and interest are unconditionally guaranteed by, the United States of America, including obligations of any of the federal agencies set forth in clause (ii) below to the extent unconditionally guaranteed by the United States of America;
- (ii) bonds, debentures, or other evidences of indebtedness issued or guaranteed by any agency or corporation which has been or may hereafter be created pursuant to an Act of Congress as an agency or instrumentality of the United States of America which at the time of their purchase hereunder are rated “AAA” by Standard & Poor’s and “Aaa” by Moody’s Investors Service, if rated by both rating agencies, and, if rated by one such rating agency, shall have a rating of “AAA” or “Aaa” by Standard & Poor’s or Moody’s Investors Service, as the case may be;
- (iii) obligations of any state of the United States of America or any political subdivision thereof or any agency or instrumentality of any state or political subdivision, provided that at the time of their purchase hereunder such obligations are rated in either of the two highest whole rating categories by two nationally recognized rating agencies;
- (iv) direct and general obligations of the State of Florida for the payment of the principal of and interest on which the full faith and credit of said State is pledged, or any bonds or other obligations which as to principal and interest are unconditionally guaranteed by the State of Florida;
- (v) certificates that evidence ownership of the right to payments of principal and/or interest on obligations described in clauses (i) and (ii) of this definition, provided that such obligations shall be held in trust by a bank or trust company or a national banking association authorized to exercise corporate trust powers and subject to supervision or examination of federal, state, territorial or District of Columbia authority and having a combined capital, surplus and undivided profits of not less than \$50,000,000;
- (vi) certificates of deposit, whether negotiable or non-negotiable, and banker’s acceptances issued by any bank, trust company or national banking association, in each case, having a combined capital, surplus and undivided profits of not less than \$100,000,000; provided, that at the time of their purchase hereunder such instruments are (a) rated not lower than the second highest whole rating category by two nationally recognized rating agencies, (b) issued by a bank, trust company or nationally recognized association (1) which bank, trust company or national banking association’s deposit obligations have been issued the highest possible rating (giving effect to any refinement or graduation of ratings by a numerical or symbolic modifier or otherwise) by (X) Moody’s Investors Service or Standard & Poor’s

or (Y) two nationally recognized rating agencies or (2) which bank, trust company or national banking association has issued and outstanding senior unsecured indebtedness rated not lower than the second highest whole rating category by two nationally recognized rating agencies; provided that, if after the purchase of any such certificates of deposit, the ratings thereon or with respect to the issuer thereof, as the case may be, shall fall below the requirements set forth in clause (a) or (b) hereof, JEA shall sell such certificates of deposit, or (c) fully insured by the Federal Deposit Insurance Corporation or secured, to the extent not insured by the Federal Deposit Insurance Corporation, by such securities as are described in clause (i) of this definition which securities shall at all times have a market value at least equal to the principal amount of such certificates of deposit or banker's acceptances;

- (vii) commercial paper that, at the date of investment, is rated "P-1" by Moody's Investors Service and "A-1" by Standard & Poor's, or if not so rated by both such rating agencies, then rated "P-1" by Moody's Investors Service or "A-1" by Standard & Poor's or "F-1" by Fitch Ratings and rated with the highest possible rating (giving effect to any refinement or graduation of ratings with a numerical or symbolic modifier or otherwise) by one other nationally recognized rating agency;
- (viii) any repurchase agreement with any bank or trust company organized under the laws of any state of the United States of America or any national banking association or government bond dealer reporting to, trading with, and recognized as a primary dealer by the Federal Reserve bank of New York, which agreement relates to the sale and repurchase of any one or more of the securities described in clauses (i) and (ii) above and which, in the judgment of JEA, conforms as to terms and conditions with then prevailing prudent standards in the financial markets;
- (ix) shares of an investment company organized under the Investment Company Act of 1940, as amended (or successor provision of law), which invests in assets exclusively in obligations of the type described in the other clauses of this definition which shares shall be rated "AA" or above if rated by Standard & Poor's and "Aa2" or above if rated by Moody's Investors Service;
- (x) interests in the State of Florida Local Government Surplus Funds Trust Fund or other similar common trust fund for which such state, or a constitutional or statutory officer or agency thereof, shall be the custodian; and
- (xi) any agreements or contracts with insurance companies or other financial institutions, which agreements or contracts (a) shall be rated at the date of investment of such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies, or (b) are issued or entered into by (i) an insurance company whose claims paying ability shall be rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies or (ii) an insurance company or other financial institution that has issued and outstanding senior unsecured indebtedness rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies, and whereby under each such

agreement or contract the insurance company or other financial institution shall be absolutely and unconditionally obligated to repay the moneys invested by JEA and interest thereon, without any right of recoupment, counterclaim or set off.



EXHIBIT III  
RESTATED AND AMENDED BULK POWER SUPPLY SYSTEM  
AUTHORIZED INVESTMENTS

"Authorized Investments" shall mean and include each of the following securities, obligations and investments if and to the extent that at the time the same shall be legal for investment of JEA's funds:

- (i) any bonds or other obligations which constitute direct obligations of, or as to principal and interest are unconditionally guaranteed by, the United States of America, including obligations of any of the federal agencies set forth in clause (ii) below to the extent unconditionally guaranteed by the United States of America;
- (ii) bonds, debentures, or other evidences of indebtedness issued or guaranteed by any agency or corporation which has been or may hereafter be created pursuant to an Act of Congress as an agency or instrumentality of the United States of America which at the time of their purchase hereunder are rated "AAA" by Standard & Poor's and "Aaa" by Moody's Investors Service, if rated by both rating agencies, and, if rated by one such rating agency, shall have a rating of "AAA" or "Aaa" by Standard & Poor's or Moody's Investors Service, as the case may be;
- (iii) obligations of any state of the United States of America or any political subdivision thereof or any agency or instrumentality of any state or political subdivision, provided that at the time of their purchase hereunder such obligations are rated in either of the two highest whole rating categories by two nationally recognized rating agencies;
- (iv) direct and general obligations of the State of Florida for the payment of the principal of and interest on which the full faith and credit of said State is pledged, or any bonds or other obligations which as to principal and interest are unconditionally guaranteed by the State of Florida;
- (v) certificates that evidence ownership of the right to payments of principal and/or interest on obligations described in clauses (i) and (ii) of this definition, provided that such obligations shall be held in trust by a bank or trust company or a national banking association authorized to exercise corporate trust powers and subject to supervision or examination of federal, state, territorial or District of Columbia authority and having a combined capital, surplus and undivided profits of not less than \$50,000,000;
- (vi) certificates of deposit, whether negotiable or non-negotiable, and banker's acceptances issued by any bank, trust company or national banking association, in each case, having a combined capital, surplus and undivided profits of not less than \$100,000,000; *provided*, that at the time of their purchase hereunder such instruments are (a) rated not lower than the second highest whole rating category by two nationally recognized rating agencies, (b)

issued by a bank, trust company or nationally recognized association (1) which bank, trust company or national banking association's deposit obligations have been issued the highest possible rating (giving effect to any refinement or graduation of ratings by a numerical or symbolic modifier or otherwise) by (X) Moody's Investors Service or Standard & Poor's or (Y) two nationally recognized rating agencies or (2) which bank, trust company or national banking association has issued and outstanding senior unsecured indebtedness rated not lower than the second highest whole rating category by two nationally recognized rating agencies; provided that, if after the purchase of any such certificates of deposit, the ratings thereon or with respect to the issuer thereof, as the case may be, shall fall below the requirements set forth in clause (a) or (b) hereof, JEA shall sell such certificates of deposit, or (c) fully insured by the Federal Deposit Insurance Corporation or secured, to the extent not insured by the Federal Deposit Insurance Corporation, by such securities as are described in clause (i) of this definition which securities shall at all times have a market value at least equal to the principal amount of such certificates of deposit or banker's acceptances;

- (vii) commercial paper that, at the date of investment, is rated "P-1" by Moody's Investors Service and "A-1" by Standard & Poor's, or if not so rated by both such rating agencies, then rated "P-1" by Moody's Investors Service or "A-1" by Standard & Poor's or "F-1" by Fitch Ratings and rated with the highest possible rating (giving effect to any refinement or graduation of ratings with a numerical or symbolic modifier or otherwise) by one other nationally recognized rating agency;
- (viii) any repurchase agreement with any bank or trust company organized under the laws of any state of the United States of America or any national banking association or government bond dealer reporting to, trading with, and recognized as a primary dealer by the Federal Reserve bank of New York, which agreement relates to the sale and repurchase of any one or more of the securities described in clauses (i) and (ii) above and which, in the judgment of JEA, conforms as to terms and conditions with then prevailing prudent standards in the financial markets;
- (ix) shares of an investment company organized under the Investment Company Act of 1940, as amended (or successor provision of law), which invests in assets exclusively in obligations of the type described in the other clauses of this definition which shares shall be rated "AA" or above if rated by Standard & Poor's and "Aa" or above if rated by Moody's Investors Service;
- (x) interests in the State of Florida Local Government Surplus Funds Trust Fund or other similar common trust fund for which such state, or a constitutional or statutory officer or agency thereof, shall be the custodian; and
- (xi) any agreements or contracts with insurance companies or other financial institutions, which agreements or contracts (a) shall be rated at the date of investment of such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies, or (b) are issued or entered into by (i) an insurance company whose claims paying ability shall be rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies or (ii) an insurance company



or other financial institution that has issued and outstanding senior unsecured indebtedness rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies, and whereby under each such agreement or contract the insurance company or other financial institution shall be absolutely and unconditionally obligated to repay the moneys invested by JEA and interest thereon, without any right of recoupment, counterclaim or set off. Any such agreement or contract may provide that, with the approval of JEA, the insurance company or other financial institution may have the right to assign its obligations under any such agreement or contract to any other insurance company or other financial institution.



EXHIBIT IV  
JEA WATER AND SEWER AUTHORIZED INVESTMENTS

"Authorized Investments" shall mean and include any of the following securities, if and to the extent the same are at the time legal for investment of JEA's funds:

- (i) any bonds or other obligations which constitute direct obligations of, or as to principal and interest are unconditionally guaranteed by, the United States of America, including obligations of any of the Federal agencies set forth in clause (iii) below to the extent unconditionally guaranteed by the United States of America;
- (ii) bonds, debentures, or other evidences of indebtedness issued or guaranteed by an agency or corporation which has been or may hereafter be created pursuant to an Act of Congress as an agency or instrumentality of the United States of America;
- (iii) obligations of any state of the United States of America or any political subdivision thereof or an agency or instrumentality of any state or political subdivision, provided at the time of their purchase hereunder such obligations are rated in either of the two highest rating categories by two nationally recognized rating agencies;
- (iv) any agreements or contracts with insurance companies or other financial institutions, which agreements or contracts (a) shall be rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies, or (b) are issued and entered into by (i) an insurance company whose claim paying ability shall be rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies or (ii) an insurance company or other financial institution that has issued and outstanding senior unsecured indebtedness rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies, and whereby under each such agreement or contract the insurance company or other financial institution shall be absolutely and unconditionally obligated to repay the moneys invested by JEA and interest thereon, without any right of recoupment, counterclaim or set off. Right of assignment is permitted, if approved by JEA
- (v) direct and general obligations of the State of Florida for the payment of the principal of and interest on which the full faith and credit of said State are pledged, or any bonds or other obligations which as to principal and interest are unconditionally guaranteed by the State of Florida;
- (vi) certificates that evidence ownership of the right to payments of principal and/or interest on obligations described in clause (i) and (iii) of this definition, provided that such obligations shall be held in trust by a bank or trust company or a national banking association authorized to exercise corporate trust powers and subject to supervision or examination by federal, state, territorial or District of Columbia authority and having a combined capital, surplus and undivided profits of not less than \$50,000,000;
- (vii) certificates of deposit, whether negotiable or non-negotiable, and banker's acceptances issued by any bank, trust company or national banking association, in each case, having a combined capital, surplus and undivided profits of not less than \$100,000,000, provide at the time of their purchase hereunder such instruments are (a) rated not lower than the

second highest rating category by two nationally recognized rating agencies, (b) issued by a bank, trust company or national banking association (1) which bank, trust company or national banking association's deposit obligations have been issued the highest possible rating (giving effect to any refinement or graduation of ratings by a numerical modifier or otherwise) by (x) Moody's Investors Service or (y) two nationally recognized rating agencies or (2) which bank, trust company or national banking association has issued and outstanding senior unsecured indebtedness rated not lower than the second highest whole rating category by two nationally recognized rating agencies; provided that, if after the purchase of any such certificates of deposit, the ratings thereon or with respect to the issuer thereof, as the case may be, shall fall below the requirement set forth in clause (a) or (b) hereof, JEA shall sell such certificates of deposit, or (c) fully insured by the FDIC or secured, to the extent not insured by the FDIC, by such securities as described in clause (i) of this definition which securities shall at all times have a market value at least equal to the principal amount of such certificates of deposit or banker's acceptances;

- (viii) commercial paper that, at the date of investment, is rated "P-1" by Moody's Investors Service and "A-1" by Standard & Poor's Rating Group or their respective successors or if not so rated by both such rating agencies, then rated "P-1" by Moody's Investors Service or "A-1" by Standard & Poor's Ratings Group or "F-1" by Fitch Investors Service and rated with the highest possible rating (giving effect to any refinement or graduation of ratings with a numerical or symbolic modifier or otherwise) by one other nationally recognized rating agency;
- (ix) any repurchase agreement with any bank or trust company organized under the laws of any state of the United States of America or any national banking association or government bond dealer reporting to, trading with, and recognized as a primary dealer by the Federal Reserve Bank of New York, which agreement relates to the sale and repurchase of any of the securities described in clauses (i) and (iii) above and which, in the judgement of JEA, conforms as to terms and conditions with the then prevailing prudent standards in the financial markets;
- (x) shares of an investment company organized under the Investment Company Act of 1940, as amended, including money market mutual funds, which invests its assets exclusively in obligations of the type described in the other clauses of this definition which shares shall be rated AAA if rated by Standard & Poor's or Aaa if rated by Moody's Investors Service; and
- (xi) interests in the State of Florida Local Government Surplus Funds Trust Fund or any intergovernmental investment pool authorized pursuant to the Florida Interlocal Cooperation Act, as provided in s. 163.01.

EXHIBIT V  
JEA DISTRICT ENERGY SYSTEM AUTHORIZED INVESTMENTS

"Authorized Investments" shall mean and include any of the following securities, if and to the extent the same are at the time legal for investment of JEA's funds:

- (i) any bonds or other obligations which constitute direct obligations of, or as to principal and interest are unconditionally guaranteed by, the United States of America, including obligations of any of the Federal agencies set forth in clause (iii) below to the extent unconditionally guaranteed by the United States of America;
- (ii) bonds, debentures, or other evidences of indebtedness issued or guaranteed by an agency or corporation which has been or may hereafter be created pursuant to an Act of Congress as an agency or instrumentality of the United States of America;
- (iii) obligations of any state of the United States of America or any political subdivision thereof or an agency or instrumentality of any state or political subdivision, provided at the time of their purchase hereunder such obligations are rated in either of the two highest rating categories by two nationally recognized rating agencies;
- (iv) any agreements or contracts with insurance companies or other financial institutions, which agreements or contracts (a) shall be rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies, or (b) are issued and entered into by (i) an insurance company whose claim paying ability shall be rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies or (ii) an insurance company or other financial institution that has issued and outstanding senior unsecured indebtedness rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies, and whereby under each such agreement or contract the insurance company or other financial institution shall be absolutely and unconditionally obligated to repay the moneys invested by JEA and interest thereon, without any right of recoupment, counterclaim or set off. Right of assignment is permitted, if approved by JEA;
- (v) direct and general obligations of the State of Florida for the payment of the principal of and interest on which the full faith and credit of said State are pledged, or any bonds or other obligations which as to principal and interest are unconditionally guaranteed by the State of Florida;
- (vi) certificates that evidence ownership of the right to payments of principal and/or interest on obligations described in clause (i) and (iii) of this definition, provided that such obligations shall be held in trust by a bank or trust company or a national banking association authorized to exercise corporate trust powers and subject to supervision or examination by federal, state, territorial or District of Columbia authority and having a combined capital, surplus and undivided profits of not less than \$50,000,000;
- (vii) certificates of deposit, whether negotiable or non-negotiable, and banker's acceptances issued by any bank, trust company or national banking association, in each case, having a combined capital, surplus and undivided profits of not less than \$100,000,000, provide at the time of their purchase hereunder such instruments are (a) rated not lower than the second highest rating category by two nationally recognized rating agencies, (b) issued by a bank, trust company or national banking association (1) which bank, trust company or

national banking association's deposit obligations have been issued the highest possible rating (giving effect to any refinement or graduation of ratings by a numerical modifier or otherwise) by (x) Moody's Investors Service or (y) two nationally recognized rating agencies or (2) which bank, trust company or national banking association has issued and outstanding senior unsecured indebtedness rated not lower than the second highest whole rating category by two nationally recognized rating agencies; provided that, if after the purchase of any such certificates of deposit, the ratings thereon or with respect to the issuer thereof, as the case may be, shall fall below the requirement set forth in clause (a) or (b) hereof, JEA shall sell such certificates of deposit, or (c) fully insured by the FDIC or secured, to the extent not insured by the FDIC, by such securities as described in clause (i) of this definition which securities shall at all times have a market value at least equal to the principal amount of such certificates of deposit or banker's acceptances;

- (viii) commercial paper that, at the date of investment, is rated "P-1" by Moody's Investors Service and "A-1" by Standard & Poor's or their respective successors or if not so rated by both such rating agencies, then rated "P-1" by Moody's Investors Service or "A-1" by Standard & Poor's or "F-1" by Fitch Investors Service and rated with the highest possible rating (giving effect to any refinement or graduation of ratings with a numerical or symbolic modifier or otherwise) by one other nationally recognized rating agency;
- (ix) any repurchase agreement with any bank or trust company organized under the laws of any state of the United States of America or any national banking association or government bond dealer reporting to, trading with, and recognized as a primary dealer by the Federal Reserve Bank of New York, which agreement relates to the sale and repurchase of any of the securities described in clauses (i) and (iii) above and which, in the judgement of JEA, conforms as to terms and conditions with the then prevailing prudent standards in the financial markets;
- (x) shares of an investment company organized under the Investment Company Act of 1940, as amended, including money market mutual funds, which invests its assets exclusively in obligations of the type described in the other clauses of this definition which shares shall be rated AAA if rated by Standard & Poor's or Aaa if rated by Moody's Investors Service; and
- (xi) the State of Florida Local Government Surplus Funds Trust Fund or any intergovernmental investment pool authorized pursuant to the Florida Interlocal Cooperation Act of 1969, as provided in s. 163.01.

Table 1 – JEA Investment Limitations

Option	Allowable Range (% of total investments and/or \$ amount)	Comments
Bank NOW Account	Up to 25%, except for 3/31 and 9/30 at which time the limit is 30%	Federal or state insured financial institutions designated as Qualified Public Depositories by the State of Florida
Triparty Repo	Up to 15% with any one dealer; up to 25% in aggregate	102% collateral. Collateral can include Treasuries and/or Agencies and is held by a 3 <sup>rd</sup> party custodian. Dealers rated AA by two rating agencies.
U.S. Treasuries or Treasury-only Money Market Funds	Up to 100%	Fund must be rated AAA or Aaa and registered with SEC.
U.S. Agencies (Fannie Mae, Federal Home Loan Bank, Freddie Mac, etc.)	Less than 35% in any one issuer and up to 75% in aggregate, including repo collateral	Electric/Water/DES: No ratings requirement  Other Systems: AAA rated All Systems: Not backed by mortgage loans.
Commercial Paper	Up to 25% of portfolio; maximum of \$12.5 million in any one issuer	Must be in Fortune 500/Global 500, or governments of Canada or Canadian provinces (U.S. dollar-denominated); rated at least A-1/P-1 with stable or positive outlook
Municipal Bonds	Up to 30% non-JEA debt; 50% including JEA debt	Non-JEA debt must be rated AA by two rating agencies
Government Agency Money Market Mutual Funds	Up to 10% in any one fund; up to 25% in aggregate	AAA or Aaa rating required. Registered with SEC.
Intergovernmental Investment Pool	Up to 15%	Authorized by Florida statutes. Includes Florida Prime Fund and PFM's Florida Education Income Trust Fund.





**JEA  
TREASURY SERVICES  
INVESTMENT POLICY  
AS OF ~~MAY 16, 2017~~ AUGUST 21, 2018**

**1.0 SCOPE**

The statement of investment policy and guidelines applies to funds under control of JEA in excess of those required to meet short-term expenses.

This investment policy applies to financial assets including funds related to the issuance of debt by JEA, including the Electric System, the Water and Sewer System, St. Johns River Power Park (SJRPP), the Bulk Power Supply System, the District Energy System (DES), and any other entity created and approved by JEA's Board. Furthermore, this investment policy applies to customer deposit monies held by JEA. This policy shall not apply to investments of the SJRPP Employees' Retirement Plan or investments of the Other Post-Employment Benefits (OPEB) Trust, which are covered by separate investment policies or authorizing resolutions.

**2.0 INVESTMENT OBJECTIVES**

JEA's investment portfolio shall be managed with the primary objective of safety of capital. The investment strategy will provide sufficient liquidity to meet anticipated cash flow requirements.

JEA will strive to obtain the highest possible yields consistent with safety of capital, liquidity of the portfolio and prudent investment principles.

Investments are made with the intention of holding the securities to maturity. However, investments may be sold from time to time to meet cash flow requirements, for the purpose of restructuring the average duration of the portfolio and taking advantage of market opportunities to record capital gains.

**3.0 PERFORMANCE MEASUREMENT**

JEA seeks to optimize the return on investment within the constraints of safety and liquidity. The investment portfolio shall be designed to attain a market yield consistent with the investment risk, maturity and liquidity constraints as discussed in this policy. A benchmark index will be used to evaluate the performance of the portfolio and the index will be periodically reviewed by the Chief Financial Officer to determine its appropriateness and to recommend changes as needed.

## 4.0 PRUDENCE AND ETHICAL STANDARDS

The standard of prudence to be applied by JEA shall be the “Prudent Person” rule, which states: “Investments shall be made with judgment and care under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived from the investment.” The “Prudent Person” rule shall be applied in the context of managing the overall portfolio.

Employees of JEA involved in the investment process shall not transact personal business activity that could or could appear to conflict with State Statutes, City Ordinances, JEA Management Directives, proper execution of the investment program or which could impair their ability to make impartial investment decisions.

## 5.0 AUTHORIZED INVESTMENTS

Refer to Exhibits I through VI for a complete listing of the “Authorized Investments”. ~~Exhibit I includes the Authorized Investments for the Electric System and Exhibit VI lists the Authorized Investments for DES.~~ The bond resolutions for the Electric System, the Water and Sewer System and for DES allow any investment that is permitted by Florida law. Further, the Florida statutes provide that authorized investments include those that have been authorized by a resolution of the entity, e.g. a Board resolution. Thus, the JEA Board can amend the list of Authorized Investments for the Electric System, the Water and Sewer System, and for DES. The Authorized Investments for the other JEA systems ~~or entities~~ are specifically listed in their respective bond resolutions and thus can only be changed by a change in the resolution.

Money market funds are specifically included in the list of Authorized Investments for the Electric System, the Water and Sewer System, and DES. However, the term “money market funds” is not specifically noted in the list of Authorized Investments for the SJRPP Second Bond Resolution or ~~the Bulk Power Supply System, or the Water and Sewer System.~~ The listings for those systems include as Authorized Investments the shares of an investment company organized under the Investment Company Act of 1940, as amended. Money market funds which are organized and registered under the Investment Company Act of 1940, as amended, fall under this definition and are thus included as eligible investments.

~~In the case of the SJRPP First Bond Resolution, the list of Investment Securities includes investments in direct obligations of or obligations guaranteed by the United States of America. Section 660.415 of the Florida Statutes states that in the absence of an express provision to the contrary, when a governing instrument (e.g. a bond resolution) permits investments in United States Government obligations, trust companies, trust departments, trustees and fiduciaries may invest in shares of an investment company registered under the Investment Company Act of 1940 if the portfolio of such investment company is limited to United States Government obligations and repurchase agreements fully~~

~~collateralized by United States Government obligations. Thus the funds held by the SJRPP Trustee in the Debt Service Account and the Debt Service Reserve Account in the Debt Service Fund may be invested in money market mutual funds which invest solely in United States Government obligations or repurchase agreements fully collateralized by United States Government obligations.~~

For all JEA systems, ~~only~~ money market funds ~~must be~~~~that are~~ rated AAA by Standard and Poor's or Aaa by Moody's Investors Service, ~~are permitted.~~

JEA does not speculate on the future movement of interest rates and is not permitted to utilize reverse repurchase agreements or other forms of debt leverage in the management of its investment portfolio. Floating rate notes, inflation-indexed notes, and other adjustable rate securities are permitted types of securities. Inverse floaters, however, are prohibited.

JEA is permitted to use interest rate swap agreements for asset/liability management. For its assets, JEA utilizes interest rate swaps in a 100% asset matched strategy with JEA's revolving fund balances. JEA is also permitted to engage in the practice of securities lending, whereby a fee is paid to JEA in exchange for lending securities that are fully collateralized by securities listed as ~~"Authorized Investments"~~. JEA's investment professionals have developed sufficient understanding of the investment vehicles listed above and have the expertise to manage them.

## **6.0 MATURITY AND LIQUIDITY REQUIREMENTS**

The investment portfolio shall be structured in such manner as to provide sufficient liquidity to pay obligations as they come due. To the extent possible, investment maturities will be matched with known cash needs and anticipated cash flow requirements.

Additionally, maturity limitations for funds related to the issuance of debt are outlined in the Bond Resolution relating to those bond issues.

## **7.0 PORTFOLIO COMPOSITION**

The investment portfolio may be structured to have limits on certain types of securities, issuers, and maturities. Refer to Table 1 for specific limitations.

Investments in commercial paper, certificates of deposit or bankers acceptances shall have the following restrictions: Nine months maximum maturity, \$12,500,000 limit per issuer, and limited to 25% of the entire portfolio (including money market and repurchase agreements). Exceeding the 25% limit is permitted when including investments for the debt service sinking funds and escrows relating to the economic defeasance of debt. In addition, commercial paper must be rated in the highest whole rating category (i.e. A-1 by Standard and Poor's, P-1 by Moody's Investors Service or F1 by Fitch) by at least 2 nationally recognized rating agencies and be issued by a Fortune 500 company, a Fortune Global 500 company with significant operations in the U.S. (in U.S. dollar-denominated securities), or

the governments of Canada or Canadian provinces (in U.S. dollar-denominated securities). The ratings outlook for the commercial paper must be positive or stable at the time of the investment.

## **8.0 RISK AND DIVERSIFICATION**

Assets held shall be diversified to control the risk of loss resulting from over concentration of assets in a specific maturity, issuer, instrument, dealer, or bank through which these instruments are bought and sold. Diversification strategies shall be reviewed and revised periodically as necessary by the appropriate management staff. A diversity of treasury and agency issues shall be maintained to avoid a concentration in any one issue or maturity. Refer to Table 1 for detailed investment limitations. Such limitations will be periodically reviewed by the Chief Financial Officer to determine their appropriateness and to recommend changes as needed.

## **9.0 AUTHORIZED INVESTMENT INSTITUTIONS AND DEALERS**

JEA shall only execute US Treasury and Agency investment transactions and repurchase agreements with primary securities dealers as designated by the Federal Reserve Bank of New York and commercial banks within JEA's geographical service area who are member banks of the Federal Reserve System and have capital stock, surplus and undivided earnings aggregating at least \$25,000,000 and have a rating on short-term bank deposits of at least P-1 by Moody's Investors Service. Commercial paper transactions, CD's and BA's can be executed with primary securities dealers and firms considered to be "Direct Issuers". Municipal securities transactions can be executed with primary securities dealers or municipal securities firms having a significant presence in Florida or firms owning a specific JEA bond issue and only on a delivery versus payment basis. Investment Agreements can be purchased directly from the issuing insurance company or financial institution. Money market mutual funds can be purchased from commercial banks meeting the requirements discussed above, from primary dealers, ~~through JEA Trustees as discussed in Section 5.0;~~ or directly from the money market mutual fund. All other investments can only be purchased from primary dealers.

## **10.0 THIRD-PARTY CUSTODIAL AGREEMENTS**

All securities purchased by, and all collateral obtained by, JEA under this section shall be properly designated as an asset of JEA and held in safekeeping by a third party custodial bank or other third party custodial institution, except as noted below.

All securities purchased and sold by JEA under this section shall be executed using the "delivery versus payment procedure." Collateral requirements for Repurchase Agreements and Securities Lending Agreements will be contained in the Master Repurchase Agreement/Custodial Undertaking and Securities Lending Agreement, respectively, executed between JEA and the broker/dealer or bank.

The safekeeping institution shall issue a safekeeping receipt to JEA listing the specific instrument, par value, rate, maturity and any other pertinent information. In the case of securities purchased or sold, the “confirmation” received from the dealer or safekeeping institution should be attached to the internally generated trade ticket. In the case of repurchase agreements, collateral safekeeping receipts should be compared on a daily basis to ensure compliance with collateral requirements and investment limitations.

No withdrawal of securities, in whole or in part, shall be made from safekeeping, except by an authorized staff member of JEA.

An exception to third party custody of assets would be the safekeeping of collateral for repurchase agreements entered into between JEA and its primary bank for the purpose of conducting day to day cash management functions. Collateral will be held by that bank but not in JEA’s name. The bank will issue a safekeeping receipt indicating the collateral pledged to JEA.

## **11.0 MASTER REPURCHASE AGREEMENT**

JEA shall require all institutions and dealers transacting repurchase agreements to execute and perform as stated in the Master Repurchase Agreement that is signed by both parties. All repurchase agreement transactions shall adhere to the requirements of the Master Repurchase Agreement.

Repurchase Agreements can only be entered into with authorized investment institutions and dealers as defined in Section 9.0 of this policy. In addition, all repurchase agreements must adhere to the provisions as defined in Section 5.0 of this policy relating to authorized investments and Section 10.0 of this policy regarding third-party custodial agreements. Collateral requirements must adhere to those outlined in the appropriate bond resolution. Tri Party Repurchase Agreements are preferred to “conventional” (delivery of collateral versus wire transfer of the amount invested) Repurchase Agreements due to significant cost savings derived from safekeeping the collateral at the same custodian utilized by the dealer. Due to the costs associated with transferring Repurchase Agreements on a daily basis, the interest rate paid to JEA will be compared on a daily basis to the market (using Bloomberg or a similar source) and when appropriate, the Repurchase Agreement will be re-executed with a different institution based on the rate comparison.

## **12.0 BID REQUIREMENT**

Staff shall determine the approximate maturity date based on cash flow needs and market conditions, analyze and select one or more optimal types of investment, and competitively bid the security in question when feasible and appropriate.

Competitive bids or offerings shall be obtained from at least three dealers on all sales or purchases except in situations where:

- a. the security involved is a “new issue” and/or can be purchased “at the auction”;

- b. the security involved has a fixed, “posted scale” rate;
- c. the security involved is available through direct issue, private placement (e.g., ~~General Electric Commercial Paper, Chevron Commercial Paper~~ direct issue commercial paper, etc.);
- d. the security involved is of particular special interest to JEA (e.g. Florida General Obligation bonds or other municipal bonds) and dealer competition could have an adverse impact with respect to the price and/or availability of the security to JEA;
- e. a dealer or institution brings to JEA an unsolicited swap proposal deemed advantageous to JEA.

Although direct investments in equity securities are not ~~a~~Authorized ~~i~~Investments, such securities are received by JEA from time to time as payment for customer liabilities in lieu of the receipt of cash. Competitive bids are not required on the sale of such securities in order that the sale may take place in an expeditious manner.

The requirement for competitive bids does not apply to JEA purchases of JEA bonds in the secondary market, or to investments in money market mutual funds, the State of Florida Local Government Surplus Funds Trust Fund (~~the “State Pool”~~ “Florida Prime”), or intergovernmental investment pools. Money market funds shall be rated AAA by Standard and Poor’s or Aaa by Moody’s Investors Service and will be selected on the basis of a fund’s yield, ranking versus peers, expenses, portfolio composition, assets under management, etc. Investments in money market mutual funds or in ~~the State Pool~~ Florida Prime or an intergovernmental pool will be reviewed on a periodic basis for appropriateness.

### 13.0 INTERNAL CONTROLS

The Chief Financial Officer and/or the Treasurer will maintain a system of internal controls, which will be documented in writing and made part of operational procedures in Treasury Services. The internal controls will be reviewed by independent auditors as part of any financial audit periodically required of JEA.

The internal controls should be designed to prevent losses of funds which might arise from fraud, employee error, misrepresentation by third parties, or imprudent actions by employees of JEA.

### 14.0 REPORTING

Treasury Services shall generate monthly reports for management purposes. The reports shall include securities in the portfolio by class or type, book value, and yield earned during the period. Market values are reported quarterly in JEA’s financial statements. Treasury



Services shall provide other such reports and information as deemed reasonable, upon request, from other internal and external sources.

#### **15.0 CONTINUING EDUCATION**

JEA staff responsible for making investment decisions must annually complete 8 hours of continuing education in subjects of study related to investment practices and products. This requirement can be met through a variety of methods including, but not limited to, seminars, conferences, college courses, and CPA continuing education.

#### **16.0 AUDITS**

Certified public accountants conducting audits of JEA pursuant to section 218.39, Florida Statutes, shall report, as part of the audit, whether or not JEA has complied with this section 218.415, Florida Statutes.

#### **17.0 SALE OF SECURITIES**

When the invested funds are needed in whole or in part for the purposes originally intended or for more optimal investments, JEA may sell such investments at the “market” and place the proceeds in the proper account or fund.

#### **18.0 AUTHORIZATIONS**

JEA investment accounts may be opened or continued at registered broker/dealers or banks. The Managing Director and Chief Executive Officer (CEO), or his designee, is authorized to open such accounts and to 1) purchase and sell authorized investments and to 2) sell securities received as payment for customer liabilities in lieu of the receipt of cash. A detailed listing of individuals in authorized positions and their specific authorities and signatures will be maintained in an “Authorization for the Opening and Continuing of Certain Investment Accounts and Signatories Therefor.”

#### **19.0 PRIORITY OF DOCUMENTS**

This JEA Investment Policy shall be the governing document when conflicting or otherwise inconsistent with the JEA Procurement Code.

#### **20.0 INVESTMENT POLICY APPROVAL**

The authority to approve, modify, or amend this Investment Policy rests with the JEA Finance and Audit Committee and the JEA Board. The JEA Chief Financial Officer or Treasurer may submit recommendations for changes to the Investment Policy as deemed necessary.

EXHIBIT 1  
JEA ELECTRIC SYSTEM AUTHORIZED INVESTMENTS

"Authorized Investments" shall mean and include any of the following securities, if and to the extent the same are at the time legal for investment of JEA's funds:

- (i) any bonds or other obligations which constitute direct obligations of, or as to principal and interest are unconditionally guaranteed by, the United States of America, including obligations of any of the Federal agencies set forth in clause (iii) below to the extent unconditionally guaranteed by the United States of America;
- ~~(ii) any bonds or other obligations of any state of the United States of America or of any agency, instrumentality or local governmental unit of any such state (a) which are not callable prior to maturity, or which have been duly called for redemption by the obligor on a date or dates specified and as to which irrevocable instructions have been given to a trustee in respect of such bonds or other obligations by the obligor to give due notice of such redemption on such date or dates, which date or dates shall be also specified in such instructions, (b) which are secured as to principal and interest and redemption premium, if any, by a fund consisting only of cash or bonds or other obligations of the character described in clause (i) above which fund may be applied only to the payment of such principal of and interest and redemption premium, if any, on such bonds or other obligations on the maturity date or dates thereof or the redemption date or dates specified in the irrevocable instructions referred to in subclause (a) of this clause (ii), as appropriate, (c) as to which the principal of and interest on the bonds and obligations of the character described in clause (i) above on deposit in such fund along with any cash on deposit in such fund are sufficient to pay principal of and interest and redemption premium, if any, on the bonds or other obligations described in this clause (ii) on the maturity date or dates thereof or on the redemption date or dates specified in the irrevocable instructions referred to in subclause (a) of this clause (ii), as appropriate and (d) which at the time of their purchase hereunder are rated AAA by Standard & Poor's and if rated by Moody's Investors Service, are rated Aaa by such agency;~~
- (iii) bonds, debentures, or other evidences of ~~long-term~~ indebtedness issued or guaranteed by an agency or corporation which has been or may hereafter be created pursuant to an Act of Congress as an agency or instrumentality of the United States of America;
- ~~(iv) discount notes or other short-term debt issued or guaranteed by an agency or corporation which has been or may hereafter be created pursuant to an Act of Congress as an agency or instrumentality of the United States of America which at the time of their purchase are rated in the highest rating category by two nationally recognized rating agencies;~~
- ~~(v) New Housing Authority Bonds issued by public agencies or municipalities and fully secured as to the payment of both principal and interest by a pledge of annual contributions under an annual contributions contract or contracts with the United States of America, or project notes issued by public agencies or municipalities and fully secured as to the payment of both principal and interest by a requisition or payment agreement with the United States of America;~~
- (~~viii~~iii) obligations of any state of the United States of America or any political subdivision thereof or an agency or instrumentality of any state or political subdivision, provided at the time of their purchase hereunder such obligations are rated in either of the two highest rating categories by two nationally recognized rating agencies;

- (~~viii~~iv) any agreements or contracts with insurance companies or other financial institutions, which agreements or contracts (a) shall be rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies, or (b) are issued and entered into by (i) an insurance company whose claim paying ability shall be rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies or (ii) an insurance company or other financial institution that has issued and outstanding senior unsecured indebtedness rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies, and whereby under each such agreement or contract the insurance company or other financial institution shall be absolutely and unconditionally obligated to repay the moneys invested by JEA and interest thereon, without any right of recoupment, counterclaim or set off. Right of assignment is permitted, if approved by JEA;
- (~~viii~~v) direct and general obligations of the State of Florida for the payment of the principal of and interest on which the full faith and credit of said State are pledged, or any bonds or other obligations which as to principal and interest are unconditionally guaranteed by the State of Florida;
- (~~ix~~vi) certificates that evidence ownership of the right to payments of principal and/or interest on obligations described in clause (i) and (iii) of this definition, provided that such obligations shall be held in trust by a bank or trust company or a national banking association authorized to exercise corporate trust powers and subject to supervision or examination by federal, state, territorial or District of Columbia authority and having a combined capital, surplus and undivided profits of not less than \$50,000,000;
- (~~x~~vii) certificates of deposit, whether negotiable or non-negotiable, and banker's acceptances issued by any bank, trust company or national banking association, in each case, having a combined capital, surplus and undivided profits of not less than \$100,000,000, provided at the time of their purchase hereunder such instruments are (a) rated not lower than the second highest rating category by two nationally recognized rating agencies, (b) issued by a bank, trust company or national banking association (1) which bank, trust company or national banking association's deposit obligations have been issued the highest possible rating (giving effect to any refinement or graduation of ratings by a numerical modifier or otherwise) by (x) Moody's Investors Service or (y) two nationally recognized rating agencies or (2) which bank, trust company or national banking association has issued and outstanding senior unsecured indebtedness rated not lower than the second highest whole rating category by two nationally recognized rating agencies; provided that, if after the purchase of any such certificates of deposit, the ratings thereon or with respect to the issuer thereof, as the case may be, shall fall below the requirement set forth in clause (a) or (b) hereof, JEA shall sell such certificates of deposit, or (c) fully insured by the FDIC or secured, to the extent not insured by the FDIC, by such securities as described in clause (i) of this definition which securities shall at all times have a market value at least equal to the principal amount of such certificates of deposit or banker's acceptances;
- (~~xiv~~iii) commercial paper that, at the date of investment, is rated "P-1" by Moody's Investors Service and "A-1" by Standard & Poor's Rating Group or their respective successors or if not so rated by both such rating agencies, then rated "P-1" by Moody's Investors Service or "A-1" by Standard & Poor's Ratings Group or "F-1" by Fitch Investors Service and rated with the highest possible rating (giving effect to any refinement or graduation of ratings with a numerical or symbolic modifier or otherwise) by one other nationally recognized rating agency;

- | ~~(xi)~~ any repurchase agreement with any bank or trust company organized under the laws of any state of the United States of America or any national banking association or government bond dealer reporting to, trading with, and recognized as a primary dealer by the Federal Reserve Bank of New York, which agreement relates to the sale and repurchase of any of the securities described in clauses (i) and (iii) above and which, in the judgement of JEA, conforms as to terms and conditions with the then prevailing prudent standards in the financial markets;
- | (~~xi~~) shares of an investment company organized under the Investment Company Act of 1940, as amended, including money market mutual funds, which invests its assets exclusively in obligations of the type described in the other clauses of this definition which shares shall be rated AAA if rated by Standard & Poor's Rating Group and or Aaa if rated by Moody's Investors Service; and
- | (~~xi~~) the State of Florida Local Government Surplus Funds Trust Fund or any intergovernmental investment pool authorized pursuant to the Florida Interlocal Cooperation Act of 1969, as provided in s. 163.01.

~~EXHIBIT II~~  
~~SJRPP AUTHORIZED INVESTMENTS—FIRST BOND RESOLUTION~~

~~"Authorized Investments" shall mean and include any of the following securities, if and to the extent the same are at the time legal for investment of JEA's funds:~~

- ~~(i)——direct obligations of or obligations guaranteed by the United States of America;~~
- ~~(ii)——obligations issued by any of the following agencies or their successors: Banks for Cooperatives; Federal Intermediate Credit Banks; Federal Home Loan Banks; Federal Land Banks; Export-Import Bank of the United States; Tennessee Valley Authority; Government National Mortgage Association; Federal Farm Credit Banks; Farmers Home Administration; Federal National Mortgage Association; a Federal agency to the extent that such obligations are backed by the full faith and credit of the United States of America (other than as provided in clause (i) hereof);~~
- ~~(iii)——public housing bonds issued by public housing authorities and fully secured as to the payment of both principal and interest by a pledge or annual contribution under an annual contributions contract or contracts with the United States of America; or project notes issued by public agencies or municipalities, in each case, fully secured as to the payment of both principal and interest by a requisition or payment agreement with the United States of America;~~
- ~~(iv)——direct and general obligations of or obligations guaranteed by the State of Florida, to the payment of the principal of and interest on which the full faith and credit of the State is pledged;~~
- ~~(v)——deposits in interest bearing time deposits or certificates of deposit fully secured by obligations described in clause (i) through (iv) hereof to the extent not insured by the Federal Deposit Insurance Corporation or the Federal Savings and Loan Insurance Corporation;~~
- ~~(vi)——debt obligations having a maximum maturity of one year of any corporation or bank which are rated by Moody's Investors Service, Inc. and Standard & Poor's Corporation or their successors in the highest rating category used by one such rating agency and in one of the two highest rating categories used by the other rating agency for comparable types of debt obligations; and~~
- ~~(vii)——investment agreements with any government bond dealer reporting to the Federal Reserve Bank of New York, or any Member bank of the Federal Reserve System having capital stock, surplus and undivided earnings aggregating at least \$25,000,000 which agreements are secured by obligations described in sub-paragraphs (i) through (vi) of this paragraph having a market value of at least 103 percent of the amount of such agreement.~~

EXHIBIT III  
SJRPP AUTHORIZED INVESTMENTS – SECOND BOND RESOLUTION

“Authorized Investments” shall mean and include each of the following securities, obligations and investments if and to the extent that at the time the same shall be legal for investment of JEA’s funds:

- (i) any bonds or other obligations which constitute direct obligations of, or as to principal and interest are unconditionally guaranteed by, the United States of America, including obligations of any of the federal agencies set forth in clause (ii) below to the extent unconditionally guaranteed by the United States of America;
- (ii) bonds, debentures, or other evidences of indebtedness issued or guaranteed by any agency or corporation which has been or may hereafter be created pursuant to an Act of Congress as an agency or instrumentality of the United States of America which at the time of their purchase hereunder are rated “AAA” by Standard & Poor’s and “Aaa” by Moody’s Investors Service, if rated by both rating agencies, and, if rated by one such rating agency, shall have a rating of “AAA” or “Aaa” by Standard & Poor’s or Moody’s Investors Service, as the case may be;
- (iii) obligations of any state of the United States of America or any political subdivision thereof or any agency or instrumentality of any state or political subdivision, provided that at the time of their purchase hereunder such obligations are rated in either of the two highest whole rating categories by two nationally recognized rating agencies;
- (iv) direct and general obligations of the State of Florida for the payment of the principal of and interest on which the full faith and credit of said State is pledged, or any bonds or other obligations which as to principal and interest are unconditionally guaranteed by the State of Florida;
- (v) certificates that evidence ownership of the right to payments of principal and/or interest on obligations described in clauses (i) and (ii) of this definition, provided that such obligations shall be held in trust by a bank or trust company or a national banking association authorized to exercise corporate trust powers and subject to supervision or examination of federal, state, territorial or District of Columbia authority and having a combined capital, surplus and undivided profits of not less than \$50,000,000;
- (vi) certificates of deposit, whether negotiable or non-negotiable, and banker’s acceptances issued by any bank, trust company or national banking association, in each case, having a combined capital, surplus and undivided profits of not less than \$100,000,000; provided, that at the time of their purchase hereunder such instruments are (a) rated not lower than the second highest whole rating category by two nationally recognized rating agencies, (b) issued by a bank, trust company or nationally recognized association (1) which bank, trust company or national banking association’s deposit obligations have been issued the highest possible rating (giving effect to any refinement or graduation of ratings by a numerical or symbolic modifier or otherwise) by (X) Moody’s Investors Service or Standard & Poor’s

or (Y) two nationally recognized rating agencies or (2) which bank, trust company or national banking association has issued and outstanding senior unsecured indebtedness rated not lower than the second highest whole rating category by two nationally recognized rating agencies; provided that, if after the purchase of any such certificates of deposit, the ratings thereon or with respect to the issuer thereof, as the case may be, shall fall below the requirements set forth in clause (a) or (b) hereof, JEA shall sell such certificates of deposit, or (c) fully insured by the Federal Deposit Insurance Corporation or secured, to the extent not insured by the Federal Deposit Insurance Corporation, by such securities as are described in clause (i) of this definition which securities shall at all times have a market value at least equal to the principal amount of such certificates of deposit or banker's acceptances;

- (vii) commercial paper that, at the date of investment, is rated "P-1" by Moody's Investors Service and "A-1" by Standard & Poor's, or if not so rated by both such rating agencies, then rated "P-1" by Moody's Investors Service or "A-1" by Standard & Poor's or "F-1" by Fitch Ratings and rated with the highest possible rating (giving effect to any refinement or graduation of ratings with a numerical or symbolic modifier or otherwise) by one other nationally recognized rating agency;
- (viii) any repurchase agreement with any bank or trust company organized under the laws of any state of the United States of America or any national banking association or government bond dealer reporting to, trading with, and recognized as a primary dealer by the Federal Reserve bank of New York, which agreement relates to the sale and repurchase of any one or more of the securities described in clauses (i) and (ii) above and which, in the judgment of JEA, conforms as to terms and conditions with then prevailing prudent standards in the financial markets;
- (ix) shares of an investment company organized under the Investment Company Act of 1940, as amended (or successor provision of law), which invests in assets exclusively in obligations of the type described in the other clauses of this definition which shares shall be rated "AA" or above if rated by Standard & Poor's and "Aa2" or above if rated by Moody's Investors Service;
- (x) interests in the State of Florida Local Government Surplus Funds Trust Fund or other similar common trust fund for which such state, or a constitutional or statutory officer or agency thereof, shall be the custodian; and
- (xi) any agreements or contracts with insurance companies or other financial institutions, which agreements or contracts (a) shall be rated at the date of investment of such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies, or (b) are issued or entered into by (i) an insurance company whose claims paying ability shall be rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies or (ii) an insurance company or other financial institution that has issued and outstanding senior unsecured indebtedness rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies, and whereby under each such



agreement or contract the insurance company or other financial institution shall be absolutely and unconditionally obligated to repay the moneys invested by JEA and interest thereon, without any right of recoupment, counterclaim or set off.

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EXHIBIT ~~III~~<sup>IV</sup>  
RESTATED AND AMENDED BULK POWER SUPPLY SYSTEM  
AUTHORIZED INVESTMENTS

"Authorized Investments" shall mean and include each of the following securities, obligations and investments if and to the extent that at the time the same shall be legal for investment of JEA's funds:

- (i) any bonds or other obligations which constitute direct obligations of, or as to principal and interest are unconditionally guaranteed by, the United States of America, including obligations of any of the federal agencies set forth in clause (ii) below to the extent unconditionally guaranteed by the United States of America;
- (ii) bonds, debentures, or other evidences of indebtedness issued or guaranteed by any agency or corporation which has been or may hereafter be created pursuant to an Act of Congress as an agency or instrumentality of the United States of America which at the time of their purchase hereunder are rated "AAA" by Standard & Poor's and "Aaa" by Moody's Investors Service, if rated by both rating agencies, and, if rated by one such rating agency, shall have a rating of "AAA" or "Aaa" by Standard & Poor's or Moody's Investors Service, as the case may be;
- (iii) obligations of any state of the United States of America or any political subdivision thereof or any agency or instrumentality of any state or political subdivision, provided that at the time of their purchase hereunder such obligations are rated in either of the two highest whole rating categories by two nationally recognized rating agencies;
- (iv) direct and general obligations of the State of Florida for the payment of the principal of and interest on which the full faith and credit of said State is pledged, or any bonds or other obligations which as to principal and interest are unconditionally guaranteed by the State of Florida;
- (v) certificates that evidence ownership of the right to payments of principal and/or interest on obligations described in clauses (i) and (ii) of this definition, provided that such obligations shall be held in trust by a bank or trust company or a national banking association authorized to exercise corporate trust powers and subject to supervision or examination of federal, state, territorial or District of Columbia authority and having a combined capital, surplus and undivided profits of not less than \$50,000,000;
- (vi) certificates of deposit, whether negotiable or non-negotiable, and banker's acceptances issued by any bank, trust company or national banking association, in each case, having a combined capital, surplus and undivided profits of not less than \$100,000,000; *provided*, that at the time of their purchase hereunder such instruments are (a) rated not lower than the second highest whole rating category by two nationally recognized rating agencies, (b)

issued by a bank, trust company or nationally recognized association (1) which bank, trust company or national banking association's deposit obligations have been issued the highest possible rating (giving effect to any refinement or graduation of ratings by a numerical or symbolic modifier or otherwise) by (X) Moody's Investors Service or Standard & Poor's or (Y) two nationally recognized rating agencies or (2) which bank, trust company or national banking association has issued and outstanding senior unsecured indebtedness rated not lower than the second highest whole rating category by two nationally recognized rating agencies; provided that, if after the purchase of any such certificates of deposit, the ratings thereon or with respect to the issuer thereof, as the case may be, shall fall below the requirements set forth in clause (a) or (b) hereof, JEA shall sell such certificates of deposit, or (c) fully insured by the Federal Deposit Insurance Corporation or secured, to the extent not insured by the Federal Deposit Insurance Corporation, by such securities as are described in clause (i) of this definition which securities shall at all times have a market value at least equal to the principal amount of such certificates of deposit or banker's acceptances;

- (vii) commercial paper that, at the date of investment, is rated "P-1" by Moody's Investors Service and "A-1" by Standard & Poor's, or if not so rated by both such rating agencies, then rated "P-1" by Moody's Investors Service or "A-1" by Standard & Poor's or "F-1" by Fitch Ratings and rated with the highest possible rating (giving effect to any refinement or graduation of ratings with a numerical or symbolic modifier or otherwise) by one other nationally recognized rating agency;
- (viii) any repurchase agreement with any bank or trust company organized under the laws of any state of the United States of America or any national banking association or government bond dealer reporting to, trading with, and recognized as a primary dealer by the Federal Reserve bank of New York, which agreement relates to the sale and repurchase of any one or more of the securities described in clauses (i) and (ii) above and which, in the judgment of JEA, conforms as to terms and conditions with then prevailing prudent standards in the financial markets;
- (ix) shares of an investment company organized under the Investment Company Act of 1940, as amended (or successor provision of law), which invests in assets exclusively in obligations of the type described in the other clauses of this definition which shares shall be rated "AA" or above if rated by Standard & Poor's and "Aa" or above if rated by Moody's Investors Service;
- (x) interests in the State of Florida Local Government Surplus Funds Trust Fund or other similar common trust fund for which such state, or a constitutional or statutory officer or agency thereof, shall be the custodian; and
- (xi) any agreements or contracts with insurance companies or other financial institutions, which agreements or contracts (a) shall be rated at the date of investment of such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies, or (b) are issued or entered into by (i) an insurance company whose claims paying ability shall be rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies or (ii) an insurance company

or other financial institution that has issued and outstanding senior unsecured indebtedness rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies, and whereby under each such agreement or contract the insurance company or other financial institution shall be absolutely and unconditionally obligated to repay the moneys invested by JEA and interest thereon, without any right of recoupment, counterclaim or set off. Any such agreement or contract may provide that, with the approval of JEA, the insurance company or other financial institution may have the right to assign its obligations under any such agreement or contract to any other insurance company or other financial institution.

EXHIBIT IV  
JEA WATER AND SEWER AUTHORIZED INVESTMENTS

"Authorized Investments" shall mean and include any of the following securities, if and to the extent the same are at the time legal for investment of JEA's funds:

- (i) any bonds or other obligations which constitute direct obligations of, or as to principal and interest are unconditionally guaranteed by, the United States of America, including obligations of any of the Federal agencies set forth in clause (iii) below to the extent unconditionally guaranteed by the United States of America;
- ~~(ii) any bonds or other obligations of any state of the United States of America or of any agency, instrumentality or local governmental unit of any such state (a) which are not callable prior to maturity, or which have been duly called for redemption by the obligor on a date or dates specified and as to which irrevocable instructions have been given to a trustee in respect of such bonds or other obligations by the obligor to give due notice of such redemption on such date or dates, which date or dates shall be also specified in such instructions, (b) which are secured as to principal and interest and redemption premium, if any, by a fund consisting only of cash or bonds or other obligations of the character described in clause (i) above which fund may be applied only to the payment of such principal of and interest and redemption premium, if any, on such bonds or other obligations on the maturity date or dates thereof or the redemption date or dates specified in the irrevocable instructions referred to in subclause (a) of this clause (ii), as appropriate, (c) as to which the principal of and interest on the bonds and obligations of the character described in clause (i) above on deposit in such fund along with any cash on deposit in such fund are sufficient to pay principal of and interest and redemption premium, if any, on the bonds or other obligations described in this clause (ii) on the maturity date or dates thereof or on the redemption date or dates specified in the irrevocable instructions referred to in subclause (a) of this clause (ii), as appropriate and (d) which at the time of their purchase hereunder are rated AAA by Standard & Poors Ratings Group and if rated by Moody's Investors Service, are rated Aaa by such agency;~~
- (iii) bonds, debentures, or other evidences of indebtedness issued or guaranteed by an agency or corporation which has been or may hereafter be created pursuant to an Act of Congress as an agency or instrumentality of the United States of America; ~~which at the time of their purchase hereunder are rated AAA and Aaa by Standard and Poor's and Moody's Investors Service, respectively, or if only rated by one, then shall have a rating of AAA or Aaa, as the case may be;~~
- ~~(iv) New Housing Authority Bonds issued by public agencies or municipalities and fully secured as to the payment of both principal and interest by a pledge of annual contributions under an annual contributions contract or contracts with the United States of America, or project notes issued by public agencies or municipalities and fully secured as to the payment of both principal and interest by a requisition or payment agreement with the United States of America;~~
- (iii\*) obligations of any state of the United States of America or any political subdivision thereof or an agency or instrumentality of any state or political subdivision, provided at the time

of their purchase hereunder such obligations are rated in either of the two highest rating categories by two nationally recognized rating agencies;

- (iv) any agreements or contracts with insurance companies or other financial institutions, which agreements or contracts (a) shall be rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies, or (b) are issued and entered into by (i) an insurance company whose claim paying ability shall be rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies or (ii) an insurance company or other financial institution that has issued and outstanding senior unsecured indebtedness rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies, and whereby under each such agreement or contract the insurance company or other financial institution shall be absolutely and unconditionally obligated to repay the moneys invested by JEA and interest thereon, without any right of recoupment, counterclaim or set off. Right of assignment is permitted, if approved by JEA
- (v) direct and general obligations of the State of Florida for the payment of the principal of and interest on which the full faith and credit of said State are pledged, or any bonds or other obligations which as to principal and interest are unconditionally guaranteed by the State of Florida;
- (vi) certificates that evidence ownership of the right to payments of principal and/or interest on obligations described in clause (i) and (iii) of this definition, provided that such obligations shall be held in trust by a bank or trust company or a national banking association authorized to exercise corporate trust powers and subject to supervision or examination by federal, state, territorial or District of Columbia authority and having a combined capital, surplus and undivided profits of not less than \$50,000,000;
- (vii) certificates of deposit, whether negotiable or non-negotiable, and banker's acceptances issued by any bank, trust company or national banking association, in each case, having a combined capital, surplus and undivided profits of not less than \$100,000,000, provide at the time of their purchase hereunder such instruments are (a) rated not lower than the second highest rating category by two nationally recognized rating agencies, (b) issued by a bank, trust company or national banking association (1) which bank, trust company or national banking association's deposit obligations have been issued the highest possible rating (giving effect to any refinement or graduation of ratings by a numerical modifier or otherwise) by (x) Moody's Investors Service or (y) two nationally recognized rating agencies or (2) which bank, trust company or national banking association has issued and outstanding senior unsecured indebtedness rated not lower than the second highest whole rating category by two nationally recognized rating agencies; provided that, if after the purchase of any such certificates of deposit, the ratings thereon or with respect to the issuer thereof, as the case may be, shall fall below the requirement set forth in clause (a) or (b) hereof, JEA shall sell such certificates of deposit, or (c) fully insured by the FDIC or secured, to the extent not insured by the FDIC, by such securities as described in clause (i) of this definition which securities shall at all times have a market value at least equal to the principal amount of such certificates of deposit or banker's acceptances;

- (viii) commercial paper that, at the date of investment, is rated “P-1” by Moody's Investors Service and “A-1” by Standard & Poor's Rating Group or their respective successors or if not so rated by both such rating agencies, then rated “P-1” by Moody’s Investors Service or “A-1” by Standard & Poor’s Ratings Group or “F-1” by Fitch Investors Service and rated with the highest possible rating (giving effect to any refinement or graduation of ratings with a numerical or symbolic modifier or otherwise) by one other nationally recognized rating agency;
- (ix) any repurchase agreement with any bank or trust company organized under the laws of any state of the United States of America or any national banking association or government bond dealer reporting to, trading with, and recognized as a primary dealer by the Federal Reserve Bank of New York, which agreement relates to the sale and repurchase of any of the securities described in clauses (i) and (iii) above and which, in the judgement of JEA, conforms as to terms and conditions with the then prevailing prudent standards in the financial markets;
- (xi) shares of an investment company organized under the Investment Company Act of 1940, as amended, including money market mutual funds, which invests its assets exclusively in obligations of the type described in the other clauses of this definition which shares shall be rated AAA ~~or above~~ if rated by Standard & Poor’s ~~Rating Group and or~~ Aaa2 ~~or above~~ if rated by Moody’s Investors Service; and
- (xii) interests in the State of Florida Local Government Surplus Funds Trust Fund or ~~other similar common trust fund for which such state, or a constitutional or statutory officer or agency thereof, shall be the custodian~~ any intergovernmental investment pool authorized pursuant to the Florida Interlocal Cooperation Act, as provided in s. 163.01.



EXHIBIT VI  
JEA DISTRICT ENERGY SYSTEM AUTHORIZED INVESTMENTS

"Authorized Investments" shall mean and include any of the following securities, if and to the extent the same are at the time legal for investment of JEA's funds:

- (i) any bonds or other obligations which constitute direct obligations of, or as to principal and interest are unconditionally guaranteed by, the United States of America, including obligations of any of the Federal agencies set forth in clause (iii) below to the extent unconditionally guaranteed by the United States of America;
- ~~(ii) any bonds or other obligations of any state of the United States of America or of any agency, instrumentality or local governmental unit of any such state (a) which are not callable prior to maturity, or which have been duly called for redemption by the obligor on a date or dates specified and as to which irrevocable instructions have been given to a trustee in respect of such bonds or other obligations by the obligor to give due notice of such redemption on such date or dates, which date or dates shall be also specified in such instructions, (b) which are secured as to principal and interest and redemption premium, if any, by a fund consisting only of cash or bonds or other obligations of the character described in clause (i) above which fund may be applied only to the payment of such principal of and interest and redemption premium, if any, on such bonds or other obligations on the maturity date or dates thereof or the redemption date or dates specified in the irrevocable instructions referred to in subclause (a) of this clause (ii), as appropriate, (c) as to which the principal of and interest on the bonds and obligations of the character described in clause (i) above on deposit in such fund along with any cash on deposit in such fund are sufficient to pay principal of and interest and redemption premium, if any, on the bonds or other obligations described in this clause (ii) on the maturity date or dates thereof or on the redemption date or dates specified in the irrevocable instructions referred to in subclause (a) of this clause (ii), as appropriate and (d) which at the time of their purchase hereunder are rated AAA by Standard & Poor's Ratings Group and if rated by Moody's Investors Service, are rated Aaa by such agency;~~
- (iii) bonds, debentures, or other evidences of ~~long-term~~ indebtedness issued or guaranteed by an agency or corporation which has been or may hereafter be created pursuant to an Act of Congress as an agency or instrumentality of the United States of America;
- ~~(iv) discount notes or other short-term debt issued or guaranteed by an agency or corporation which has been or may hereafter be created pursuant to an Act of Congress as an agency or instrumentality of the United States of America which at the time of their purchase are rated in the highest rating category by two nationally recognized rating agencies;~~
- ~~(v) New Housing Authority Bonds issued by public agencies or municipalities and fully secured as to the payment of both principal and interest by a pledge of annual contributions under an annual contributions contract or contracts with the United States of America, or project notes issued by public agencies or municipalities and fully secured as to the payment of both principal and interest by a requisition or payment agreement with the United States of America;~~
- (~~viii~~iii) obligations of any state of the United States of America or any political subdivision thereof or an agency or instrumentality of any state or political subdivision, provided at the time of their purchase hereunder such obligations are rated in either of the two highest rating categories by two nationally recognized rating agencies;

- | ~~(vii)~~ any agreements or contracts with insurance companies or other financial institutions, which agreements or contracts (a) shall be rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies, or (b) are issued and entered into by (i) an insurance company whose claim paying ability shall be rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies or (ii) an insurance company or other financial institution that has issued and outstanding senior unsecured indebtedness rated at the date of investment in such agreements or contracts in the highest whole rating category by two nationally recognized rating agencies, and whereby under each such agreement or contract the insurance company or other financial institution shall be absolutely and unconditionally obligated to repay the moneys invested by JEA and interest thereon, without any right of recoupment, counterclaim or set off. Right of assignment is permitted, if approved by JEA;
- | ~~(viii)~~ direct and general obligations of the State of Florida for the payment of the principal of and interest on which the full faith and credit of said State are pledged, or any bonds or other obligations which as to principal and interest are unconditionally guaranteed by the State of Florida;
- | ~~(viii)~~ certificates that evidence ownership of the right to payments of principal and/or interest on obligations described in clause (i) and (iii) of this definition, provided that such obligations shall be held in trust by a bank or trust company or a national banking association authorized to exercise corporate trust powers and subject to supervision or examination by federal, state, territorial or District of Columbia authority and having a combined capital, surplus and undivided profits of not less than \$50,000,000;
- | ~~(ixvii)~~ certificates of deposit, whether negotiable or non-negotiable, and banker's acceptances issued by any bank, trust company or national banking association, in each case, having a combined capital, surplus and undivided profits of not less than \$100,000,000, provide at the time of their purchase hereunder such instruments are (a) rated not lower than the second highest rating category by two nationally recognized rating agencies, (b) issued by a bank, trust company or national banking association (1) which bank, trust company or national banking association's deposit obligations have been issued the highest possible rating(giving effect to any refinement or graduation of ratings by a numerical modifier or otherwise) by (x) Moody's Investors Service or (y) two nationally recognized rating agencies or (2) which bank, trust company or national banking association has issued and outstanding senior unsecured indebtedness rated not lower than the second highest whole rating category by two nationally recognized rating agencies; provided that, if after the purchase of any such certificates of deposit, the ratings thereon or with respect to the issuer thereof, as the case may be, shall fall below the requirement set forth in clause (a) or (b) hereof, JEA shall sell such certificates of deposit, or (c) fully insured by the FDIC or secured, to the extent not insured by the FDIC, by such securities as described in clause (i) of this definition which securities shall at all times have a market value at least equal to the principal amount of such certificates of deposit or banker's acceptances;

- | (~~xviii~~) commercial paper that, at the date of investment, is rated “P-1” by Moody's Investors Service and “A-1” by Standard & Poor's or their respective successors or if not so rated by both such rating agencies, then rated “P-1” by Moody’s Investors Service or “A-1” by Standard & Poor’s or “F-1” by Fitch Investors Service and rated with the highest possible rating (giving effect to any refinement or graduation of ratings with a numerical or symbolic modifier or otherwise) by one other nationally recognized rating agency;
- | (~~xix~~) any repurchase agreement with any bank or trust company organized under the laws of any state of the United States of America or any national banking association or government bond dealer reporting to, trading with, and recognized as a primary dealer by the Federal Reserve Bank of New York, which agreement relates to the sale and repurchase of any of the securities described in clauses (i) and (iii) above and which, in the judgement of JEA, conforms as to terms and conditions with the then prevailing prudent standards in the financial markets;
- | (~~xii~~) shares of an investment company organized under the Investment Company Act of 1940, as amended, including money market mutual funds, which invests its assets exclusively in obligations of the type described in the other clauses of this definition which shares shall be rated AAA if rated by Standard & Poor’s ~~and~~ or Aaa if rated by Moody’s Investors Service; and
- | (~~xvi~~) the State of Florida Local Government Surplus Funds Trust Fund or any intergovernmental investment pool authorized pursuant to the Florida Interlocal Cooperation Act of 1969, as provided in s. 163.01.

Table 1 – JEA Investment Limitations

Option	Allowable Range (% of total investments and/or \$ amount)	Comments
Bank NOW Account	Up to 25%, except for 3/31 and 9/30 at which time the limit is 30%	Federal or state insured financial institutions designated as Qualified Public Depositories by the State of Florida
Triparty Repo	Up to 15% with any one dealer; up to 25% in aggregate	102% collateral, <del>for Elec., Water, SJRPP 2<sup>nd</sup> Resolution; 103% for SJRPP 1<sup>st</sup> Resolution.</del> Collateral can include Treasuries and/or Agencies and is held by a 3 <sup>rd</sup> party custodian. Dealers rated AA by two rating agencies.
U.S. Treasuries or Treasury-only Money Market Funds	Up to 100%	Fund must be rated AAA or Aaa and registered with SEC.
U.S. Agencies (Fannie Mae, Federal Home Loan Bank, Freddie Mac, etc.)	Less than 35% in any one issuer and up to 75% in aggregate, including repo collateral	Electric/ <del>Water</del> /DES: No ratings requirement <del>for long-term debt; A-1/P-1 or better for short-term debt; SJRPP 1<sup>st</sup> Resolution: no ratings requirements;</del> Other Systems: AAA rated All Systems: Not backed by mortgage loans.
Commercial Paper	Up to 25% of portfolio; maximum of \$12.5 million in any one issuer	Must be in Fortune 500/Global 500, or governments of Canada or Canadian provinces (U.S. dollar-denominated); rated at least A-1/P-1 with stable or positive outlook
Municipal Bonds	Up to 30% non-JEA debt; 50% including JEA debt	Non-JEA debt must be rated AA by two rating agencies <del>for Elec., Water, and 2<sup>nd</sup> Power Park Resolution; Fla. GOs for original Power Park Resolution</del>
Government Agency Money Market Mutual Funds	Up to 10% in any one fund; up to 25% in aggregate	AAA or Aaa rating required. Registered with SEC.
Intergovernmental Investment Pool	Up to <del>10</del> 15%	Authorized by Florida statutes. Includes Florida Prime Fund and PFM's Florida Education Income Trust Fund.

## VIII. A. 9.

### JEA Energy Market Risk Management Policy Report



July 20, 2018

**SUBJECT:** JEA ENERGY MARKET RISK MANAGEMENT POLICY REPORT

**Purpose:**

☒ Information Only

☐ Action Required

☐ Advice/Direction

**Issue:** The JEA Board approved the Energy Market Risk Management (EMRM) Policy in March 2014. The Policy was developed to codify the risk, governance, limits, and criteria associated with managing energy market exposure, and to comply with requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act. The reporting section of the Policy requires a quarterly report on JEA's financial and physical fuel and power transactions. This report includes physical transactions greater than one year and all financial transactions.

**Significance:** High. The Policy governs JEA's wholesale energy market risk management and allows JEA to execute certain physical and financial transactions. The attached report is provided to the Board Finance and Audit Committee and satisfies the requirements of the reporting section of the EMRM Policy.

**Effect:** Financial and physical transactions allow the JEA Fuels group to manage the risks inherent in the wholesale fuel and energy markets. The attached Finance and Audit Committee report summarizes JEA's current positions.

**Cost or Benefit:** The costs of financial transactions are reflected in comparison to market indices. The benefits include establishment of a stable fuel price for the future.

**Recommended Board action:** None required. The report is required by the EMRM Policy and is provided as information.

**For additional information, contact:** Steve McInall, 665-4309

Submitted by: AFZ/MHD/MJB/SGM



**Commitments to Action**

- 1 Earn Customer Loyalty**
- 2 Deliver Business Excellence**
- 3 Develop an Unbeatable Team**





8/13/2018

**(F&A) Energy Market Risk Management: Physical and Financial Positions**

Summary as of 7/1/2018		
Projected FY18 Expense (Budget = \$431M)	\$462M	☹
Projected FY18 Fuel Fund Ending Balance	\$66M	☹
Projected FY19 Expense (Budget = \$418M)	\$417M	☺
EMRM Compliance	Yes	☺
Counterparty Credit Limit Exceptions	No	☺
Any Issues of Concern	No	☺

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**Table 1: Physical Counterparties (Contracts One Year or Greater) as of 7/1/2018**

Generating Unit	Fuel Type	Supplier/Counterparty	Contract Type	Remaining Contract Value	Remaining Contract Term
Scherer 4	Coal	Contura Eagle Butte - 003	Fixed Price	\$1,192,974	6 months
Scherer 4	Coal	Peabody Caballo - 009	Fixed Price	\$1,074,588	6 months
Scherer 4	Coal	Buckskin - 010	Fixed Price	\$463,559	6 months
Scherer 4	Coal	CY19 Contura Eagle Butte - 001	Fixed Price	\$2,806,571	12 months
Scherer 4	Coal	CY19 Contura Eagle Butte - 004	Fixed Price	\$862,826	12 months
Scherer 4	Coal	CY19 Peabody Caballo -005	Fixed Price	\$2,334,578	12 months
Scherer 4	Coal	CY20 Contura Eagle Butte - 001	Fixed Price	\$3,018,716	12 months
NG Fleet	Natural Gas	Shell Energy	Index w/Fixed Price Option	\$179,132,661	2.83 years

**Table 2: Financial Positions as of 7/1/2018**

Year	Commodity	Physical Volume (mmBtu)	Hedged Volume (mmBtu)	Percent Hedged	Unhedged Cost (\$/mmBtu)	Hedge Type	Hedge Price	Mark-to-Market Value	Counter Party
FY18	Natural Gas	8,683,300	3,640,000	41.9%	\$ 2.85	Swap	\$ 2.65	\$ (757,120)	Wells Fargo
FY19	Natural Gas	54,589,300	5,460,000	10.0%	\$ 2.81	Swap	\$ 2.65	\$ (1,521,520)	Wells Fargo
FY20	Natural Gas	51,229,300	-	0.0%	\$ 2.69	-	-	\$ -	-

**Table 3: Fuel Procurement as of 7/1/2018**

Fuel Type	Natural Gas	Coal	Petcoke	Purchased Power	Oil/Diesel	Renewables
FY18 Remaining / Energy Mix	45%	21%	18%	15%	0%	1%
Expected Spend (\$M)	39	23	24	15	0.1	3.8
% Procured	78%	100%	100%	63%	100%	100%
% Hedged	37%	100%	8%	7%	100%	100%
FY19 Budget / Energy Mix	50%	18%	12%	18%	0%	2%
Expected Spend (\$M)	156	73	50	64	2.0	18
% Procured	50%	67%	8%	55%	100%	100%
% Hedged	9%	67%	8%	6%	100%	100%
FY20 Projection / Energy Mix	50%	16%	13%	16%	0%	5%
Expected Spend (\$M)	141	69	54	54	1.8	29
% Procured	44%	42%	8%	14%	100%	100%
% Hedged	0%	42%	8%	2%	100%	100%

**Supporting Notes:**

- Renewable purchase power agreements are not included in Table 1
- Natural Gas Transportation is 100% fixed capacity and price
- Solid fuel procurement - annually and quarterly at Northside; CY2018-2020 for Scherer
- Table 3: FY Energy Mix based on MWH
- In Table 3, the procured percent relates to inventory on hand, or contracted and the percent hedged is inventory on hand or contracted with fixed pricing or financial hedges
- Renewables in Table 3 represent signed agreements and an estimated cost for pending contracts

