

**JEA  
FINANCE & AUDIT COMMITTEE AGENDA**

**DATE:** August 19, 2019  
**TIME:** 8:00 – 10:00 AM  
**PLACE:** 21 W. Church Street  
 8<sup>th</sup> Floor Conference Room

			<b>Responsible Person</b>	<b>Action (A) Info (I)</b>	<b>Total Time</b>
<b>I.</b>	<b>OPENING CONSIDERATIONS</b>		Kelly Flanagan		
	A.	Call to Order			
	B.	Adoption of Agenda		A	
	C.	Approval of Minutes – May 20, 2019	Madricka Jones	A	
<b>II.</b>	<b>NEW BUSINESS</b>				
	A.	Audit Services			
		1. Quarterly Audit Services Update	Steve Tuten	I	5 mins.
		2. Annual Approval of Internal Audit Charter	Steve Tuten	A	5 mins.
		3. Approval of Annual Audit Internal Plan	Lee Montanez	A	10 mins.
		4. Enterprise Risk Management (ERM) Update	Ryan Wannemacher/Frank DiBenedetto	I	15 mins.
	B.	Ethics Officer Quarterly Report	Walette Stanford	I	5 mins.
	C.	Ernst & Young FY2019 Annual Financial Audit Plan	John DiSanto	A	20 mins.
	D.	STAR Plan Phase 2 Update			
		1. Pricing Policy Revision	Juli Crawford	A	5 mins.
		2. Debt Management Policy Revision	Joe Orfano	A	5 mins.
	E.	Electric System and Water and Sewer System Reserve Fund Quarterly Report	Joe Orfano	I	5 mins.
	F.	JEA Energy Market Risk Management Policy Report	Caren Anders	I	5 mins.
	G.	Announcements			
		1. Next Meeting, December 9, 2019, 8:00 – 10:00 AM			
	H.	Committee Discussions			
		1. Ernst & Young Cybersecurity Assessment Update	Ted Hobson	I	5 mins.
		2. Ernst & Young	John DiSanto	I	5 mins.
		3. Director, Audit Services	Steve Tuten	I	5 mins.
		4. Council Auditor's Office	Jeff Rodda	I	5 mins.
	I.	Adjournment			

JEA FINANCE & AUDIT COMMITTEE MINUTES  
May 20, 2019

The Finance & Audit Committee of JEA met on Monday, May 20, 2019, 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 called the meeting to order at 8:03 AM. Board Chair April Green and board member Alan Howards were in attendance. Others in attendance were Aaron Zahn, Melissa Dykes, Ryan Wannemacher, Ted Hobson, Shawn Eads, Herschel Vinyard, Lynn Rhode, Lawsikia Hodges, Steve Tuten, Juli Crawford, Walette Stanford, Gregory Taggart, Kristina Quartermann, Laure Whitmer, Phillip Peterson, Council Auditors office and Russ Jeans, Ernst & Young. John DiSantos, Ernst & Young joined telephonically
- B. Adoption of Agenda – The agenda was adopted on **motion** by Mr. Howard and second by Board Chair April Green.
- C. Approval of Minutes – The March 18, 2019 Minutes were unanimously approved on **motion** by Mr. Howard and second by Board Chair April Green.

**Agenda Item II – New Business**

- A. FY2020 Budget Presentation – Ryan Wannemacher, Chief Financial Officer, started the presentation by stating that JEA is required to submit the budget to the City Council by July 1. He reviewed the intersection of the budget and strategic planning process. Juli Crawford, Director of Financial Planning Budget & Rates, took over the presentation and reviewed the FY2020 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 budget plan has capital projects for Energy and Water/Wastewater completely cash funded with no plans of new debt issuance. The proposed budgets also address key strategic initiatives to support the quality of service delivery, climate change, regulatory compliance, workforce readiness, communications, conservation, sewer resiliency, septic tank phase-out, and customer satisfaction initiatives. Staff also recommended that the Finance and Audit Committee provide feedback and direction for final Board approval at the June 25, 2019 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 highlights and progress of the FY19 Internal Audit Plan, open audit and investigation report issues, the Enterprise Risk Management (ERM) initiative to quantify financial risk impact, and Forensic Audit & Investigations' case statistics and summaries. This presentation was received for information.
- C. Ethics Officer Quarterly Report – Walette Stanford, Ethics Officer, provided an update regarding ethics inquiries, FY19/20 gift registry, Business Ethics Training Survey results, and quarterly Ethics newsletter. Ms. Stanford also stated that JEA is working on updating the JEA Gifts and secondary employment policies based on updates to the city ordinance. This presentation was received for information.

- D. Electric System and Water and Sewer System Reserve Fund Quarterly Report – Ryan Wannemacher, Chief Financial Officer 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 – Caren Anders, Vice President/General Manager, Energy, reviewed the Energy Market Risk Management Policy Report, which was received for information.
- F. Announcements
  - 1. The next Finance and Audit Committee meeting will be held on August 19, 2019, at 8:00 AM.
- G. Committee Discussion Sessions
  - 1. Ernst & Young Engagement – At 9:33 AM, Committee Chair Flanagan dismissed staff and the Committee held a general conversation with Ted Hobson, Vice-President & Chief Compliance Officer. Shawn Eads, Chief Information Officer present as well.
  - 2. Ernst & Young – At 9:36 AM, Committee Chair Flanagan and the Committee held a conversation with Russ Jeans, Ernst & Young. John DiSantos, Ernst & Young joined the discussion telephonically.
  - 3. Director, Audit Services – At 9:44 AM, Committee Chair Flanagan and the Committee held a general conversation with Steve Tuten, Director, Audit Services.
  - 4. There was no discussion held with the Council Auditor.

**Closing Considerations**

With no further business claiming the attention of this Committee, the meeting was declared adjourned at 9:47 AM.

APPROVED BY:

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

Submitted by:

\_\_\_\_\_  
Madricka Jones  
Executive Assistant



## INTER-OFFICE MEMORANDUM

July 26, 2019

**SUBJECT: QUARTERLY AUDIT SERVICES UPDATE**

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

**TO:** JEA Finance and Audit Committee

Kelly Flanagan, Chair  
April Green  
John Campion

### **BACKGROUND:**

The Quarterly Audit Services Update provides the JEA Board of Directors with information on the current activities of two of the three groups within Audit Services: (1) Forensic Audit & Investigations; and (2) Internal Audit. The Forensic Audit & Investigations Group conducts internal investigations of confidential reports into JEA's Ethics Hotline (EHL) and from other sources. The Internal Audit Group reviews internal control processes and ensures that departments maintain compliance with operating procedures and regulations. Note: The update for the third Audit Services Group, Enterprise Risk Management, will be presented separately.

### **DISCUSSION:**

This update will provide an assessment of how JEA is monitoring controls to reduce and/or prevent adverse impact to its business operations.

### **RECOMMENDATION:**

No action required, as this update is for information only.

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Aaron F. Zahn, Managing Director/CEO

AFZ/TEH/SVT





# Audit Services Quarterly Update



# Audit Services Groups

- Forensic Audit & Investigations – pp. 3-5
- Internal Audit – pp. 6-12
- Enterprise Risk Management (ERM) – Separate presentation

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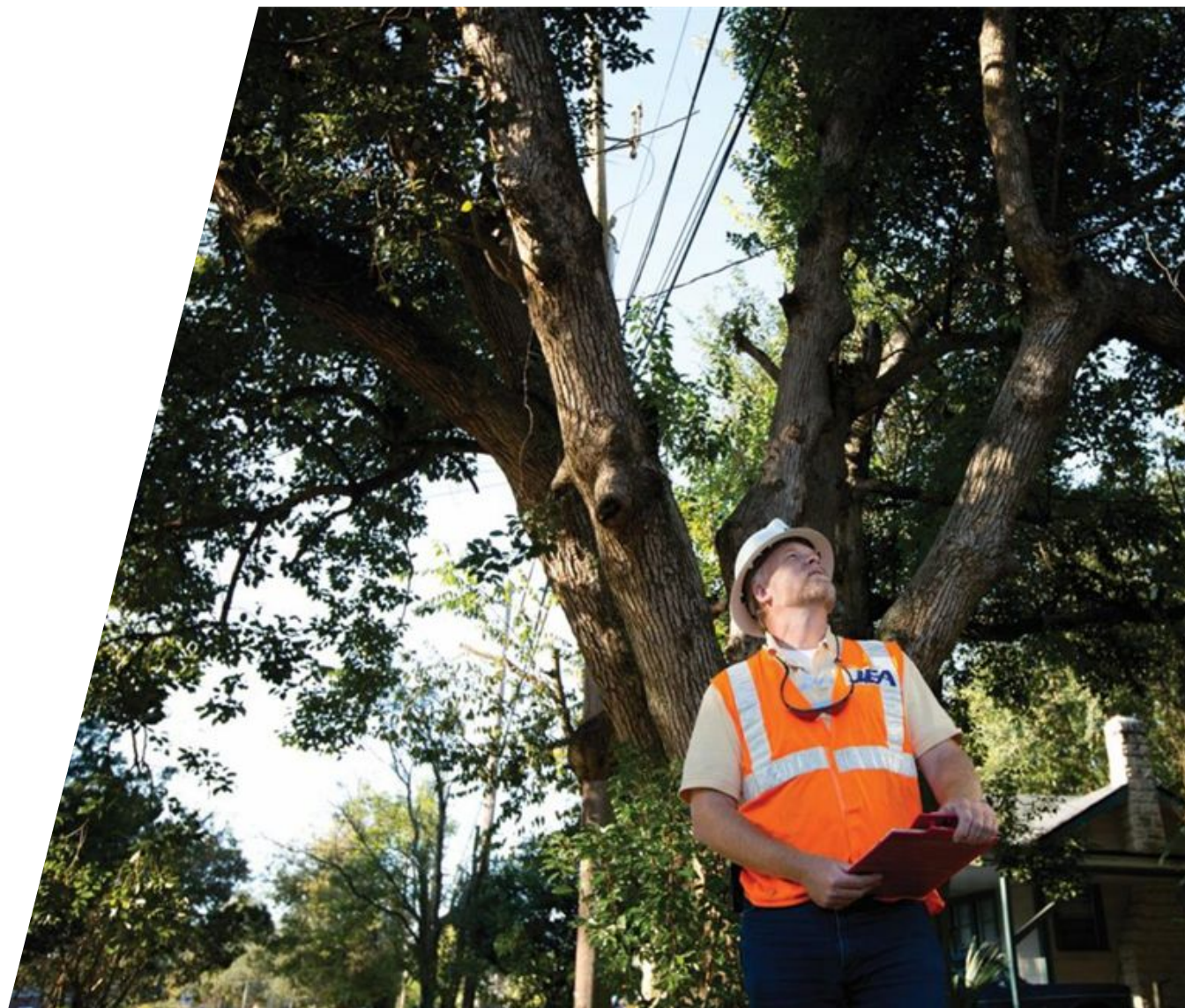
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# Forensic Audit & Investigations



## Investigative Case Statistics – 3Q19

Open Cases 3/31/2019	Cases Opened Q3 FY19	Cases Closed Q3 FY19	Open Cases 6/30/2019
6	4	2	8
Categories For Cases Opened During Q3 FY19			
Conflict of Interest/Ethics Matters			3
Discrimination/Harassment			1
Total			4

## Summary of Closed Cases – 3Q19

Reporting Source	Allegation	Investigation Results
Internal	JEA-19-05-0002 – Wells Fargo notified JEA's Treasury Department of a potential fraudulent ACH transaction involving a payment of \$30,773.43 to a JEA vendor.	An ACH fraud occurred as a result of an employee bypassing an internal control. JEA recovered all of the funds. Actions were taken to strengthen controls to mitigate future losses. In addition, training was conducted to inform staff of the newly revised Vendor Master procedures.
EHL	JEA-19-03-0001 – Employees have been wasting company time during their daily shifts by spending time watching YouTube on company computers and on their cell phones.	Substantial evidence was not found to support the allegation, and there were no additional details from the caller.

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## Internal Audit



# Internal Audit Highlights



- ✓ The Internal Audit team successfully completed the annual risk assessment process for the FY20 Internal Audit plan by administering 95 risk surveys, and follow-up meetings with the SLT, Directors and Managers. The FY20 Internal Audit plan will be addressed separately in this meeting.
- ✓ A special engagement audit for the certification, through Green-e, of JEA renewable energy credits for 2017 and 2018 was recently completed.
- ✓ Laurie Gaughan, the JEA lead Auditor for the TEA engagement, has begun planning for the FY2020 audit and engaging with other utilities for the identification of additional audit resources.

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# FY19 Audit Calendar

	1Q (Oct – Dec)		2Q (Jan – Mar)		3Q (Apr – Jun)		4Q (Jul – Sept)	
Internal Audits	2018 Utility Locate/3 <sup>rd</sup> Party Claims	✓	2018 Response and Environmental Programs	✓	Corporate Records Compliance	●	Payroll Services Follow-Up	●
	2018 Tax Administration	✓	2018 Information Security Follow-Up	✓	Electric Systems Asset Management	●		
	2018 Electric Production Engineering and Outages	✓	Branch Follow-Up	✓	Contract Administration	●		
	2018 Technology Infrastructure	✓	Electric Systems Byproduct	✓	Procurement Inventory Control	●		
	2018 Disaster Recovery Follow-Up	✓	Customer Solutions and Market Development	✓				
	2018 W/WW Reuse and Treatment	✓	Talent Acquisition Services	✓				
			Project Management Office	●				
			District Energy Services	✓				
			Meter Operations Follow-Up	●				
Special Projects	JEA Performance Pay Audit	✓	TEA Audit	✓	2020 Annual Risk Assessments	✓	MEAG/Vogle	●
					Green-e Agreed-Upon Procedures Engagement	✓	(3) Top Corporate Risk COSO	●

Not Started	●	In Progress	●	Report in Draft	✓	Final Report Issued	✓
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Internal Audit

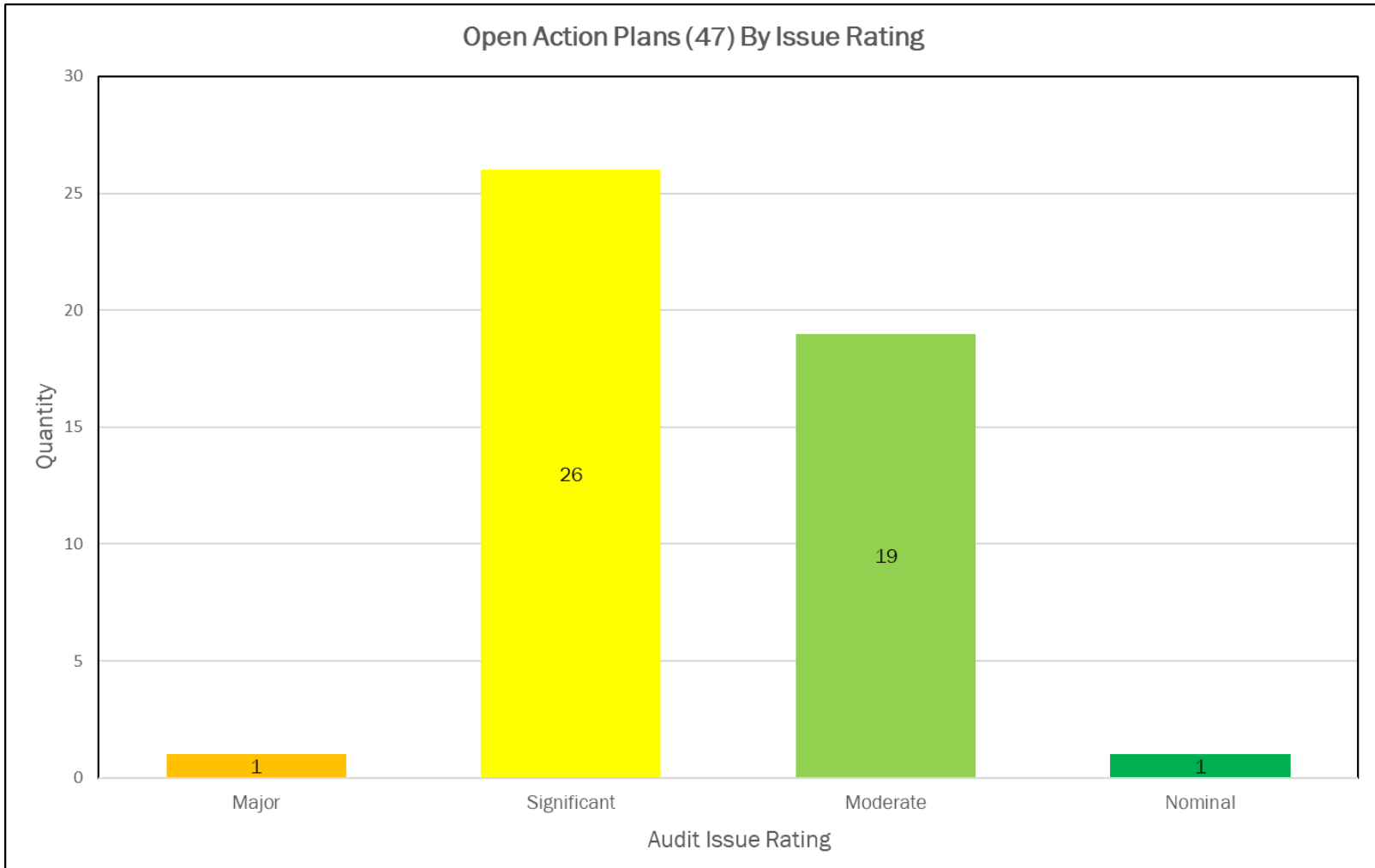


# Summary of Completed Audits & Projects for Q3

	Audit Name	Report Rating	# of Issues	Description of Significant or Greater Issue(s)
Internal Audits	Electric System Byproduct	EXCELLENT	3	No significant issues identified.
	Talent Acquisition Services	EXCELLENT	6	No significant issues identified.
	Customer Solutions and Market Development	SATISFACTORY	4	Significant opportunities for improvement include the following: <ul style="list-style-type: none"> <li>• External quality control inspections for the Residential Energy Solutions Program provider;</li> <li>• Insufficient supporting documentation for several invoices and no controls to detect duplicate payments;</li> <li>• Incomplete internal quality control checks for the Commercial Energy efficient upgrade, electric vehicles, and off-road electrification rebate programs; and</li> <li>• Lack of written job aids and desktop procedures related to several rebate programs.</li> </ul>
	District Energy Services	SATISFACTORY	6	Significant opportunities for improvement include the following: <ul style="list-style-type: none"> <li>• Chilled water plant capacity for current and prospective customers; and</li> <li>• Lack of business continuity planning for major power outages or damage due to weather events.</li> </ul>
Special Project	Green-e Agreed-Upon Procedures Engagement	No Rating	0	No issues identified.

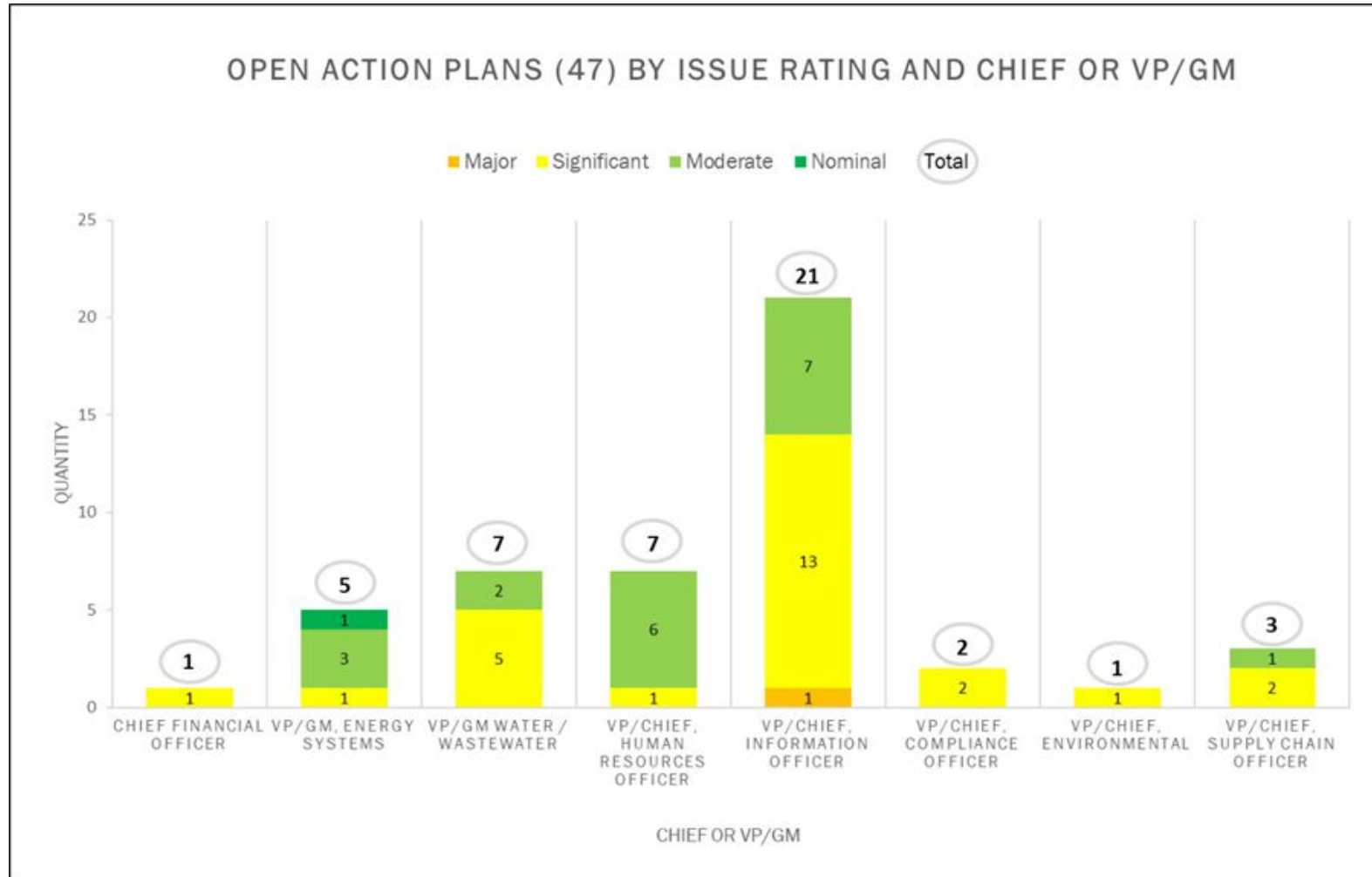
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# Open Audit and Investigations Report Issues



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# Open Audit and Investigations Report Issues



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# Open Audit and Investigations Report Issue – Major Rating

VP/Chief	Director / (Audit Name)	Issue Observation	Action Plan	Current Due Date	Action Plan Status Comments
VP/Chief, Information Officer	Director, Enterprise Architecture <i>(Information Security)</i>	Audit noted that a Data Management Policy and Plan currently do not exist to guide the storage, protection and destruction of sensitive information.	Audit recommends that a Data Management Policy and Plan be created based on the findings of the current data classification project.	9/30/19	With the assistance of an outside vendor, Management will complete a Data Governance readiness assessment. An implementation plan will be created based on the results of the assessment.



## **INTER-OFFICE MEMORANDUM**

July 26, 2019

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

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

**TO:** JEA Finance and Audit Committee

Kelly Flanagan, Chair  
April Green  
John Campion

### **BACKGROUND:**

The Internal Audit Group reviews internal control processes and ensures that the organization maintains compliance with all procedures and regulations. The Internal Audit Charter provides the JEA Board of Directors with information on the authority of the Internal Audit staff, its key roles and responsibilities, and the outline of Internal Audit's Quality Assurance Program. There have been no changes in the charter since it was last presented for approval on August 13, 2018.

### **DISCUSSION:**

The benefits to the organization are seen in risk avoidance and improved internal control processes, and the knowledge of the organization's degree of compliance with policy, procedures, rules and regulations.

### **RECOMMENDATION:**

Staff recommends that the Finance & Audit Committee and the Board of Directors approve the Internal Audit Charter.

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Aaron F. Zahn, Managing Director/CEO

AFZ/TEH/SVT

<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 Institute of Internal Auditors' (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 19, 2019

Revised Dates: August 19, 2019

Origination Date: October 5, 2004, with eleven (11) subsequent annual subsequent revisions / presentations / approvals, most recently on August 13, 2018.

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



## INTER-OFFICE MEMORANDUM

July 26, 2019

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

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

**TO:** JEA Finance and Audit Committee

Kelly Flanagan, Chair  
April Green  
John Campion

### **BACKGROUND:**

The Internal Audit Group reviews internal control processes and ensures that departments maintain compliance with all procedures and regulations. Annually, Internal Audit develops a risk-based work plan for the upcoming fiscal year.

### **DISCUSSION:**

The benefits to the organization are seen in risk avoidance and improved internal control processes, and the knowledge of the organization's degree of compliance with policy, procedures, rules and regulations.

### **RECOMMENDATION:**

Staff recommends that the Finance & Audit Committee and the Board of Directors approve the Annual Internal Audit Plan for FY20.

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Aaron F. Zahn, Managing Director/CEO

AFZ/TEH/SVT



# FY20 Internal Audit Plan



# The Role of Internal Audit

“The role of internal audit is to provide independent assurance that an organization’s risk management, governance, and internal control processes are operating effectively.”

Source: The Institute of Internal Auditors

The scope of work of Internal Audit encompasses many aspects of JEA’s operations and activities:

- Provide guidance in the development of JEA’s internal control framework;
- Monitor and test the effectiveness of the internal control framework;
- Monitor and test JEA’s operational process for compliance, efficiency, safety, etc.; and
- Follow-up on Management’s action plans for ensuring operational compliance and effectiveness.

compliance  
Internal <sup>risk</sup> Audit  
independent <sup>add value</sup> <sup>effective</sup> <sup>improve</sup> <sup>efficient</sup> <sup>assurance</sup> <sup>objective</sup>

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**FY20 Internal  
Audit Plan**



## Risk-Based Audit Plan Guidance

The Institute of Internal Auditors (IIA) provides the following Standards for the creation of a Risk-Based Audit Plan:

- Standard 2010: The chief audit executive must **establish a risk-based plan** to determine the priorities of the internal audit activity, consistent with the organization's goals.
- Standard 2010.A1: The internal audit activity's plan of engagements must be **based on a documented risk assessment**, undertaken at least annually. The **input of senior management and the board** must be considered in this process.
- Standard 2020: The chief audit executive must **communicate the internal audit activity's plans and resource requirements**, including significant interim changes, to **senior management and the board for review and approval**. The chief audit executive must also communicate the impact of resource limitations.

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**FY20 Internal  
Audit Plan**





## Risk-Based Audit Plan Steps

The following approach was used to develop the Audit Plan:



- The JEA auditable entities structure was updated to reflect any organizational changes by JEA's leadership.
- Interviews with the Senior Leadership Team, combined with risk survey follow-up 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.

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**FY20 Internal  
Audit Plan**



## Risk Assessment Survey

The risk assessment survey, sent to management of JEA's identified auditable entities, consisted primarily of yes/no questions addressing the following:

- Top Corporate Risks related to Revenue and Expense Management (F01), Disruptive Technologies (C03) and Emergency Preparedness / Business Continuity (E13)
- Governance & Culture
- Compliance and Data Management
- Criticality and Satisfaction of Internal Dependencies
- Human Resources
- Audit Timing & Additional Concerns

Internal Audit reviewed the survey results and followed up with management about these risks. We then combined the scores to determine the highest risk areas for JEA.

A copy of the survey is shown on Appendix pp. A5-A16.

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## Description of Scheduled Audits

- The final plan includes nineteen (19) scheduled audits and projects:
  - Thirteen (13) new audits based on the FY2020 risk assessment process.
  - One (1) special project.
  - One (1) recurring project related to Performance Pay.
  - One (1) JEA-led external audit of The Energy Authority (TEA).
  - One (1) Green-e Agreed-Upon Procedures Engagement.
  - Two (2) follow-up audits due to “Needs Improvement” audit report rating.
- The proposed audit plan calendar is shown on page 7.
- A detailed list of these audits/projects, which includes an entity description is shown on Appendix pp. A1-A4.

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**FY20 Internal  
Audit Plan**



# FY20 Audit Plan Calendar







	1Q (Oct – Dec)		2Q (Jan – Mar)		3Q (Apr – Jun)		4Q (Jul – Sept)	
Internal Audits	JEA Academy	Troy England (TE)	Procurement	LG/AS	POP Process Follow-Up	DA	Meter Operations Follow-Up	DA
	Business Development & Community Project Management	David Arnold (DA)	Software Licensing	RB	NGS Generation	LG	Bulk Power and Customer Service Response	LG
	P-Cards	Andrew Shelley (AS)	Black Belts	DA	Cloud Computing	RB	Fleet Services	TE
					Risk Management	AS	Air & Lab Permitting and Compliance	AS
					W/WW Planning	TE		
Special Projects	Cyber Program Assessment **	Rashid Brittain (RB)			FY 2021 Annual Risk Assessments	All		
	TEA Audit	Laurie Gaughan (LG) / RB			Green-e Agreed-Upon Procedures Engagement	Lee Montanez		
	JEA Performance Pay Audit	TE						

\*\* Special Project expected to be carried out during all of FY20.

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# Internal Audit Team

	Name / Title	Education & Certification(s)	Audit Experience
	<b>Lee Montanez</b> Manager, Internal Audit	Master of Business Administration <ul style="list-style-type: none"> <li>▪ Certified Internal Auditor</li> <li>▪ Certified Information Systems Auditor</li> </ul>	14 years (8 yrs. at JEA)
	<b>David Arnold</b> Senior Auditor	Master of Business Administration	20 years (4 yrs. at JEA)
	<b>Troy England</b> Senior Auditor	BBA – Business Administration <ul style="list-style-type: none"> <li>▪ Certified Internal Controls Auditor</li> </ul>	18 years (5 yrs. at JEA)
	<b>Laurie Gaughan</b> Senior Auditor	BBA – Economics and Accounting <ul style="list-style-type: none"> <li>▪ Certified Public Accountant</li> <li>▪ Certification in Risk Management Assurance</li> </ul>	10 years (5 yrs. at JEA)
	<b>Andrew Shelley</b> Senior Auditor	Master of Accountancy	6 years (2 yrs. at JEA)
	<b>Rashid Brittain</b> Senior Information Technology Auditor	Master of Accountancy <ul style="list-style-type: none"> <li>▪ Certified Public Accountant</li> <li>▪ Certified Information Systems Auditor</li> </ul>	7 years (3 yrs. at JEA)

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## Appendix

- The following supplemental documents were cross-referenced in the preceding presentation:
  - A1-A4 – Proposed FY20 Internal Audit Plan with Details Pp. 6-7.
  - A5-A16 – Risk Assessment Survey for FY20 Internal Audit Plan Pp. 4.

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**INTER-OFFICE MEMORANDUM**

[July 26, 2019]

**SUBJECT: ENTERPRISE RISK MANAGEMENT (ERM) UPDATE**

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

**TO:** JEA Finance and Audit Committee

Kelly Flanagan, Chair  
April Green  
John Campion

**BACKGROUND:**

The Enterprise Risk Management (ERM) Update provides the JEA Board of Directors with information on the current activities of this group within Audit Services. The ERM Program identifies, assesses, measures, monitors and actively manages risk. Today's presentation addresses ERM's new risk scoring methodology. Note: The update for the other two Audit Services groups, Forensic Audit & Investigations and Internal Audit, were presented separately.

**DISCUSSION:**

This update will provide an assessment of how JEA is managing risk to reduce and/or prevent adverse impact to its business operations.

**RECOMMENDATION:**

No action required, as this update is for information only.

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Aaron F. Zahn, Managing Director/CEO

AFZ/TEH/SVT





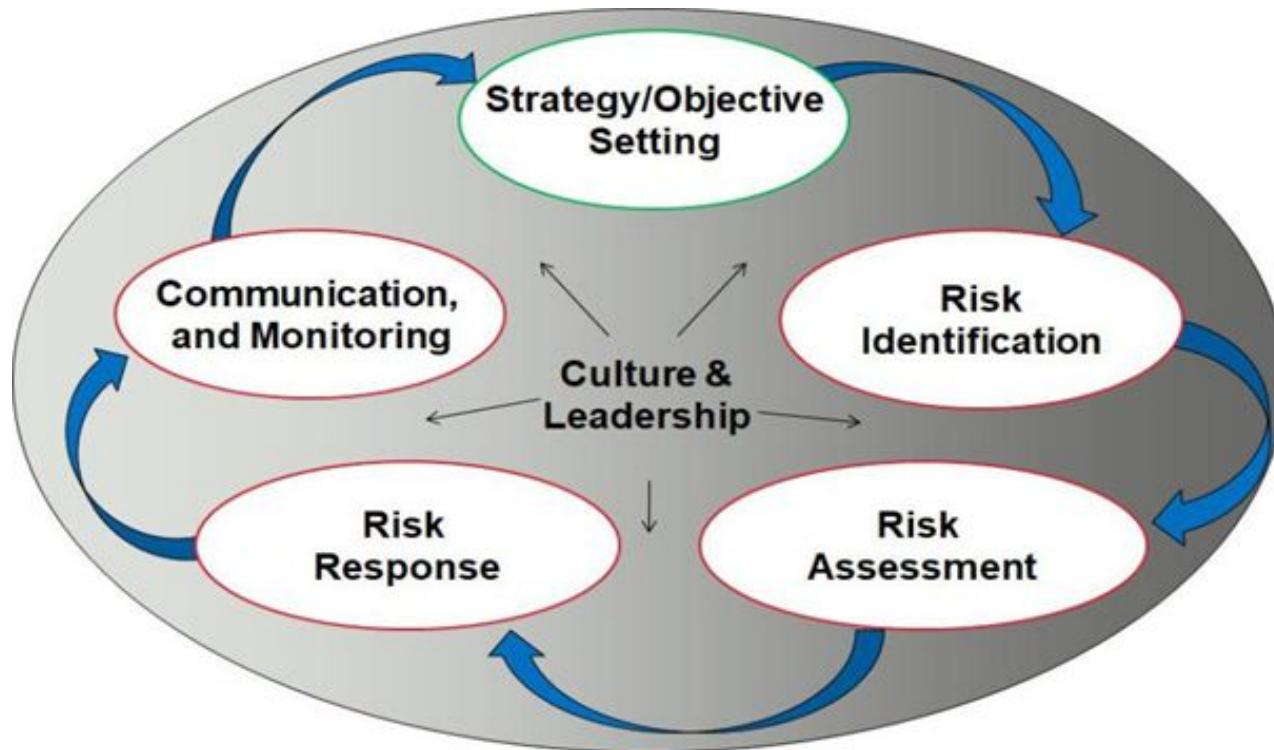
# Enterprise Risk Management (ERM)

August 2019



# Summary of ERM Structure

Enterprise Risk Management is designed to identify, assess, and mitigate potential and actual risk events that have a significant negative impact, financial and/or reputational.



August 2019

ERM

# Summary of ERM Structure

- Risks are prioritized through a scoring methodology that identifies those risk events having the greatest negative impact.
- Our scoring methodology is being enhanced, as described in the following slides.

August 2019



# Scoring Methodology Enhancements

- Our methodology is migrating from managing by risk score rankings to a more action-oriented focus on responding to key risks.
- Developing a financial module to reassess the financial impact of each risk to identify total financial exposure and time frames.
- Modifying the risk prioritization to also include how well prepared we are to minimize negative impact and/or likelihood, if the risk event occurs.
- Pages 5-8 detail the new elements of the scoring methodology, using one of our risks, Cooling Water Intake Structures 316(b), as an example.

August 2019



ERM



# Financial Impact Description

Objective: Modify the Financial Impact to Consider Insurance Coverage

Ownership			Risks Impact			
Risk #	Risk Title	Risk Owner(s)	Initial Financial Impact	Modified Financial Impact (Insurance)	Reputation Impact	Total Impact Average
E05	Cooling Water Intake Structures 316(b)	Caren Anders / Paul Steinbrecher	Severe/Catastrophic (>\$100M)	None	Moderate	3.5

**Initial Financial Impact** - Identifies the “Worst Credible” financial impact if the risk event occurs.

**Modified Financial Impact (Insurance)** - Identifies the out-of-pocket /deductible financial impact after insurance coverage payment. Where applicable, this will be used in determining the true financial impact of a risk.

August 2019

ERM

# Probability Factors Description

Objective: Modify the Probability Factor to Include Other Variables That Can Impact the Likelihood of an Event.

Ownership			Probability Factors				
Risk #	Risk Title	Risk Owner(s)	Likelihood	Velocity	Preparedness	Influence	Total Probability Average
E05	Cooling Water Intake Structures 316(b)	Caren Anders / Paul Steinbrecher	Possible (41 - 60%)	1 - 3 years away	Medium prep/controls	Very Low	3.0

**Likelihood** - Identifies the range of likelihood of the risk event occurring, as determined by the risk owners.

**Velocity** - Identifies the time frame in which a risk event can occur.

**Preparedness** - Identifies the effectiveness of current mitigations that reduce the impact and/or likelihood if the risk event occurs. Where available, this includes any key risk indicators (KRIs) to validate the effectiveness of the mitigations.

**Influence** - Identifies our ability to influence the risk from occurring. For example, we have no influence in preventing a new regulatory requirement, some influence in managing fuel prices through hedging, and a high influence of reliability through an effective maintenance program.

August 2019

ERM

# Preparedness Description

Objective: Assess effectiveness of risk mitigation efforts

Ownership			Preparedness Score
Risk #	Risk Title	Risk Allocation Business Unit	
E05	Cooling Water Intake Structures 316(b)	Caren Anders / Paul Steinbrecher	2

**Preparedness Score** - This column helps assess the effectiveness of mitigations to reduce the impact and likelihood of an event.

**Factor that determine preparedness include:**

- Existence of key risk indicators (KRIs)
- KRI results
- Effectiveness of current controls / mitigation efforts

August 2019

# Expenditure Description

Objective: Non-Adjusted-Most Likely Financial / Exposure Impact

Risk #	Risk Title	Risk Owner(s)	Non-Adjusted Financial Impact (in millions) / Spend Rate		Most Likely Financial Exposure (in millions)
E05	Cooling Water Intake Structures 316(b)	Caren Anders / Paul Steinbrecher	\$130.0	Once	\$65.0

**Non-Adjusted Financial Impact:** Identifies the mid-point of the financial impact before probability adjustment.

**Spend Rate:** Identifies the time frame within which an expenditure can occur.

**Most Likely Financial Exposure:** Identifies the most likely financial exposure based on the midpoint of the financial Impact and the midpoint of the total probability average.

August 2019



# Financial Assessment

Risk Register as of July 2019							
Risk Categories	Likelihood Average	Expected Time Frame					Total Most Likely Financial Exposure (in millions)
		< 1 year	1 - 3 years away	3 - 5 years away	5 - 10 years away	> 10 years away	
<b>Risks with High Likelihood of Occurrence within Shorter Time Frame</b> (e.g. Plant Vogtle, Coal Combustion Residual Rule (CCR), Credit, Cooling Water Intake Structures 316 (b))	Likely (61 - 80%)	\$0.0	\$107.0	\$0.0	\$33.0	\$175.5	\$315.5
<b>Risks with High Likelihood of Occurrence within Longer Time Frame</b> (e.g. Carbon Emission Mitigation/Renewable Energy Standards, Disruptive Technologies)	Possible (41 - 60%)	\$0.0	\$0.0	\$50.9	\$50.0	\$0.0	\$100.9
Risks with Lower Likelihood of Occurrence							
<b>Operations</b> (e.g. Emergency Preparedness / Business Continuity, Infrastructure Maintenance, Drinking Water Quality)	Possible (41 - 60%)	\$0.0	\$30.3	\$0.0	\$22.5	\$22.5	\$75.3
<b>Workforce</b> (e.g. Work Environment, Staffing Retention)	Possible (41 - 60%)	\$0.0	\$17.5	\$10.5	\$1.5	\$0.0	\$29.5
<b>Compliance</b> (e.g. FERC/NERC Compliance, Environmental Compliance, Other Regulations (HIPAA))	Possible (41 - 60%)	\$0.0	\$19.2	\$0.0	\$0.0	\$0.0	\$19.2
<b>Physical Security</b> (e.g. Physical Security /Terrorism / Criminal Activity / Active Shooter)	Possible (41 - 60%)	\$0.0	\$6.9	\$0.0	\$0.0	\$0.0	\$6.9
<b>Cyber Security</b> (e.g. CIP Compliance, Cyber Security IT & OT)	Possible (41 - 60%)	\$0.0	\$6.7	\$0.0	\$0.0	\$0.0	\$6.7
<b>Technology</b> (e.g. Technology Services Disaster Recovery/Business Continuity, Technology Infrastructure Reliability)	Unlikely (21 - 40%)	\$0.0	\$3.3	\$0.0	\$0.0	\$0.0	\$3.3
<b>Grand Totals:</b>		<b>\$0.0</b>	<b>\$190.9</b>	<b>\$61.4</b>	<b>\$107.0</b>	<b>\$198.0</b>	<b>\$557.3</b>

August 2019



ERM



## INTER-OFFICE MEMORANDUM

August 19, 2019

**SUBJECT:** ETHICS OFFICER REPORT

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

**TO:** JEA Finance and Audit Committee

Kelly Flanagan, Chair  
April Green  
John Campion

### **BACKGROUND:**

Per Ordinance 2011-197-E, JEA is required to appoint an Ethics Officer to represent the agency on ethics matters and to participate in a citywide Ethics Coordination Council. The Finance and Audit Committee will receive a quarterly update from the Ethics Officer.

### **DISCUSSION:**

JEA Ethics Officer ensures information is shared and advice given regarding issues and questions. This role manages ethical concerns for the organization and ensure compliance with business and governmental regulations.

### **RECOMMENDATION:**

This item is for information only.

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Aaron F. Zahn, Managing Director/CEO

AFZ/TEH/WMS



## **Ethics Officer Report** **Walette Stanford**

August 2019

## Five Year Case in Review

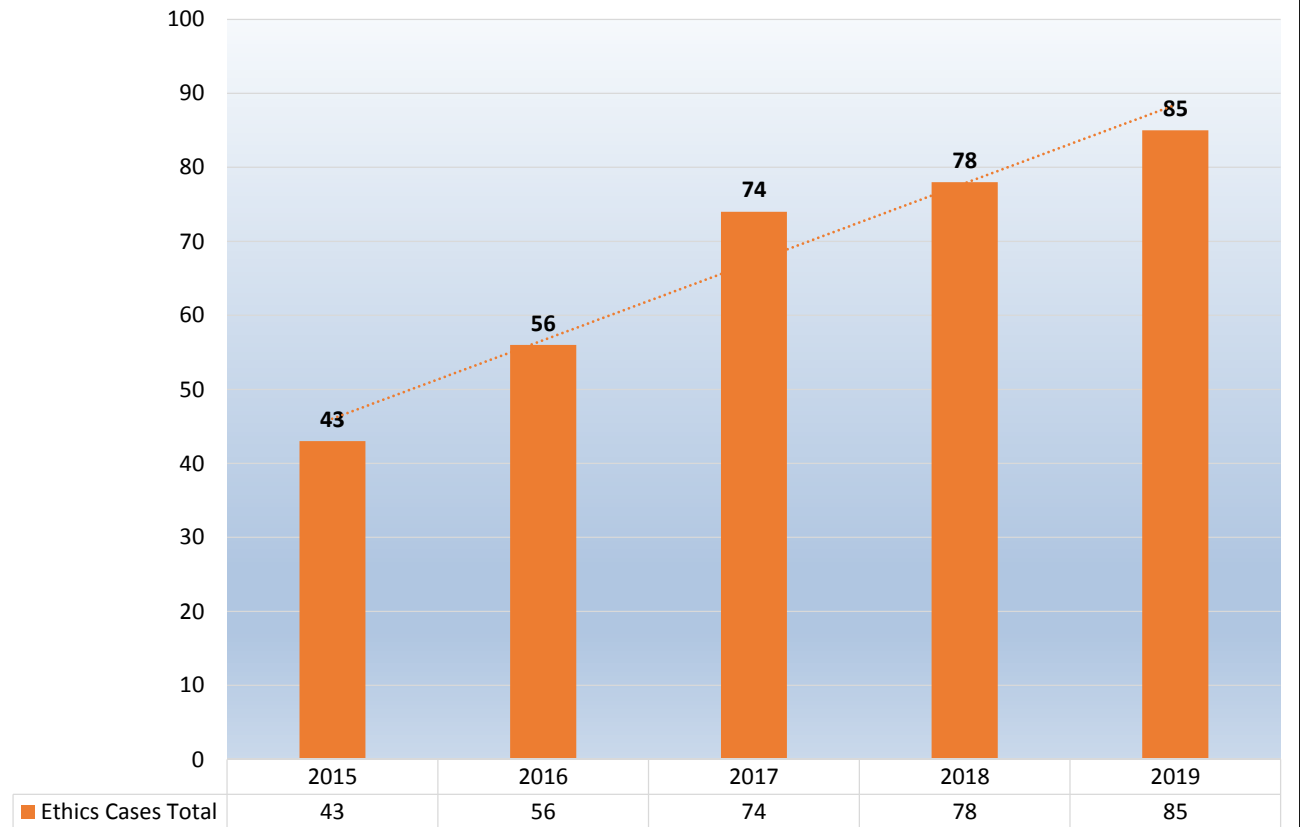


August 2019



## Ethics Officer Cases

### Ethics Cases By Year





## Inquiry Categories

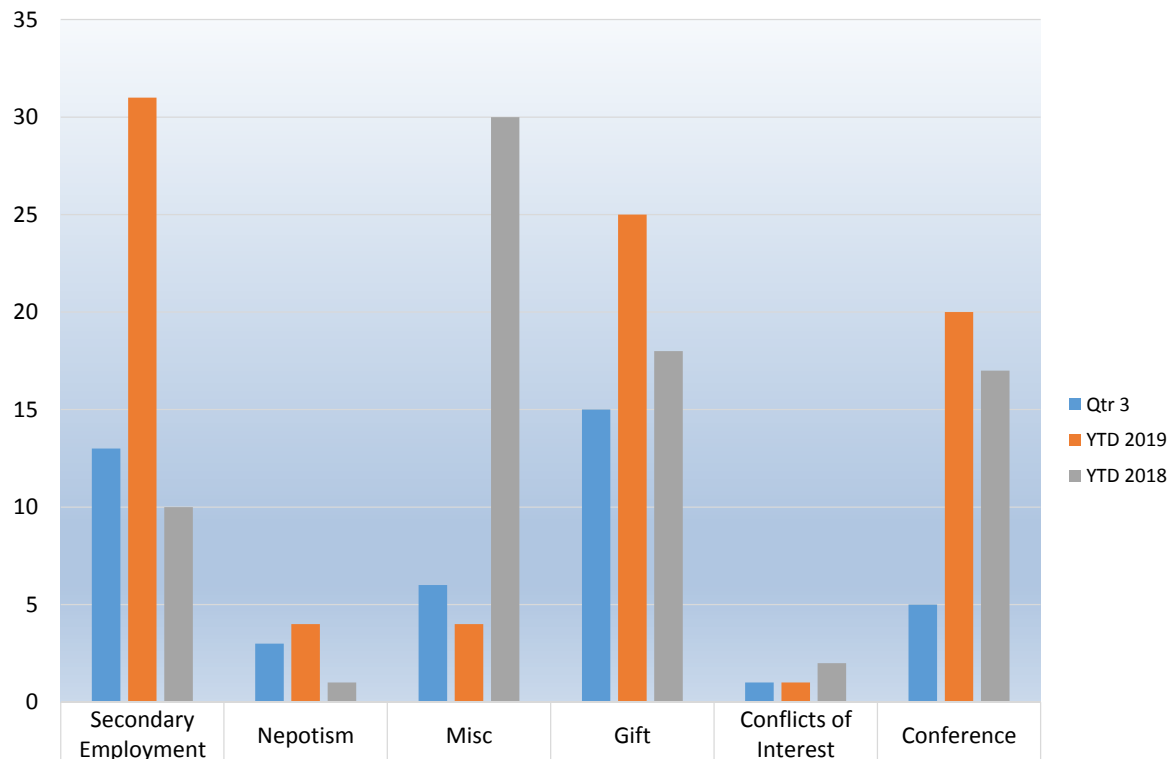


August 2019



## Ethics Officer Cases

### Ethics Officer Inquiries



	Secondary Employment	Nepotism	Misc	Gift	Conflicts of Interest	Conference
Qtr 3	13	3	6	15	1	5
YTD 2019	31	4	4	25	1	20
YTD 2018	10	1	30	18	2	17

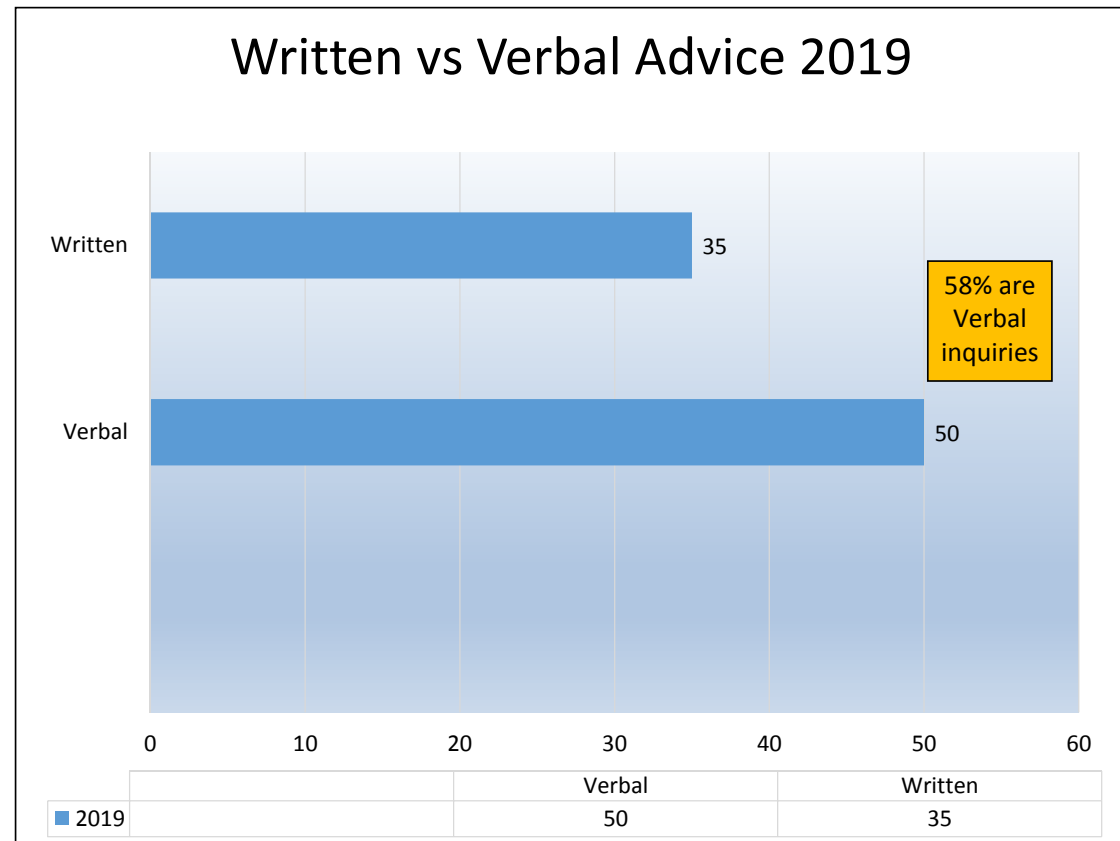
## Report on Ethics Advice



August 2019



## Ethics Officer Cases



## Quarterly Newsletter


4<sup>th</sup> Quarter focusing on  
Secondary Employment/  
Moonlighting

\* Highest inquiry category ytd

August 2019



**FY19 update**




**OCTOBER  
ETHICS**


# JEA BUSINESS ETHICS

**PREVENTING CONFLICTS,  
PROMOTING FAIRNESS**


More on the JEA BUSINESS Ethics Page on the Grid




**GIFTS OVER \$100 OR  
ASKING FOR THINGS**




**NOT REPORTING  
SECONDARY EMPLOYMENT**




**TRAVEL PAID  
BY 3<sup>RD</sup> PARTY**




**MISUSE OF TIME,  
SUPPLIES OR EQUIPMENT**




**CONFLICTS OF INTEREST**




**MISUSE OF POSITION**



**SUNSHINE  
VIOLATIONS**



**HIRING OR PROMOTING  
RELATIVES**



**DESTROYING PUBLIC  
RECORDS**

**IF YOU SEE SOMETHING, SAY SOMETHING**

**ETHICS HOTLINE 1-800-805-3569**

## Oversight Responsibility



August 2019



**FY19 update**

- Companywide Annual Business Ethics for Contract workers was released on June 14<sup>th</sup>. As of July 15<sup>th</sup> a total of 30% of contractors have taken the training. Reminder going out in August.
- Working with OGC on updating JEA Gifts and Secondary Employment policies based on city ordinance updates. Held meeting with Companywide Ethics Representatives on June 4<sup>th</sup> to discuss the proposed updates.
- Cleaning up the SharePoint Database on Secondary Employment to ensure compliance.
- Revamping the Business Ethics Guidelines to the Business Ethics Code of Conduct.



## INTER-OFFICE MEMORANDUM

August 19, 2019

**SUBJECT:** ERNST & YOUNG FY2019 ANNUAL FINANCIAL AUDIT PLAN

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

**TO:** JEA Finance and Audit Committee

Kelly Flanagan, Chair  
April Green  
John Campion

### **BACKGROUND:**

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

To keep in compliance with the Finance and Audit Committee Operating Policy, a formal approval of the annual financial audit plan is required. The formal approval demonstrates the Board has reviewed and is in agreement with the plan. Additionally, meeting with auditors to discuss the audit plan assists the Board in overseeing management's financial reporting process.

### **DISCUSSION:**

Ernst & Young (E&Y) has prepared the FY2019 annual financial audit plan. The plan outlines the scope of their services, identifies the E&Y team that will perform the audit and presents key considerations that will affect the FY2019 audit. E&Y has been invited to attend the August 19, 2019 Finance and Audit Committee meeting to review and discuss the FY2019 annual financial audit scope and approach.

### **RECOMMENDATION:**

Staff recommends that the Finance and Audit Committee and Board approve the FY2019 Annual Financial Audit Plan.

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

AFZ/RFW/GLT



# JEA

## 2019 audit plan

August 19, 2019





# Executive summary: 2019 audit plan

## 2019 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 2019 audit is outlined in the [Areas of audit emphasis](#).

### Involvement of internal audit and others

- ▶ We plan to use the work of the city council auditors in selected areas of our 2019 audit similar to previous years. Refer to the [Involvement of Council Auditors](#).

## Important updates\*

- ▶ [New GASB Pronouncements](#)

## Significant 2019 considerations

- ▶ Plant Vogtle
- ▶ Debt Service Coverage letters to change from positive to negative assurance
- ▶ Uniform Guidance Audits (FEMA) results.

## Audit innovation\*

We continue to benefit from and improve upon the digital audit technology implemented during our FY18 audit, including:

- ▶ **Canvas client portal:** Shared audit team access to documentation to ensure status of requests is shared; segregated access of sensitive data to appropriate users.
- ▶ **EY Helix:** Executed the Revenue and payroll expense audit programs which resulted in a reduction of traditional tests of details.
- ▶ **Trade Receivables Analyzer:** Identified key items that pose the greatest risk of material misstatement by analyzing aggregated accounts receivable transactions.

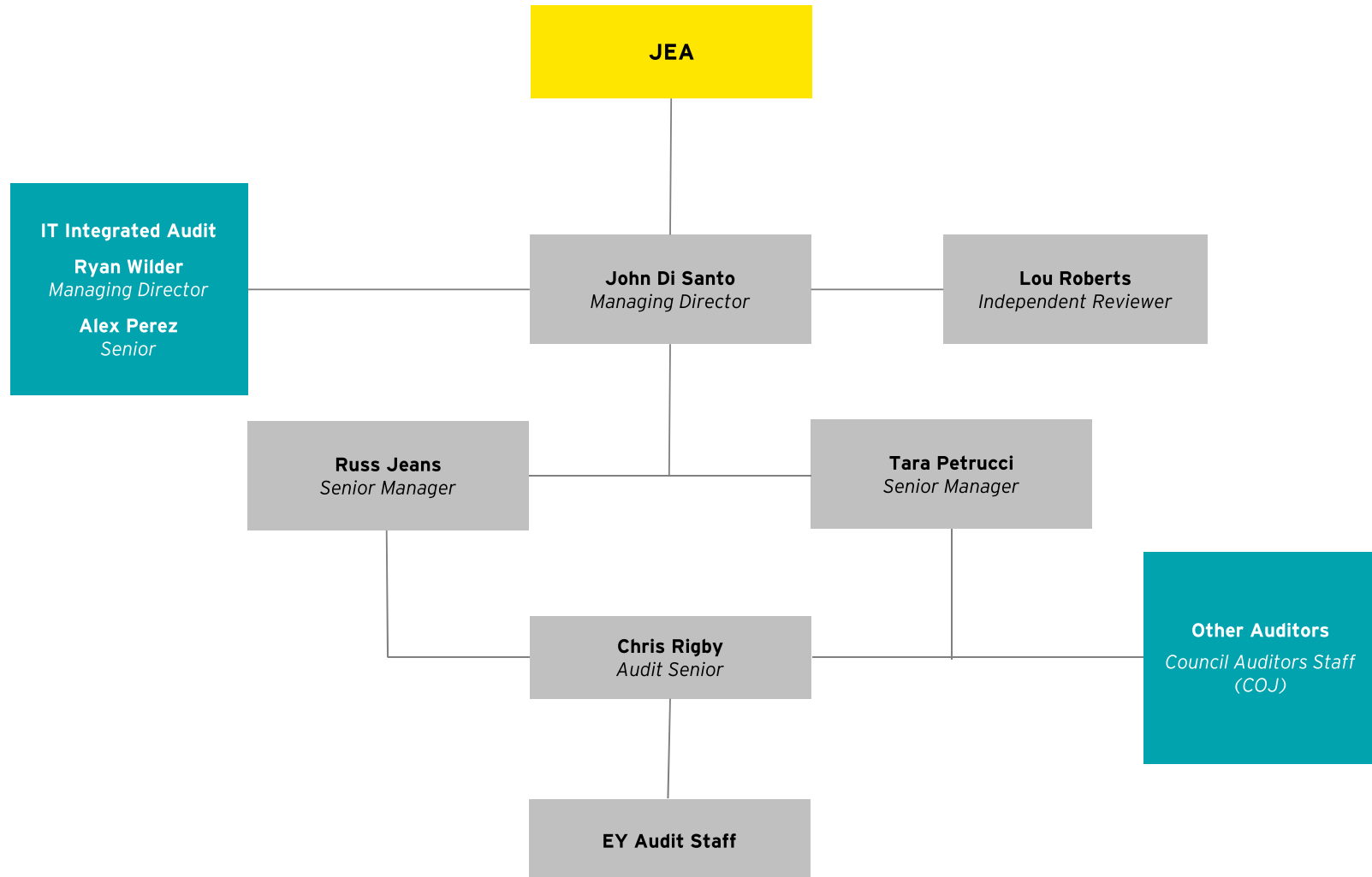
## Inquiries\*

- ▶ Inquiries of the audit committee are intended to assess the board's awareness of important matters pertaining to the audit.

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

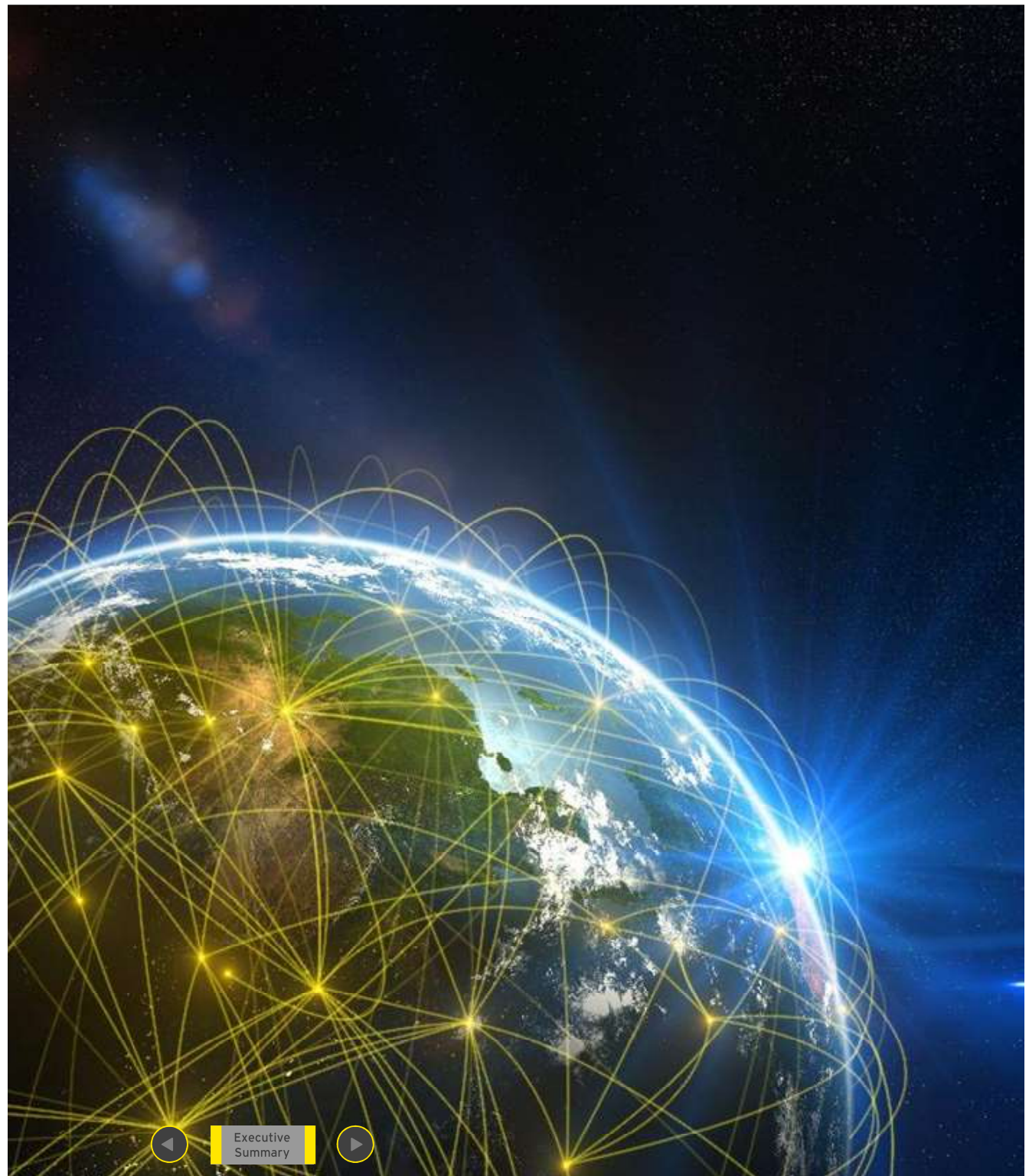
Note: This report is intended solely for the information and use of the those charged with governance, Board of Directors and management. It is not intended to be, and should not be, used by anyone other than these specified parties.

# Client service team



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## 2019 audit plan



# 2019 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 on pages 11 through 15.

## Areas of audit emphasis

- Revenue
- Asset retirement obligations (SJRPP Decommissioning) <sup>(A)</sup>
- Regulatory accounts
- Risk of management override of controls <sup>(B)</sup>
- Derivative instruments and hedging activities <sup>(A)</sup>
- Other post retirement benefits liabilities (OPEB) <sup>(A)</sup>
- Pension accounting, including valuation of pension assets <sup>(A)</sup>
- Investments <sup>(A)</sup>
- Capital assets

<sup>(A)</sup> We will utilize the assistance of internal EY valuation subject-matter professionals in performing our procedures.

<sup>(B)</sup> Professional standards require that we consider the risk of management override of controls to be a significant risk on all audits. Our audit procedures, including our journal entry testing, are designed to be responsive to this risk.

# 2019 audit plan: Involvement of Council Auditors

As required by AICPA standards, we have evaluated the competence and objectivity of the Jacksonville city council auditors ("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 the Council Auditors in our 2019 audit. We have discussed with the Council Auditors their 2019 audit involvement. We expect the Council Auditors to provide assistance consistent with previous audits. The table below represents the areas where we plan to use the Council Auditors in the 2019 audit.

We will work with Council Auditors in a direct assistance model, which involves us performing:

- On-site direction and supervision
- Detailed review of working papers
- Reperforming their work on a test basis

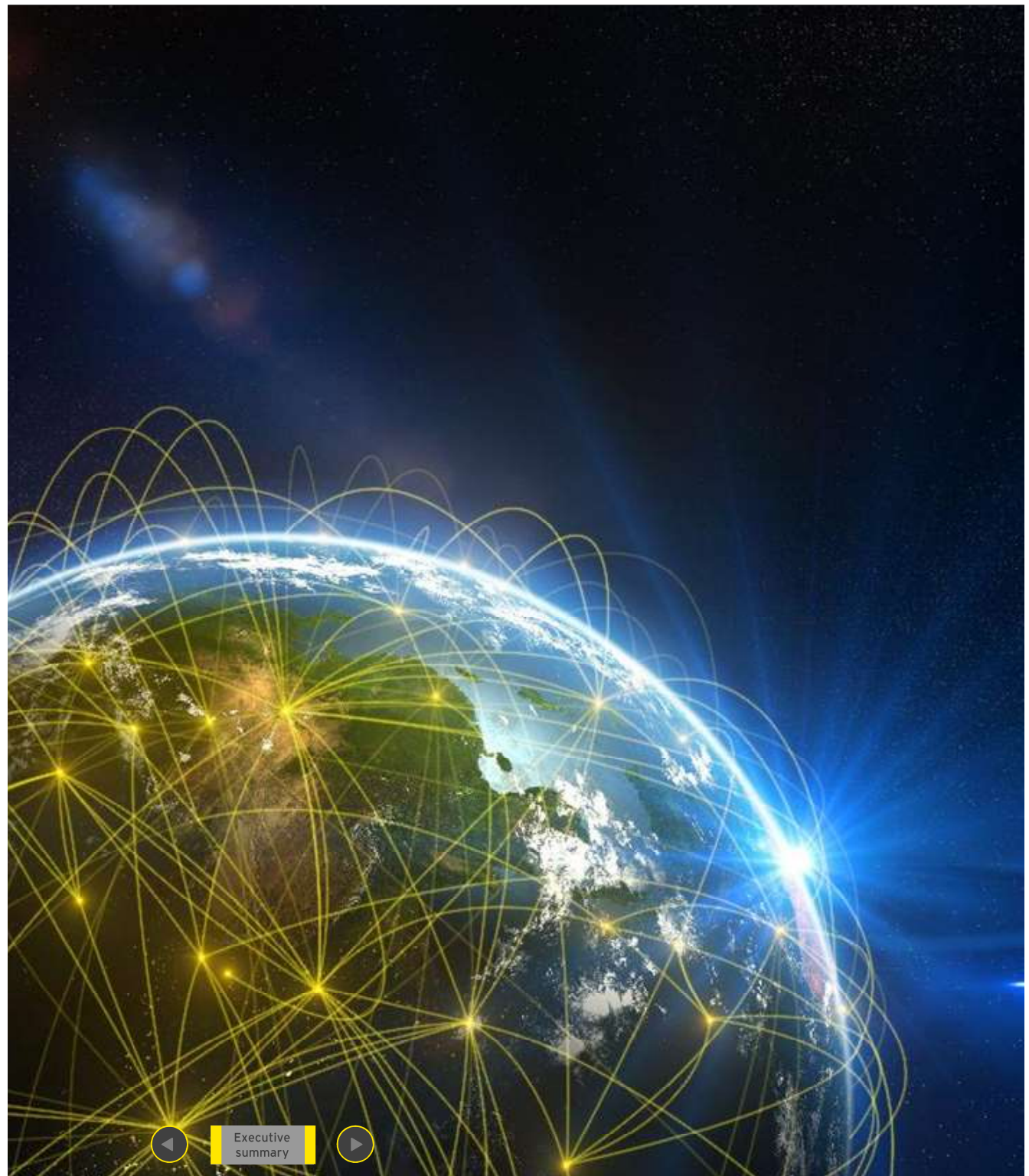
## Areas/significant class of transactions where EY is planning to use the work of the Council Auditors

- Test of transactions
- Substantive procedures for certain audit areas (including cash and investments, AR, capital assets, AP, taxes)



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## Important updates





## Important Updates : New GASB Pronouncements

GASB Pronouncement	Effective for Fiscal Year Ending	Description
GASB Statement No. 84, Fiduciary Activities	September 30, 2020	Requires fiduciary activities to be presented in the financial statements (separate funds). Affects SJRPP pension plan and JEA OPEB plan.
GASB Statement No. 87, Leases	September 30, 2021	Requires all leases to be recorded as assets and liabilities on the balance sheet. (Note purchase power agreements are specifically excluded).
GASB Statement No. 88, Certain Disclosures Related to Debt	September 30, 2019	Requires additional information regarding debt to be disclosed in the notes to the financial statements, including unused lines of credit, assets pledged as collateral, terms and consequences of default and acceleration clauses.
GASB Statement No. 89, Accounting for Interest Cost Incurred Before the End of a Construction Period	September 30, 2021	Requires that all interest cost incurred on long-term debt borrowing during the period of construction to be expensed, rather than capitalized. Requires retroactive application.

## Important Updates : New GASB Pronouncements

GASB Pronouncement	Effective for Fiscal Year Ending	Description
GASB Statement No. 90, Majority Equity Interests	September 30, 2020	Requires that majority equity interests be reported as either an investment following the equity method or a component unit depending on the facts and circumstances. JEA will need to evaluate its investment in TEA and any other majority equity interests to determine if any accounting changes will be warranted.
GASB Statement No. 91, Conduit Debt Obligations	September 30, 2022	Clarifies definition of conduit debt, establishes that conduit debt is not an obligation of the issuer, requires the third-party obligor to record the liability for the debt and requires additional footnote disclosures.
GASB Exposure Draft, Subscription-Based Information Technology Arrangements	September 30, 2022	Provides accounting guidance on subscription-based information technology arrangements ("SB ITAs"), such as cloud computing arrangements. Requires recognition of a right-to-use asset and a corresponding liability for SB ITAs, and requires expensing of certain costs associated with SB ITAs.

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## Appendices

- A [Areas of audit emphasis](#)
- B [2019 EY services](#)
- C [Inquiries](#)
- D [Peer review report](#)



Executive  
summary



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## Appendix A

Areas of audit emphasis



Executive  
summary



# Areas of audit emphasis

Area of emphasis	Summary of planned audit procedures
<p><b>Revenue</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>

# Areas of audit emphasis

Area of emphasis	Summary of planned audit procedures
<b>Regulatory accounts</b>	
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, Water & 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.	<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>Derivative instruments and hedging activities</b>	
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.	<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 (SJRP 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>	<p>► 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 of year end.</p> <p>► As part of our review of the financial statements we will assess any required disclosures in accordance with GASB 83.</p> <p>► We will obtain and inspect the annual asset retirement obligation roll forward and perform substantive procedures over material movements within the balance.</p>
<p><b>Other postretirement benefits liabilities</b></p> <p>JEA adopted and implemented GASB 75 in the prior year.</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>	<p>► 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 GASB 75.</p> <p>► We will review significant assumptions used by the actuary for reasonableness and test data provided by JEA used in the actuary's calculations.</p> <p>► 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 as of year end.</p> <p>► We will audit Plan assets held by the Florida Municipal Pension Trust Fund.</p> <p>► We will review the note disclosure and required supplementary information to ensure it is complete and accurate.</p>

# Areas of audit emphasis

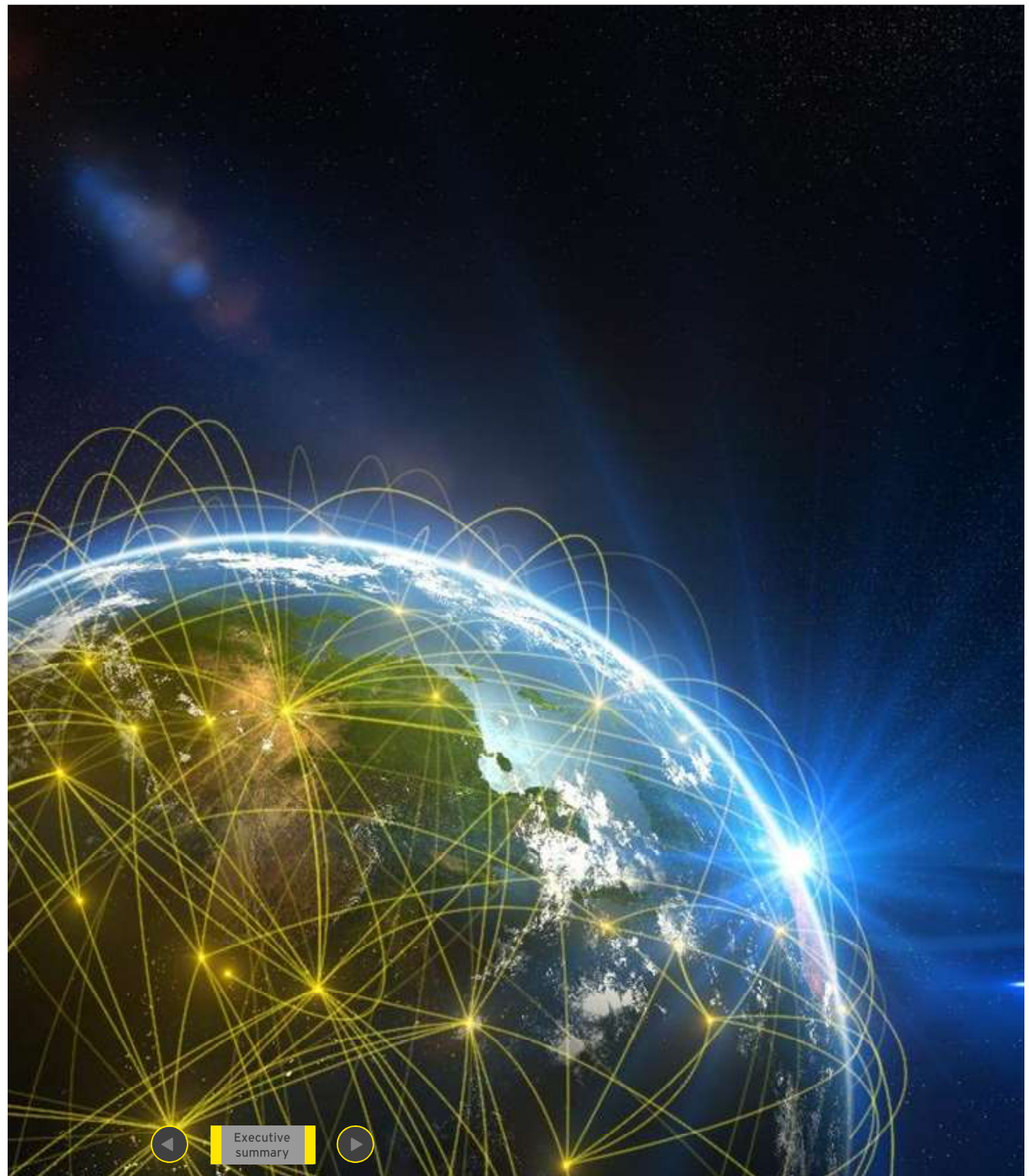
Area of emphasis	Summary of planned audit procedures
<b>Pension plan accounting and reporting – COJ Plan</b>	
In accordance with GASB 68 JEA is required to record a liability for its share of unfunded pension obligations for the City of Jacksonville (COJ) cost-sharing multi employer pension plan.	<ul 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 required 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 its 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>▸ Substantively 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>	
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.	<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>	
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.	<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>	
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.	<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>

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## Appendix B: 2019 EY services



# 2019 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 Office's Government Auditing Standards.
- Provide negative assurance on 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 report on compliance with each major state financial assistance project and report on internal control over compliance and report on schedule of expenditures of state financial assistance required by Chapter 10.550, Rules of the Auditor General
  - Issue a report on internal control over financial reporting and on compliance and other matters based on an audit of financial statements in accordance with Government Audit Standards
  - 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 and Chapter 10.550 Rules of the Auditor General
- Issue negative assurance reports on compliance with debt covenants
- 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 and others, if applicable
- Uniform Guidance and State Chapter 10.650 grant compliance audits (FEMA)



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## Appendix C

### Inquiries



Executive  
summary



# Inquiries

Inquiries of the audit committee are intended to assess the board's awareness of important matters pertaining 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 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 JEA and any concerns related to those relationships or transactions.



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## Appendix D

### Peer review report



Executive  
summary





# Thought leadership



## [Top priorities for boards in 2019](#)

To help boards navigate the challenges ahead, the EY Center for Board Matters presents five priorities for 2019, and actionable questions for boards to consider.



## [Cybersecurity disclosure benchmarking](#)

EY explores how various types of governance stakeholders have expressed interest in the ways companies guard against and respond to cybersecurity incidents.



## [The board's role in corporate culture](#)

Culture is a critical element for high-performing boards to oversee and, if necessary, take action to address.



## [ISS proxy voting guidelines and the audit committee](#)

Institutional Shareholder Services shares insight and answers questions about its increased interest in auditor ratification and audit committees.

Additional audit committee thought leadership available on [ey.com/boardmatters](https://www.ey.com/boardmatters)

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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 come 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.



## INTER-OFFICE MEMORANDUM

August 19, 2019

**SUBJECT: PRICING POLICY REVISIONS**

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

**TO:** JEA Finance and Audit Committee

Kelly Flanagan, Chair  
April Green  
John Campion

### **BACKGROUND:**

JEA's Pricing Policy (originally called the Pricing Philosophy) was established in November 2005 to provide broad guidance and facilitate the management, control and oversight of JEA's revenue requirements and pricing structure, and was last updated with approval in December 2018.

### **DISCUSSION:**

This Pricing Policy is intended to provide broad guidance and to facilitate the management, control and oversight of JEA's pricing structure. Its primary goal is to establish revenue requirements to fully recover the costs necessary to operate and maintain the utility, consistent with its mission, through fair and equitable pricing. This includes sufficient revenue for required transfers to the City, depreciation expense, and balance sheet liquidity. The total revenue requirement of each system must be sufficient to ensure the financial integrity of the utility, including recovery of debt service, sufficient revenue to meet renewal and replacement fund requirements, and maintenance of key financial metrics. It recognizes the operational challenges of managing dynamic businesses with major cost drivers such as significant regulatory reform, as well as fuel and debt service, which are dependent on global market conditions. The Pricing Policy contains the guiding parameters that JEA utilizes to develop its financial reporting, ratemaking, budget, and financial projections.

The attached Pricing Policy has been updated to reflect staff's recommendation to eliminate the Debt Management Strategy Stabilization Fund and to use those funds to execute Phase 2 of the Strategic and Timely Asset Realignment (STAR) plan, to adjust the environmental language for clarity and to make administrative changes.

The Debt Management Strategy Stabilization Fund was initially created to mitigate expenses related to market disruption in the capital markets, disruption of the availability of credit or unanticipated credit expenses, or to fund variable interest costs in excess of budget. JEA has mitigated these risks with the \$200 million increase in its revolving credit facility in November 2018 to a total commitment of \$500 million.

Together with available cash balances from the Operations Fund and Renewal and Replacement Fund, release of the Debt Management Strategy Stabilization Fund will allow staff to execute Phase 2 of the STAR plan. The Board approved the STAR plan in December 2018 to utilize cash from the Operations Fund, Debt Management Strategy Fund, and Renewal and Replacement Fund to defease debt. Phase 2 will be executed October 2019, for a total of approximately \$93 million in early debt retirement, bringing the STAR plan total debt defeasance to approximately \$288 million to date.

This Policy will become effective October 1, 2019.

**RECOMMENDATION:**

Staff recommends that JEA Finance and Audit Committee review and recommend that the JEA Board approve and authorize the Pricing Policy, as revised, at the next scheduled Board of Directors meeting.

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Aaron F. Zahn, Managing Director/CEO

AFZ/RFW/JEC



## Pricing Policy

### I. Scope

This Pricing Policy is intended to provide broad guidance and to facilitate the management, control and oversight of JEA's pricing structure. Its primary goal is to establish revenue requirements to fully recover the costs necessary to operate and maintain the utility, consistent with its mission, through fair and equitable pricing. This includes sufficient revenue for required transfers to the City, depreciation expense, and balance sheet liquidity. The total revenue requirement of each system must be sufficient to ensure the financial integrity of the utility, including recovery of debt service, sufficient revenue to meet renewal and replacement fund requirements, and maintenance of key financial metrics. It recognizes the operational challenges of managing dynamic businesses with major cost drivers such as significant regulatory reform, as well as fuel and debt service, which are dependent on global market conditions. The Pricing Policy contains the guiding parameters that JEA utilizes to develop its financial reporting, ratemaking, budget, and financial projections.

The Board is JEA's independent body responsible for setting rates. As part of this responsibility, the Board acknowledges that the rate setting policy and practices utilized will govern JEA's accounting under current generally accepted accounting principles, meaning that rate actions by the Board will impact when certain costs and revenues are recognized for financial statement purposes. This policy formalizes the rate philosophy utilized in prior years and codifies policy changes required for the implementation of regulatory accounting beginning with FY2015, including the change in rate setting methodology from Cash Basis to Utility Basis.

### II. Goal and Objectives

JEA's pricing shall be managed with an overall philosophy to provide advantages of a community-owned utility by delivering high quality, reliable and exceptional service at fair and competitive rates. JEA will exhaust all other net revenue improvement opportunities before recommending any price increases. JEA will develop a price structure that is based on cost of service and allocates costs to appropriate customer classes based on the cost to serve each class. Pricing shall be sufficient, predictable, consistent, understandable, fair, equitable, non-discriminatory and relatively easy to administer. A comprehensive cost of service study will be performed at a minimum of every five years to support that the rates charged by class are based on cost.

### III. Responsibility for Pricing Policy

The overall Pricing Policy is approved by the JEA Board of Directors and implemented by the Chief Executive Officer (CEO), Chief Financial Officer (CFO) and staff. Annually, during the development of the Five Year Financial Projection that is provided to the credit rating agencies, the ~~Chief Executive Officer (CEO)~~, Chief Operating Officer (COO), ~~Chief Financial Officer (CFO)~~, Chief Customer Officer (CCO), Vice President/General Manager Water Wastewater Systems, and

Vice President/General Manager Electric Systems will meet to develop strategy and review pricing and financial performance. JEA's Financial Planning and Rates department will develop and manage processes to implement and administer this Policy. Based on this review, any changes to pricing such that JEA continues to have rates based on cost of service and sufficient to maintain each System's financial integrity will be recommended to the Board for approval.

#### **IV. Authorization**

The JEA Board of Directors is independent from JEA management and has the power to fix, pledge to establish or establish, levy, regulate, impose and collect rates, assessments, fees and charges for the use or benefit of the utilities system and to alter and amend the same from time to time.

Although JEA is a non-jurisdictional entity, Tariffs approved by the Board of Directors are filed with the Public Service Commission for information and review. The Florida Public Service Commission (FPSC) does not regulate the revenue requirement of municipal utilities, yet pursuant to Section 366.04 (2), Florida Statutes, the FPSC has jurisdiction to review a rate structure for municipal utilities.

#### **V. Electric System**

Revenue requirements and rate design for the Electric System shall be constructed in three major categories: Base Rate, Fuel Charge, and Environmental Charge.

##### **Base Rate**

###### Structure

The Base Rate will be structured with two major components: a fixed monthly charge and consumption charges. The fixed charge is billed as a "Basic Monthly Charge" and the consumption charges are billed as "Energy Charge," "Residential Conservation Charge," "*Demand Charge*," and "*Excess kVar Charge*." (Italicized charges apply to commercial or industrial customers only, and do not appear on [typical](#) residential bills.) Revenue requirements and rates will be set using depreciation expense as the capital recovery estimate but must also ensure the financial integrity of the Electric System by achieving the following objectives:

- A minimum annual total debt service coverage ratio of 2.2x, (with a long-term goal of consistently achieving a minimum annual total debt service coverage ratio of 2.5x)
- A minimum of 150 to 250 days of liquidity
- Continue to move towards a maximum debt to asset ratio of 60%
- Maintain stabilization funds as detailed in the "Stabilization Funds" section

Staff plans to phase in higher fixed components of base rates over time, utilizing widely accepted principles and practices to better reflect the fixed components of JEA's electric system cost structure.

###### Pricing

The Base Rate will recover expenditures necessary to operate and maintain the system, depreciation expense, capital required to maintain the system, the

necessary contribution to the City, any special charges for programs adopted by JEA and approved by the Board, and additional revenues required to maintain the financial integrity of the System.

Staff will review with the Board of Directors the Base revenue and capital funding plans during both the annual budget cycle and the discussion of the Five Year Projection (as outlined in the “Five Year Projection” section). Recurring capital will be recovered from revenues each year. Non-recurring or unanticipated (i.e., storm damage or major equipment failure) costs will be evaluated by management to determine the best source of capital funding. This can include absorbing the cost in the current year budget or the inclusion of cost in future rates over a period of time with funding of the cost from debt or reserves. Authorization from the Board to recover non-recurring capital over a future period of time may constitute an asset on JEA’s balance sheet.

The Base Rate will additionally include a policy-directed allocation of current year base electric revenues to Customer Benefit programs to be collected in addition to the Residential Conservation Charge. Staff will develop specific programs such as electrification, direct load control, demand side management, residential low income efficiency programs, and customer utility optimization education programs, set program objectives and periodically report the status of the programs. Each year, the Customer Benefit budget will include an allocation for customer education initiatives at least equal to revenues generated from the Residential Conservation Charge (initially set at \$0.01 per kWh for monthly residential consumption in excess of 2,750 kWh) collected from customers in the prior year. The budgeted carve-out from the Base Rate will be set each year based on funding required to meet the targets determined by staff, at least equal to the Residential Conservation Charge and not to exceed \$0.50 per 1,000 kWh. Any amounts collected in excess of current and future anticipated need will be used for future costs or refunded to customers. The Customer Benefit programs do not function as special charge, but are a component of JEA’s cost of service in determination of the Base Rate each year.

Gains realized from coordinated dispatch agreements will be allocated to base revenue, unless otherwise directed by the Board.

## **Fuel Charge**

### **Structure**

The Fuel Charge is designed to recover fuel and energy costs and will be structured with three potential components, the Variable Fuel Rate, the Fuel Stabilization Charge and the Fuel Recovery Charge.

The Variable Fuel Rate will be structured for full recovery of actual energy expenditures including direct fuel expenses, fuel procurement, fuel handling, residual disposal expense, less any proceeds from the sale of residuals, byproduct expenses directly utilized in managing the facilities used to prepare the byproduct for its final disposition, fuel hedging activities including gains and losses on settlement of fuel hedges, purchase power energy charges such as fuel, and renewable energy that is not considered generation available for JEA’s current capacity plans. This charge can be adjusted up or down based upon energy costs. The Fuel Charge structure shall also include a charge for Fuel Stabilization to fund

potential negative variances between projected and actual energy costs, when projections at the time of the rate setting indicate this fund balance will be below the target balance during the rate period. A Fuel Recovery Charge may also be included as part of the Fuel Charge if needed to recover a cumulative fuel fund deficit over a set number of years.

### Pricing

The Fuel Charge will be set annually during the budget process to be effective October 1 of the upcoming fiscal year. The Charge is based on the forward twelve-month energy cost projection and will be structured to fully recover all expected fuel-related costs and any amounts for Fuel Stabilization Fund, discussed below, over the coming fiscal year. Provided the actual plus forecasted energy costs remain within 10% of projected energy cost, any variance will be “trued-up” annually and recovered in the subsequent twelve month period. Should actual plus forecasted energy costs exceed the 10% range of projected energy costs during the twelve month period, rates may be adjusted to reflect current market conditions. For example, a Variable Fuel Rate charge of \$50.00/1,000 kWh may be adjusted when the twelve month projection for total energy cost is less than \$45.00/1,000 kWh or greater than \$55.00/1,000 kWh. Absent a rate change, Fuel Charges collected in excess of fuel expenses are deposited in the Fuel Stabilization Fund, and under collected amounts are funded through Fuel Stabilization Fund withdrawals until rates can be adjusted.

The Fuel Charge may include an amount for a Fuel Stabilization Charge to fund potential short-term negative variances between projected and actual energy costs. The target balance in the Fuel Stabilization Fund is equal to 15% of the greater of (i) the maximum fiscal year fuel cost in the preceding five fiscal years or (ii) the projected fiscal year fuel cost. Should the Fuel Stabilization Fund balance reach the 15% level at any point during the twelve month variable fuel rate cycle, the CEO, CFO, CCO, and staff will evaluate the Fuel Stabilization Fund balance, projection through year-end, and current market prices and volatility, and will recommend to the Board to either continue funding with no change, credit customers with the overfunded amount, or modify the Fuel Charge. Absent any specific change, the Fuel Charge will continue to be collected until the end of the cycle. An objective of the Fuel Stabilization Charge is to establish the most transparent mechanism to communicate the amount of the Fuel Charge which is being collected to fund the Fuel Stabilization Fund, and thus should be utilized in the communication with stakeholders. Allowable uses of the Fuel Stabilization Fund shall include cash deposits supporting any fuel fund deficits, energy risk management activities, and inter-fund loans.

The Fuel Charge may also include a Fuel Recovery Charge to recover any cumulative fuel fund deficit. Allowable uses shall include debt reduction, repayment of inter-fund loans, new inter-fund loans, and fund activities employed during the time the fuel deficit accumulated that were used to fund the deficit.

Each month management shall report the total fuel revenues, expenses and the resulting surplus or deficit. All authorized fuel related costs shall be recovered through the Fuel Charge, and funds collected in excess of authorized fuel related expenses (including Fuel Stabilization Fund deposits, when required) shall be used to fund future expenses or be refunded to customers.

## Environmental Charge

### Structure

The Environmental Charge is applied to all kWh consumption and structured to provide funding for major specific environmental and regulatory program needs.

### Pricing

The Environmental Charge is designed to recover from customers ~~all~~ costs of environmental remediation, environmental projects and compliance with new and existing environmental regulations, excluding the amount already collected in the Environmental Liability Reserve. Applicable use of funds is described in the “Stabilization Funds” section.

Annually the Board will review and approve the operating, maintenance and capital costs of projects to be included in determining the Environmental Charge for that year. For capital projects funded from sources other than the environmental charge revenues, the Board will determine an appropriate method including recovery period for including these costs in the determination of the Environmental Charge. The revenues collected will be used to reimburse the fund that provided the original funding. Methods used for recovery can include amortization over a relatively short period of time, depreciation expense and related carrying charge of the related asset or other reasonable methods.

Any revenues collected in excess of costs in any period will be used to fund operating and capital costs of approved projects in the future.

The amounts collected from the Environmental Charge will be accounted for in the Electric System Environmental Stabilization Fund. Amounts collected for future environmental capital projects are transferred from the Electric System Environmental Rate Stabilization Fund to the Environmental Capital Fund.

## VI. Water and Sewer System

Revenue requirements and rate design for the Water and Sewer System shall be constructed in two major categories: Base Rate and Environmental Charge.

### **Base Rate**

#### Structure

Revenue and rate design for the Water and Sewer System shall be constructed in two major categories: monthly charges and initial charges, including capacity and main extension fees. Standard monthly charges will include two primary components: A fixed monthly charge and volume charges based on customer usage. The fixed charge is billed as a “Basic Monthly Charge” and the volume charges are billed as “Water Consumption Charges” and “Sewer Usage Charges”.

Revenue requirements and rates will be set using depreciation expense as the capital recovery estimate but must also ensure the financial integrity of the Water and Sewer System by achieving the following objectives:

- A minimum annual total debt service coverage ratio of 1.8x, with a long-term goal of consistently achieving a minimum annual total debt service coverage ratio of 2.0x
- A minimum of 100 days of liquidity
- A long-term objective of a maximum debt to asset ratio of 50%
- Maintain stabilization funds in the “Stabilization Funds” section

### Pricing

The Base Rate will recover expenditures necessary to operate and maintain the system, depreciation expense, capital required to maintain the system, the necessary contribution to the City, any special charges for programs adopted by JEA and approved by the Board, and additional revenues required to maintain the financial integrity of the System.

Staff will review with the Board of Directors the Base revenue and capital funding plans during both the annual budget cycle and the discussion of the Five Year Projection (as outlined in the “Five Year Projection” section). Recurring capital not recovered via the Environmental Charge will be recovered from revenues each year. Non-recurring or unanticipated (i.e., storm damage or major equipment failure) costs will be evaluated by management to determine the best source of capital funding. This can include absorbing the cost in the current year budget or the inclusion of cost in future rates over a period of time with funding of the cost from debt or reserves. Authorization from the Board to recover non-recurring capital over a future period of time may constitute an asset on JEA’s balance sheet. The annual principal repayment requirements and contributions to the Renewal and Replacement Fund will be added to the non-capacity capital expenditure amount with the amount in excess of the annual depreciation expense included as an additional cost in setting rates. Capacity fee revenue will be used as an additional source of revenue in determining annual revenue requirements.

Capacity fees to recover water, sewer and reclaimed water treatment facilities investment are established to recover 100% of the cost, including materials, of performing these services. These fees will be reviewed and if necessary, adjusted at least every three years. Capacity fees to recover the cost of off-site water and sewer line extensions shall be established to recover:

- 75% master plan main extension attributed to general system growth, assessed on a per connection basis; and
- 100% main extension attributed to specific development, assessed to the developer in accordance with JEA’s development policy.

On-site line extensions have been and will remain the financial responsibility of the developer, builder, homeowner or business and shall be contributed to JEA at no charge to own, operate and maintain.

Tap and meter fees will be established to recover 100% of the cost, including materials, of performing tap and meter services. These fees will be reviewed and, if necessary, adjusted at least every three years.

Staff will review with the Board of Directors the revenue and capital funding plans during both the annual budget cycle and the Five Year Projection/Rating Agency cycle.



## **Environmental Charge**

### Structure

The Environmental Charge is applied to all kgal sales and structured to provide funding for major specific environmental and regulatory program needs.

### Pricing

The Environmental Charge is designed to recover from customers ~~all~~ costs of environmental remediation, [environmental projects](#) and compliance with new and existing environmental regulations. Applicable use of funds is described in the “Stabilization Funds” section.

Annually the Board will review and approve the operating, maintenance and capital costs of projects to be included in determining the Environmental Charge for that year. For capital projects funded from sources other than the environmental charge revenues, the Board will determine an appropriate method including recovery period for including these costs in the determination of the Environmental Charge. The revenues collected will be used to reimburse the fund that provided the original funding. Methods used for recovery can include amortization over a relatively short period of time, depreciation expense and related carrying charge of the related asset or other reasonable methods.

Any revenues collected in excess of costs in any period will be used to fund operating and capital costs of approved projects in the future.

The amounts collected from the Environmental Charge will be accounted for in the Water and Sewer System Environmental Stabilization Fund. Amounts collected for future environmental capital projects are transferred from the Water and Sewer System Environmental Rate Stabilization Fund to the Environmental Capital Fund.

## **VII. Five Year Projection**

Staff will prepare a Five Year Projection annually that will be presented to Board of Directors and Rating Agencies. The Five Year Projection will address the status of the current pricing and forecasted cost-based revenue requirements.

The annual budgeting process will be used to project the cost-based revenue requirements and suggested pricing for the next fiscal year. Thereafter, factors to be considered in the projections include:

- Required revenue and resulting rates
- The forecast of unit sales
- Projected fuel and purchased power costs
- Projected non-fuel purchased power costs
- Projected operating and maintenance costs
- Contribution to the City General Fund
- Renewal and Replacement Deposit
- Amortization of regulatory assets and liabilities including gains and losses on debt refinancing, debt issue costs and other items approved by the Board
- Desired level of operating capital outlay
- Projected depreciation expense

- Desired debt service coverage, liquidity, and debt to asset levels consistent with a highly rated electric and water and sewer utilities
- Analysis of costs and revenue of any special charges for programs adopted by JEA and approved by the Board

## **VIII. Stabilization Funds**

The Board authorizes the funding and utilization of certain Stabilization Funds within each of the Electric and Water and Sewer Systems. Deposits and withdrawals will be made into each of the funds as specifically described below, and are governed by both this Pricing Policy and JEA's Bond Resolutions. The Stabilization Funds described below have a specific funding source which is approved by the Board, and uses of funds which are also approved by the Board. Any excess amounts remaining after the funding target is met and expenses are paid are refunded back to customers.

### **Fuel Stabilization Fund**

#### Target Balance

The target balance in the Fuel Stabilization Fund is equal to 15% of the greater of (i) the maximum fiscal year fuel cost in the preceding five fiscal years or (ii) the projected fiscal year fuel cost.

#### Funding and Authorization

The Fuel Charge for each Fiscal Year is established to include the projected fuel-related expenditures for the upcoming fiscal year as well as deposits required into the Fuel Stabilization Fund to maintain the target balance in the Fund. These projections, including any Fuel Stabilization Fund projected deposit amounts, are approved by the Board in connection with the approval of the annual Budget. Deposits to the Fuel Stabilization Fund during the fiscal year are made for amounts representing the excess of the variable rate fuel revenues (not including the fuel stabilization revenues) recorded for the fiscal year over the amount of actual fuel and purchased power expense for the fiscal year.

#### Allowable Uses

Withdrawals from the Fuel 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 pay for the costs associated with any energy risk management activities and/or
- d) to be rebated back to the customers as a credit against the electric bill

The balance in the Fuel Stabilization Fund may also be borrowed by the Electric System operating fund through an interfund loan, which requires the approval of the CFO and the CEO with the amounts required to be repaid within a reasonable period of time.

#### Excess Funds

Funds collected in excess of authorized fuel related expenses (including Fuel Stabilization Fund deposits, when required) shall be used to fund future expenses or be refunded to customers.

## **Customer Benefit Stabilization Fund**

### Funding and Authorization

Deposits to the Customer Benefit Stabilization Fund are made for amounts representing the Residential Conservation Charge to the customer (\$0.01 per kWh over 2,750 kWh) and the Customer Benefit Revenue Allocation (up to \$0.50 per 1,000 kWh) during the course of the fiscal year. The Residential Conservation Charge revenues are direct collections from customers based on sales. The Customer Benefit Revenue Allocation is approved by the Board in connection with the annual Budget process.

### Allowable Uses

Withdrawals from the Customer Benefit Stabilization Fund are limited to amounts representing charges to the applicable "Customer Benefit" expense types, which represent Customer Benefit programs approved annually by the Board. Amounts withdrawn from the Customer Benefit Stabilization Fund will first be funded by the Residential Conservation Charge (\$0.01 per kWh over 2,750 kWh) and the remaining funded by the Customer Benefit Revenue Allocation (up to \$0.50 per 1,000 kWh). Any costs not recovered in the current year will be collected in future years through the Residential Conservation Charge and the Customer Benefit Revenue Allocation.

### Excess Funds

Funds collected in excess of the approved Customer Benefit programs shall be used to fund future program expenses or be refunded to customers.

## **Electric System Environmental Stabilization Fund**

### Funding and Authorization

Deposits to the Electric System Environmental Stabilization Fund are made for amounts collected from the Environmental Charge to the customer. The Environmental Charge will be set each year to recover the costs of approved projects. Any shortfalls will be included as a cost in determining the Environmental Charge.

### Allowable Uses

Withdrawals from the Electric System Environmental Stabilization Fund are limited to potential environmental expenditures approved by the Board, and may include [regulatory](#) initiatives such as the cost of acquisition of renewable energy capacity. [Costs directly required to operate and maintain the environmentally driven or regulatory required assets can also be funded from this revenue source.](#)

### Excess Funds

Funds collected in excess shall be used to fund future environmental expenses or be refunded to customers.

## **Water and Sewer System Environmental Stabilization Fund**

### Funding and Authorization

Deposits to the Water and Sewer System Environmental Stabilization Fund are made for amounts collected from the Environmental Charge to the customer. The Environmental Charge will be set each year to recover the costs of approved projects. Any shortfalls will be included as a cost in determining the Environmental Charge.

### Allowable Uses

Withdrawals from the Water and Sewer System Environmental Stabilization Fund are limited to major environmental and regulatory program needs. Capital costs include those costs associated with specific environmental or regulatory requirements. Costs directly required to operate and maintain the environmentally driven or regulatory required assets can also be funded from this revenue source. The Environmental Charge revenue may also be used for JEA's cost participation with the City of Jacksonville septic tank phase-out program, including a waiver of sewer and main extension fees, or for well mitigation. Additionally, the Environmental Charge revenue may be used for Customer Benefit programs supporting the Consumptive Use Permit objective to reduce JEA's demand on the Florida Aquifer.

### Excess Funds

Funds collected in excess shall be used to fund future environmental expenses or be refunded to customers.

## **Debt Management Strategy Stabilization Fund**

### Funding and Authorization

~~The Board will approve a Debt Management Policy and use of related stabilization funds. Deposits to the Debt Management Strategy Stabilization Fund will be for amounts associated with any debt management strategy objectives. The Board as part of the budget review process will determine and approve the amounts included in rates that are to be deposited into the Debt Management Strategy Stabilization Fund for the year. The Board may, periodically throughout the year, determine and approve changes to these amounts. The amounts included in rates and deposited into the stabilization fund are intended to offset future costs.~~

### Allowable Uses

~~Withdrawals from the Debt Management Strategy 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. Any amounts withdrawn for these costs will subsequently be presented for approval by the Board.~~

### Excess Funds

~~Amounts deposited into the Debt Management Strategy Stabilization Fund for debt management strategy in excess of the target amount set forth in the Debt Management Policy in both the Electric and Water and Sewer Systems may be authorized by the Board to be used to (1) maintain the financial integrity of the~~

~~Systems, (2) fund future debt-related expenses including early debt retirement or defeasance, or (3) be refunded to customers.~~

## **Non-Fuel Purchased Power (NFPP) Stabilization Fund**

### Target Balance

Initially, the total projected principal payments incurred by MEAG for the Vogtle Units 3 and 4 Purchased Power Agreement prior to the operating date of each unit.

### Funding and Authorization

Deposits to the NFPP Stabilization Fund are for amounts associated with any non-fuel purchased power. The Board will determine as part of the Budget approval process or periodically throughout the year the amount to include in rates that will be deposited into the NFPP Stabilization Fund.

### Allowable Uses

Withdrawals from the NFPP Stabilization Fund are to reimburse non-fuel purchased power expenses associated with Plant.

### Excess Funds

Funds collected in excess shall be used to fund future non-fuel purchased power expenses or be refunded to customers.

## **Health Self-Insurance Reserve**

### Target Balance

The target size of this reserve is based on regulatory requirements, market conditions and risk management experience, along with input from the Department of Insurance, the regulatory body responsible for oversight of all self-insurance health and medical plans.

The objective is to maintain appropriate reserves and to ensure the long-term viability of the organization and the sustainability of the self-insurance health programs. Rule 69O-149.053, Florida Administrative Code requires that JEA maintain a minimum surplus reserve of 60 days over and above the amount needed for the Plan's claim liability to cover costs associated with unexpected claims.

### Funding and Authorization

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

### Allowable Uses:

The amounts approved for recovery from the employees will be used to reduce the annual cost. Any costs in excess of revenues collected will be included in rates at the direction of the Board in a future period.

**Excess Funds**

Any amount over the required reserve requirement will be used to reduce future costs included in rates or will be refunded to the employee through premium holidays as approved by the Board.

**IX. Policy Exceptions**

Any pricing activity determined to be in conflict with this Policy will be brought to the Board of Directors for review and approval prior to adoption, and resulting metrics will be reported on an annual basis within the Five Year Projection.

**X. Effective Date**

This Pricing Policy became effective October 1, 2005 (originally called "Pricing Philosophy"). This revision will become effective on the date on which it is adopted by the full Board effective ~~October 1~~ January 1, 2019.



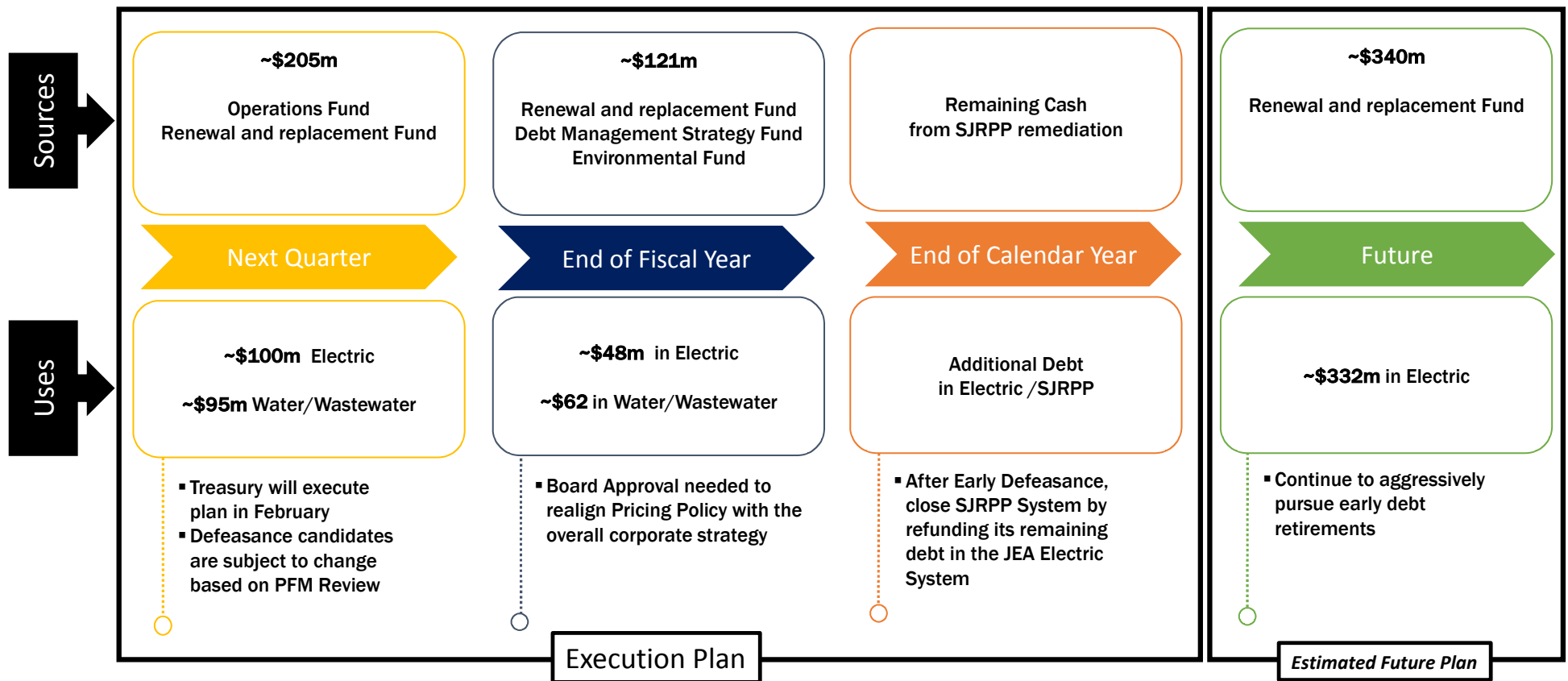


# Policy Revisions

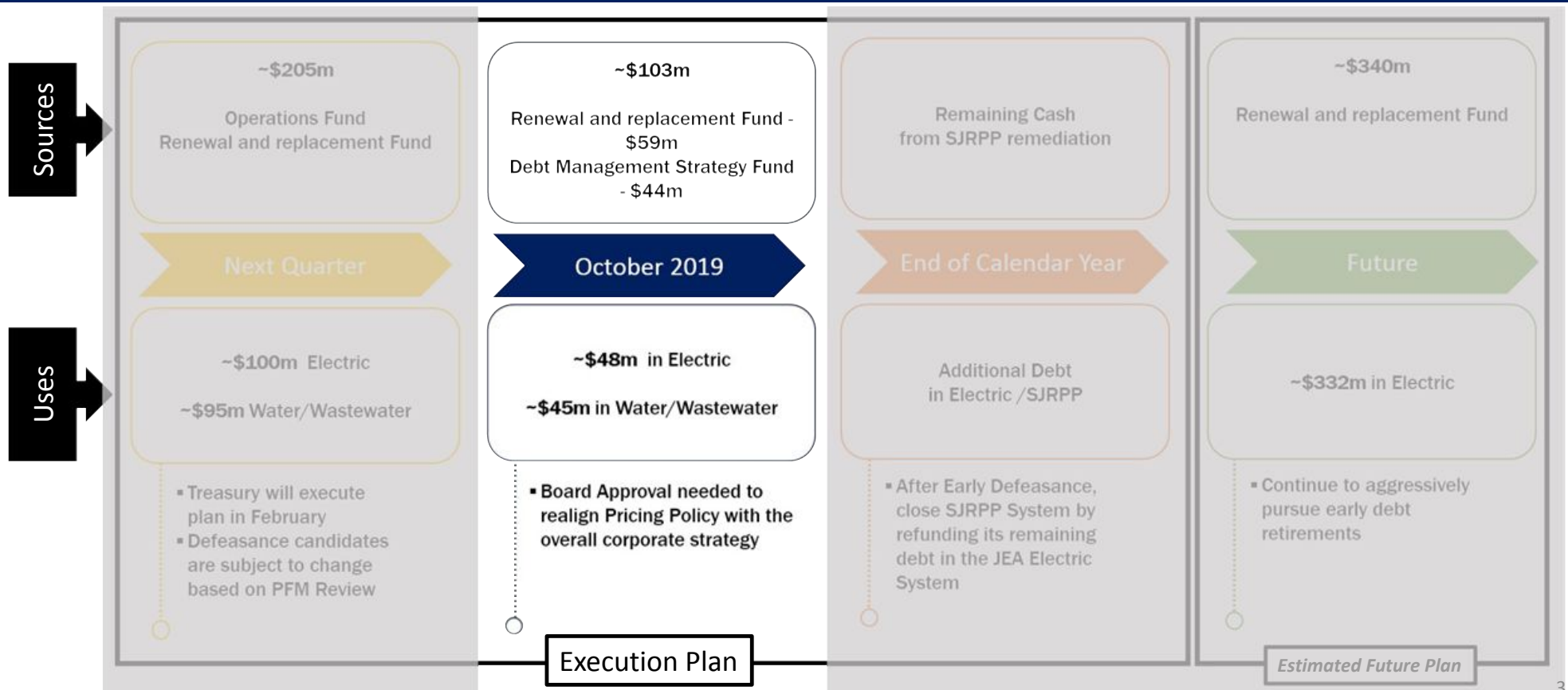
August 2019 Finance and Audit



# The Strategic & Timely Asset Realignment Plan was presented to the Board December 2018



# Phase 2 of the plan will be implemented October 2019



# Phase 2 of the STAR plan requires adjustments to internal policies

## Debt Management Policy

Removal of the former Policy Section VIII.F.  
“VARIABLE RATE DEBT INSTRUMENTS – Reserve  
Fund”

## Pricing Policy

Removal of “Debt Management Stabilization Fund”

Changes recommended due to:

- ▶ a benign short-term interest rate environment that has seen SIFMA average 1.42% over the past 20 years;
- ▶ \$200 million increase in JEA's revolving credit facility in November 2018 to a total commitment of \$500 million, providing for additional liquidity should there be a spike in interest rates;
- ▶ use of the Electric and Water and Sewer System debt management strategy stabilization fund balances of approximately \$29.9 million and \$14.2 million, respectively, for the STAR Plan Phase 2 debt defeasance.



# Phase 2 STAR Plan Sources and Uses

## Energy

SOURCES (\$millions)	Phase 1	Phase 2	Total FY 19
Cash Flow from Operations	\$0	\$122	\$122
Operation Fund	\$35	\$0	\$35
Renewal & Replacement Fund	\$70	\$25	\$95
Debt Management Fund	\$0	\$30	\$30
Environmental Fund	\$0	\$0	\$0
<b>Total Funds</b>	<b>\$105</b>	<b>\$177</b>	<b>\$282</b>

USES (\$millions)	Phase 1	Phase 2	Total FY 19
Scheduled Principal Payments	\$0	\$122	\$122
Principal Early Defeased	\$100	\$48	\$148
Escrow Cost*	\$5	\$7	\$12
<b>Total Escrow</b>	<b>\$105</b>	<b>\$177</b>	<b>\$282</b>

\*Costs are subject to change due to fluctuations in future market conditions

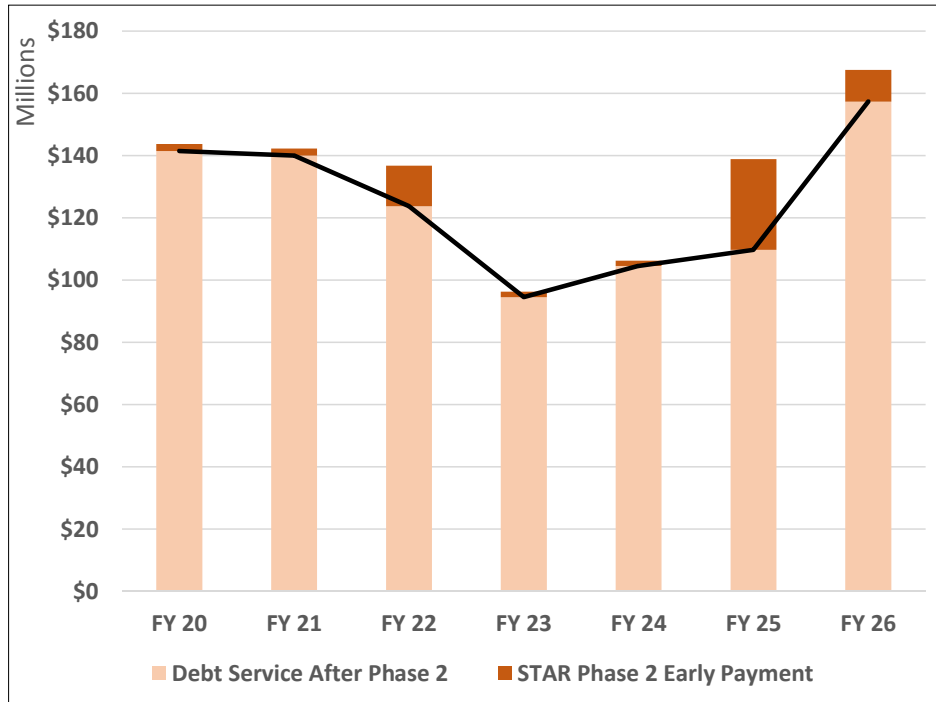
## Water Wastewater

SOURCES (\$millions)	Phase 1	Phase 2	Total FY 19
Cash Flow from Operations	\$0	\$55	\$55
Operation Fund	\$0	\$0	\$0
Renewal & Replacement Fund	\$98	\$34	\$132
Debt Management Fund	\$0	\$14	\$14
Environmental Fund	\$0	\$0	\$0
<b>Total Funds</b>	<b>\$98</b>	<b>\$103</b>	<b>\$201</b>

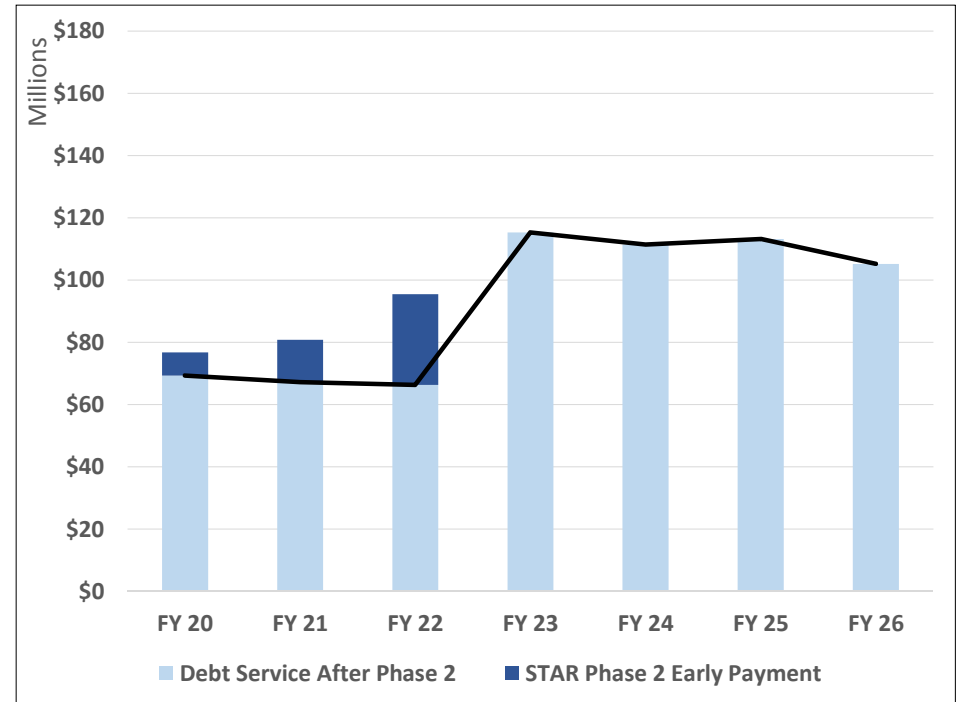
USES (\$millions)	Phase 1	Phase 2	Total FY 19
Scheduled Principal Payments	\$0	\$55	\$55
Principal Early Defeased	\$95	\$45	\$140
Escrow Cost*	\$3	\$3	\$6
<b>Total Escrow</b>	<b>\$98</b>	<b>\$103</b>	<b>\$201</b>

# STAR Plan Phase 2 Debt Payment Schedule

## Energy



## Water Wastewater



## STAR Plan Phase 2 Results In:

### Energy

▶ \$48  
MILLION

DEBT RETIREMENT

▶ FY

2022, 2025 - 2026

▶ \$60  
MILLION

DEBT SERVICE SAVINGS

### Water Wastewater

▶ \$45  
MILLION

DEBT RETIREMENT

▶ FY

2020 - 2022

▶ \$49  
MILLION

DEBT SERVICE SAVINGS

## Total Savings: \$109 million



# Recommendation

Staff recommends that JEA Finance and Audit Committee review and recommend that the JEA Board approve and authorize the Debt Management Policy and the Pricing Policy, as revised, at the next scheduled Board of Directors meeting.

*Following approval of the policy revisions, staff will bring an additional recommendation to the Board to provide for use of electric environmental funds for environmental projects, such as solar. Historically electric environmental funds have only been used for environmental operating expenses, and this approval would allow funding for additional environmental projects.*

*This change will result in additional funds deposited into the R&R fund which may be used for Phase 2 of the STAR plan.*



## INTER-OFFICE MEMORANDUM

July 26, 2019

**SUBJECT: DEBT MANAGEMENT POLICY REVISION**

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

**TO:** JEA Finance and Audit Committee

Kelly Flanagan, Chair  
April Green  
John Campion

### **BACKGROUND:**

The Debt Management Policy, originally adopted on May 20, 2003 and amended on April 19, 2005, October 18, 2005, November 20, 2007 and December 15, 2009, contains detailed provisions and strategies regarding the management of JEA's debt including fixed rate debt, variable rate debt, refunding debt and interest rate swaps, caps, collars and related hedging instruments.

### **DISCUSSION:**

The most recent version of the Debt Management Policy became effective on December 15, 2009. JEA staff reviews the Policy on a periodic basis with the Debt/Investment Strategy Committee in order to consider current industry practices, rating agency considerations and the JEA operating environment. The Policy's goal is to ensure JEA's debt is managed taking a long-term approach in borrowing funds at the lowest possible interest cost after taking into consideration the various risks. Based on its most recent review staff is proposing a number of changes to the Policy. Most are removal of outdated references, clarifications and conforming of terms, and format cleanups.

The only change of substance is the removal of the former Policy Section VIII.F. VARIABLE RATE DEBT INSTRUMENTS – Reserve Fund. The Reserve Fund is being eliminated to reflect the following factors:

- a benign short-term interest rate environment that has seen SIFMA average 1.42% over the past 20 years;
- the \$200 million increase in JEA's revolving credit facility in November 2018 to a total commitment of \$500 million, providing for additional liquidity should there be a spike in interest rates;
- use of the Electric and Water and Sewer System debt management strategy stabilization fund balances of approximately \$29.9 million and \$14.2 million, respectively, for the STAR Plan Phase 2 debt defeasance.

The Reserve Fund language that is being eliminated is presented below:

#### **F. Reserve Fund**

Beginning in FY 2010, deposits will be made to the Rate Stabilization Fund for the Debt Management Strategy Reserve and will 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. At a minimum, 50% of the calculated reserve will be recorded and deposited each fiscal year. An additional amount, up to the full value of the calculated reserve (the remaining 50%), will be

reviewed by the Debt and Investment Committee and recorded at their option. However, the amount deposited to the Rate Stabilization Fund (in addition to actual debt service costs for the fiscal year) cannot exceed the total amount of the budgeted debt service. The reserve will be calculated on a system by system basis, however, based on the calculation, any mandatory deposit will exclude the District Energy System. The budget reserve is capped at five percent of the par amount of the total outstanding variable rate debt. Withdrawals from the Rate Stabilization Fund for the Debt Management Strategy 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.

A clean and marked version indicating changes from the December 15, 2009 version of the Policy are included with this memorandum.

**RECOMMENDATION:**

Staff recommends that JEA Finance and Audit Committee review and recommend that the JEA Board approve and authorize the use the Debt Management Policy, as revised, at its August 27, 2019 meeting.

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Aaron F. Zahn, Managing Director/CEO

AFZ/RFW/JEO/RLH

# **DEBT MANAGEMENT POLICY**

Revised as of ~~December 15, 2009~~August 27, 2019

## **I. SCOPE**

This Policy applies to all current and future debt and related hedging instruments issued by JEA for its Electric System, Water and Sewer System, District Energy System, (DES), St. Johns River Power Park (SJRPP), Bulk Power Supply System, (BPSS), and any other entity created and approved by JEA's Board. The Policy is intended to provide broad policy guidance and facilitate the management, control, and oversight of JEA's debt function facilitating ongoing access to the capital markets necessary to the funding of future capital projects.

## **II. GOAL/MISSION/OBJECTIVE**

JEA's debt shall be managed with an overall philosophy of taking a long-term approach in borrowing funds at the lowest possible interest cost. To achieve this goal, JEA will continuously work towards developing the optimal capital structure, including the amounts and types of variable rate exposure, in view of JEA's risk tolerance to market fluctuations, capital market outlook, future capital funding needs, rating agency considerations, counterparty credit profiles, and competition.

The Debt Management Policy sets forth parameters and provides guidance regarding the following issues:

- Capital structure
- Credit ratings
- Compliance with tax regulations
- Management of floating interest rate risk
- Management of hedging instruments

The main goals of the Debt Management Policy are as follows:

- Maintain cost of capital consistent with other "AA" similarly rated municipal utilities
- Maintain steady credit ratings
- Establish and maintain reserve funds
- Reduce floating rate debt "put" risk
- Maintain diversification of debt

### III. RESPONSIBILITY FOR POLICY

The overall Debt Management Policy is approved by the JEA Board and implemented by the Chief Financial Officer (CFO) ~~Vice President of Financial Services.~~ An oversight committee, the Debt/Investment Strategy Committee (Committee) will meet ~~quarterly~~semiannually to develop strategy and review the performance of the debt and investment portfolio in conjunction with this Policy. The members of the Committee are the ~~CEO, CFO/Vice President of Financial Services, Director of Treasury Services, and Portfolio Specialist~~Managing Director and Chief Executive Officer (CEO), CFO, Treasurer and Manager Cash and Investments.

JEA's Treasury Services group will develop procedures to implement and administer this Policy. In addition, ~~Financial Management~~Treasury Services will continuously apply process improvement methodologies to make improvements to the Debt Management processes.

### IV. AUTHORIZATION

#### A. Debt Authorization

—The overall amount of debt that JEA is allowed to issue for ~~both~~ the electric system ~~and, SJRPP,~~ the water and sewer system and DES is authorized by the JEA Board and by City Council ~~Ordinance~~ordinance on an as needed basis. Based on capital and related debt issuance ~~projections~~financial forecast, the JEA Board typically approves the projected debt issuance limits for the next several years in conjunction with the next fiscal year's budget process.

The available amount of debt authorization outstanding is monitored by Treasury Services and is reported monthly to the Board as part of the monthly financial statements.

#### B. Authorizations for Debt-Related Hedging Instruments such as ~~Swaps~~swaps and ~~Caps~~caps.

Resolutions approving the use of interest swap, cap, and related hedging instruments outlining, among other things, size and maturity restrictions, must be approved by the JEA Board prior to execution.

#### C. New Systems Authorization and Financing

This Policy will include debt issued pursuant to new system resolutions approved by the JEA Board and City Council. Debt authorization limits will be approved by a separate authorizing resolution approved by the JEA Board and City Council ordinance.

## V. INVESTMENT STRUCTURE

JEA is authorized to invest available funds pursuant to an established Investment Policy approved by the Board on September 19, 2000, last amended ~~August 18, 2008~~March 26, 2019, Florida Statutes section 218.415 and the ~~-Electric, Water and Sewer, District Energy~~DES, SJRPP, and ~~Bulk Power Supply bonds~~BPSS bond resolutions. The primary goals of the Investment Policy are to (1) provide safety of capital, (2) provide sufficient liquidity to meet anticipated cash flow requirements and (3) maximize investment yields while complying with the first two goals. The Investment Policy outlines the parameters on authorized investments, maturity and liquidity requirement limits, and procurement and safekeeping procedures.

JEA ~~utilizes~~is authorized to utilize investment/asset-based “fixed to floating” swaps in order to take advantage of longer term investment yields as a hedge to the shorter yielding funds which are required to remain in short-term investments (i.e., debt service funds and operating funds).

The notional amount of swaps outstanding classified as investment/asset-based swaps ~~are~~is authorized by the Board under a separate resolution. JEA may not have outstanding a notional amount of investment/asset swaps which in aggregate is an amount greater than the amount of variable/short-term investable funds (100% hedged).

## VI. ANNUAL PLAN OF FINANCE

~~Treasury Services will prepare annually, as~~As part of the annual budget presentation, a Plan of Finance ~~that~~ will be submitted to the Board for information purposes. Such Plan of Finance will address at a minimum the amount of debt projected to be issued during the next fiscal year and whether such debt is senior or subordinated, fixed and/or variable and the possible use of hedging instruments.

A. The annual capital budgeting process will be used to project the amount of debt to be issued during the next five-year period. Factors to be considered in the final ~~projections~~financial forecast are:

- The forecast of spending levels for capital projects.
- The availability of internal funds to pay for capital projects.
- Desired debt service coverage levels consistent with a highly rated electric and water and sewer utility.
- The additional bonds test calculation outlined in the respective senior and subordinated resolution of each system.

B. Senior vs. Subordinated Debt

The electric system and the water and sewer system each have a separate senior and subordinated bond resolution. The electric system senior

resolution authorizes debt issued under its resolution to fund projects relating to non-generation capital expenditures and the subordinated resolution authorizes debt issued under its resolution to fund projects relating to all categories of capital expenditures. This Policy will target debt issued under the subordinated resolution to fund generation capital expenditures.

The water and sewer senior and subordinated bond resolutions authorize debt to be issued under the respective resolution to fund projects relating to all categories of water and sewer related capital expenditures.

~~JEA is utilizing the original SJRPP bond resolution to issue debt in order to refund outstanding SJRPP debt. The proceeds from these debt issues are used to retire outstanding debt and cost of issuance of the refunding debt.~~  
A second revenue bond resolution for SJRPP is being used to issue additional new money debt and any associated debt refunding transactions.

A restated and amended ~~Bulk Power Supply system~~BPSS resolution authorizes Debt to be issued to fund new projects and refund related debt.

The ~~District Energy System~~DES resolution authorizes debt to fund projects and refund related debt.

C. Tax-exempt vs. Taxable

As a municipal utility, JEA is authorized to issue tax-exempt debt and must comply with appropriate tax regulations. JEA will endeavor at all times to issue tax-exempt debt. For certain transactions, due to tax regulations, it may be necessary or advantageous for JEA to issue taxable debt. Such prevailing circumstances may include excessive transferred proceeds, volume cap limitations, and private use restrictions. Treasury Services will monitor current tax regulations and utilize tax-exempt financing whenever possible.

D. Fixed vs. Variable Debt

Pursuant to this Policy, JEA will not exceed 30% of Net Variable Rate Debt to Total Debt and will not exceed 55% of Net Variable Rate Debt plus Net Fixed to Floating Interest Rate Swaps to Total Debt.

For purposes of this Policy, the above limits will be calculated with the following components:

- Net Variable Rate Debt equals ~~actual~~Total Variable Rate Debt minus Net Variable Rate Assets.
- Net Variable Rate Assets equals ~~actual~~ Variable Rate Assets minus notional amount of investment/asset-matched interest rate swaps.



- Net ~~fixed~~Fixed to ~~floating interest rate swaps~~Floating Interest Rate Swaps shall be defined as the notional amount of fixed to floating swaps maturing in 10 years or less minus the notional amount of floating to fixed swaps maturing in 10 years or less outstanding on the last day of each month.
- Total Debt equals the par amount of fixed rate debt plus Total Variable Rate Debt.
- Total Variable Rate Debt equals hedged and unhedged variable rate debt.
- Variable Rate Assets are defined as investments maturing in less than one year.
- Unhedged Variable Rate Debt is defined as ~~actual variable rate debt~~Total Variable Rate Debt outstanding less variable rate debt that is associated with a floating to fixed rate swap where the term of the swap matches the term of the variable rate debt.

The calculation of these percentages will be performed ~~monthly~~semiannually and reported to the ~~CFO/Vice President of Financial Services~~Committee.

JEA's capital structure, comprised of fixed rate debt, variable rate debt, and debt-related hedging instruments such as interest rate swaps and caps, will be managed in conjunction with investment assets and investment-related hedging instruments to incorporate the natural occurrence of hedging impacts in those balance sheet categories. The goal of adopting a comprehensive investment and debt management strategy is to use each side of the balance sheet to mitigate or hedge cash flow risks posed by the other side of the balance sheet. For example, interest income for variable rate assets provides a natural offset to the interest expense of variable rate debt as interest rates increase or decrease. Therefore, in determining JEA's exposure risk to a changing interest rate environment, both components of the balance sheet will be analyzed and JEA's "net" exposure evaluated.

JEA will utilize a mix of fixed and variable rate debt to lower the overall cost of capital. Variable rate debt will generally be used as an efficient way to fund new construction requirements and as a permanent component of a long-term funding strategy. The amount of variable rate debt outstanding shall be based on any one or a combination of the following factors:

(1) Interest Rates

The absolute level of interest rates, the forecasted direction of interest rates and the shape of the yield curve are all factors in managing the amount of variable rate debt outstanding. If fixed rates are high relative to the current cycle of rates and the yield curve is steep, a higher percentage of net variable rate debt may be

desirable. Conversely, if interest rates are low relative to the current cycle of rates and the yield curve is flat, a higher percentage of net fixed rate debt may be desirable.

(2) Capital Structure and Construction Funding

Given that JEA has a continuous capital program with projects beginning at various points in time and the lack of correlation between low interest rate environments and the need to begin a project, having a variable rate program will allow for “Just in Time” financing while providing for market timing flexibility. Additionally, variable rate debt adds flexibility for capital structure changes like accelerating the pay down of debt.

(3) Other Related Variable Rate Risks

JEA will take into consideration when determining the appropriate variable rate risk levels the potential exposure to variable rate risk on joint financing programs with the City of Jacksonville and other related agencies.

JEA’s strategies for responding to changes in short and long-term interest rates include the following actions:

- JEA may elect to lower the ratio of ~~net variable rate debt~~Net Variable Rate Debt to ~~total debt~~Total Debt when (a) long-term interest rates are at or near market lows compared to market-based indices for the last three to ten-year averages, (b) short to intermediate-range forecasts for long-term rates are predicting higher rates or (c) the ratio of ~~variable rate debt~~Net Variable Rate Debt to ~~total debt~~Total Debt is or forecasted to be at the upper end of the allowable percentage. If such a determination is made to lower the ratio, the desired ranges for the ratios outlined in Section VI.D, above are 10% to 25% of Net Variable Rate Debt to Total Debt and 35% to 50% of Net Variable Rate Debt plus Net Fixed to Floating Interest Rate Swaps to Total Debt.
- JEA may elect to increase the ratio of ~~net variable rate debt~~Net Variable Rate Debt to ~~total debt~~Total Debt when (a) long-term interest rates are at or near market high levels compared to market based indices for the last three to ten year averages, or (b) short to intermediate-range forecasts for long-term rates are predicting lower rates or (c) the ratio of ~~variable rate debt~~Net Variable Rate Debt to ~~total debt~~Total Debt is or forecasted to be at the lower end of the allowable percentage. If such a determination is made to increase the ratio, the desired ranges for the ratios outlined in Section VI.D, above are 20% to 30% of Net Variable Rate Debt to Total Debt and 45% to 55% of Net Variable Rate Debt plus Net Fixed to Floating Interest Rate Swaps to Total Debt.

To assist in the decision making process, a forecast of interest rate volatility over the short and long terms and expected performance of various financial products (debt or hedging instruments) under various interest rate scenarios will be modeled on a periodic basis. In determining when to use alternative financing arrangements including variable, fixed, and synthetic structures, the availability of internal and external technical expertise to properly manage risk will be evaluated along with ongoing administrative costs. These analyses will be reviewed at the regularly scheduled ~~quarterly~~semiannual meetings by the Committee.

E. “Just in Time” Financing.

The cash flow forecast for budgeted capital projects is the main factor used in determining the appropriate timing of new money debt transactions. The goal is to issue new debt as outstanding debt proceeds are spent. However, the timing of debt transactions may also depend upon factors including:

- Desired debt service coverage levels
- Budget, financial statement and ratings impacts
  - ~~Ability to earn positive arbitrage~~
  - Annual Plan of Finance
- Interest rate environment

All of the above factors are considered prior to making the final determination of the most optimal time to issue new debt to fund capital projects.

F. Budget/~~Projection~~Financial Forecast goals for debt service

In order to adequately project debt service for budget purposes and for official ~~projections~~financial forecast/rating agency purposes, Treasury Services will develop interest rate assumptions using the following guidelines:

(1) Fixed Rate Debt

For the upcoming budget year, the budget assumption for interest rates for new incremental fixed rate debt will be (i) at a minimum, the average of the AA MMD index for comparable maturities for the most recent twelve months ending March 31, or (ii) management, at its discretion, ~~can~~ choose to utilize higher rates. Interest rate forecasts from JEA’s underwriting team can be used as support for this determination. ~~Projections~~Forecasts for the fiscal years beyond the upcoming budget year will be based upon the budget interest rate assumption plus or minus based upon input from either ~~senior management or projections~~forecasts received from investment bankers ~~or from Bloomberg.~~

(2) Variable Rate Debt

~~For the upcoming budget year, the budget assumption for interest rates for outstanding and new incremental variable rate debt will be (i) at a minimum, the average of the BMASIFMA index for the most recent twelve months ended March 31February 28, or (ii) higher rates selected by Management, at itsthe Treasurer's discretion.~~ Interest rate forecasts from JEA's underwriting team or from Bloomberg can be used as support for this determination. ProjectionsForecasts for the fiscal years beyond the upcomingcoming budget year will be based upon the budget interest rate assumption plus or minus based upon input from either senior management ~~or projections~~forecasts received from investment bankers or from Bloomberg.

(3) The interest rate assumptions may be adjusted based upon JEA's actual trading differential to the appropriate index during the most recent twelve months ended March 31February 28.

(4) The projected fixed and variable interest rate assumptions will be agreed ~~upon~~provided by the Debt/Investment ~~Strategy Committee~~Treasurer by April 30February 28th of each year; ~~commencing in fiscal year 2004~~.

(5) Unless otherwise agreed upon by the CommitteeCFO, debt service for new debt will be projected on a level basis.

G. Credit Ratings

JEA recognizes that strong credit ratings are necessary to ensure the lowest possible borrowing costs, which will factor into maintaining low rates for our customers. JEA's goal is to maintain a long-term senior unsecured "AA" category rating by each rating agency.

JEA will utilize the following municipal debt rating services: Fitch Ratings, Standard and Poor's, and Moody's Investors Service. Any changes, additions, or deletions to the list above will require approval of the CEO.

## VII. FIXED RATE DEBT

A. Overview

Fixed rate debt is authorized to finance capital projects and for any other allowable purpose as stipulated in the governing bond resolutions and tax regulations.

B. Type

JEA may issue any type of fixed rate debt as authorized by JEA's various bond resolutions and recommended by JEA's Financial Advisor. Some of the various types of debt authorized include, but are not limited to, serial and term bonds issued at par, discount or premium, capital appreciation bonds, and bullet bonds (e.g., refundable principal installments).

C. Maturity, Structure, and Call Provisions

Prudent debt management requires that there be a proper matching of the lives of the assets and the length of the debt used to finance such asset. JEA will, at all times, structure the amortization and maturity of any fixed rate debt to comply with the appropriate tax regulations.

To provide the maximum amount of flexibility, JEA will utilize, for tax-exempt debt, five year but no longer than ten-year calls, at par, whenever possible. For taxable debt, JEA can utilize make whole call provisions at terms and conditions prevalent in the taxable bond market at the time of pricing. JEA staff along with the financial advisor and underwriter will assess the market at the time of pricing to determine its ability to issue bonds with such features while minimizing interest costs.

D. Providers

Under the PurchasingProcurement Code, JEA is allowed to sell debt by either negotiated sale or competitive bid. The determination of the method is to be made prior to each financing.

If JEA selects the "negotiated sale" method, the underwriting team will be selected pursuant to the JEA PurchasingProcurement Code. JEA shall require that a master underwriting agreement be entered into and signed by all parties at the end of the solicitation process and a separate bond purchase agreement with the senior underwriter(s) shall be approved by the JEA Board at each sale of debt.—, unless the Board has previously delegated such approval authority to the CEO.

If JEA selects the "competitive sale" method, determination of the winning bid will be based on the following methodology: (1) the "standard convention" as recommended by JEA's Financial Advisor, (2) calculation utilized by the State Board of Administration or (3) the underwriting firm with the lowest True Interest Cost (TIC) proposal.

JEA will employ staff or an outside professional financial advisor, other than the underwriter, who is familiar with and abreast of the conditions of the municipal market, and is available to assist in structuring the issue, pricing, and monitoring of sales activities. JEA shall not use a firm to serve as both the financial advisor and underwriter. Selection of underwriters, financial

advisors, bond counsel, and other necessary consultants involved in the debt transactions will be selected as outlined in the JEA PurchasingProcurement Code.

E. Debt Service Reserves

A debt service 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.

- The debt service reserve may be in the form of cash and/or investments funded from the proceeds of bonds and/or revenues from operations.
- If allowed by the resolution, a surety issued by a financial institution nationally recognized in the industry to issue such policies may be used in place of a cash-funded debt service reserve.
- If allowed under the respective bond resolution, any other form of financial instruments may be used in place of cash-funded or surety-funded debt service reserve, provided such financial instruments are issued by firms of nationally recognized standing.
- JEA will weigh the benefits of each method of funding the debt service reserve prior to each issue and will choose the method most beneficial to JEA based upon the facts and circumstances of each issue.

A debt service reserve may also be maintained if, in the opinion of the underwriter, it is reasonably required to provide security for the payment of debt service with respect to JEA's bonds and is consistent with normal practice in respect of bonds of the same general type as those being issued by JEA. Selection of a surety provider or provider of any financial instrument acceptable to fund the debt service reserve requirement under the appropriate resolution will be pursuant to the JEA PurchasingProcurement Code.

F. Bond Insurance

For each debt transaction, JEA will evaluate the economic benefit of using bond insurance. This analysis will incorporate the insurance benefits to the call date, to maturity date, and any intermediate date. If based on the analysis, JEA determines that bond insurance will add economic benefit to the transaction an insurance provider will be selected pursuant to the JEA PurchasingProcurement Code. Financial institutions which insure bonds for investors of JEA must have, at the time the bonds are issued, a credit rating (if rated) not less than AA/Aa2/AA from Fitch Ratings, Moody's, and Standard & Poor's, respectively.

G. Approvals

The structure, maturity, and call provisions for each fixed rate financing must be approved in writing by the CFO/~~Vice President of Financial Services~~ on or prior to the date of pricing. The CFO/~~Vice President of Financial Services~~ has the responsibility to review the structure of each debt transaction with the CEO. Negotiation with the underwriter on negotiated bond transactions will be conducted by the ~~Director, Treasury Services~~. Treasurer. Final transaction approval must be obtained from the Board; however, it may be in the form of a delegated authority.

H. Reporting and Compliance

A monthly report entitled "Schedule of Outstanding Indebtedness" will be provided to the Board that summarizes the principal amount, the range of interest rates and maturity dates of all outstanding debt.

JEA is committed to full and complete compliance with all applicable laws and regulations with respect to its debt. Because of the complexity of the tax regulations and the consequences of non-compliance, the advice of bond counsel and other qualified professionals will be sought whenever necessary. In carrying out its responsibility, JEA shall monitor and analyze the investments and use of bond proceeds and calculate the amount of arbitrage rebate liability due.

## VIII. VARIABLE RATE DEBT INSTRUMENTS

A. Overview

Variable rate debt is authorized to finance capital projects and for any other allowable purpose as stipulated in the governing bond resolutions and tax regulations.

JEA must adhere to the variable rate debt limits outlined in this Policy.

B. Type

JEA may issue any type of variable rate debt as authorized by JEA's various bond resolutions and recommended by JEA's Financial Advisor. Some of the various types of debt authorized include, but are not limited to, Commercial Paper, Variable Rate Demand Obligations, ~~Auction-Rate Securities~~, and Medium-Term Notes.

C. Management

On a periodic basis, ~~but not less than quarterly, the~~ Treasury Services group will make decisions regarding any changes to the interest mode for variable



rate demand obligations, ~~auction period for auction rate securities~~ and desired maturities for commercial paper.

D. Maturity and Call Provisions

As with fixed rate debt, JEA will structure the maturity dates of the variable rate debt to match the lives of the assets being financed. JEA will, at all times, structure the amortization and maturity of any variable rate debt to comply with the appropriate tax regulations. For JEA commercial paper program, the maturity of a Commercial Paper Note shall not exceed 270 days and the term of a commercial paper program shall not exceed 30 years in order to stay within the current safe harbor rules to be treated as part of a single issue. For variable rate debt with tender rights, the current safe harbor rules limit the maturity to no longer than 35 years.

E. Providers

Underwriters, remarketing agents or dealers of JEA's variable rate debt program will be selected pursuant to JEA's PurchasingProcurement Code.

Banks providing Liquidity Facilities for variable rate debt shall be reviewed regularly with the Financial Advisor and minimum short-term ratings (if rated) established for these providers shall be F1, P1, A1 from the three rating agencies: Fitch Ratings, Moody's, and Standard & Poor's, respectively. The long-term credit rating should generally have a minimum rating equal to JEA's credit rating on the underlying debt.

If bond insurance is necessary for variable rate debt, the insurance provider will be selected pursuant to JEA's PurchasingProcurement Code. Financial institutions which insure bonds for investors of JEA must have, at the time the bonds are issued, a short-term credit rating (if rated) of F1, P1, A1 and a long-term credit rating (if rated) not less than AA/Aa2/AA from Fitch Ratings, Moody's, and Standard & Poor's, respectively.

~~F. Reserve Fund~~

~~Beginning in FY 2010, deposits will be made to the Rate Stabilization Fund for the Debt Management Strategy Reserve and will 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. At a minimum, 50% of the calculated reserve will be recorded and deposited each fiscal year. An additional amount, up to the full value of the calculated reserve (the remaining 50%), will be reviewed by the Debt and Investment Committee and recorded at their option. However, the amount deposited to the Rate Stabilization Fund (in addition to actual debt service costs for the fiscal year) cannot exceed~~

~~the total amount of the budgeted debt service. The reserve will be calculated on a system by system basis, however, based on the calculation, any mandatory deposit will exclude the District Energy System. The budget reserve is capped at five percent of the par amount of the total outstanding variable rate debt. Withdrawals from the Rate Stabilization Fund for the Debt Management Strategy 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.~~

F. Approvals

~~—The structure, maturity, and call provisions for each variable rate financing must be approved in writing by the CFO/Vice President of Financial Services prior to the transaction. The CFO/Vice President of Financial Services has the responsibility to review the structure of each debt transaction with the CEO. Final transaction approval must be obtained from the Board.~~

G. Compliance/Reporting Requirements

The amount of variable rate debt outstanding for JEA shall be included on the report entitled “Schedule of Outstanding Indebtedness” and will be reported to the Board monthly in conjunction with the monthly report of financial position of JEA. For variable rate debt, this report shall ~~detail~~summarize the various types, maturities, and current rates of interest on each variable debt issue then outstanding.

A report shall be prepared ~~quarterly~~semiannually for the Committee, showing the comparison of the monthly interest rates (including all fees) paid for each ~~Variable Rate~~variable rate issue then outstanding, comparing each of these with the monthly average interest rate of LIBOR, ~~BMA~~SIFMA, and such other short-term variable interest rate indices, which may accurately reflect the existing variable interest rate market. This comparison will provide information on the most cost beneficial type and mode of variable rate debt for various periods of time. This information will be used as part of a recommendation on what type of variable rate debt will be issued in future periods or for changes to JEA’s existing variable rate program.

JEA will monitor and report any arbitrage rebate liability due to the U.S. Treasury on bond proceeds from variable rate transactions.

## IX. DEBT REFUNDING

### A. Overview

~~Refunding~~The refunding of outstanding debt represents ~~unique opportunities~~an opportunity for JEA to realize ~~savings in debt service cost.~~ ~~Refunding also allows~~savings. Refundings may allow JEA to ~~re-structure~~restructure its existing debt ~~or debt profile~~portfolio to enable JEA to operate in a more competitive manner. Many of the policies and practices applicable to new money fixed and variable rate financings are applicable to debt refundings as well ~~and those policies and practices shall be adhered to in any debt refunding issue unless specifically addressed below.~~

### B. Management

Periodic reviews of all outstanding debt will be undertaken to determine refunding opportunities. Refundings will be considered within federal tax law constraints. JEA and the financial advisor shall monitor the municipal bond market for opportunities to obtain interest savings. Current tax regulations do not permit ~~one tax-exempt~~ Advance Refunding ~~opportunity for a post-1986 issue of bonds.~~transactions. There are no ~~similar~~ limitations with respect to a current refunding of bonds. The following guidelines should apply to the issuance of refunding bonds:

- (1) Any refunding will be evaluated on the economic savings or structure advantages relating to issuing the new debt. For a fixed rate refunding, a five percent savings target is a general guideline. However, refunding issues that produce a net present value savings of less than five percent may be issued for various business and/or economic purposes. Examples include but are not limited to (a) restructuring debt, (b) amending provisions of a bond document, and (c) taking savings based on structure or low interest rate environment considerations. Savings below the five percent guideline must be approved by the CFO ~~Vice President of Financial Services~~ or by delegated authority from the Board prior to the execution of the refunding transaction.
- (2) Refundings involving variable rate debt generally do not produce savings and will not have a savings guideline. These transactions are usually executed to take advantage of structuring opportunities or to reduce risk, or may be utilized to take advantage of low long-term interest rates.
- (3) The final structure (including the use of hedging products) will be recommended by ~~the~~ Treasury Services ~~group~~ to the CFO ~~Vice President of Financial Services~~ for approval prior to the execution of any refunding transaction. The ~~Vice~~ CFO ~~President of Financial~~

~~Services~~ has the responsibility to review the structure of each debt transaction with the CEO.

C. Fixed and Variable

JEA can utilize fixed or variable rate debt for refunding purposes and must adhere to the variable rate debt limits outlined in this Policy.

D. Maturity and Call Provisions

The maturity of refunding bonds shall, absent a bond counsel opinion, be in accordance with the safe harbor rules for the creation of replacement proceeds found in the tax regulations.

To provide the maximum amount of flexibility, JEA will utilize five year, but no longer than 10 year calls, at par, whenever possible for tax-exempt debt. Call provisions for taxable debt will be based on terms and conditions prevalent in the taxable bond market at the time of pricing. JEA staff along with the financial advisor and underwriter will assess the market at the time of pricing to determine its ability to issue bonds with such features while minimizing interest costs.

E. Debt Service Reserve

~~To the extent of an existing cash funded debt service reserve, in~~ the event ~~of that~~ a refunding ~~that transaction~~ reduces the debt service reserve requirement, ~~JEA will~~ may deposit any such reduction into the defeasance escrow account for the refunded bonds or utilize the reduction for any lawful purpose.

F. Approvals

The structure, maturity, and call provisions for each refunding must be approved in writing by the CFO/~~Vice President of Financial Services~~ on or prior to the date of pricing. The CFO/~~Vice President of Financial Services~~ has the responsibility to review the structure of each debt transaction with the CEO. Negotiation with the underwriter on negotiated bond transactions will be conducted by the ~~Director, Treasury Services.~~ Treasurer. Final transaction approval (which may be delegated) must be obtained from the Board.

~~H. SJRPP/FPL Considerations~~

~~Under the Joint Ownership Agreement JEA financed its 80% ownership interest in the joint facilities through the issuance of tax exempt bonds. FPL is obligated under the sale back arrangement to pay 37.50% of the debt service on the bonds issued for construction by JEA to finance its interest.~~

~~Although not required but done in the spirit of fostering a good partnership relationship, JEA has made it a practice to confer with FPL with respect to various structural elements in its refunding of SJRPP debt. JEA will continue to confer with FPL on various structural issues of future refundings but is not required to obtain its approval with respect to such structural issues nor with respect to the timing of such refundings.~~

## **X. INTEREST RATE SWAPS, CAPS, COLLARS, AND RELATED HEDGING INSTRUMENTS**

### **A. Overview**

The prudent use of hedging instruments, including interest rate swaps, caps and collars, can be an effective tool in meeting funding needs and structuring a balance sheet while managing risk associated with the movement of interest rates. Utilizing hedging products can provide JEA with cost effective alternatives to traditional debt financing choices.

Utilizing interest rate swaps to achieve substantially lower interest costs is a main component in building the desired capital structure to allow JEA to compete effectively. There are three types of interest rate swaps JEA is authorized to enter into:

- Floating to fixed rate swaps,
  - Hedge interest rate risk on variable rate debt,
  - Lock in fixed rates on refunding bonds that will be issued in the future or
  - Take advantage of opportunities to obtain fixed swap rates that are lower than comparable fixed rate bonds.
- Fixed rate to floating rate swaps
  - Increase the amount of variable rate exposure without incurring the remarketing and liquidity costs.
  - Eliminate the put risk associated with variable rate debt.
  - Take advantage of opportunities to obtain variable swap rates that are lower than comparable variable rate bonds.
- Basis swaps manage the risk associated with
  - The mismatch between two benchmarks.
  - Methodologies used to set interest rates.

### **B. Risks**

Interest rate swaps and related hedging instruments may introduce additional risks to JEA's credit profile. These risks include, but are not necessarily limited to, termination risk, counterparty risk, re-execution risk,

amortization risk, Basis Risk, and tax event risk. Prior to entering into each interest rate swap transaction, these risks are evaluated to ensure adequate provisions are in place to minimize the downside and provide the maximum benefit the transaction originally intended.

C. Limits

The percentage of variable rate exposure (the notional amount of ~~“net” fixed~~Net Fixed to ~~floating interest rate swaps~~Floating Interest Rate Swaps and ~~variable rate debt~~Total Variable Rate Debt outstanding) to ~~total debt~~Total Debt outstanding shall not exceed 55%. The ~~variable rate debt~~Total Variable Rate Debt outstanding and ~~“net” fixed~~Net Fixed to ~~floating rate swaps~~Floating Interest Rate Swaps shall be calculated as set forth in Section VI.D of this Policy. The notional amount of interest rate swaps, caps, collars, and related hedging instruments will be limited to the amount approved in resolutions approved by the Board from time to time.

Interest rate caps and related hedging instruments will be utilized to help manage interest rate risk in the ~~Debt Management Program~~debt portfolio. At all times, a fixed to floating- interest rate swap will have an associated interest rate cap for the same notional amount at a level no greater than 200 basis points above the interest rate swap fixed rate. (See waiver in Section K)

Additionally, it is contemplated that an interest rate cap will not always have the same maturity as the interest swap with which it is associated. The average life of aggregate outstanding caps will not be less than 75% of average life of the associated aggregate swaps.

From time to time, Treasury Services will evaluate the use of collar (cap and floor instrument) transactions as a hedging tool to minimize cost and risk. The cap portion will be executed pursuant to the above referenced rules. The related floor rate will be approved by the Committee prior to execution.

D. Fixed to Floating Rate Swap Management

The Committee shall have the overall responsibility, from an overview standpoint, for the execution and management of fixed to floating interest rate swaps. One of the main components of the debt management strategy is to use intermediate term fixed to floating rate swaps to achieve a long-~~term~~ goal of having up to 55% of the total debt based on a floating/variable interest rate.

Based on Committee approval, interest rate swaps will be executed ~~quarterly~~semiannually to achieve an averaging into the market philosophy. The Committee shall determine the size of the total interest rate swap program and the maturity date for the swaps within the parameters of ~~the~~this Policy, which has been approved by the Board.

Forecasts of interest rate volatility over the intermediate term (4 to 7 years) and expected performance of the swaps, caps, collars, and related hedging instruments under various interest rate scenarios shall be updated on not less than a ~~semi-annual~~semiannual basis. Short and long-term interest rates will be monitored over varying time periods. If current interest rates are either above or below the moving averages as measured by varying time periods, the Committee may elect to alter the timing of adding additional fixed to variable swaps to either increase or decrease the amount of variable exposure. Furthermore, the Committee may elect to enter into “reversing” swaps to take advantage of market opportunities. In the event a fixed to floating swap is “reversed”, any associated floor will be simultaneously “reversed”. Any associated cap will be evaluated and “reversed” if approved by the Committee.

The amount of interest rate caps shall not exceed the amount of variable rate exposure to JEA.

The following “decision rules” will govern the decision to initially execute a fixed to floating interest rate swap, cap, or other hedging instruments within the Debt Management Program:

1. JEA receives payments based on a fixed rate and pays based on a floating rate.
2. Floating rate is based on either SIFMA or LIBOR.
3. If the ~~BMA~~SIFMA Index is selected, no adjustment to the notional amount is needed.
4. If the LIBOR index is selected, the notional amount of the interest rate swap and cap will be adjusted by the current ratio of the ~~BMA~~SIFMA based fixed rate to the LIBOR based fixed rate. (See example below)

$$\frac{\text{BMA Fixed Rate}}{\text{LIBOR Fixed Rate}} = \frac{4.50\%}{6.50\%} = 69.2\%$$

$$\frac{\text{SIFMA Fixed Rate}}{\text{LIBOR Fixed Rate}} = \frac{1.56\%}{2.36\%} = 66.1\%$$

The notional amount will be multiplied by the ratio to obtain the adjusted notional amount.

5. Decision to select LIBOR or ~~BMA~~SIFMA will be based on a combination of historical, current, and future expectations for the relationships of floating ~~BMA~~SIFMA to floating LIBOR and fixed



~~BMASIFMA~~ to fixed LIBOR. Generally, if the floating ~~BMASIFMA~~ to LIBOR ratio is lower than the fixed ~~BMASIFMA~~ to LIBOR ratio, a ~~BMASIFMA~~ based swap is preferred. However, historical and future expectations must be evaluated in order to make the decision.

6. Term of the interest rate swap and cap shall not exceed 10 years. The overall average for the program will be four to seven years.
7. An interest rate swap will not be executed unless the spread between the fixed rate and initial floating rate is a positive 10 basis points or more. In addition, as stated above, the execution of a swap may be affected by the relationship of current rates to historical averages.
8. If a swap is not executed or re-executed due to the 10 basis point decision rule, the swap will be executed during the following quarter, decision rule permitting. If a swap is not entered into due to the historical relationship of rates to the current level, the Committee will decide when the appropriate time to enter into the next transaction. In the event swaps are delayed for two or more consecutive periods, only one additional swap per quarter will be executed until the original schedule can be re-established.
9. An interest rate cap is to be entered into at the time of each swap transaction for the identical notional amount if JEA does not have a current interest rate cap in place that meets the criteria. The cap should be at a level no greater than 200 basis points above the fixed rate of the swap. However, if JEA has current interest rate cap positions that are not associated with any particular interest rate swap, but are being utilized generally to manage variable rate risk, an interest rate cap meeting the conditions listed above may be utilized to satisfy the requirements of this section.

The Committee will meet on a ~~quarterly~~semiannual basis to review the performance of the fixed to floating interest rate swaps, and review the current interest rate swap and cap decision rules. Any changes to the “decision” rules recommended by the Committee must be approved by the Board prior to implementation. The Committee may, however, elect not to execute an interest rate swap or cap normally scheduled to be executed based on the “decision rules” if a change to the “decision rules” has been recommended by the Committee but not yet acted on by the Board.

#### E. Floating to Fixed Rate Swap Management

The Committee shall have the overall responsibility regarding the execution and management of floating to fixed interest rate swaps. An additional component of the debt management strategy is to use floating to fixed rate swaps to lock in the lowest possible borrowing costs over a long period of

time. Floating to fixed rate swaps can be used in conjunction with issuing variable rate debt to obtain the lowest fixed rate when compared to traditional forms of fixed rate financings. In addition, floating to fixed swaps may be desirable when the cycle of long-term rates moves down to or near historical lows and “fixing” a portion of the outstanding variable rate debt appears advantageous. Swaps will be evaluated as alternatives to traditional financing instruments considering their comparable costs, ease of entry and exit provisions, and the amount of potential risk exposure.

Interest rate swaps will be executed for notional amounts, maturities and other related terms and conditions as determined by the Committee. Re-execution risk, amortization risk, tax event risk and Basis Risk will be evaluated in order to minimize any potential negative results.

Forecasts of interest rate volatility over the term of the swaps and expected performance of the swaps under various interest rate scenarios shall be analyzed prior to the execution of the swaps. Short and long-term interest rates will be monitored over varying time periods. The Committee may elect to enter into “reversing” swaps to take advantage of market opportunities.

The following “decision rules” will govern the decision to execute and/or re-execute a floating to fixed interest rate swap:

1. JEA receives payments based on a floating rate and pays based on a fixed rate.
2. Floating rate is based on either BMASIFMA or a percent of LIBOR.
3. If the BMASIFMA Index is selected, no additional analysis is needed.
4. If the LIBOR index is selected, the historical relationship of BMASIFMA to LIBOR will be used as a guide when selecting the percent of LIBOR as the index. A risk analysis will be done on a projected basis to quantify the risk versus potential reward.
5. Decision to select LIBOR or BMASIFMA will be based on a combination of historical, current, and future expectations for the relationships of floating BMASIFMA to floating LIBOR and fixed BMASIFMA base rate versus the fixed rate based on the LIBOR index.
6. Term of the interest rate swap is a maximum of 30 years or if the swap is executed with the purpose of synthetically fixing a specific variable rate debt issue, the swap transaction is permitted to have a term which matches the term of the variable rate debt, but will be determined based on the life of the related debt being hedged. If the term of the swap is less than the underlying debt that it may generally be hedging, JEA is exposed to re-execution risk. In a rising interest

rate environment, a new swap may potentially be re-executed at a higher fixed rate than the original swap. Additionally, the amortization of the principal on the debt that the swap is generally hedging is taken into consideration when structuring the terms and conditions of the swap. This is referred to as amortization risk.

Interest rate ~~Cap~~scaps and ~~Collar~~scollars are additional hedging instruments that JEA may utilize to manage risks associated with variable rate debt. All ~~Cap~~cap or ~~Collar~~collar transactions executed must comply with the requirements set forth in items F through K listed immediately below.

#### F. Compliance and Reporting Requirements

Resolutions approving the use of interest rate swap, cap, and other hedging instruments outlining, among other things, size, and maturity restrictions, must be approved by the JEA Board prior to execution.

JEA Board must approve the overall Debt Management Policy including explicit parameters for the use of interest rate swaps, caps, and other hedging instruments.

JEA CEO must sign all interest rate swap, cap, or collar confirmations.

JEA external auditors shall perform an annual review relating to fixed to floating interest rate swap management and present to the JEA Board.

Monthly performance reports regarding outstanding interest rate swaps, caps and related hedging instruments will be provided to Accounting Services to be included in the monthly financial statements to the Board. Mark to market valuations will be updated on a ~~quarterly~~semiannual basis and provided to Committee members and Accounting Services to be included in the financial statements.

Collateral reports will be updated on a monthly basis providing information relating to specific swap transactions that may require collateral posted based on mark to market valuations.

JEA's CFO~~Vice President of Financial Services~~ or ~~Director, Treasury Services~~Treasurer must approve the interest rate swap term sheet prior to execution. In addition, the purpose of the transaction, (asset matched, debt management, etc.) will be included as part of the swap paperwork file kept for each executed swap transaction.

#### G. Providers

Financial Institutions and Dealers executing interest rate swaps, caps, and other hedging instruments for JEA shall be selected pursuant to the JEA

~~Purchasing~~Procurement Code. JEA shall require that all institutions and dealers entering into interest rate swap, cap and other hedging instrument agreements execute a Master Swap Agreement (the ISDA Master Agreement must be used as a part of the Master Swap Agreement) that is signed by both parties. All transactions entered into shall adhere to the requirements of the Master Swap Agreement.

#### H. Diversification

No more than \$500 million of net interest rate swap and cap or other hedging instruments shall be outstanding in the aggregate with any one provider or affiliate thereof unless approved in writing by the CEO. The aggregate amount of all “long dated” (greater than 10 years) transactions executed with financial institutions and all affiliates thereof, shall be limited to an amount based on the credit rating of the financial institution at the time of the entry into the long dated hedging transaction as shown below:

<u>Rating Level</u>	<u>Notional Amount</u>
<del>AAA/Aaa by one or more Rating Agencies</del>	<del>\$400,000,000</del>
<del>AA-/Aa3 or better by at least two Rating Agencies</del>	<del>\$300,000,000</del>
<del>A/A2 or better by at least two Rating Agencies</del>	<del>\$200,000,000</del>
<del>Below A/A2 by at least two rating Agencies</del>	<del>\$0</del>

<u>Rating Level</u>	<u>Notional Amount</u>
<u>AAA/Aaa by one or more Rating Agencies</u>	<u>\$400,000,000</u>
<u>AA-/Aa3 or better by at least two Rating Agencies</u>	<u>\$300,000,000</u>
<u>A/A2 or better by at least two Rating Agencies</u>	<u>\$200,000,000</u>
<u>Below A/A2 by at least two Rating Agencies</u>	<u>\$0</u>

The rating criteria shown above apply either to the counterparty to the long dated transaction or, if the payment obligation of such counterparty under the relevant Swap Agreement shall be guaranteed by an affiliate thereof, such affiliate. -The overall maximum by definition of the above limits ~~can~~ not/cannot exceed \$400 million for “long dated” transactions.

This provision includes all interest rate swap, cap and other hedging instruments JEA may utilize to manage interest rate risk including, but not limited to, debt management, and 100% investment/asset matched program.

I. Bid

All “initial” interest rate swap and cap transactions shall be competitively bid by at least (3) three providers that have executed interest rate swap agreements with JEA. Upon written authorization from the CEO or his designee, 1) a “reversing transaction” resulting in an upfront payment to JEA may be negotiated with the original swap, cap, or collar counterparty, 2) a negotiated swap with a counterparty may be executed as part of a debt financing or (3) a cap/collar can be procured either with bids received from two providers or negotiated with only one provider if JEA receives a letter from the then current Financial Advisor stating that the payment for such cap/collar was executed at market levels.

J. Reserve Fund

An annual budgeted reserve contribution ~~(budgeted contributions beginning 10/1/03)~~ will be made to a reserve fund to cover any payments made as a result of the use of swaps as part of the Policy. Three percent of the notional amount of each fixed to floating interest rate swap initially executed will be retained in the reserve fund and used if needed to make interest rate swap payments. The contributions to the reserve fund will be funded in three equal installments of 1% of the notional amount beginning in the month the swap is executed. Once funded, the reserve fund shall at all times be not less than three percent of the notional amount of fixed to floating debt interest rate swaps outstanding unless the reserve fund is used as stipulated below. Accounting will be consistent with the variable rate reserve fund.

The reserve fund can be used for any lawful purpose including debt service, debt repayment and capital outlay. The use of this reserve fund must be approved in writing by the CEO.

K. Other

If a fixed to floating interest rate swap is executed in conjunction with a refunding transaction where the net effect is to maintain the current level of variable rate exposure, (1) the requirement to execute a cap with an associated fixed to floating swap is waived and (2) any reserve requirement needed for the fixed to floating swap is waived; however, the reserve requirement shall be calculated as if the variable rate debt is outstanding in the amount of the notional amount of the associated fixed to floating interest rate swap.

XI. INSIDER TRADING POLICY GUIDELINES

Insider trading is a court developed doctrine under which it is unlawful to purchase or sell a security while in possession of material ~~nonpublic~~non-

**public** information in breach of a duty or other relationship of trust or confidence.

Insider trading likely would not be found where an issuer is communicating in good faith with investors or analysts and disclosing information that is (1) Public, (2) not material or “market-moving” or (3) both public and non-material.

A written procedure, approved by the **Managing Director/CEO**, will provide specific guidelines that JEA employees will follow to ensure compliance with insider rules and regulations

## **XII. POLICY EXCEPTIONS**

Any financing activity not included in this Policy will be brought to the Board for review and approval prior to execution.

## **XIII. EFFECTIVE DATE**

This Policy will become effective May 20, 2003 (as revised April 19, 2005, October 10, 2005, November 20, 2007, ~~and~~ December 15, 2009) and August 27, 2019).

## **XIV. DEFINITIONS**

**Advance Refunding** A bond is treated as issued to advance refund another bond if it is issued more than 90 days before the redemption of the refunded bond.

~~**Auction Rate Bonds** means “Short-term Adjustable Rate Securities” which are issued and outstanding under the “Auction Rate Mode” and which bear interest for each Auction Period, payable in arrears, at the Auction Rate in effect on the Auction Date (as defined in the respective Supplemental Resolution) for the Auction Period as defined. Such securities do not normally require Liquidity Facility support, but may require Bond Insurance.~~

**Basis Risk** Movement in the underlying variable rate indices may not be perfectly in tandem, creating a cost differential that could result in a net cash outflow from the issuer. Also, the mismatch that can occur in a swap with both sides using floating, but different, rates.

~~**BMA Index** The Bond Market Association Municipal Swap Index, the principal benchmark for the floating rate payments for tax-exempt issuers. The index is a national rate based on a market basket of high-grade, seven-day tax-exempt variable rate bond issues.~~

**Capacity Expansion** Capital expansion projects are those projects designed to accommodate new customers, acquisitions, new “plants”, and expansion of existing system capacity.

**Commercial Paper Note** shall mean any Bond which has a maturity date which is not more than 270 days after the date of issuance thereof.

**Competitive Bid** a method of submitting proposals for the purchase of new issue of municipal securities by which the securities are awarded to the underwriting syndicate presenting the best bid according to stipulated criteria set forth in the notice of sale.

**Construction Loan Credit Facility** means obligations of JEA of a particular credit facility for construction advance purposes which shall be similar to Bond Anticipation Notes.

**Counterparty Risk** the risk that the other party in the derivative transaction fails to meet its obligations under the contract.

**Credit Enhancement** shall mean, with respect to the Bonds of a Series, a maturity within a Series or an interest rate within a maturity, the issuance of an insurance ~~Policy~~policy, letter of credit, surety bond or any other similar obligation, whereby the issuer thereof becomes unconditionally obligated to pay when due, to the extent not paid by JEA or otherwise, the principal of and interest on such Bonds.

**Current Refunding** A bond is treated as issued to current refund another bond if the refunding issue is issued not more than 90 days before the redemption of the refunded bond.

**Hedge** a transaction entered into to reduce exposure to market fluctuations.

**Interest Rate Swap** a transaction in which two parties agree to exchange future net cash flows based on predetermined interest rate indices calculated on an agreed notional amount. The swap is not a debt instrument between the issuer and the counterparty, and there is no exchange of principal.

**ISDA** International Swap Dealers Association, the global trade association with over 550 members that include dealers in the derivatives industry.

**ISDA Master Agreement** the standardized master agreement for all swaps between the ~~Issuer~~issuer and the dealer that identifies the definitions and terms governing the swap transaction.

**LIBOR** the principal benchmark for floating rate payments for taxable issuers. The London Inter Bank Offer Rate (LIBOR) is calculated as the average interest rate on Eurodollars traded between banks in London and can vary depending upon the maturity (e.g., one month or six months).



Because the regulator for LIBOR has announced the LIBOR benchmark will be discontinued as of December 31 2021, JEA shall not enter into any new LIBOR-based transactions extending past that date; any LIBOR based transactions terminating after December 31, 2021 shall use the replacement benchmark agreed upon by JEA after that date.

**Long-Dated Swap** a swap with a term of more than ten years. Often used in the municipal market, as issuers often prefer to use a hedge that matches the maturity of the underlying debt or investment.

**Mark-to-Market** calculation of the value of a financial instrument (like an interest rate swap) based on the current market rates or prices of the underlying (i.e. the variable on which the derivative is based).

**Medium-Term Note** any bond which has a maturity date which is more than 365 days, but not more than 15 years, after the date of issuance and is designated as a medium-term note in the supplemental resolution authorizing such bond.

**Negotiated Sale** the sale of a new issue of municipal securities by an issuer through an exclusive agreement with an underwriter or underwriting syndicate selected by the issuer.

**SIFMA Index** The SIFMA Municipal Swap index is a 7-day high-grade market index comprised of tax-exempt VRDO reset rates that are reported to the Municipal Securities Rule Making Board's Short-Term Obligation Rate Transparency reporting system.

**Termination Risk** the risk that a swap will be terminated by the counterparty before maturity that could require the issuer to make a cash termination payment to the counterparty.

**True Interest Cost** is the rate, compounded ~~semi-annually~~semiannually, necessary to discount the amounts payable on the respective principal and interest payment date to the purchase price received for the bonds.

**Variable Rate Bond** shall mean any Bond not bearing interest throughout its term at a specified rate or specified rates determined at the time of initial issuance.

**Variable Rate Demand Obligations (VRDO)** A long-term maturity security which is subject to a frequently available put option or tender option feature under which the holder may put the security back to the issuer or its agent at a predetermined price (generally par) after giving specified notice or as a result of a mandatory tender. Optional tenders are typically available to investors on a daily basis while in the daily or weekly mode and mandatory tenders are required upon a change in the interest rate while in the flexible or term mode. The frequency of a change in the interest rate of a variable rate demand obligation is based upon the particular mode the security is in at the time.

# **DEBT MANAGEMENT POLICY**

Revised as of August 27, 2019

## **I. SCOPE**

This Policy applies to all current and future debt and related hedging instruments issued by JEA for its Electric System, Water and Sewer System, District Energy System (DES), St. Johns River Power Park (SJRPP), Bulk Power Supply System (BPSS), and any other entity created and approved by JEA's Board. The Policy is intended to provide broad policy guidance and facilitate the management, control, and oversight of JEA's debt function facilitating ongoing access to the capital markets necessary to the funding of future capital projects.

## **II. GOAL/MISSION/OBJECTIVE**

JEA's debt shall be managed with an overall philosophy of taking a long-term approach in borrowing funds at the lowest possible interest cost. To achieve this goal, JEA will continuously work towards developing the optimal capital structure, including the amounts and types of variable rate exposure, in view of JEA's risk tolerance to market fluctuations, capital market outlook, future capital funding needs, rating agency considerations, counterparty credit profiles, and competition.

The Debt Management Policy sets forth parameters and provides guidance regarding the following issues:

- Capital structure
- Credit ratings
- Compliance with tax regulations
- Management of floating interest rate risk
- Management of hedging instruments

The main goals of the Debt Management Policy are as follows:

- Maintain cost of capital consistent with other "AA" similarly rated municipal utilities
- Maintain steady credit ratings
- Establish and maintain reserve funds
- Reduce floating rate debt "put" risk
- Maintain diversification of debt

### **III. RESPONSIBILITY FOR POLICY**

The overall Debt Management Policy is approved by the JEA Board and implemented by the Chief Financial Officer (CFO). An oversight committee, the Debt/Investment Strategy Committee (Committee) will meet semiannually to develop strategy and review the performance of the debt and investment portfolio in conjunction with this Policy. The members of the Committee are the Managing Director and Chief Executive Officer (CEO), CFO, Treasurer and Manager Cash and Investments.

JEA's Treasury Services group will develop procedures to implement and administer this Policy. In addition, Treasury Services will continuously apply process improvement methodologies to make improvements to the Debt Management processes.

### **IV. AUTHORIZATION**

#### **A. Debt Authorization**

The overall amount of debt that JEA is allowed to issue for the electric system, SJRPP, the water and sewer system and DES is authorized by the JEA Board and by City Council ordinance on an as needed basis. Based on capital and related debt issuance financial forecast, the JEA Board typically approves the projected debt issuance limits for the next several years in conjunction with the next fiscal year's budget process.

The available amount of debt authorization outstanding is monitored by Treasury Services and is reported monthly to the Board as part of the monthly financial statements.

#### **B. Authorizations for Debt-Related Hedging Instruments such as swaps and caps.**

Resolutions approving the use of interest swap, cap, and related hedging instruments outlining, among other things, size and maturity restrictions, must be approved by the JEA Board prior to execution.

#### **C. New Systems Authorization and Financing**

This Policy will include debt issued pursuant to new system resolutions approved by the JEA Board and City Council. Debt authorization limits will be approved by a separate authorizing resolution approved by the JEA Board and City Council ordinance.

## **V. INVESTMENT STRUCTURE**

JEA is authorized to invest available funds pursuant to an established Investment Policy approved by the Board on September 19, 2000, last amended March 26, 2019, Florida Statutes section 218.415 and the Electric, Water and Sewer, DES, SJRPP, and BPSS bond resolutions. The primary goals of the Investment Policy are to (1) provide safety of capital, (2) provide sufficient liquidity to meet anticipated cash flow requirements and (3) maximize investment yields while complying with the first two goals. The Investment Policy outlines the parameters on authorized investments, maturity and liquidity requirement limits, and procurement and safekeeping procedures.

JEA is authorized to utilize investment/asset-based “fixed to floating” swaps in order to take advantage of longer term investment yields as a hedge to the shorter yielding funds which are required to remain in short-term investments (i.e., debt service funds and operating funds).

The notional amount of swaps outstanding classified as investment/asset-based swaps is authorized by the Board under a separate resolution. JEA may not have outstanding a notional amount of investment/asset swaps which in aggregate is an amount greater than the amount of variable/short-term investable funds (100% hedged).

## **VI. ANNUAL PLAN OF FINANCE**

As part of the annual budget presentation, a Plan of Finance will be submitted to the Board for information purposes. Such Plan of Finance will address at a minimum the amount of debt projected to be issued during the next fiscal year and whether such debt is senior or subordinated, fixed and/or variable and the possible use of hedging instruments.

A. The annual capital budgeting process will be used to project the amount of debt to be issued during the next five-year period. Factors to be considered in the final financial forecast are:

- The forecast of spending levels for capital projects.
- The availability of internal funds to pay for capital projects.
- Desired debt service coverage levels consistent with a highly rated electric and water and sewer utility.
- The additional bonds test calculation outlined in the respective senior and subordinated resolution of each system.

B. Senior vs. Subordinated Debt

The electric system and the water and sewer system each have a separate senior and subordinated bond resolution. The electric system senior resolution authorizes debt issued under its resolution to fund projects

relating to non-generation capital expenditures and the subordinated resolution authorizes debt issued under its resolution to fund projects relating to all categories of capital expenditures. This Policy will target debt issued under the subordinated resolution to fund generation capital expenditures.

The water and sewer senior and subordinated bond resolutions authorize debt to be issued under the respective resolution to fund projects relating to all categories of water and sewer related capital expenditures.

A second revenue bond resolution for SJRPP is being used to issue additional new money debt and any associated debt refunding transactions.

A restated and amended BPSS resolution authorizes Debt to be issued to fund new projects and refund related debt.

The DES resolution authorizes debt to fund projects and refund related debt.

C. Tax-exempt vs. Taxable

As a municipal utility, JEA is authorized to issue tax-exempt debt and must comply with appropriate tax regulations. JEA will endeavor at all times to issue tax-exempt debt. For certain transactions, due to tax regulations, it may be necessary or advantageous for JEA to issue taxable debt. Such prevailing circumstances may include excessive transferred proceeds, volume cap limitations, and private use restrictions. Treasury Services will monitor current tax regulations and utilize tax-exempt financing whenever possible.

D. Fixed vs. Variable Debt

Pursuant to this Policy, JEA will not exceed 30% of Net Variable Rate Debt to Total Debt and will not exceed 55% of Net Variable Rate Debt plus Net Fixed to Floating Interest Rate Swaps to Total Debt.

For purposes of this Policy, the above limits will be calculated with the following components:

- Net Variable Rate Debt equals Total Variable Rate Debt minus Net Variable Rate Assets.
- Net Variable Rate Assets equals Variable Rate Assets minus notional amount of investment/asset-matched interest rate swaps.
- Net Fixed to Floating Interest Rate Swaps shall be defined as the notional amount of fixed to floating swaps maturing in 10 years or less minus the notional amount of floating to fixed swaps maturing in 10 years or less outstanding on the last day of each month.

- Total Debt equals the par amount of fixed rate debt plus Total Variable Rate Debt.
- Total Variable Rate Debt equals hedged and unhedged variable rate debt.
- Variable Rate Assets are defined as investments maturing in less than one year.
- Unhedged Variable Rate Debt is defined as Total Variable Rate Debt outstanding less variable rate debt that is associated with a floating to fixed rate swap where the term of the swap matches the term of the variable rate debt.

The calculation of these percentages will be performed semiannually and reported to the Committee.

JEA's capital structure, comprised of fixed rate debt, variable rate debt, and debt-related hedging instruments such as interest rate swaps and caps, will be managed in conjunction with investment assets and investment-related hedging instruments to incorporate the natural occurrence of hedging impacts in those balance sheet categories. The goal of adopting a comprehensive investment and debt management strategy is to use each side of the balance sheet to mitigate or hedge cash flow risks posed by the other side of the balance sheet. For example, interest income for variable rate assets provides a natural offset to the interest expense of variable rate debt as interest rates increase or decrease. Therefore, in determining JEA's exposure risk to a changing interest rate environment, both components of the balance sheet will be analyzed and JEA's "net" exposure evaluated.

JEA will utilize a mix of fixed and variable rate debt to lower the overall cost of capital. Variable rate debt will generally be used as an efficient way to fund new construction requirements and as a permanent component of a long-term funding strategy. The amount of variable rate debt outstanding shall be based on any one or a combination of the following factors:

(1) Interest Rates

The absolute level of interest rates, the forecasted direction of interest rates and the shape of the yield curve are all factors in managing the amount of variable rate debt outstanding. If fixed rates are high relative to the current cycle of rates and the yield curve is steep, a higher percentage of net variable rate debt may be desirable. Conversely, if interest rates are low relative to the current cycle of rates and the yield curve is flat, a higher percentage of net fixed rate debt may be desirable.

(2) Capital Structure and Construction Funding

Given that JEA has a continuous capital program with projects beginning at various points in time and the lack of correlation between low interest rate environments and the need to begin a project, having a variable rate program will allow for “Just in Time” financing while providing for market timing flexibility. Additionally, variable rate debt adds flexibility for capital structure changes like accelerating the pay down of debt.

(3) Other Related Variable Rate Risks

JEA will take into consideration when determining the appropriate variable rate risk levels the potential exposure to variable rate risk on joint financing programs with the City of Jacksonville and other related agencies.

JEA’s strategies for responding to changes in short and long-term interest rates include the following actions:

- JEA may elect to lower the ratio of Net Variable Rate Debt to Total Debt when (a) long-term interest rates are at or near market lows compared to market-based indices for the last three to ten-year averages, (b) short to intermediate-range forecasts for long-term rates are predicting higher rates or (c) the ratio of Net Variable Rate Debt to Total Debt is or forecasted to be at the upper end of the allowable percentage. If such a determination is made to lower the ratio, the desired ranges for the ratios outlined in Section VI.D, above are 10% to 25% of Net Variable Rate Debt to Total Debt and 35% to 50% of Net Variable Rate Debt plus Net Fixed to Floating Interest Rate Swaps to Total Debt.
- JEA may elect to increase the ratio of Net Variable Rate Debt to Total Debt when (a) long-term interest rates are at or near market high levels compared to market based indices for the last three to ten year averages, or (b) short to intermediate-range forecasts for long-term rates are predicting lower rates or (c) the ratio of Net Variable Rate Debt to Total Debt is or forecasted to be at the lower end of the allowable percentage. If such a determination is made to increase the ratio, the desired ranges for the ratios outlined in Section VI.D above are 20% to 30% of Net Variable Rate Debt to Total Debt and 45% to 55% of Net Variable Rate Debt plus Net Fixed to Floating Interest Rate Swaps to Total Debt.

To assist in the decision making process, a forecast of interest rate volatility over the short and long terms and expected performance of various financial products (debt or hedging instruments) under various interest rate scenarios will be modeled on a periodic basis. In determining when to use



alternative financing arrangements including variable, fixed, and synthetic structures, the availability of internal and external technical expertise to properly manage risk will be evaluated along with ongoing administrative costs. These analyses will be reviewed at the regularly scheduled semiannual meetings by the Committee.

E. “Just in Time” Financing.

The cash flow forecast for budgeted capital projects is the main factor used in determining the appropriate timing of new money debt transactions. The goal is to issue new debt as outstanding debt proceeds are spent. However, the timing of debt transactions may also depend upon factors including:

- Desired debt service coverage levels
- Budget, financial statement and ratings impacts
- Annual Plan of Finance
- Interest rate environment

All of the above factors are considered prior to making the final determination of the most optimal time to issue new debt to fund capital projects.

F. Budget/Financial Forecast goals for debt service

In order to adequately project debt service for budget purposes and for official financial forecast/rating agency purposes, Treasury Services will develop interest rate assumptions using the following guidelines:

(1) Fixed Rate Debt

For the upcoming budget year, the budget assumption for interest rates for new incremental fixed rate debt will be (i) at a minimum, the average of the AA MMD index for comparable maturities for the most recent twelve months ending March 31, or (ii) management, at its discretion, can choose to utilize higher rates. Interest rate forecasts from JEA’s underwriting team can be used as support for this determination. Forecasts for the fiscal years beyond the upcoming budget year will be based upon the budget interest rate assumption plus or minus based upon input from either forecasts received from investment bankers or from Bloomberg.

(2) Variable Rate Debt

For the upcoming budget year, the budget assumption for interest rates for outstanding and new incremental variable rate debt will be (i) at a minimum, the average of the SIFMA index for the most recent twelve months ended February 28, or (ii) higher rates selected at the Treasurer’s discretion. Interest rate forecasts from JEA’s

underwriting team or from Bloomberg can be used as support for this determination. Forecasts for the fiscal years beyond the coming budget year will be based upon the budget interest rate assumption plus or minus based upon input from either forecasts received from investment bankers or from Bloomberg.

- (3) The interest rate assumptions may be adjusted based upon JEA's actual trading differential to the appropriate index during the most recent twelve months ended February 28.
- (4) The projected fixed and variable interest rate assumptions will be provided by the Treasurer by February 28th of each year.
- (5) Unless otherwise agreed upon by the CFO, debt service for new debt will be projected on a level basis.

**G. Credit Ratings**

JEA recognizes that strong credit ratings are necessary to ensure the lowest possible borrowing costs, which will factor into maintaining low rates for our customers. JEA's goal is to maintain a long-term senior unsecured "AA" category rating by each rating agency.

JEA will utilize the following municipal debt rating services: Fitch Ratings, Standard and Poor's, and Moody's Investors Service. Any changes, additions, or deletions to the list above will require approval of the CEO.

**VII. FIXED RATE DEBT**

**A. Overview**

Fixed rate debt is authorized to finance capital projects and for any other allowable purpose as stipulated in the governing bond resolutions and tax regulations.

**B. Type**

JEA may issue any type of fixed rate debt as authorized by JEA's various bond resolutions and recommended by JEA's Financial Advisor. Some of the various types of debt authorized include, but are not limited to, serial and term bonds issued at par, discount or premium, capital appreciation bonds, and bullet bonds (e.g., refundable principal installments).

**C. Maturity, Structure, and Call Provisions**

Prudent debt management requires that there be a proper matching of the lives of the assets and the length of the debt used to finance such asset.

JEA will, at all times, structure the amortization and maturity of any fixed rate debt to comply with the appropriate tax regulations.

To provide the maximum amount of flexibility, JEA will utilize, for tax-exempt debt, five year but no longer than ten-year calls, at par, whenever possible. For taxable debt, JEA can utilize make whole call provisions at terms and conditions prevalent in the taxable bond market at the time of pricing. JEA staff along with the financial advisor and underwriter will assess the market at the time of pricing to determine its ability to issue bonds with such features while minimizing interest costs.

D. Providers

Under the Procurement Code, JEA is allowed to sell debt by either negotiated sale or competitive bid. The determination of the method is to be made prior to each financing.

If JEA selects the “negotiated sale” method, the underwriting team will be selected pursuant to the JEA Procurement Code. JEA shall require that a master underwriting agreement be entered into and signed by all parties at the end of the solicitation process and a separate bond purchase agreement with the senior underwriter(s) shall be approved by the JEA Board at each sale of debt, unless the Board has previously delegated such approval authority to the CEO.

If JEA selects the “competitive sale” method, determination of the winning bid will be based on the following methodology: (1) the “standard convention” as recommended by JEA’s Financial Advisor, (2) calculation utilized by the State Board of Administration or (3) the underwriting firm with the lowest True Interest Cost (TIC) proposal.

JEA will employ staff or an outside professional financial advisor, other than the underwriter, who is familiar with and abreast of the conditions of the municipal market, and is available to assist in structuring the issue, pricing, and monitoring of sales activities. JEA shall not use a firm to serve as both the financial advisor and underwriter. Selection of underwriters, financial advisors, bond counsel, and other necessary consultants involved in the debt transactions will be selected as outlined in the JEA Procurement Code.

E. Debt Service Reserves

A debt service 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.

- The debt service reserve may be in the form of cash and/or investments funded from the proceeds of bonds and/or revenues from operations.
- If allowed by the resolution, a surety issued by a financial institution nationally recognized in the industry to issue such policies may be used in place of a cash-funded debt service reserve.
- If allowed under the respective bond resolution, any other form of financial instruments may be used in place of cash-funded or surety-funded debt service reserve, provided such financial instruments are issued by firms of nationally recognized standing.
- JEA will weigh the benefits of each method of funding the debt service reserve prior to each issue and will choose the method most beneficial to JEA based upon the facts and circumstances of each issue.

A debt service reserve may also be maintained if, in the opinion of the underwriter, it is reasonably required to provide security for the payment of debt service with respect to JEA's bonds and is consistent with normal practice in respect of bonds of the same general type as those being issued by JEA. Selection of a surety provider or provider of any financial instrument acceptable to fund the debt service reserve requirement under the appropriate resolution will be pursuant to the JEA Procurement Code.

#### F. Bond Insurance

For each debt transaction, JEA will evaluate the economic benefit of using bond insurance. This analysis will incorporate the insurance benefits to the call date, to maturity date, and any intermediate date. If based on the analysis, JEA determines that bond insurance will add economic benefit to the transaction an insurance provider will be selected pursuant to the JEA Procurement Code. Financial institutions which insure bonds for investors of JEA must have, at the time the bonds are issued, a credit rating (if rated) not less than AA/Aa2/AA from Fitch Ratings, Moody's, and Standard & Poor's, respectively.

#### G. Approvals

The structure, maturity, and call provisions for each fixed rate financing must be approved in writing by the CFO on or prior to the date of pricing. The CFO has the responsibility to review the structure of each debt transaction with the CEO. Negotiation with the underwriter on negotiated bond transactions will be conducted by the Treasurer. Final transaction approval must be obtained from the Board; however, it may be in the form of a delegated authority.

#### H. Reporting and Compliance

A monthly report entitled “Schedule of Outstanding Indebtedness” will be provided to the Board that summarizes the principal amount, the range of interest rates and maturity dates of all outstanding debt.

JEA is committed to full and complete compliance with all applicable laws and regulations with respect to its debt. Because of the complexity of the tax regulations and the consequences of non-compliance, the advice of bond counsel and other qualified professionals will be sought whenever necessary. In carrying out its responsibility, JEA shall monitor and analyze the investments and use of bond proceeds and calculate the amount of arbitrage rebate liability due.

### **VIII. VARIABLE RATE DEBT INSTRUMENTS**

#### A. Overview

Variable rate debt is authorized to finance capital projects and for any other allowable purpose as stipulated in the governing bond resolutions and tax regulations.

JEA must adhere to the variable rate debt limits outlined in this Policy.

#### B. Type

JEA may issue any type of variable rate debt as authorized by JEA’s various bond resolutions and recommended by JEA’s Financial Advisor. Some of the various types of debt authorized include, but are not limited to, Commercial Paper, Variable Rate Demand Obligations, and Medium-Term Notes.

#### C. Management

On a periodic basis, Treasury Services will make decisions regarding any changes to the interest mode for variable rate demand obligations and desired maturities for commercial paper.

#### D. Maturity and Call Provisions

As with fixed rate debt, JEA will structure the maturity dates of the variable rate debt to match the lives of the assets being financed. JEA will, at all times, structure the amortization and maturity of any variable rate debt to comply with the appropriate tax regulations. For JEA commercial paper program, the maturity of a Commercial Paper Note shall not exceed 270 days and the term of a commercial paper program shall not exceed 30 years in order to stay within the current safe harbor rules to be treated as part of

a single issue. For variable rate debt with tender rights, the current safe harbor rules limit the maturity to no longer than 35 years.

E. Providers

Underwriters, remarketing agents or dealers of JEA's variable rate debt program will be selected pursuant to JEA's Procurement Code.

Banks providing Liquidity Facilities for variable rate debt shall be reviewed regularly with the Financial Advisor and minimum short-term ratings (if rated) established for these providers shall be F1, P1, A1 from the three rating agencies: Fitch Ratings, Moody's, and Standard & Poor's, respectively. The long-term credit rating should generally have a minimum rating equal to JEA's credit rating on the underlying debt.

If bond insurance is necessary for variable rate debt, the insurance provider will be selected pursuant to JEA's Procurement Code. Financial institutions which insure bonds for investors of JEA must have, at the time the bonds are issued, a short-term credit rating (if rated) of F1, P1, A1 and a long-term credit rating (if rated) not less than AA/Aa2/AA from Fitch Ratings, Moody's, and Standard & Poor's, respectively.

F. Approvals

The structure, maturity, and call provisions for each variable rate financing must be approved in writing by the CFO prior to the transaction. The CFO has the responsibility to review the structure of each debt transaction with the CEO. Final transaction approval must be obtained from the Board.

G. Compliance/Reporting Requirements

The amount of variable rate debt outstanding for JEA shall be included on the report entitled "Schedule of Outstanding Indebtedness" and will be reported to the Board monthly in conjunction with the monthly report of financial position of JEA. For variable rate debt, this report shall summarize the various types, maturities, and current rates of interest on each variable debt issue then outstanding.

A report shall be prepared semiannually for the Committee, showing the comparison of the monthly interest rates (including all fees) paid for each variable rate issue then outstanding, comparing each of these with the monthly average interest rate of LIBOR, SIFMA, and such other short-term variable interest rate indices, which may accurately reflect the existing variable interest rate market. This comparison will provide information on the most cost beneficial type and mode of variable rate debt for various periods of time. This information will be used as part of a recommendation on what type of variable rate debt will be issued in future periods or for changes to JEA's existing variable rate program.

JEA will monitor and report any arbitrage rebate liability due to the U.S. Treasury on bond proceeds from variable rate transactions.

## **IX. DEBT REFUNDING**

### **A. Overview**

The refunding of outstanding debt represents an opportunity for JEA to realize debt service savings. Refundings may allow JEA to restructure its existing debt portfolio to enable JEA to operate in a more competitive manner. Many of the policies and practices applicable to new money fixed and variable rate financings are applicable to debt refundings as well.

### **B. Management**

Periodic reviews of all outstanding debt will be undertaken to determine refunding opportunities. Refundings will be considered within federal tax law constraints. JEA and the financial advisor shall monitor the municipal bond market for opportunities to obtain interest savings. Current tax regulations do not permit tax-exempt Advance Refunding transactions. There are no limitations with respect to a current refunding of bonds. The following guidelines should apply to the issuance of refunding bonds:

- (1) Any refunding will be evaluated on the economic savings or structure advantages relating to issuing the new debt. For a fixed rate refunding, a five percent savings target is a general guideline. However, refunding issues that produce a net present value savings of less than five percent may be issued for various business and/or economic purposes. Examples include but are not limited to (a) restructuring debt, (b) amending provisions of a bond document, and (c) taking savings based on structure or low interest rate environment considerations. Savings below the five percent guideline must be approved by the CFO or by delegated authority from the Board prior to the execution of the refunding transaction.
- (2) Refundings involving variable rate debt generally do not produce savings and will not have a savings guideline. These transactions are usually executed to take advantage of structuring opportunities or to reduce risk, or may be utilized to take advantage of low long-term interest rates.
- (3) The final structure (including the use of hedging products) will be recommended by Treasury Services to the CFO for approval prior to the execution of any refunding transaction. The CFO has the responsibility to review the structure of each debt transaction with the CEO.



C. Fixed and Variable

JEA can utilize fixed or variable rate debt for refunding purposes and must adhere to the variable rate debt limits outlined in this Policy.

D. Maturity and Call Provisions

The maturity of refunding bonds shall, absent a bond counsel opinion, be in accordance with the safe harbor rules for the creation of replacement proceeds found in the tax regulations.

To provide the maximum amount of flexibility, JEA will utilize five year, but no longer than 10 year calls, at par, whenever possible for tax-exempt debt. Call provisions for taxable debt will be based on terms and conditions prevalent in the taxable bond market at the time of pricing. JEA staff along with the financial advisor and underwriter will assess the market at the time of pricing to determine its ability to issue bonds with such features while minimizing interest costs.

E. Debt Service Reserve

In the event that a refunding transaction reduces the debt service reserve requirement, JEA may deposit any such reduction into the defeasance escrow account for the refunded bonds or utilize the reduction for any lawful purpose.

F. Approvals

The structure, maturity, and call provisions for each refunding must be approved in writing by the CFO on or prior to the date of pricing. The CFO has the responsibility to review the structure of each debt transaction with the CEO. Negotiation with the underwriter on negotiated bond transactions will be conducted by the Treasurer. Final transaction approval (which may be delegated) must be obtained from the Board.

**X. INTEREST RATE SWAPS, CAPS, COLLARS, AND RELATED HEDGING INSTRUMENTS**

A. Overview

The prudent use of hedging instruments, including interest rate swaps, caps and collars, can be an effective tool in meeting funding needs and structuring a balance sheet while managing risk associated with the movement of interest rates. Utilizing hedging products can provide JEA with cost effective alternatives to traditional debt financing choices.

Utilizing interest rate swaps to achieve substantially lower interest costs is a main component in building the desired capital structure to allow JEA to compete effectively. There are three types of interest rate swaps JEA is authorized to enter into:

- Floating to fixed rate swaps,
  - Hedge interest rate risk on variable rate debt,
  - Lock in fixed rates on refunding bonds that will be issued in the future or
  - Take advantage of opportunities to obtain fixed swap rates that are lower than comparable fixed rate bonds.
- Fixed rate to floating rate swaps
  - Increase the amount of variable rate exposure without incurring the remarketing and liquidity costs.
  - Eliminate the put risk associated with variable rate debt.
  - Take advantage of opportunities to obtain variable swap rates that are lower than comparable variable rate bonds.
- Basis swaps manage the risk associated with
  - The mismatch between two benchmarks.
  - Methodologies used to set interest rates.

#### B. Risks

Interest rate swaps and related hedging instruments may introduce additional risks to JEA's credit profile. These risks include, but are not necessarily limited to, termination risk, counterparty risk, re-execution risk, amortization risk, Basis Risk, and tax event risk. Prior to entering into each interest rate swap transaction, these risks are evaluated to ensure adequate provisions are in place to minimize the downside and provide the maximum benefit the transaction originally intended.

#### C. Limits

The percentage of variable rate exposure (the notional amount of Net Fixed to Floating Interest Rate Swaps and Total Variable Rate Debt outstanding) to Total Debt outstanding shall not exceed 55%. The Total Variable Rate Debt outstanding and Net Fixed to Floating Interest Rate Swaps shall be calculated as set forth in Section VI.D of this Policy. The notional amount of interest rate swaps, caps, collars, and related hedging instruments will be limited to the amount approved in resolutions approved by the Board from time to time.

Interest rate caps and related hedging instruments will be utilized to help manage interest rate risk in the debt portfolio. At all times, a fixed to floating interest rate swap will have an associated interest rate cap for the same

notional amount at a level no greater than 200 basis points above the interest rate swap fixed rate. (See waiver in Section K)

Additionally, it is contemplated that an interest rate cap will not always have the same maturity as the interest swap with which it is associated. The average life of aggregate outstanding caps will not be less than 75% of average life of the associated aggregate swaps.

From time to time, Treasury Services will evaluate the use of collar (cap and floor instrument) transactions as a hedging tool to minimize cost and risk. The cap portion will be executed pursuant to the above referenced rules. The related floor rate will be approved by the Committee prior to execution.

D. Fixed to Floating Rate Swap Management

The Committee shall have the overall responsibility, from an overview standpoint, for the execution and management of fixed to floating interest rate swaps. One of the main components of the debt management strategy is to use intermediate term fixed to floating rate swaps to achieve a long-term goal of having up to 55% of the total debt based on a floating/variable interest rate.

Based on Committee approval, interest rate swaps will be executed semiannually to achieve an averaging into the market philosophy. The Committee shall determine the size of the total interest rate swap program and the maturity date for the swaps within the parameters of this Policy, which has been approved by the Board.

Forecasts of interest rate volatility over the intermediate term (4 to 7 years) and expected performance of the swaps, caps, collars, and related hedging instruments under various interest rate scenarios shall be updated on not less than a semiannual basis. Short and long-term interest rates will be monitored over varying time periods. If current interest rates are either above or below the moving averages as measured by varying time periods, the Committee may elect to alter the timing of adding additional fixed to variable swaps to either increase or decrease the amount of variable exposure. Furthermore, the Committee may elect to enter into “reversing” swaps to take advantage of market opportunities. In the event a fixed to floating swap is “reversed”, any associated floor will be simultaneously “reversed”. Any associated cap will be evaluated and “reversed” if approved by the Committee.

The amount of interest rate caps shall not exceed the amount of variable rate exposure to JEA.

The following “decision rules” will govern the decision to initially execute a fixed to floating interest rate swap, cap, or other hedging instruments within the Debt Management Program:

1. JEA receives payments based on a fixed rate and pays based on a floating rate.
2. Floating rate is based on either SIFMA or LIBOR.
3. If the SIFMA Index is selected, no adjustment to the notional amount is needed.
4. If the LIBOR index is selected, the notional amount of the interest rate swap and cap will be adjusted by the current ratio of the SIFMA based fixed rate to the LIBOR based fixed rate. (See example below)

$$\frac{\text{SIFMA Fixed Rate}}{\text{LIBOR Fixed Rate}} = \frac{1.56\%}{2.36\%} = 66.1\%$$

The notional amount will be multiplied by the ratio to obtain the adjusted notional amount.

5. Decision to select LIBOR or SIFMA will be based on a combination of historical, current, and future expectations for the relationships of floating SIFMA to floating LIBOR and fixed SIFMA to fixed LIBOR. Generally, if the floating SIFMA to LIBOR ratio is lower than the fixed SIFMA to LIBOR ratio, a SIFMA based swap is preferred. However, historical and future expectations must be evaluated in order to make the decision.
6. Term of the interest rate swap and cap shall not exceed 10 years. The overall average for the program will be four to seven years.
7. An interest rate swap will not be executed unless the spread between the fixed rate and initial floating rate is a positive 10 basis points or more. In addition, as stated above, the execution of a swap may be affected by the relationship of current rates to historical averages.
8. If a swap is not executed or re-executed due to the 10 basis point decision rule, the swap will be executed during the following quarter, decision rule permitting. If a swap is not entered into due to the historical relationship of rates to the current level, the Committee will decide when the appropriate time to enter into the next transaction. In the event swaps are delayed for two or more consecutive periods, only one additional swap per quarter will be executed until the original schedule can be re-established.
9. An interest rate cap is to be entered into at the time of each swap transaction for the identical notional amount if JEA does not have a current interest rate cap in place that meets the criteria. The cap should be at a level no greater than 200 basis points above the fixed

rate of the swap. However, if JEA has current interest rate cap positions that are not associated with any particular interest rate swap, but are being utilized generally to manage variable rate risk, an interest rate cap meeting the conditions listed above may be utilized to satisfy the requirements of this section.

The Committee will meet on a semiannual basis to review the performance of the fixed to floating interest rate swaps, and review the current interest rate swap and cap decision rules. Any changes to the “decision” rules recommended by the Committee must be approved by the Board prior to implementation. The Committee may, however, elect not to execute an interest rate swap or cap normally scheduled to be executed based on the “decision rules” if a change to the “decision rules” has been recommended by the Committee but not yet acted on by the Board.

#### E. Floating to Fixed Rate Swap Management

The Committee shall have the overall responsibility regarding the execution and management of floating to fixed interest rate swaps. An additional component of the debt management strategy is to use floating to fixed rate swaps to lock in the lowest possible borrowing costs over a long period of time. Floating to fixed rate swaps can be used in conjunction with issuing variable rate debt to obtain the lowest fixed rate when compared to traditional forms of fixed rate financings. In addition, floating to fixed swaps may be desirable when the cycle of long-term rates moves down to or near historical lows and “fixing” a portion of the outstanding variable rate debt appears advantageous. Swaps will be evaluated as alternatives to traditional financing instruments considering their comparable costs, ease of entry and exit provisions, and the amount of potential risk exposure.

Interest rate swaps will be executed for notional amounts, maturities and other related terms and conditions as determined by the Committee. Re-execution risk, amortization risk, tax event risk and Basis Risk will be evaluated in order to minimize any potential negative results.

Forecasts of interest rate volatility over the term of the swaps and expected performance of the swaps under various interest rate scenarios shall be analyzed prior to the execution of the swaps. Short and long-term interest rates will be monitored over varying time periods. The Committee may elect to enter into “reversing” swaps to take advantage of market opportunities.

The following “decision rules” will govern the decision to execute and/or re-execute a floating to fixed interest rate swap:

1. JEA receives payments based on a floating rate and pays based on a fixed rate.
2. Floating rate is based on either SIFMA or a percent of LIBOR.

3. If the SIFMA Index is selected, no additional analysis is needed.
4. If the LIBOR index is selected, the historical relationship of SIFMA to LIBOR will be used as a guide when selecting the percent of LIBOR as the index. A risk analysis will be done on a projected basis to quantify the risk versus potential reward.
5. Decision to select LIBOR or SIFMA will be based on a combination of historical, current, and future expectations for the relationships of floating SIFMA to floating LIBOR and fixed SIFMA base rate versus the fixed rate based on the LIBOR index.
6. Term of the interest rate swap is a maximum of 30 years or if the swap is executed with the purpose of synthetically fixing a specific variable rate debt issue, the swap transaction is permitted to have a term which matches the term of the variable rate debt, but will be determined based on the life of the related debt being hedged. If the term of the swap is less than the underlying debt that it may generally be hedging, JEA is exposed to re-execution risk. In a rising interest rate environment, a new swap may potentially be re-executed at a higher fixed rate than the original swap. Additionally, the amortization of the principal on the debt that the swap is generally hedging is taken into consideration when structuring the terms and conditions of the swap. This is referred to as amortization risk.

Interest rate caps and collars are additional hedging instruments that JEA may utilize to manage risks associated with variable rate debt. All cap or collar transactions executed must comply with the requirements set forth in items F through K listed immediately below.

F. Compliance and Reporting Requirements

Resolutions approving the use of interest rate swap, cap, and other hedging instruments outlining, among other things, size, and maturity restrictions, must be approved by the JEA Board prior to execution.

JEA Board must approve the overall Debt Management Policy including explicit parameters for the use of interest rate swaps, caps, and other hedging instruments.

JEA CEO must sign all interest rate swap, cap, or collar confirmations.

JEA external auditors shall perform an annual review relating to fixed to floating interest rate swap management and present to the JEA Board.

Monthly performance reports regarding outstanding interest rate swaps, caps and related hedging instruments will be provided to Accounting Services to be included in the monthly financial statements to the Board.

Mark to market valuations will be updated on a semiannual basis and provided to Committee members and Accounting Services to be included in the financial statements.

Collateral reports will be updated on a monthly basis providing information relating to specific swap transactions that may require collateral posted based on mark to market valuations.

JEA's CFO or Treasurer must approve the interest rate swap term sheet prior to execution. In addition, the purpose of the transaction, (asset matched, debt management, etc.) will be included as part of the swap paperwork file kept for each executed swap transaction.

G. Providers

Financial Institutions and Dealers executing interest rate swaps, caps, and other hedging instruments for JEA shall be selected pursuant to the JEA Procurement Code. JEA shall require that all institutions and dealers entering into interest rate swap, cap and other hedging instrument agreements execute a Master Swap Agreement (the ISDA Master Agreement must be used as a part of the Master Swap Agreement) that is signed by both parties. All transactions entered into shall adhere to the requirements of the Master Swap Agreement.

H. Diversification

No more than \$500 million of net interest rate swap and cap or other hedging instruments shall be outstanding in the aggregate with any one provider or affiliate thereof unless approved in writing by the CEO. The aggregate amount of all "long dated" (greater than 10 years) transactions executed with financial institutions and all affiliates thereof, shall be limited to an amount based on the credit rating of the financial institution at the time of the entry into the long dated hedging transaction as shown below:

Rating Level	Notional Amount
AAA/Aaa by one or more Rating Agencies	\$400,000,000
AA-/Aa3 or better by at least two Rating Agencies	\$300,000,000
A/A2 or better by at least two Rating Agencies	\$200,000,000
Below A/A2 by at least two Rating Agencies	\$0

The rating criteria shown above apply either to the counterparty to the long dated transaction or, if the payment obligation of such counterparty under the relevant Swap Agreement shall be guaranteed by an affiliate thereof, such affiliate. The overall maximum by definition of the above limits cannot exceed \$400 million for "long dated" transactions.



This provision includes all interest rate swap, cap and other hedging instruments JEA may utilize to manage interest rate risk including, but not limited to, debt management, and 100% investment/asset matched program.

I. Bid

All “initial” interest rate swap and cap transactions shall be competitively bid by at least (3) three providers that have executed interest rate swap agreements with JEA. Upon written authorization from the CEO or his designee, 1) a “reversing transaction” resulting in an upfront payment to JEA may be negotiated with the original swap, cap, or collar counterparty, 2) a negotiated swap with a counterparty may be executed as part of a debt financing or (3) a cap/collar can be procured either with bids received from two providers or negotiated with only one provider if JEA receives a letter from the then current Financial Advisor stating that the payment for such cap/collar was executed at market levels.

J. Reserve Fund

An annual budgeted reserve contribution will be made to a reserve fund to cover any payments made as a result of the use of swaps as part of the Policy. Three percent of the notional amount of each fixed to floating interest rate swap initially executed will be retained in the reserve fund and used if needed to make interest rate swap payments. The contributions to the reserve fund will be funded in three equal installments of 1% of the notional amount beginning in the month the swap is executed. Once funded, the reserve fund shall at all times be not less than three percent of the notional amount of fixed to floating debt interest rate swaps outstanding unless the reserve fund is used as stipulated below. Accounting will be consistent with the variable rate reserve fund.

The reserve fund can be used for any lawful purpose including debt service, debt repayment and capital outlay. The use of this reserve fund must be approved in writing by the CEO.

K. Other

If a fixed to floating interest rate swap is executed in conjunction with a refunding transaction where the net effect is to maintain the current level of variable rate exposure, (1) the requirement to execute a cap with an associated fixed to floating swap is waived and (2) any reserve requirement needed for the fixed to floating swap is waived; however, the reserve requirement shall be calculated as if the variable rate debt is outstanding in the amount of the notional amount of the associated fixed to floating interest rate swap.

## **XI. INSIDER TRADING POLICY GUIDELINES**

Insider trading is a court developed doctrine under which it is unlawful to purchase or sell a security while in possession of material non-public information in breach of a duty or other relationship of trust or confidence.

Insider trading likely would not be found where an issuer is communicating in good faith with investors or analysts and disclosing information that is (1) Public, (2) not material or “market-moving” or (3) both public and non-material.

A written procedure, approved by the CEO, will provide specific guidelines that JEA employees will follow to ensure compliance with insider rules and regulations

## **XII. POLICY EXCEPTIONS**

Any financing activity not included in this Policy will be brought to the Board for review and approval prior to execution.

## **XIII. EFFECTIVE DATE**

This Policy will become effective May 20, 2003 (as revised April 19, 2005, October 10, 2005, November 20, 2007, December 15, 2009 and August 27, 2019).

## **XIV. DEFINITIONS**

**Advance Refunding** A bond is treated as issued to advance refund another bond if it is issued more than 90 days before the redemption of the refunded bond.

**Basis Risk** Movement in the underlying variable rate indices may not be perfectly in tandem, creating a cost differential that could result in a net cash outflow from the issuer. Also, the mismatch that can occur in a swap with both sides using floating, but different, rates.

**Capacity Expansion** Capital expansion projects are those projects designed to accommodate new customers, acquisitions, new “plants”, and expansion of existing system capacity.

**Commercial Paper Note** shall mean any Bond which has a maturity date which is not more than 270 days after the date of issuance thereof.

**Competitive Bid** a method of submitting proposals for the purchase of new issue of municipal securities by which the securities are awarded to the underwriting syndicate presenting the best bid according to stipulated criteria set forth in the notice of sale.

**Construction Loan Credit Facility** means obligations of JEA of a particular credit facility for construction advance purposes which shall be similar to Bond Anticipation Notes.

**Counterparty Risk** the risk that the other party in the derivative transaction fails to meet its obligations under the contract.

**Credit Enhancement** shall mean, with respect to the Bonds of a Series, a maturity within a Series or an interest rate within a maturity, the issuance of an insurance policy, letter of credit, surety bond or any other similar obligation, whereby the issuer thereof becomes unconditionally obligated to pay when due, to the extent not paid by JEA or otherwise, the principal of and interest on such Bonds.

**Current Refunding** A bond is treated as issued to current refund another bond if the refunding issue is issued not more than 90 days before the redemption of the refunded bond.

**Hedge** a transaction entered into to reduce exposure to market fluctuations.

**Interest Rate Swap** a transaction in which two parties agree to exchange future net cash flows based on predetermined interest rate indices calculated on an agreed notional amount. The swap is not a debt instrument between the issuer and the counterparty, and there is no exchange of principal.

**ISDA** International Swap Dealers Association, the global trade association with over 550 members that include dealers in the derivatives industry.

**ISDA Master Agreement** the standardized master agreement for all swaps between the issuer and the dealer that identifies the definitions and terms governing the swap transaction.

**LIBOR** the principal benchmark for floating rate payments for taxable issuers. The London Inter Bank Offer Rate (LIBOR) is calculated as the average interest rate on Eurodollars traded between banks in London and can vary depending upon the maturity (e.g., one month or six months).

Because the regulator for LIBOR has announced the LIBOR benchmark will be discontinued as of December 31 2021, JEA shall not enter into any new LIBOR-based transactions extending past that date; any LIBOR based transactions terminating after December 31, 2021 shall use the replacement benchmark agreed upon by JEA after that date.

**Long-Dated Swap** a swap with a term of more than ten years. Often used in the municipal market, as issuers often prefer to use a hedge that matches the maturity of the underlying debt or investment.

**Mark-to-Market** calculation of the value of a financial instrument (like an interest rate swap) based on the current market rates or prices of the underlying (i.e. the variable on which the derivative is based).

**Medium-Term Note** any bond which has a maturity date which is more than 365 days, but not more than 15 years, after the date of issuance and is designated as a medium-term note in the supplemental resolution authorizing such bond.

**Negotiated Sale** the sale of a new issue of municipal securities by an issuer through an exclusive agreement with an underwriter or underwriting syndicate selected by the issuer.

**SIFMA Index** The SIFMA Municipal Swap index is a 7-day high-grade market index comprised of tax-exempt VRDO reset rates that are reported to the Municipal Securities Rule Making Board's Short-Term Obligation Rate Transparency reporting system.

**Termination Risk** the risk that a swap will be terminated by the counterparty before maturity that could require the issuer to make a cash termination payment to the counterparty.

**True Interest Cost** is the rate, compounded semiannually, necessary to discount the amounts payable on the respective principal and interest payment date to the purchase price received for the bonds.

**Variable Rate Bond** shall mean any Bond not bearing interest throughout its term at a specified rate or specified rates determined at the time of initial issuance.

**Variable Rate Demand Obligations (VRDO)** A long-term maturity security which is subject to a frequently available put option or tender option feature under which the holder may put the security back to the issuer or its agent at a predetermined price (generally par) after giving specified notice or as a result of a mandatory tender. Optional tenders are typically available to investors on a daily basis while in the daily or weekly mode and mandatory tenders are required upon a change in the interest rate while in the flexible or term mode. The frequency of a change in the interest rate of a variable rate demand obligation is based upon the particular mode the security is in at the time.



## INTER-OFFICE MEMORANDUM

July 24, 2019

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

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

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**TO:** JEA Finance and Audit Committee

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Kelly Flanagan, Chair  
April Green  
John Campion

### **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, 2019.

### **RECOMMENDATION:**

No action required; provided for information only.

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Aaron F. Zahn, Managing Director/CEO

AFZ/RFW/JEO/BHG



# **Quarterly Reserve Report**

**For the Third Quarter Ending  
June 2019**



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

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

### Electric System

	<u>Actual</u> <u>Fiscal Year</u> <u>2016</u>	<u>Actual</u> <u>Fiscal Year</u> <u>2017</u>	<u>Actual</u> <u>Fiscal Year</u> <u>2018</u>	<u>Projected</u> <u>Fiscal Year</u> <u>2019</u>	<u>Detail</u> <u>Page #</u>
<b>Unrestricted</b>					
Operations/Revenue Fund	\$ 56,665	\$ 54,800	\$ 85,482	\$ 26,170	
Debt Management Strategy Reserve	-	-	-	-	
Self Insurance Reserve Fund					
• Property	10,000	10,000	10,000	10,000	3
• Employee health insurance	11,179	9,214	8,138	8,138	4
Rate Stabilization					
• Fuel	180,115	131,716	74,376	46,761	5
• DSM/conservation	3,515	3,695	3,470	4,585	6
• Environmental	29,975	36,417	42,163	47,494	7
• Debt Management	42,126	29,884	29,884	29,884	8
• Non-Fuel Purchased Power	34,400	25,189	53,493	57,987	9
Environmental	18,556	17,672	16,818	16,568	10
Customer Deposits	41,084	42,105	44,242	44,439	11
<b>Total Unrestricted</b>	<b>427,615</b>	<b>360,692</b>	<b>368,066</b>	<b>292,026</b>	
<b>Days of Cash on Hand (2)</b>	<b>270</b>	<b>234</b>	<b>219</b>	<b>118</b>	
<b>Restricted</b>					
Debt Service Funds (Sinking Funds)	136,232	167,087	159,656	145,808	12
Debt Service Reserve Funds	60,582	60,582	60,582	60,582	13
Renewal and Replacement Funds/OCO (3)	192,179	201,368	189,922	26,201	14
Construction Funds	-	-	203	-	15
<b>Total Restricted</b>	<b>388,993</b>	<b>429,037</b>	<b>410,363</b>	<b>232,591</b>	
<b>Total Electric System</b>	<b>\$ 816,608</b>	<b>\$ 789,729</b>	<b>\$ 778,429</b>	<b>\$ 524,617</b>	

### Water and Wastewater System

<b>Unrestricted</b>					
Operations/Revenue Fund	\$ 42,948	\$ 69,232	\$ 43,461	\$ 20,483	
Rate Stabilization					
• Debt Management	20,290	14,209	14,209	14,209	16
• Environmental	1,699	5,214	12,914	12,482	17
Customer Deposit	13,910	15,086	15,616	15,958	18
<b>Total Unrestricted</b>	<b>78,847</b>	<b>103,741</b>	<b>86,200</b>	<b>63,132</b>	
<b>Days of Cash on Hand (2)</b>	<b>528</b>	<b>496</b>	<b>454</b>	<b>138</b>	
<b>Restricted</b>					
Debt Service Funds (Sinking Funds)	65,410	82,208	81,241	81,040	19
Debt Service Reserve Funds	108,086	107,488	102,850	63,442	20
Renewal and Replacement Funds	179,431	150,319	141,415	24,667	21
Environmental Fund [Capital Projects]	2,659	1,839	1,159	1,710	22
Construction Funds	152	15	284	27,468	23
<b>Total Restricted</b>	<b>355,738</b>	<b>341,869</b>	<b>326,949</b>	<b>198,327</b>	
<b>Total Water &amp; Sewer System</b>	<b>\$ 434,585</b>	<b>\$ 445,610</b>	<b>\$ 413,149</b>	<b>\$ 261,459</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

Fund/Account Description	Electric System	Water and Sewer System
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.



## Electric System Self Insurance - Property

For the Third Quarter Ending June 30, 2019

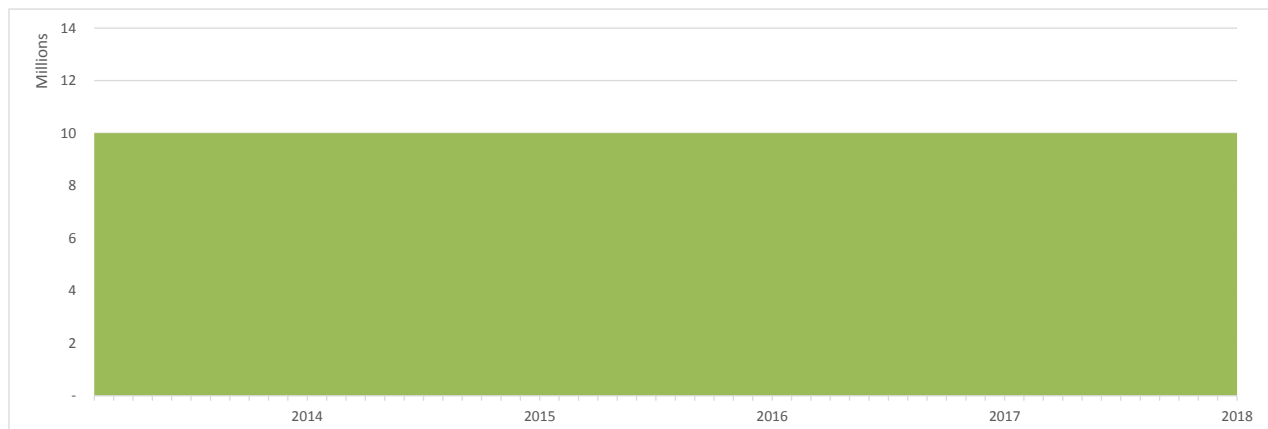
### Definitions and Goals

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)	Current Activity		Projected Activity		
	Quarter-End	Year -to-Date	2019	2020	2021
Opening Balance	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Additions:					
Contributions					
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -
Withdrawals					
Ending Balance	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000

### Historical Activity

	2014	2015	2016	2017	2018
Opening Balance	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Additions:					
Contributions	-	-	-	-	-
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -
Withdrawals					
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -
Ending balance	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000



### Observations

- Reserve/Fund Authorization: Budget Appropriation.

## Electric System Self Insurance - Employee Health Insurance

**For the Third Quarter Ending June 30, 2019**

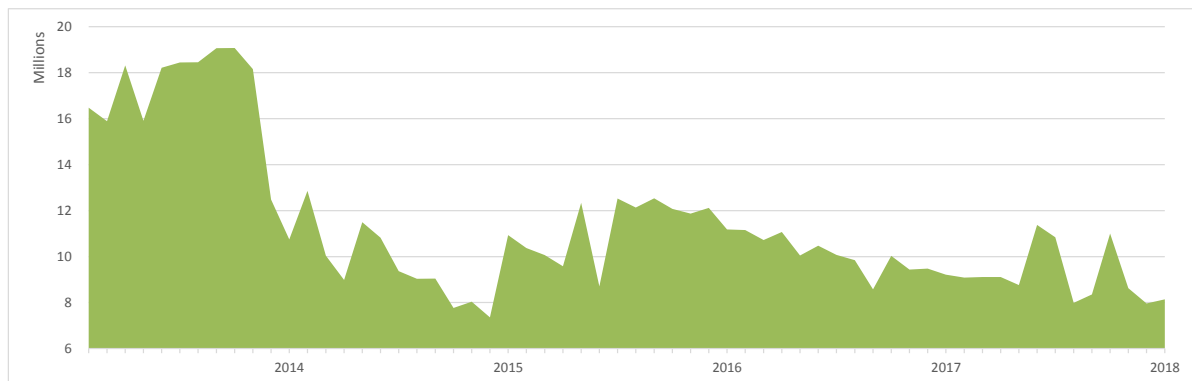
### Definitions and Goals

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.

(In Thousands)	Current Activity		Projected Activity		
	Quarter-End	Year -to-Date	2019	2020	2021
Opening Balance	\$ 10,221	\$ 8,138	\$ 8,138	\$ 8,138	\$ 8,138
Additions:					
Employee Contributions	1,629	4,788	5,027	5,279	5,543
Retiree & Other Contributions	1,747	4,940	5,236	5,551	5,884
Employer Contributions	4,712	15,928	25,252	27,370	29,673
Sub-total	\$ 8,088	\$ 25,656	\$ 35,516	\$ 38,200	\$ 41,100
Withdrawals:					
Payments for Claims	6,955	21,404	33,408	36,029	38,863
Actuary & Other Payments	634	1,670	2,108	2,171	2,237
Sub-total	\$ 7,589	\$ 23,074	\$ 35,516	\$ 38,200	\$ 41,100
Ending Balance	\$ 10,720	\$ 10,720	\$ 8,138	\$ 8,138	\$ 8,138

### Historical Activity

	2014	2015	2016	2017	2018
Opening Balance	\$ 15,914	\$ 10,749	\$ 10,937	\$ 11,179	\$ 9,214
Additions:					
Employee Contributions	4,573	5,447	5,460	5,862	6,158
Retiree & Other Contributions	5,188	5,141	5,694	6,443	7,273
Employer Contributions	14,252	22,220	24,231	19,004	18,378
Sub-total	\$ 24,013	\$ 32,808	\$ 35,385	\$ 31,309	\$ 31,809
Withdrawals:					
Payments for Claims	27,157	30,408	32,946	30,994	30,933
Actuary & Other Payments	2,021	2,212	2,197	2,280	1,952
Sub-total	\$ 29,178	\$ 32,620	\$ 35,143	\$ 33,274	\$ 32,885
Ending balance	\$ 10,749	\$ 10,937	\$ 11,179	\$ 9,214	\$ 8,138



Maximum Balance: 19,072  
Minimum Balance: 7,359

Average Balance: 11,382

### Observations

- Self Insurance for Employee Health Insurance began in July 2009.

## Electric System Rate Stabilization - Fuel Management

**For the Third Quarter Ending June 30, 2019**

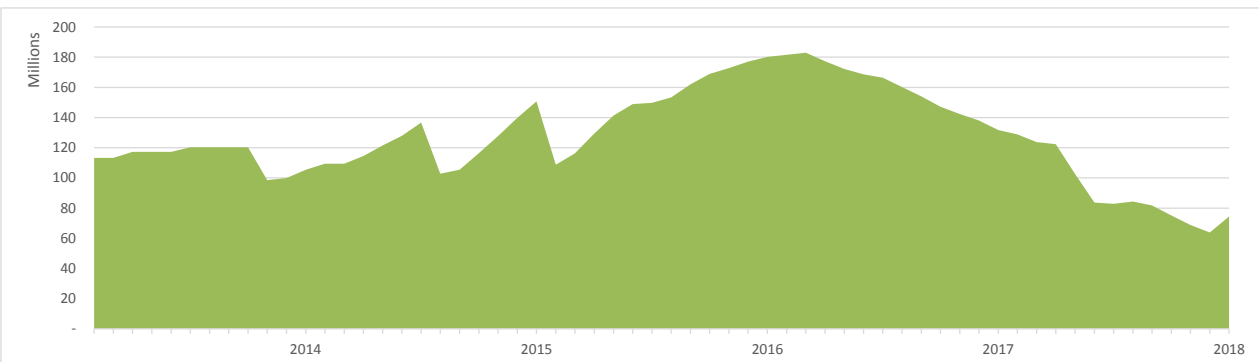
### Definitions and Goals

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 (i) the maximum fiscal year fuel cost in the preceding five fiscal years or (ii) the projected fiscal year 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.

(In Thousands)	Current Activity		Projected Activity		
	Quarter-End	Year -to-Date	2019	2020	2021
Opening Balance	\$ 44,208	\$ 74,376	\$ 74,376	\$ 46,761	\$ 80,199
Additions:					
Contributions			11,206	33,438	28,886
Sub-total	\$ -	\$ -	\$ 11,206	\$ 33,438	\$ 28,886
Withdrawals:					
Withdrawals	8,017	38,185	38,821	0	0
Sub-total	\$ 8,017	\$ 38,185	\$ 38,821	\$ -	\$ -
Ending Balance	\$ 36,191	\$ 36,191	\$ 46,761	\$ 80,199	\$ 109,086

### Historical Activity

	2014	2015	2016	2017	2018
Opening Balance	\$ 108,289	\$ 105,457	\$ 150,742	\$ 180,115	\$ 131,716
Additions:					
Contributions	22,496	95,224	85,979	2,845	-
Sub-total	\$ 22,496	\$ 95,224	\$ 85,979	\$ 2,845	\$ -
Withdrawals:					
Withdrawals				51,244	57,340
Fuel Rebate Credit	25,328	49,939	56,606		
Sub-total	\$ 25,328	\$ 49,939	\$ 56,606	\$ 51,244	\$ 57,340
Ending balance	\$ 105,457	\$ 150,742	\$ 180,115	\$ 131,716	\$ 74,376



Maximum Balance: 182,960  
Minimum Balance: 63,814

Average Balance: 127,473

### 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 Third Quarter Ending June 30, 2019

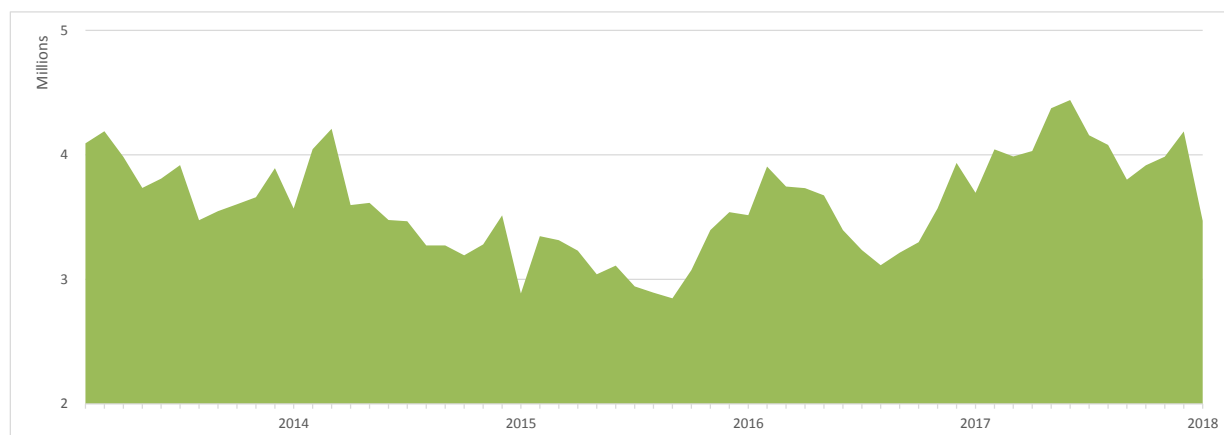
### Definitions and Goals

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.

(In Thousands)	Current Activity		Projected Activity		
	Quarter-End	Year-to-Date	2019	2020	2021
Opening Balance	\$ 4,197	\$ 3,470	\$ 3,470	\$ 4,585	\$ 5,472
Additions:					
Contributions	1,801	4,804	6,910	6,682	6,682
Sub-total	\$ 1,801	\$ 4,804	\$ 6,910	\$ 6,682	\$ 6,682
Withdrawals:					
Withdrawals	1,500	3,776	5,795	5,795	5,795
Sub-total	\$ 1,500	\$ 3,776	\$ 5,795	\$ 5,795	\$ 5,795
Ending Balance	\$ 4,498	\$ 4,498	\$ 4,585	\$ 5,472	\$ 6,359

### Historical Activity

	2014	2015	2016	2017	2018
Opening Balance	\$ 3,891	\$ 3,570	\$ 2,886	\$ 3,515	\$ 3,695
Additions:					
Contributions	6,929	7,059	7,232	6,685	7,088
Sub-total	\$ 6,929	\$ 7,059	\$ 7,232	\$ 6,685	\$ 7,088
Withdrawals:					
Withdrawals	7,250	7,743	6,603	6,505	7,313
Sub-total	\$ 7,250	\$ 7,743	\$ 6,603	\$ 6,505	\$ 7,313
Ending balance	\$ 3,570	\$ 2,886	\$ 3,515	\$ 3,695	\$ 3,470



Maximum Balance: 4,441  
Minimum Balance: 2,848

Average Balance: 3,609

### Observations

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

## Electric System Rate Stabilization - Environmental

**For the Third Quarter Ending June 30, 2019**

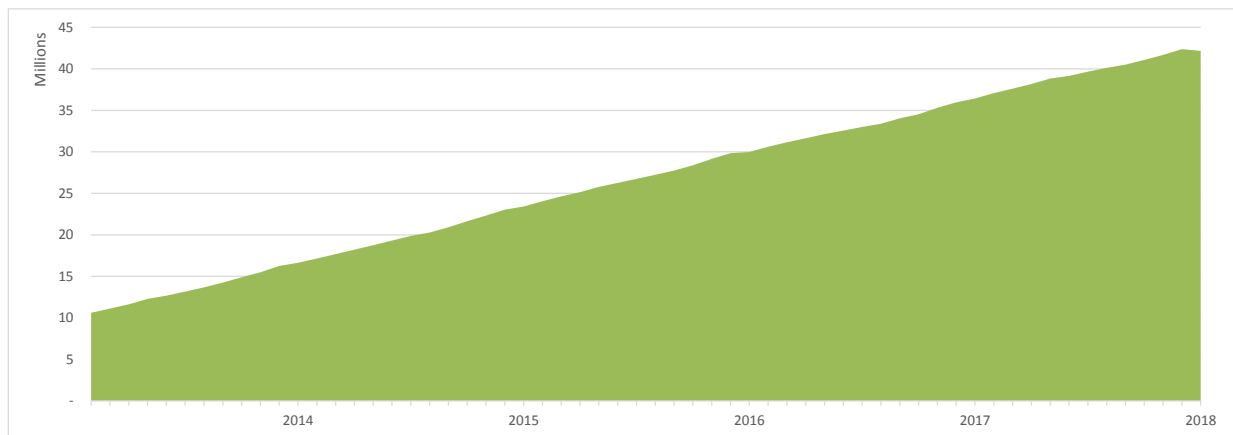
### Definitions and Goals

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.

(In Thousands)	Current Activity		Projected Activity		
	Quarter-End	Year -to-Date	2019	2020	2021
Opening Balance	\$ 44,138	\$ 42,163	\$ 42,163	\$ 47,494	\$ 53,289
Additions:					
Contributions	1,978	5,357	7,563	7,814	7,320
Sub-total	\$ 1,978	\$ 5,357	\$ 7,563	\$ 7,814	\$ 7,320
Withdrawals:					
Withdrawals	326	1,730	2,232	2,019	2,918
Ending Balance	\$ 45,790	\$ 45,790	\$ 47,494	\$ 53,289	\$ 57,691

### Historical Activity

	2014	2015	2016	2017	2018
Opening Balance	\$ 10,023	\$ 16,639	\$ 23,430	\$ 29,975	\$ 36,417
Additions:					
Contributions	7,395	7,586	7,700	7,384	7,572
Sub-total	\$ 7,395	\$ 7,586	\$ 7,700	\$ 7,384	\$ 7,572
Withdrawals:					
Withdrawals	779	795	1,155	942	1,827
Sub-total	\$ 779	\$ 795	\$ 1,155	\$ 942	\$ 1,827
Ending balance	\$ 16,639	\$ 23,430	\$ 29,975	\$ 36,417	\$ 42,163



Maximum Balance: 42,378  
Minimum Balance: 10,602

Average Balance: 26,826

### Observations

- Rate Stabilization Fund for Environmental began in June 2010.

## Electric System Rate Stabilization - Debt Management

**For the Third Quarter Ending June 30, 2019**

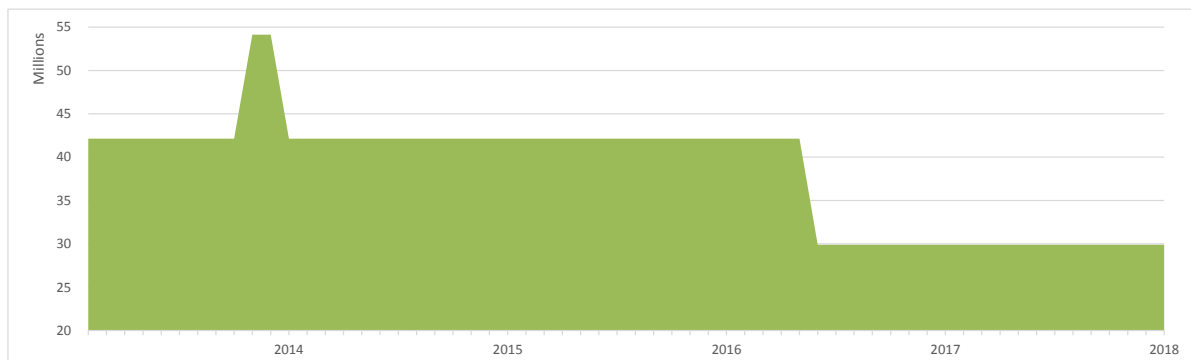
### Definitions and Goals

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. 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.

(In Thousands)	Current Activity		Projected Activity		
	Quarter-End	Year-to-Date	2019	2020	2021
Opening Balance	\$ 29,884	\$ 29,884	\$ 29,884	\$ 29,884	\$ 29,884
Additions:					
Contributions					
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -
Withdrawals:					
Withdrawals			-		
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -
Ending Balance	\$ 29,884	\$ 29,884	\$ 29,884	\$ 29,884	\$ 29,884

### Historical Activity

	2014	2015	2016	2017	2018
Opening Balance	\$ 42,126	\$ 42,126	\$ 42,126	\$ 42,126	\$ 29,884
Additions:					
Contributions					
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -
Withdrawals:					
Withdrawals				12,242	
Sub-total	\$ -	\$ -	\$ -	\$ 12,242	\$ -
Ending balance	\$ 42,126	\$ 42,126	\$ 42,126	\$ 29,884	\$ 29,884



Maximum Balance: 54,126  
Minimum Balance: 29,884

Average Balance: 38,445

### Observations

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

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

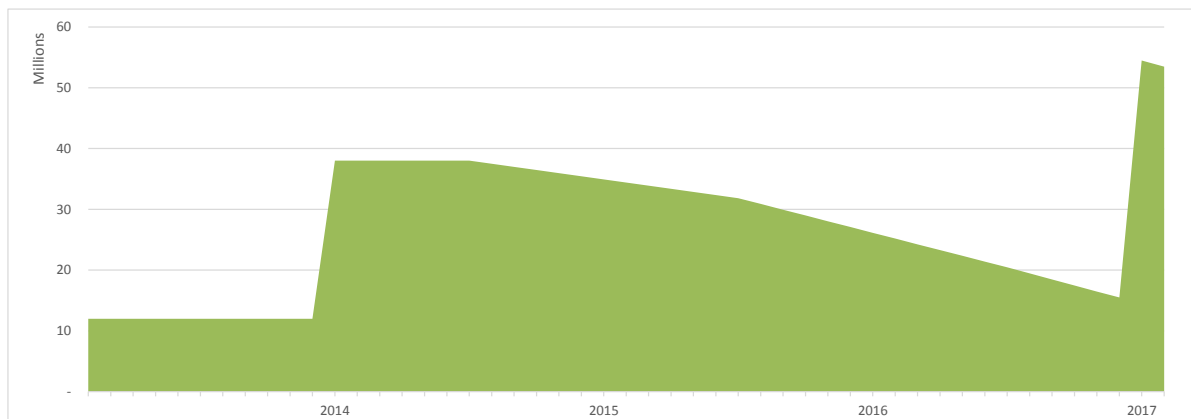
For the Third Quarter Ending June 30, 2019

### 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.

(In Thousands)	Current Activity		Projected Activity		
	Quarter-End	Year -to-Date	2019	2020	2021
Opening Balance	\$ 47,564	\$ 53,493	\$ 53,493	\$ 57,987	\$ 36,379
Additions:					
Contributions			17,566		
Sub-total	\$ -	\$ -	\$ 17,566	\$ -	\$ -
Withdrawals:					
Withdrawals	3,561	9,490	13,072	21,608	34,325
Ending Balance	\$ 44,003	\$ 44,003	\$ 57,987	\$ 36,379	\$ 2,054

Historical Activity					
	2014	2015	2016	2017	2018
Opening Balance	\$ -	\$ 12,000	\$ 38,000	\$ 34,400	\$ 25,189
Additions:					
Contributions	12,000	26,000			40,000
Sub-total	\$ 12,000	\$ 26,000	\$ -	\$ -	\$ 40,000
Withdrawals:					
Withdrawals			3,600	9,211	11,696
Sub-total	\$ -	\$ -	\$ 3,600	\$ 9,211	\$ 11,696
Ending balance	\$ 12,000	\$ 38,000	\$ 34,400	\$ 25,189	\$ 53,493



Maximum Balance: 54,488  
Minimum Balance: 12,000

Average Balance: 26,883

### Observations

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

## Electric System Environmental Reserve

For the Third Quarter Ending June 30, 2019

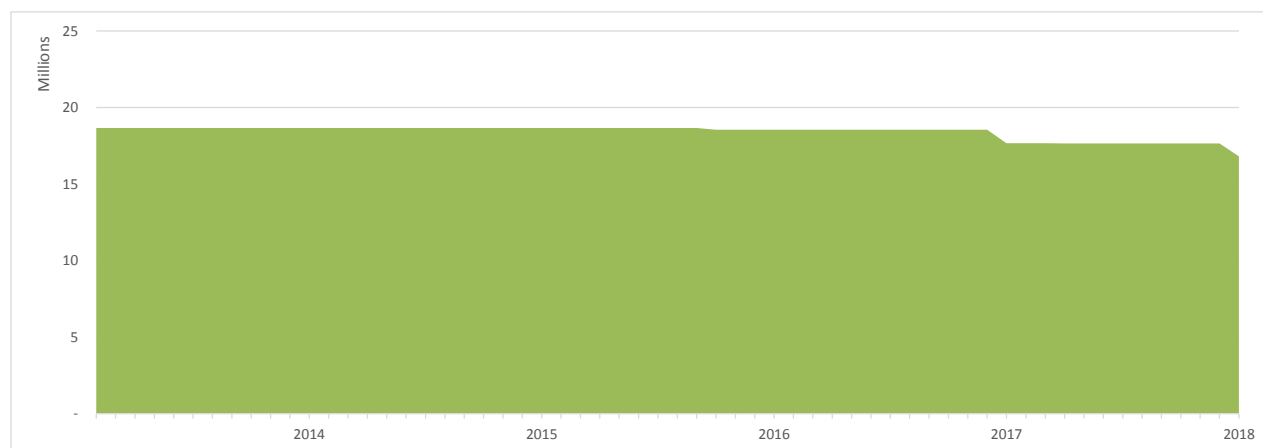
### Definitions and Goals

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.

(In Thousands)	Current Activity		Projected Activity		
	Quarter-End	Year -to-Date	2019	2020	2021
Opening Balance	\$ 16,808	\$ 16,818	\$ 16,818	\$ 16,568	\$ 16,068
Additions:					
Contributions					
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -
Withdrawals:					
Withdrawals	240	250	250	500	5,000
Ending Balance	\$ 16,568	\$ 16,568	\$ 16,568	\$ 16,068	\$ 11,068

### Historical Activity

	2014	2015	2016	2017	2018
Opening Balance	\$ 18,662	\$ 18,662	\$ 18,662	\$ 18,556	\$ 17,672
Additions:					
Contributions					
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -
Withdrawals:					
Withdrawals			106	884	854
Sub-total	\$ -	\$ -	\$ 106	\$ 884	\$ 854
Ending balance	\$ 18,662	\$ 18,662	\$ 18,556	\$ 17,672	\$ 16,818



Maximum Balance: 18,662  
Minimum Balance: 16,818

Average Balance: 18,403

### Observations

- The Environmental Reserve began in FY 2008.



## Electric System Customer Deposits

For the Third Quarter Ending June 30, 2019

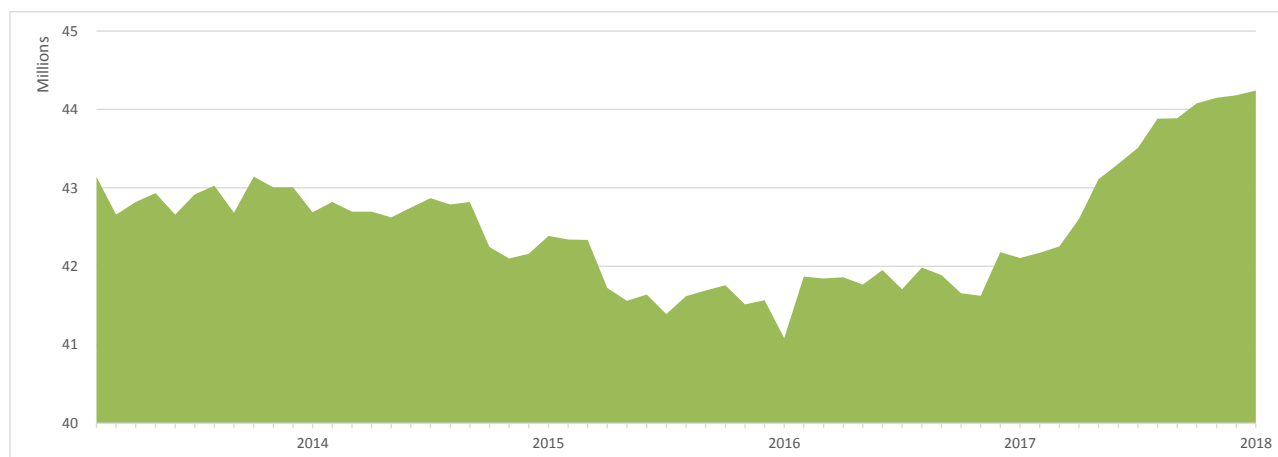
### Definitions and Goals

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.

(In Thousands)	Current Activity		Projected Activity		
	Quarter-End	Year -to-Date	2019	2020	2021
Opening Balance	\$ 44,543	\$ 44,242	\$ 44,242	\$ 44,439	\$ 44,439
Additions:					
Net Customer Activity		197	197		
Sub-total	\$ -	\$ 197	\$ 197	\$ -	\$ -
Withdrawals:					
Net Customer Activity	104				
Ending Balance	\$ 44,439	\$ 44,439	\$ 44,439	\$ 44,439	\$ 44,439

### Historical Activity

	2014	2015	2016	2017	2018
Opening Balance	\$ 44,882	\$ 42,688	\$ 42,389	\$ 41,084	\$ 42,105
Additions:					
Net Customer Activity				1,021	2,137
Sub-total	\$ -	\$ -	\$ -	\$ 1,021	\$ 2,137
Withdrawals:					
Net Customer Activity	2,194	299	1,305		
Sub-total	\$ 2,194	\$ 299	\$ 1,305	\$ -	\$ -
Ending balance	\$ 42,688	\$ 42,389	\$ 41,084	\$ 42,105	\$ 44,242



Maximum Balance: 44,242  
Minimum Balance: 41,084

Average Balance: 42,495

### Observations

## Electric System Debt Service Sinking Fund

For the Third Quarter Ending June 30, 2019

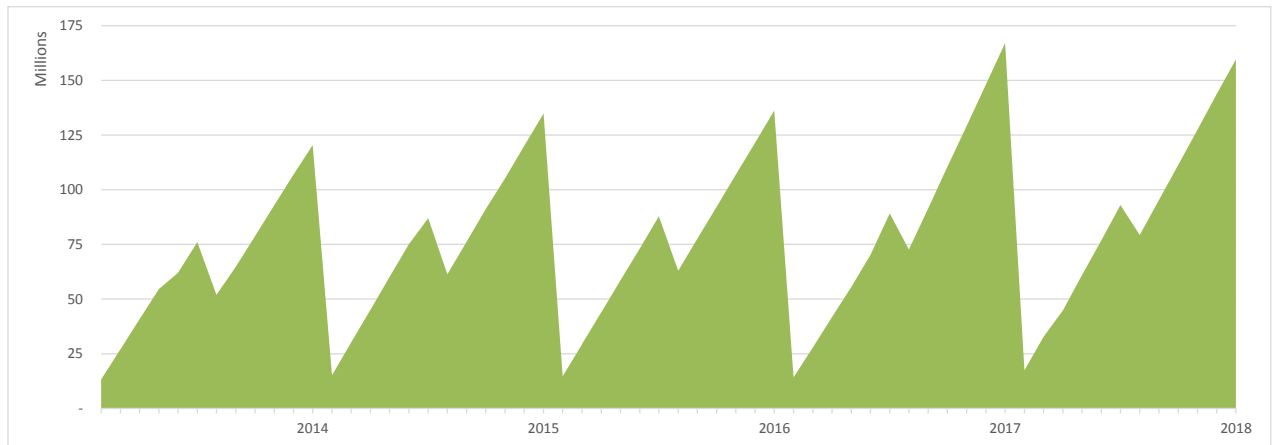
### Definitions and Goals

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)	Current Activity		Projected Activity		
	Quarter-End	Year -to-Date	2019	2020	2021
Opening Balance	\$ 87,603	\$ 159,656	\$ 159,656	\$ 145,808	\$ 87,830
Additions:					
Revenue Fund Deposits	46,211	140,352	186,503	130,420	131,677
Sub-total	\$ 46,211	\$ 140,352	\$ 186,503	\$ 130,420	\$ 131,677
Withdrawals:					
Principal and Int Payments	31,533	197,727	200,351	188,398	134,212
Ending Balance	\$ 102,281	\$ 102,281	\$ 145,808	\$ 87,830	\$ 85,295

### Historical Activity

	2014	2015	2016	2017	2018
Opening Balance	\$ 101,305	\$ 120,458	\$ 134,927	\$ 136,232	\$ 167,087
Additions:					
Revenue Fund Deposits	167,340	181,006	177,847	209,450	201,359
Sub-total	\$ 167,340	\$ 181,006	\$ 177,847	\$ 209,450	\$ 201,359
Withdrawals:					
Principal and Int Payments	148,187	166,537	176,542	178,595	208,790
Sub-total	\$ 148,187	\$ 166,537	\$ 176,542	\$ 178,595	\$ 208,790
Ending balance	\$ 120,458	\$ 134,927	\$ 136,232	\$ 167,087	\$ 159,656



Maximum Balance: 167,087  
Minimum Balance: 13,302

Average Balance: 77,616

### 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).
- Projections are based on the debt outstanding as of December 31, 2018.

## Electric System Debt Service Reserve Account

For the Third Quarter Ending June 30, 2019

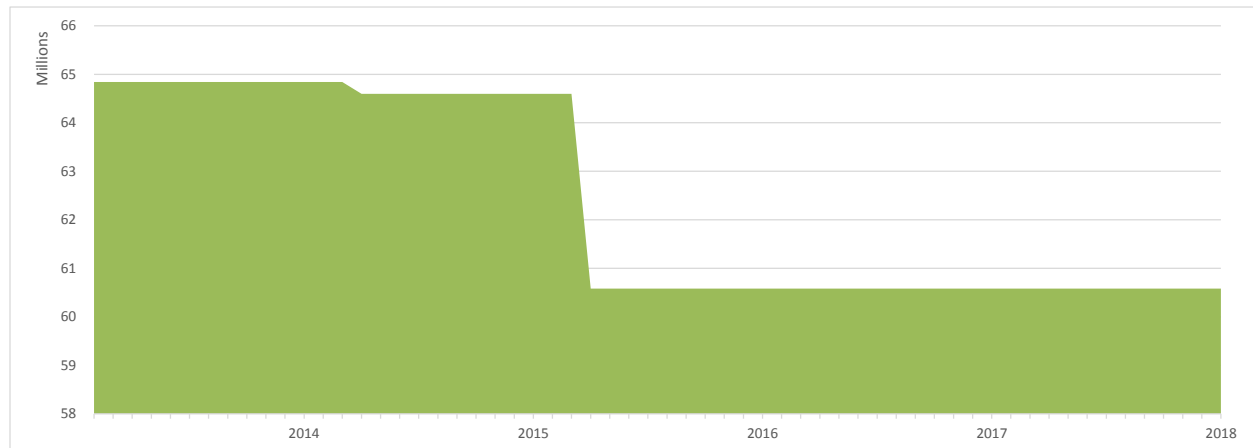
### Definitions and Goals

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)	Current Activity		Projected Activity		
	Quarter-End	Year -to-Date	2019	2020	2021
Opening Balance	\$ 60,582	\$ 60,582	\$ 60,582	\$ 60,582	\$ 60,582
Additions:					
Proceeds from Bonds					
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -
Withdrawals:					
Release to Revenue Fund					
Ending Balance	\$ 60,582	\$ 60,582	\$ 60,582	\$ 60,582	\$ 60,582

### Historical Activity

	2014	2015	2016	2017	2018
Opening Balance	\$ 64,841	\$ 64,841	\$ 64,595	\$ 60,582	\$ 60,582
Additions:					
Proceeds from Bonds					
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -
Withdrawals:					
Release to Revenue Fund		246	4,013		
Sub-total	\$ -	\$ 246	\$ 4,013	\$ -	\$ -
Ending balance	\$ 64,841	\$ 64,595	\$ 60,582	\$ 60,582	\$ 60,582



Maximum Balance: 64,841  
Minimum Balance: 60,582

Average Balance: 62,378

### Observations

- This report does not include any Scherer debt service reserves.

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

For the Third Quarter Ending June 30, 2019

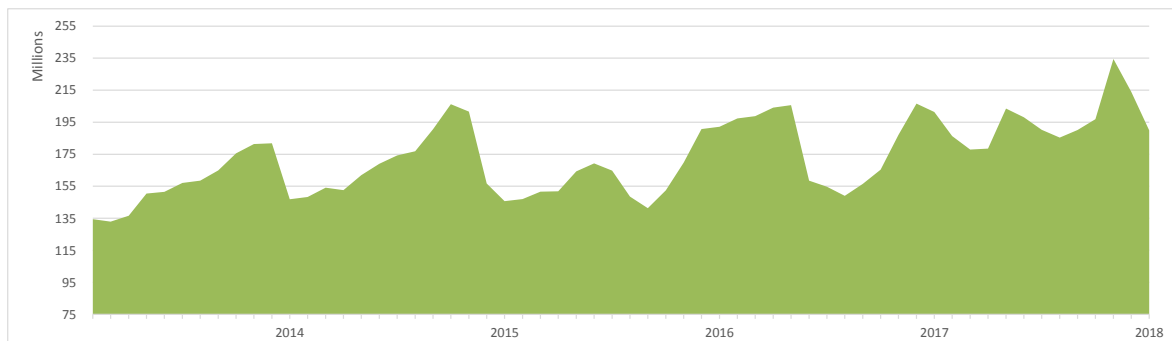
### Definitions and Goals

Pursuant to the 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. In addition, as a portion of the base rate, JEA will recover from current revenue a formula driven amount for capital expenditures known 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)	Current Activity		Projected Activity		
	Quarter-End	Year -to-Date	2019	2020	2021
Opening Balance	\$ 65,955	\$ 189,922	\$ 189,922	\$ 26,201	\$ 16,522
Additions:					
R&R/OCO Contribution	61,112	128,337	183,836	232,000	282,000
Transfers Loans betw Capital Fds			201		
Other	2,056	18,234	20,680	5,500	2,000
Sub-total	\$ 63,168	\$ 146,571	\$ 204,717	\$ 237,500	\$ 284,000
Withdrawals:					
Capital Expenditures	70,627	207,997	275,438	247,179	286,554
Transfers betw Capital Fds					
Debt Defeasance		70,000	93,000		
Other					
Sub-total	\$ 70,627	\$ 277,997	\$ 368,438	\$ 247,179	\$ 286,554
Ending Balance	\$ 58,496	\$ 58,496	\$ 26,201	\$ 16,522	\$ 13,968

### Historical Activity

	2014	2015	2016	2017	2018
Opening Balance	\$ 140,486	\$ 146,910	\$ 145,711	\$ 192,179	\$ 201,368
Additions:					
R&R/OCO Contribution	85,639	110,351	200,692	196,589	148,105
Loans betw Capital Fds	-				
Other	4,014	970	3,744	5,074	35,675
Sub-total	\$ 89,653	\$ 111,321	\$ 204,436	\$ 201,663	\$ 183,780
Withdrawals:					
Capital Expenditures	82,889	112,483	157,201	113,987	181,263
Transfers/loans b/w Capital Fds	340	37	765	37,200	
Debt Defeasance					
Other			2	41,287	13,963
Sub-total	\$ 83,229	\$ 112,520	\$ 157,968	\$ 192,474	\$ 195,226
Ending balance	\$ 146,910	\$ 145,711	\$ 192,179	\$ 201,368	\$ 189,922



Maximum Balance: 234,504  
Minimum Balance: 132,931

Average Balance: 173,065

### Observations

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

## Electric System Construction / Bond Fund

For the Third Quarter Ending June 30, 2019

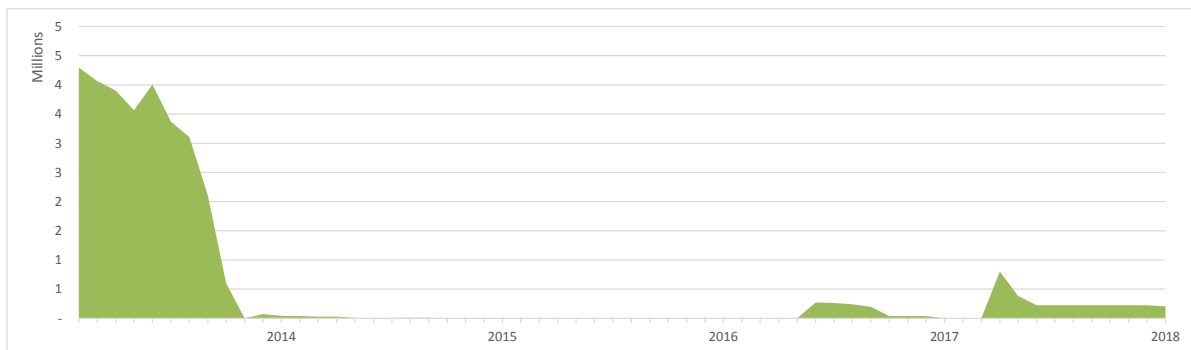
### Definitions and Goals

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)	Current Activity		Projected Activity		
	Quarter-End	Year -to-Date	2019	2020	2021
Opening Balance	\$ 201	\$ 203	\$ 203	\$ -	\$ -
Additions:					
Bond Proceeds					
Loans betw Capital Fds					
Other					
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -
Withdrawals:					
Transfers betw Capital Fds	201	201	203		
Other		2			
Sub-total	\$ 201	\$ 203	\$ 203	\$ -	\$ -
Ending Balance	\$ -	\$ -	\$ -	\$ -	\$ -

### Historical Activity

	2014	2015	2016	2017	2018
Opening Balance	\$ 5,184	\$ 42	\$ 4	\$ -	\$ -
Additions:					
Bond Proceeds				429	805
Loans betw Capital Fds	3,091				
Other	340	37	2		
Sub-total	\$ 3,431	\$ 37	\$ 2	\$ 429	\$ 805
Withdrawals:					
Capital Expenditures	4,821	75	6		
Transfers/loans b/w Capital Fds	3,091				
Other	661			429	602
Sub-total	\$ 8,573	\$ 75	\$ 6	\$ 429	\$ 602
Ending balance	\$ 42	\$ 4	\$ -	\$ -	\$ 203



Maximum Balance: 4,299  
Minimum Balance: -

Average Balance: 555

### 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 projected for FY 2019.

## Water and Sewer System Rate Stabilization - Debt Management

For the Third Quarter Ending June 30, 2019

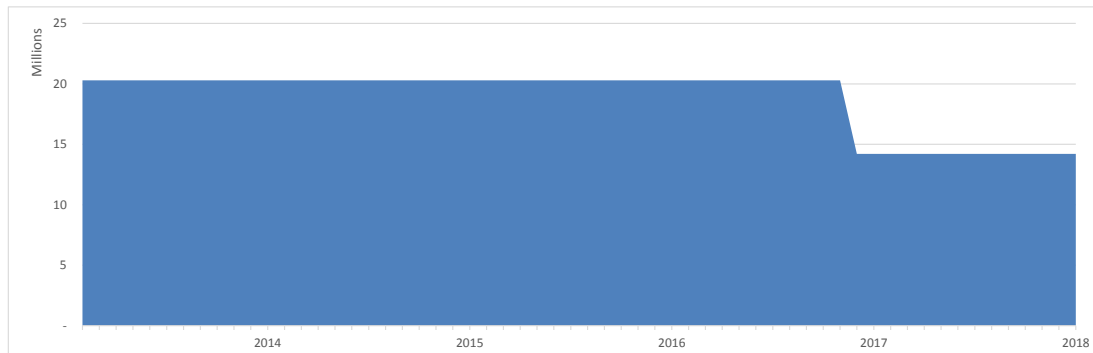
### Definitions and Goals

The Water & Sewer System Bond Resolution authorizes the establishment of a Rate Stabilization Fund ("RSF") 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 RSF 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.

	Current Activity		Projected Activity		
	Quarter-End	Year -to-Date	2019	2020	2021
(In Thousands)					
Opening Balance	\$ 14,209	\$ 14,209	\$ 14,209	\$ 14,209	\$ 14,209
Additions:					
Contributions					
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -
Withdrawals:					
Withdrawals			-		
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -
Ending Balance	\$ 14,209	\$ 14,209	\$ 14,209	\$ 14,209	\$ 14,209

### Historical Activity

	2014	2015	2016	2017	2018
Opening Balance	\$ 20,290	\$ 20,290	\$ 20,290	\$ 20,290	\$ 14,209
Additions:					
Contributions					
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -
Withdrawals:					
Withdrawals				6,081	
Sub-total	\$ -	\$ -	\$ -	\$ 6,081	\$ -
Ending balance	\$ 20,290	\$ 20,290	\$ 20,290	\$ 14,209	\$ 14,209



Maximum Balance: 20,290  
Minimum Balance: 14,209

Average Balance: 18,871

### Observations

- Contributions began in June 2009.

## Water & Sewer System Rate Stabilization - Environmental

**For the Third Quarter Ending June 30, 2019**

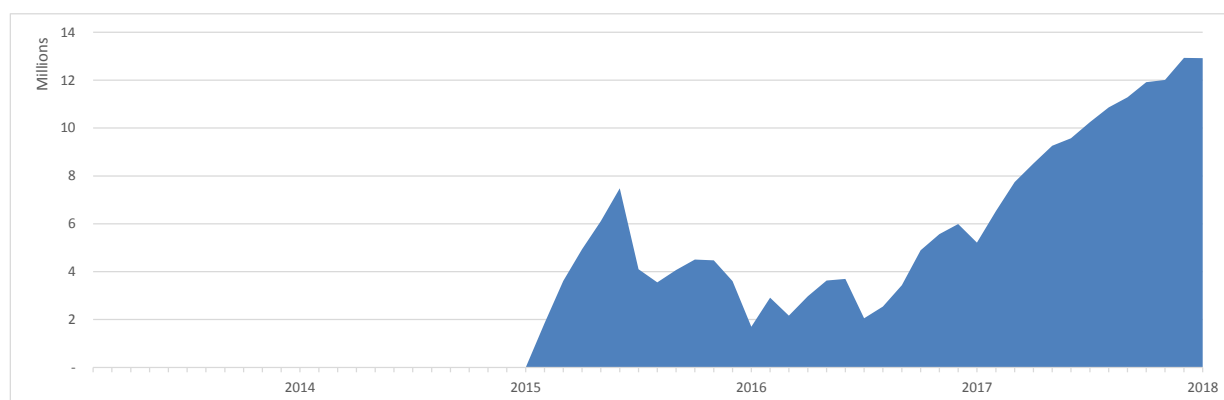
### Definitions and Goals

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.

	Current Activity		Projected Activity		
(In Thousands)	Quarter-End	Year -to-Date	2019	2020	2021
Opening Balance	\$ 15,319	\$ 12,914	\$ 12,914	\$ 12,482	\$ 12,482
Additions:					
Contributions	6,856	18,310	25,228	26,687	26,954
Sub-total	\$ 6,856	\$ 18,310	\$ 25,228	\$ 26,687	\$ 26,954
Withdrawals:					
Withdrawals	6,513	15,562	25,660	26,687	26,954
COJ Septic Tank Agreement		-	-		
Sub-total	\$ 6,513	\$ 15,562	\$ 25,660	\$ 26,687	\$ 26,954
Ending Balance	\$ 15,662	\$ 15,662	\$ 12,482	\$ 12,482	\$ 12,482

### Historical Activity

	2014	2015	2016	2017	2018
Opening Balance	\$ -	\$ -	\$ -	\$ 1,699	\$ 5,214
Additions:					
Contributions			23,635	24,362	23,829
Sub-total	\$ -	\$ -	\$ 23,635	\$ 24,362	\$ 23,829
Withdrawals:					
Withdrawals			21,936	20,847	16,129
Sub-total	\$ -	\$ -	\$ 21,936	\$ 20,847	\$ 16,129
Ending balance	\$ -	\$ -	\$ 1,699	\$ 5,214	\$ 12,914



Maximum Balance: 12,930  
Minimum Balance: 1,699

Average Balance: 6,079

### Observations

- Rate Stabilization Fund for Environmental began in June 2010.

## Water and Sewer System Customer Deposits

**For the Third Quarter Ending June 30, 2019**

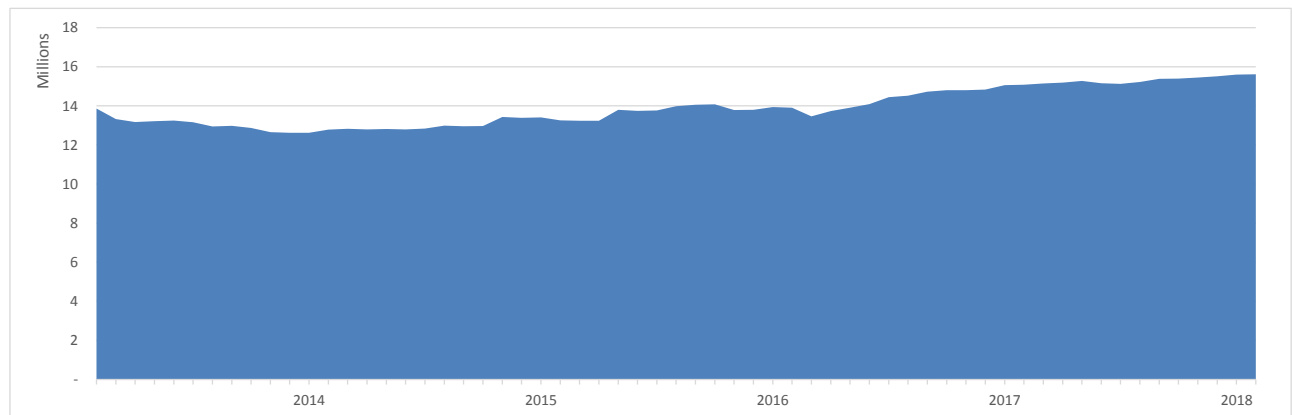
### Definitions and Goals

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.

	Current Activity		Projected Activity		
(In Thousands)	Quarter-End	Year -to-Date	2019	2020	2021
Opening Balance	\$ 15,958	\$ 15,616	\$ 15,616	\$ 15,958	\$ 15,958
Additions:					
Allocated from Electric	48	390	342		
Sub-total	\$ 48	\$ 390	\$ 342	\$ -	\$ -
Withdrawals:					
Allocated from Electric					
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -
Ending Balance	\$ 16,006	\$ 16,006	\$ 15,958	\$ 15,958	\$ 15,958

### Historical Activity

	2014	2015	2016	2017	2018
Opening Balance	\$ 13,860	\$ 12,787	\$ 13,255	\$ 13,910	\$ 15,086
Additions:					
Allocated from Electric		468	655	1,176	530
Sub-total	\$ -	\$ 468	\$ 655	\$ 1,176	\$ 530
Withdrawals:					
Allocated from Electric	1,073				
Sub-total	\$ 1,073	\$ -	\$ -	\$ -	\$ -
Ending balance	\$ 12,787	\$ 13,255	\$ 13,910	\$ 15,086	\$ 15,616



Maximum Balance: 15,616  
Minimum Balance: 12,619

Average Balance: 13,915

### Observations



## Water and Sewer System Debt Service Sinking Fund

**For the Third Quarter Ending June 30, 2019**

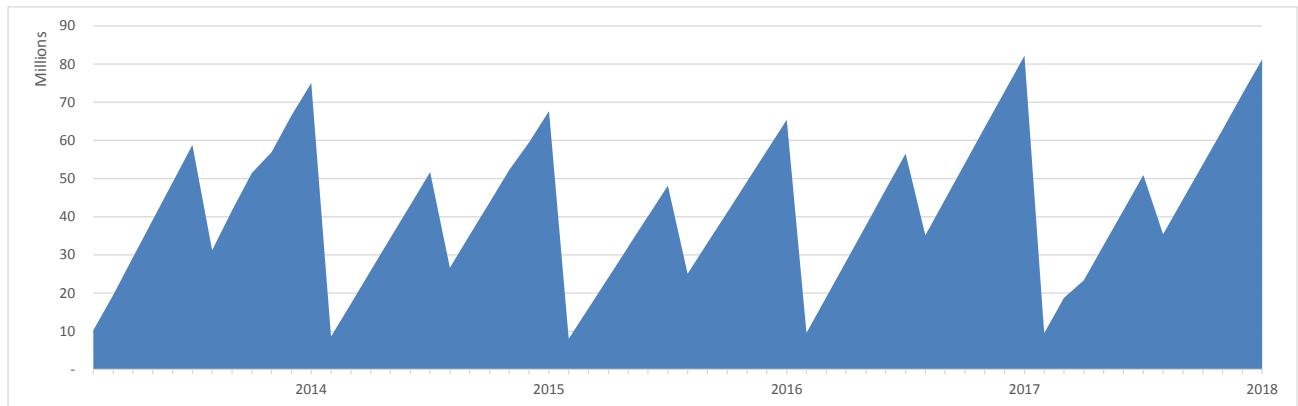
### Definitions and Goals

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)	Current Activity		Projected Activity		
	Quarter-End	Year -to-Date	2019	2020	2021
Opening Balance	\$ 53,663	\$ 81,241	\$ 81,241	\$ 81,040	\$ 45,096
Additions:					
Revenue fund deposits	27,665	84,775	112,634	76,936	81,011
Sub-total	\$ 27,665	\$ 84,775	\$ 112,634	\$ 76,936	\$ 81,011
Withdrawals:					
Principal and interest payments	27,073	111,761	112,835	112,880	78,746
Sub-total	\$ 27,073	\$ 111,761	\$ 112,835	\$ 112,880	\$ 78,746
Ending Balance	\$ 54,255	\$ 54,255	\$ 81,040	\$ 45,096	\$ 47,361

### Historical Activity

	2014	2015	2016	2017	2018
Opening Balance	\$ 80,317	\$ 75,019	\$ 67,720	\$ 65,410	\$ 82,208
Additions:					
Revenue fund deposits	117,444	102,789	97,077	114,873	113,636
Sub-total	\$ 117,444	\$ 102,789	\$ 97,077	\$ 114,873	\$ 113,636
Withdrawals:					
Principal and interest payments	122,742	110,088	99,387	98,075	114,603
Sub-total	\$ 122,742	\$ 110,088	\$ 99,387	\$ 98,075	\$ 114,603
Ending balance	\$ 75,019	\$ 67,720	\$ 65,410	\$ 82,208	\$ 81,241



Maximum Balance: 82,208  
Minimum Balance: 8,019

Average Balance: 41,856

### 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).
- Projections are based on the debt outstanding as of December 31, 2018.

## Water and Sewer System Debt Service Reserve Account

**For the Third Quarter Ending June 30, 2019**

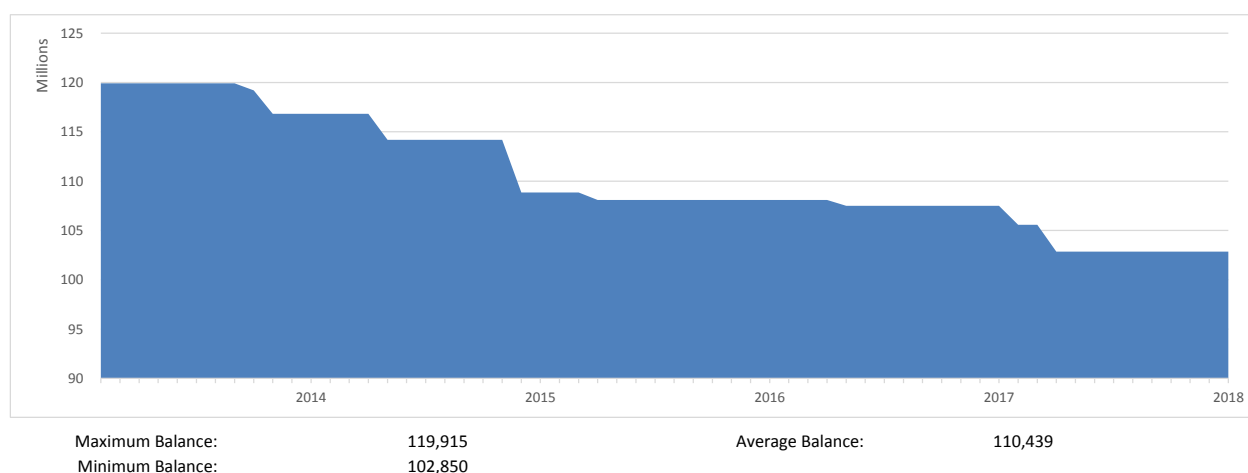
### Definitions and Goals

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)	Current Activity		Projected Activity		
	Quarter-End	Year -to-Date	2019	2020	2021
Opening Balance	\$ 63,442	\$ 102,850	\$ 102,850	\$ 63,442	\$ 63,442
Additions:					
Construction reserves/bond issues					
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -
Withdrawals:					
Revenue fund		5,524	5,524		
Construction fund		33,884	33,884		
Sub-total	\$ -	\$ 39,408	\$ 39,408	\$ -	\$ -
Ending Balance	\$ 63,442	\$ 63,442	\$ 63,442	\$ 63,442	\$ 63,442

### Historical Activity

	2014	2015	2016	2017	2018
Opening Balance	\$ 119,915	\$ 116,829	\$ 108,849	\$ 108,086	\$ 107,488
Additions:					
Construction reserves/bond issues					
Revenue fund					
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -
Withdrawals:					
Revenue fund	3,086	7,980	763	598	4,638
Sub-total	\$ 3,086	\$ 7,980	\$ 763	\$ 598	\$ 4,638
Ending balance	\$ 116,829	\$ 108,849	\$ 108,086	\$ 107,488	\$ 102,850



### 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 allowed the release of \$33.8 million to the Construction Fund.

## Water and Sewer System Renewal and Replacement (R&R) / Operating Capital Outlay (OCO)

**For the Third Quarter Ending June 30, 2019**

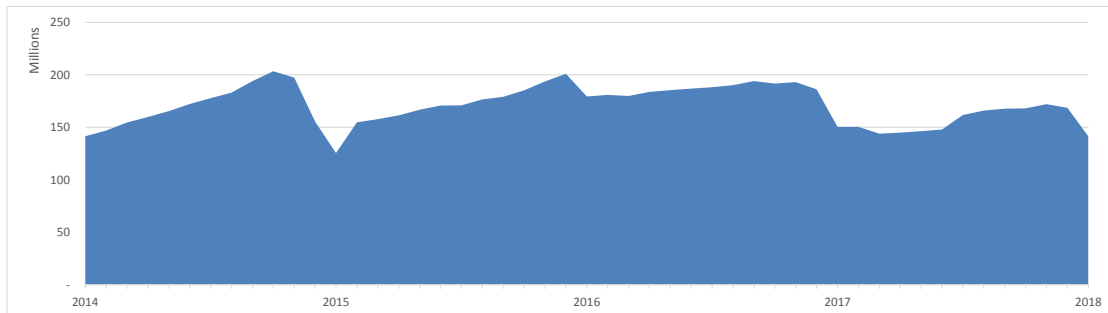
### Definitions and Goals

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. 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.

	Current Activity		Projected Activity		
	Quarter-End	Year -to-Date	2019	2020	2021
(In Thousands)					
Opening Balance	\$ 38,856	\$ 141,415	\$ 141,415	\$ 24,667	\$ 12,806
Additions:					
R&R/OCO Contribution	50,367	108,200	157,177	160,647	163,064
Capacity Fees	7,671	21,084	27,461	27,347	26,797
Transfer from Capital Fds	268	268	268		
Other	2,372	5,191	8,973	9,151	9,051
Sub-total	\$ 60,678	\$ 134,743	\$ 193,879	\$ 197,145	\$ 198,912
Withdrawals:					
Capital Expenditures	43,249	120,663	183,917	209,006	193,542
Debt Defeasance		99,189	126,688		
Other	1	22	22		
Sub-total	\$ 43,250	\$ 219,874	\$ 310,627	\$ 209,006	\$ 193,542
Ending Balance	\$ 56,284	\$ 56,284	\$ 24,667	\$ 12,806	\$ 18,176

### Historical Activity

	2014	2015	2016	2017	2018
Opening Balance	\$ 139,049	\$ 136,182	\$ 128,249	\$ 179,431	\$ 150,319
Additions:					
R&R/OCO Contribution	48,373	62,793	124,574	108,119	153,372
Capacity Fees	18,298	19,579	21,995	24,777	28,002
Loans betw Capital Fds		22		137	
Other (incl septic tank)	1,614	904	31,041	8,050	6,383
Sub-total	\$ 68,285	\$ 83,298	\$ 177,610	\$ 141,083	\$ 187,757
Withdrawals:					
Capital Expenditures	69,246	91,231	126,322	165,242	196,637
Loan Repayment	-	-	-	4,953	24
Transfer to Constr. Fund	1,893		106		
Other (incl septic tank)	13	-	-		
Sub-total	\$ 71,152	\$ 91,231	\$ 126,428	\$ 170,195	\$ 196,661
Ending balance	\$ 136,182	\$ 128,249	\$ 179,431	\$ 150,319	\$ 141,415



Maximum Balance: 203,406  
Minimum Balance: 125,438

Average Balance: 167,667

### Observations

- Other includes the Septic Tank Phase-out project, Sale of Property, and the transfer of RSF - Environmental in FY 2016 - 2019.

## Water and Sewer System - Environmental Fund [Capital Projects]

**For the Third Quarter Ending June 30, 2019**

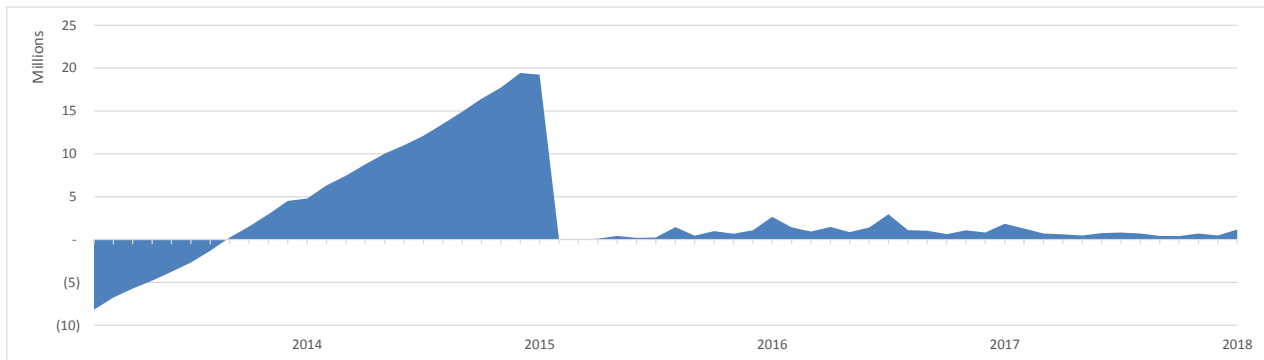
### Definitions and Goals

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.

	Current Activity		Projected Activity		
(In Thousands)	Quarter-End	Year -to-Date	2019	2020	2021
Opening Balance	\$ 533	\$ 1,159	\$ 1,159	\$ 1,710	\$ 1,000
Additions:					
Environmental Contributions	3,635	7,352	14,472	13,561	25,548
Loans betw Capital Fds					
Other					
Sub-total	\$ 3,635	\$ 7,352	\$ 14,472	\$ 13,561	\$ 25,548
Withdrawals:					
Capital Expenditures	3,742	8,085	13,921	14,271	25,548
Other					
Sub-total	\$ 3,742	\$ 8,085	\$ 13,921	\$ 14,271	\$ 25,548
Ending Balance	\$ 426	\$ 426	\$ 1,710	\$ 1,000	\$ 1,000

### Historical Activity

	2014	2015	2016	2017	2018
Opening Balance	\$ (9,857)	\$ 5,299	\$ -	\$ 2,659	\$ 1,839
Additions:					
Environmental Contributions	21,018	22,056	15,539	12,394	6,691
Loans betw Capital Fds					
Other					
Sub-total	\$ 21,018	\$ 22,056	\$ 15,539	\$ 12,394	\$ 6,691
Withdrawals:					
Capital Expenditures	5,862	7,318	12,880	13,214	7,370
Septic Tank Phase Out		203			
Other		19,834			1
Sub-total	\$ 5,862	\$ 27,355	\$ 12,880	\$ 13,214	\$ 7,371
Ending balance	\$ 5,299	\$ -	\$ 2,659	\$ 1,839	\$ 1,159



Maximum Balance:  
Minimum Balance:

19,439  
(8,192)

Average Balance:

2,832

### Observations

## Water and Sewer System - Construction / Bond Fund

For the Third Quarter Ending June 30, 2019

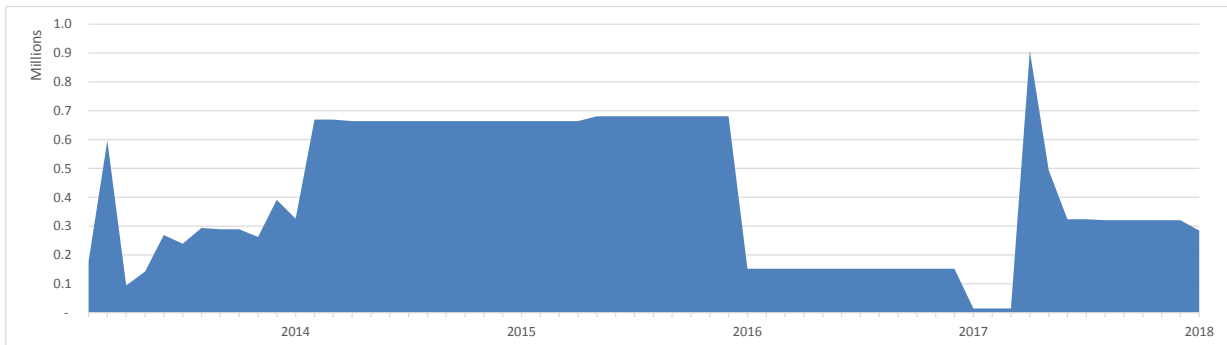
### Definitions and Goals

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)	Current Activity		Projected Activity		
	Quarter-End	Year -to-Date	2019	2020	2021
Opening Balance	\$ 29,781	\$ 284	\$ 284	\$ 27,468	\$ 12,468
Additions:					
Bond Proceeds		33,884	33,884		
Line of Credit					
Other					
Sub-total	\$ -	\$ 33,884	\$ 33,884	\$ -	\$ -
Withdrawals:					
Capital Expenditures / Bond Issue Costs	530	4,915	6,430	15,000	12,468
Other	268	270	270		
Ending Balance	\$ 28,983	\$ 28,983	\$ 27,468	\$ 12,468	\$ -

### Historical Activity

	2014	2015	2016	2017	2018
Opening Balance	\$ 2,305	\$ 326	\$ 664	\$ 152	\$ 15
Additions:					
Bond Proceeds	-				894
Line of Credit	-				
Loans/transfers b/w Capital Fds	1,893				
Other	476	344	17		
Sub-total	\$ 2,369	\$ 344	\$ 17	\$ -	\$ 894
Withdrawals:					
Capital Expenditures	3,784	6			623
Bond Proceeds	48				
Loans/trnsf btw CapFds	516				
Other			529	137	2
Sub-total	\$ 4,348	\$ 6	\$ 529	\$ 137	\$ 625
Ending balance	\$ 326	\$ 664	\$ 152	\$ 15	\$ 284



Maximum Balance: 907  
Minimum Balance: 15

Average Balance: 410

### 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.



## **INTER-OFFICE MEMORANDUM**

August 19, 2019

**SUBJECT: JEA ENERGY MARKET RISK MANAGEMENT POLICY REPORT**

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

**TO:** JEA Finance and Audit Committee

Kelly Flanagan, Chair  
April Green  
John Campion

### **BACKGROUND:**

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 one year or greater and all financial transactions.

### **DISCUSSION:**

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. The costs of financial transactions are reflected in comparison to market indices. The benefits include establishment of a stable fuel price for the future.

### **RECOMMENDATION:**

None required. The report is required by the EMRM Policy and is provided as information.

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

AFZ/CBA/WGB

### Energy Market Risk Management: Physical and Financial Positions

Summary as of 7/1/2019		
Projected FY19 Expense (Budget = \$418M)	\$425M	☹
Projected FY19 Fuel Fund Ending Balance (Target = \$75M)	\$47M	☹
Projected FY20 Fuel Expense (Budget = \$373M)	\$359M	☺
Projected FY20 Fuel Fund Ending Balance (Target = \$68M)	\$79M	☺
EMRM Compliance	Yes	☺
Counterparty Credit Limit Exceptions	No	☺
Any Issues of Concern	No	☺

**Table 1: Physical Counterparties (Contracts One Year or Greater) as of 7/1/2019**

Generating Unit	Fuel Type	Supplier/Counterparty	Contract Type	Remaining Contract Value	Remaining Contract Term
Scherer 4	Coal	CY19 Blackjewel - Eagle Butte - 001	Fixed Price	\$1,423,334	6 months
Scherer 4	Coal	CY19 Blackjewel - Eagle Butte - 004	Fixed Price	\$558,298	6 months
Scherer 4	Coal	CY19 Peabody Caballo - 005	Fixed Price	\$1,304,615	6 months
Scherer 4	Coal	CY20 Blackjewel - Eagle Butte - 001	Fixed Price	\$3,018,716	12 months
Scherer 4	Coal	CY20 Peabody Caballo - 003	Fixed Price	\$750,800	12 months
Scherer 4	Coal	CY20 Buckskin - 006	Fixed Price	\$290,600	12 months
Scherer 4	Coal	CY21 Blackjewel - Eagle Butte - 002	Fixed Price	\$691,264	12 months
Scherer 4	Coal	CY21 Peabody Caballo - 003	Fixed Price	\$770,250	12 months
Scherer 4	Coal	CY21 Peabody Caballo - 004	Fixed Price	\$459,734	12 months
Scherer 4	Coal	CY21 Blackjewel - Eagle Butte - 005	Fixed Price	\$276,597	12 months
Scherer 4	Coal	CY22 Blackjewel - Eagle Butte - 001	Fixed Price	\$426,657	12 months
Scherer 4	Coal	CY22 Peabody Caballo - 002	Fixed Price	\$315,968	12 months
Scherer 4	Coal	CY22 Peabody Caballo - 004	Fixed Price	\$471,630	12 months
Scherer 4	Coal	CY22 Blackjewel - Eagle Butte - 005	Fixed Price	\$568,800	12 months
NS CFB	Limestone	CY17-CY21 Vulcan	Fixed Price	\$19,809,638	2.5 years
NG Fleet	Natural Gas	Shell Energy	Index w/Fixed Price Option	\$107,493,224	1.92 years
NG Fleet	Natural Gas	Main Street/MGAG	Index w/Discount	\$140,309,615	30 years
NG Fleet	Natural Gas	Main Street/MGAG	Index w/Discount	\$132,226,441	30 years
NG Fleet	Natural Gas	Main Street/MGAG	Index w/Discount	\$83,620,300	20 years
* NG Fleet	Natural Gas	Main Street/MGAG	Index w/Discount	\$127,692,423	30 years

\* New this report

**Table 2: Financial Positions as of 7/1/2019**

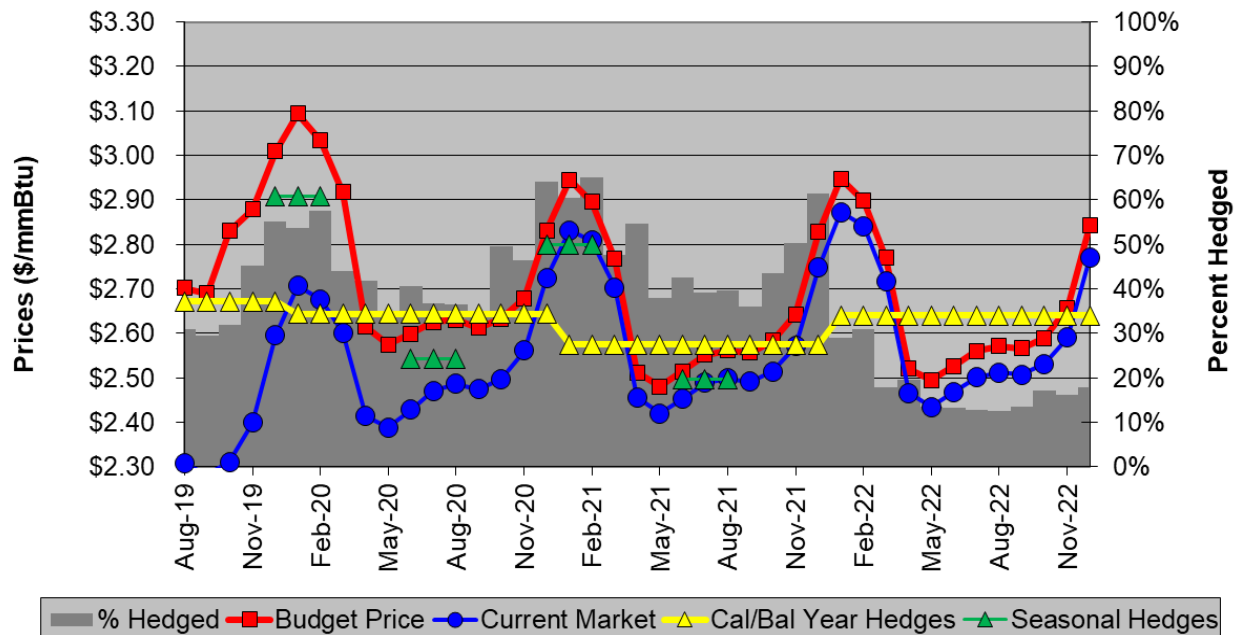
Year	Commodity	Physical Volume (mmBtu)	Hedged Volume (mmBtu)	Percent Hedged	Unhedged Cost	Hedge Type	Hedge Price	Mark-to-Market Value	Counter Party
FY19	Natural Gas	12,090,707	3,660,000	30.3%	\$ 2.30	Swap	\$ 2.67	\$ 1,376,600	Wells Fargo
FY20	Natural Gas	57,498,964	23,790,000	41.4%	\$ 2.50	Swap	\$ 2.65	\$ 3,705,230	Wells Fargo & RBC
FY21	Natural Gas	50,661,838	23,720,000	46.8%	\$ 2.58	Swap	\$ 2.60	\$ 353,440	Wells Fargo & RBC
FY22	Natural Gas	47,111,060	10,980,000	23.3%	\$ 2.60	Swap	\$ 2.61	\$ 71,720	Wells Fargo & RBC
FY23	Natural Gas	44,483,676	1,840,000	4.1%	\$ 2.64	Swap	\$ 2.64	\$ 16,380	RBC

**Table 3: Fuel Procurement as of 7/1/2019**

Fuel Type	Natural Gas	Coal	Petcoke	Limestone	Purchased Power	Oil/Diesel	Renewables
FY19 Remaining / Energy Mix	55%	12%	8%	N/A	24%	0%	1%
Expected Spend (\$)	42.9M	11.5M	7.3M	1.2M	23.1M	1.3M	3.3M
% Procured	41%	84%	100%	100%	78%	100%	100%
% Hedged	34%	84%	100%	100%	47%	100%	100%
FY20 Budget / Energy Mix	57%	17%	17%	N/A	8%	0%	1%
Expected Spend (\$)	150.0M	53.3M	42.6M	8.4M	29.3M	4.0M	13.9M
% Procured	51%	45%	0%	100%	27%	100%	100%
% Hedged	42%	45%	0%	100%	3%	100%	100%
FY21 Projection / Energy Mix	52%	17%	18%	N/A	11%	0%	2%
Expected Spend (\$)	133.6M	58.3M	49.6M	9.4M	44.5M	0.3M	15.5M
% Procured	58%	39%	0%	100%	0%	100%	100%
% Hedged	46%	39%	0%	100%	0%	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 at Scherer CY2019-2022 and quarterly at Northside
- Table 3: FY Energy Mix based on MWH; 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
- Table 1: Natural Gas discount; Municipal Gas Authority of Georgia (MGAG) issues municipal bonds to prepay for gas, allowing them to offer discounts to JEA for qualified use
- Scherer 4 coal supplier, Blackjewel - Eagle Butte, filed for chapter 11 bankruptcy, on Monday July 1. They were denied and forced to close down their mines. Our contracts are pending a final resolution.

**Natural Gas Hedging Positions**

as of 7/1/2019