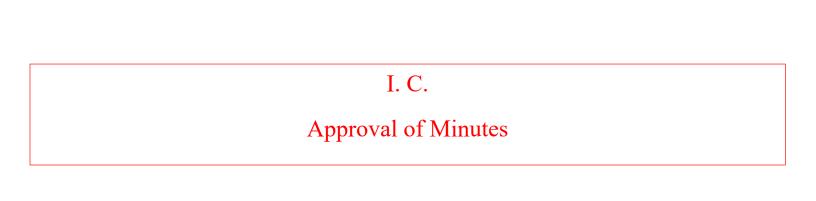
JEA FINANCE & AUDIT COMMITTEE AGENDA

December 3, 2018 DATE: 8:00 – 10:00 AM 21 W. Church Street 8th Floor TIME: PLACE:

				Responsible Person	Action (A)	Total Time
I.	OPE	ENING	CONSIDERATIONS	Kelly Flanagan		
	A.	Call	to Order			
	B.	Ado	ption of Agenda		Α	
	C.	App	roval of Minutes – August 13, 2018	La'Trece Bartley	Α	
II.	NEV	W BUS	SINESS			
	A.	Audi	it Services – Quarterly Audit Services Update	Steve Tuten	I	15 mins.
	B.	Cred	Identity Theft Protection Program Fair and Accurate dit Transactions Act (FACTA) Annual Risk essment	Dan Mishra	I	5 mins.
	C.	Ethic	cs Officer Quarterly Report	Walette Stanford	I	5 mins.
	D.	Trea	asury			
		1.	Electric System and Water and Sewer System Reserve Fund Quarterly Report	Joe Orfano	I	5 mins.
		2.	JEA Calendar Years 2019 and 2020 Fixed Rate Refunding Debt Parameter Resolutions for Electric, Water and Sewer, St. Johns River Power Park and Bulk Power Supply Systems	Joe Orfano	А	5 mins.
	E.	JEA	Energy Market Risk Management Policy Report	Steve McInall	I	5 mins.
	F.	Erns	st & Young FY2018 External Audit Report	John DiSanto	I	45 mins.
	G.	Ann	ouncements			
		1.	Next Meeting, March 18, 2019 8:00 – 10:00 AM			
		Com	nmittee Discussion Sessions			
	H.	1.	Ernst & Young	John DiSanto	I	5 mins.
		2.	Director, Audit Services	Steve Tuten	I	5 mins.
		3.	Council Auditor's Office	Jeff Rodda	I	5 mins.
	I.	Adjo	purnment			



JEA FINANCE & AUDIT COMMITTEE MINUTES August 13, 2018

The Finance & Audit Committee of JEA met on Monday, August 13, 2018 in the 8th Floor Conference Room, JEA Plaza Tower, 21 W. Church Street, Jacksonville, Florida.

Agenda Item I – Opening Considerations

- A. Call to Order Committee Chair Kelly Flanagan attended telephonically and called the meeting to order at 8:00 AM. Board Chair Alan Howard and Vice Chair Husein Cumber in attendance. Others in attendance were Aaron Zahn, Melissa Dykes, Kerri Stewart, Ted Hobson, Jody Brooks, Steve Tuten, Joe Orfano, Walette Stanford, Janice Nelson, Ryan Wannemacher, Steve McInall, Frank DiBenedetto, Kristina Quarterman, Gina Kyle, and Lee Montanez. John DiSanto and Russ Jeans, Ernst & Young.
- B. Adoption of Agenda The agenda was adopted on **motion** by Mr. Howard and second by Board Vice Chair Cumber.
- C. Approval of Minutes The May 7, 2018 Minutes were unanimously approved on **motion** by Board Vice Chair Cumber and second by Mr. Howard.

Agenda Item II – New Business

- A. Approval of Annual Internal Audit Plan Steve Tuten, Director, Audit Services, introduced Lee Montanez, Manager, Internal Audit Services. Mr. Montanez provided an overview of the FY19 Internal Audit Plan, including information on the annual planning approach, risk assessment survey, and the description of scheduled audits and proposed timeline. On **motion** by Board Chair Howard and second by Board Vice Chair Cumber, the Committee unanimously approved the Annual Internal Audit Plan and recommends Board approval.
- B. Annual Approval of Audit Services Charter Steve Tuten, Director, Audit Services, presented the JEA Audit Services Charter, noting that the Institute of Internal Auditors (IIA) requires the Finance and Audit Committee annually review and formally approve the Charter. Mr. Tuten stated no revisions have been made to the Charter. On **motion** by Board Chair Howard and second by Board Vice Chair Cumber, the Committee unanimously approved the Annual Internal Audit Plan and recommends Board approval.
- C. Audit Services Quarterly Audit Services Update Lee Montanez, Manager, Internal Audit Services, provided an update to the Committee regarding the progress of the FY18 Internal Audit Plan, open audit and investigation report issues, ERM highlights, risks and trend report, and the Ethics Hotline Report. Frank DiBenedetto, Manager, Enterprise Risk Management, provided a review of the Enterprise Compliance & Risk Committee and Subcommittees, as well as the new Information Security Governance Committee. The Committee held discussions regarding Top Corporate Risks. A request was made by the Committee for staff to re-evaluate risks, in light of recent developments regarding Plant Vogtle and the Utility environment. This presentation was received for information.
- D. Ethics Officer Quarterly Report Walette Stanford, Ethics Officer and Director, Emerging Workforce Strategies, provided an update regarding Ethics inquiries, FY18 gift registry items and Ethics policies and procedures. The Ethics officer role moved from Human Resources to Compliance on April 23, 2018. This presentation was received for information.
- E. Ernst and Young FY2018 Annual Financial Audit Plan was reviewed by John DiSanto, Executive Director. Mr. DiSanto introduced Russ Jeans, Senior Manager, Ernst and Young. On **motion** by

- Board Vice Chair Cumber and second by Board Chair Howard, the Committee recommends the full Board approve the FY2018 Annual Financial Audit Plan.
- F. Electric System and Water and Sewer System Reserve Fund Quarterly Report Joe Orfano, Treasurer, reviewed the Electric System and Water and Sewer System Reserve Fund Quarterly Report, which was received for information.
- G. JEA Investment Policy Revision to Authorized Investments Joe Orfano, Treasurer, presented. Staff is recommending revisions to the Investment Policy which include a revision to the lists of Authorized Investments for the Electric System and the District Energy System to ensure the language in the Investment Policy is consistent with updates to the Florida Statutes. In addition, the Policy will include new language to formally state that the authority to approve, amend or revise the Policy rests with the JEA Board. On **motion** by Board Vice Chair Cumber and second by Board Chair Howard, the Committee recommends the full Board approve the revised Investment Policy as amended.

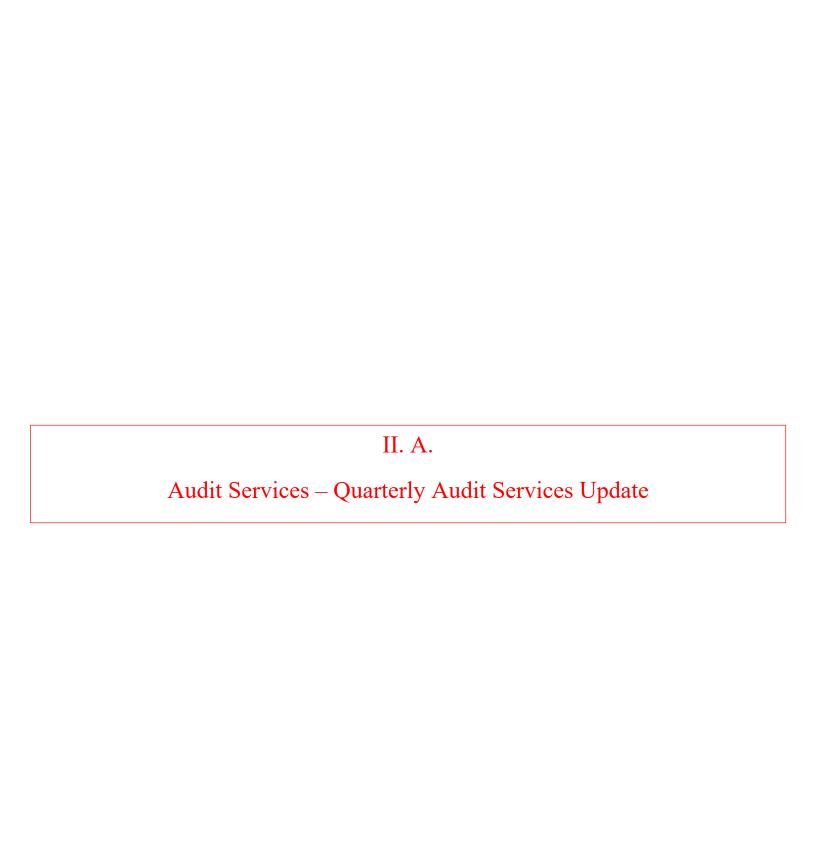
Board Chair Alan Howard left the meeting at 9:26 AM

- H. JEA Energy Market Risk Management Policy Report Steve McInall, Director, Electric Production Resource Planning, reviewed the Energy Market Risk Management Policy Report, which was received for information.
- I. Announcements
 - 1. The next Finance and Audit Committee meeting will be held on December 3, 2018, at 8:00 AM.
- J. Committee Discussion Sessions
 - 1. Ernst & Young At 9:45 AM, Committee Chair Flanagan dismissed staff and the Committee held a general conversation with John DiSanto.
 - 2. Director, Audit Services At 9:56 AM, Committee Chair Flanagan and the Committee held a general conversation with Steve Tuten, Director, Audit Services.
 - 3. Council Auditor's Office The Council Auditor's Office was not in attendance.

Closing Considerations

With no further business claiming the attention of this Committee, the meeting was declared adjourned at 10:04 AM.

APPROVED BY:	
	Kelly Flanagan, Committee Chair Date:
Submitted by:	
La'Trece Bartley Executive Assistant	



II. A. Return to 12/3/2018 Agenda (F&A)



November 16, 2018

SUBJECT:	QUARTERLY	AUDIT SERVI	CES UPDATE		
Purpose:		nation Only	☐ Action I	Required	Advice/Direction
				of Directors with Risk Managemo	n information on the current ent activities.
reports into JE control process	A's Ethics Hotli ses and ensure	ne (EHL) and fi s that departme	rom other sourcents maintain c	ces. The Internation	investigations of confidential al Audit Group reviews internal all procedures and regulations. neasures, monitors and actively
	able to manage ness operations		itor controls, id	entifying issues	to reduce and/or prevent
	it: The benefits				e or management, and the
Recommende information on		n: No action red	quired. The Qu	arterly Audit Se	ervices Update is for
For additional	<u> </u>	contact: Steve	n V. Tuten – Di	rector, Audit Se	rvices, 904-665-5206
	Energizing our community through high-value energy and water solutions.	JEA is a premier service provider, valued asset and vital partner in advancing our community.	• Safety • Service • Growth ² • Accountability • Integrity		ments to Action Earn Customer Loyalty Deliver Business Excellence Develop an

3 Develop an

Unbeatable Team



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<u>Area</u>	<u>Pages</u>
Ethics Investigations & Audit	3-6
Internal Audit	7-11
Enterprise Risk Management (ERM)	12-18

Audit Services
4Q FY18 Report

II. A. Return to 12/3/2018 Agenda (F&A)

Ethics Investigations & Audit

Audit Services
4Q FY18 Report

Investigative Case Statistics – 4Q18

Open Cases 6/30/2018	Cases Opened Q4 FY18	Cases Closed Q4 FY18	-	Cases /2018				
11	6	5	-	L2				
Categories For Cases Opened During Q4 FY18								
Fraud/Waste/Abuse								
Discrimination/Harassment								
Total								



Summary of Closed Cases – 4Q18

Reporting Source	Allegation	Investigation Results
Ethics Hotline (EHL)	JEA-16-09-0001 – An anonymous caller alleged a crew leader yelled at an employee and used obscene language in the workplace.	As a result of fact-finding meetings, it was concluded the employee's behavior was unacceptable and discipline was issued. The employee grieved the discipline, which was subsequently rescinded based on the results of an arbitration.
Internal	JEA-18-02-0003 – While conducting an investigation into the theft of money and prescription drugs from a contractor at SJRPP, law enforcement became aware of several contractors who may have stolen SJRPP materials.	The investigation resulted in the arrest of three contractors for theft of SJRPP materials, which occurred during the decommissioning of the plant. The court ordered each of them to pay restitution to JEA/SJRPP, as they were found/pled guilty to the crimes. Receivables were set up by JEA's Accounting Department for each of the restitution orders.
EHL	JEA-18-05-0001 – An anonymous caller alleged that a director was favoring a manager. In addition, the caller indicated the manager was bullying an employee.	A preliminary review was performed into the favoritism allegation with no results to substantiate the claim; however, due to the limited information provided by the caller, additional information was requested of the caller through the hotline to further the investigation into the claims. After not receiving a response from the caller for over two months, the case was closed.

December 2018



Summary of Closed Cases – 4Q18 (Concluded)

Reporting Source	Allegation	Investigation Results
EHL	JEA-18-06-0001 – A caller alleged an employee in a supervisory positon showed favoritism in providing overtime to a relative. Also, the caller claimed being targeted by the manager with verbal attacks and abuse, which created a hostile work environment.	Based on the information gathered and after review of policy, it was determined there was a violation of JEA's Nepotism Policy of which has since been rectified. The evidence was inconclusive whether or not favoritism in overtime distribution occurred; however, the area implemented a new process that should remove the opportunity for partiality in granting overtime. The evidence did not support a conclusion that harassment occurred as alleged.
EHL	JEA-18-06-0002 – The caller alleged a director was making derogatory and hostile comments to the caller of which some of the comments were made in the presence of employees at a department meeting. Additionally, the caller claimed a peer manager engaged in similar behavior against the caller. Because of the hostile work environment, the caller resigned and indicated that race may have played a part in the way the caller was treated.	After the specifics of the complaint were investigated, staff interviews were conducted, and applicable policy/relevant documents were reviewed, it was found there was not a violation of JEA's Harassment Policy and no evidence to support the ethics complaint.



Internal Audit

Audit Services
4Q FY18 Report

FY19 Internal Audit Plan - Schedule

				FY 2019 Hours		<u>First Draft Report</u>						201	9 Aud	it Time	line		
Audit/Project	Auditor-in- Charge	Status	Budgeted Hours (adjusted)	Actual Hours	Will Meet/Met Budget	Audit Estimate due date (italics if updated)	Actual Date	Will Meet/Met Due Date	Comments	Final Draft Report Date	Audit Report Rating	oct	Nov	Dec	Jan	Feb	Mar
2018 Utility Locate/ 3rd. Party Claims	Troy England (TE)	Final Draft Issued	0	14		8/7/2018	10/12/2018		Challenges in an unrelated FY18 audit extended some work into FY2019.	11/14/2018	Satisfactory						
2018 Tax Administration	Andrew Shelley (AS)	Second Draft Issued	0	51		10/16/2018	10/26/2018		Challenges in an unrelated FY18 audit extended some work into FY2019.		Excellent						
2018 Technology Infrastructure	Rashid Brittain (RB)	First Draft Issued	20	17		8/2/2018	11/20/2018		Adjusted due to additional TEA Audit work completed in FY2018. Complex audit with approximately twelve (12) issues.		Satisfactory						
2018 Electric Production Engineering and Outages	Laurie Gaughan (LG)	Reporting	100	91		11/9/2018		•	Adjusted due to additional TEA Audit work completed in FY2018.								
2018 Disaster Recovery Follow-Up	RB	Reporting	50	52		9/24/2018		•	Adjusted due to additional TEA Audit work completed in FY2018.								
2018 W/WW Reuse and Treatment	David Arnold (DA)	Reporting	75	123	•	11/13/2018		0	Audit over budget due to new W/WW Director needing additional time to provide answers and documentation.								
2018 Response and Environmental Programs	TE	Testing	160	53		12/12/2018											
2018 Information Security Follow-Up	RB	Testing	160	13		12/17/2018											
JEA FY2018 Performance Pay Audit	TE	Completed	100	31		N/A	N/A	N/A	Memo issued for JEA Performance Pay review on November 7, 2018.	11/7/2018	N/A						
Branch Follow-Up	AS	Testing	330	29		1/7/2019											
TEA Audit	LG, RB & TE	In-Progress	615	44					Adjusted hours due to some pre-audit work completed during FY2018.								
Customer Solutions & Market Development	DA	Planning	400														
FY2019 Action Plan Follow-Up	All Staff	Ongoing	470	64					Action Plans are updated quarterly.								

No negative variance in hours or report completion date.

Variance within 10% of hours or 10 workdays from estimate.

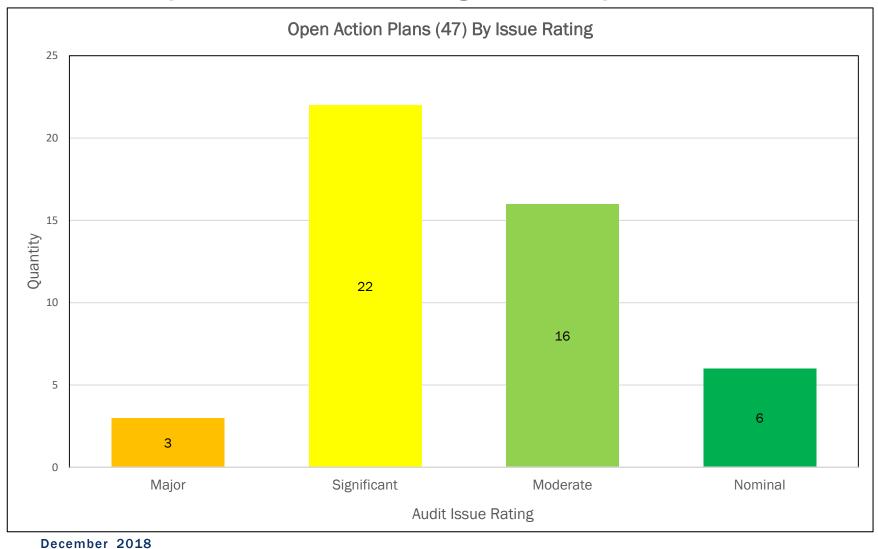
>10% variance in hours from estimate or >10 workdays from estimate.

Completed Audit In-Progress Audit

December 2018

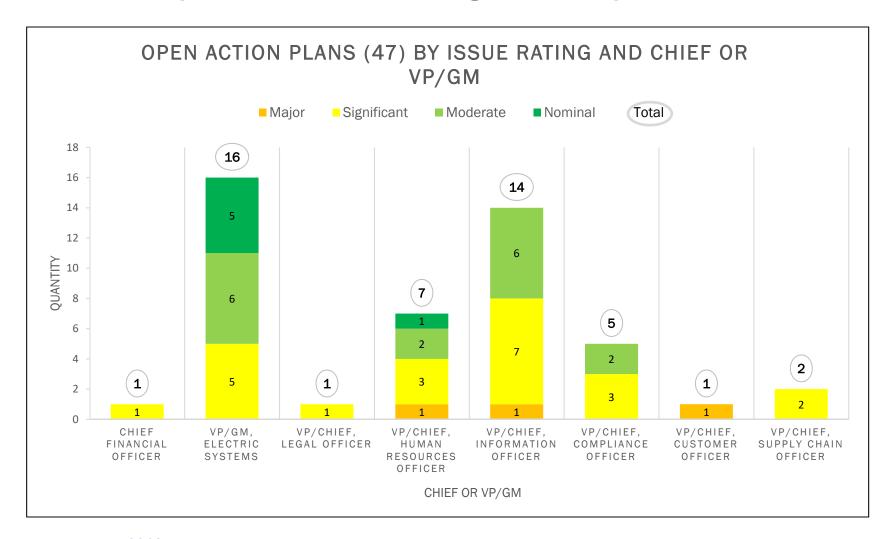


Open Audit and Investigations Report Issues





Open Audit and Investigations Report Issues





Open Audit and Investigations Report Issues - Major

VP/Chief	Director / (Audit Name)	Issue Observation	Action Plan	Current Due Date	Action Plan Status Comments
VP/Chief, Information Officer	Director, Enterprise Architecture (Information Security)	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.	11/30/18	Action Plan responsibility moved from Corporate Records Retention to Enterprise Architecture on 10/3/18. Extension granted to allow new responsible party to review and revise the mitigation.
VP/Chief, Customer Officer	Director, Customer Field & Meter Services (Meter Operations)	Audit reviewed sewer flow metering operations and noted the following: 1-4 (Mitigations Completed). 5. Meter Specialists are not trained in the calibration and operation of sewer flow meters.	Management will complete the following: 1-4 (<i>Mitigations Completed</i>). 5. Revision of Job Specs and Training.	2/15/19	Extension granted for new timeline regarding meter technicians training on sewer flow meter calibration.
VP/ Chief Human Resources Officer	Director, Organizational Effectiveness & Payroll (Personnel Out Process)	Audit noted a lack of an overall monitoring and oversight process to ensure that the POP process is working as intended, and to confirm that sub-processes related to physical and information security are completed.	Management will: (1) Create and manage an automated report to security that details employees who are running out leave. (2) Create and manage POP Scorecard that details POP accuracy to share with SLT on a quarterly basis.	3/31/19	Organizational Effectiveness sent out a communication to all employees via Compass with a POP Scorecard detailing POP accuracy. Extension was granted to verify the sustainability of the new process.

December 2018



Enterprise Risk Management (ERM)

December 2018

Audit Services 4Q FY18 Report

RISK TOLERANCE & SCORING METHODOLOGY

The methodology has been modified to better assess reputational impact of a risk event and better prioritize the risks, relative to each other.

The following pages provide the updated Heat Map and, the impact of this scoring methodology on the three risk tiers.

P. 18 provides the description for Nuclear Risk Portfolio, the top-ranked risk under the new methodology.



ERM Corporate Risk Heat Map – Scoring

			Impact								
			Minor	Moderate	Significant	Major	Severe				
			1	2	3	4	5				
	Rare <5%	1	1	2	3	4	5				
ij	Unlikely 5-35%	2	2	4	6	8	10				
Likelihood	Possible 35-65%	3	3	6	9	12	15				
poo	Likely 65-90%	4	4	8	12	16	20				
	Almost Certain >90	5	5	10	15	20	25				

X2
Financial & Reputational Risk

Tier 1	20-29	31-50
Tier 2	13 -19	
Tier 3	2 - 6	7 - 12

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

December 2018



ERM - Tier 1 Risk Trends as of Current Quarter (Q4 FY18)

Risk Name	New Score	Long Term Risk Exposure Trend >5 Years
Tier 1 Risks		
E10 - Nuclear Power Portfolio	50	↑ Increasing
F01 - Revenues and Expenses Management	28	↑ Increasing
C03 - Disruptive Technologies/Electric Systems	26	↑ Increasing
F03 - Credit Availability/Cost	25	↔ Stable
T02 - Cyber Security Information Protection	24	↑ Increasing
C02 - Physical Security (Facilities Infrastructure Security and Regulatory Compliance)	24	↑ Increasing
E13 - Infrastructure Destruction Due to Severe Weather	24	↔ Stable
E06 - Long-term Planning/Load Forecast - Electric	24	↑ Increasing
H02 - Staffing	24	↔ Stable
E04 - Adverse Electric Commodity Supply and Pricing	21	↔ Stable
W01 - Water Supply Management/Long Term Planning	21	↑ Increasing

Risk Score - New risk score includes the reputational risk component. Based on adding the Financial and Reputational Risk scores.



ERM - Tier 2 Risk Trends as of Current Quarter (Q4 FY18)

Risk Name	New Score	Long Term Risk Exposure Trend >5 Years
Tier 2 Risks		
C05 - Records Management	18	<→ Stable
C16 - Weather & Climate Change Impact Resiliency Efforts	18	↑ Increasing
W03 - Sanitary Sewer Overflow Management	18	↔ Stable
C06 - Fraud Risk Management	18	↔ Stable
W06 - Drinking Water Quality Management	18	↔ Stable
C07 - Emergency Preparedness Business Continuity	16	↔ Stable
T05 - Technology Services Resource Optimization	16	↑ Increasing
T03 - Cyber Security Business Disruption	16	↑ Increasing
E09 - FERC/NERC (Section 693) O&P Reliability & Compliance	16	↔ Stable
C04 - External Influence on Policy	16	↔ Stable
W04 - Infrastructure Maintenance - Water/Wastewater Systems	16	↔ Stable
W02 - Operations Technology Management - Water/Wastewater Systems	15	↔ Stable
C01 - Customer Relationship Management	14	↔ Stable
H03 - Employee Safety	14	↔ Stable
E01 - Carbon Emission Mitigation	13	↑ Increasing
E12 - By Product Management	13	↔ Stable

December 2018

Risk Score - New risk score includes the reputational risk component. Based on adding the Financial and Reputational Risk scores.



ERM - Tier 3 Risk Trends as of Current Quarter (Q4 FY18)

Risk Name	New Score	Long Term Risk Exposure Trend >5 Years
Tier 3 Risks		
E05 - Cooling Water Intake Structures 316(b)	12	<→ Stable
T01 - Technology Infrastructure Reliability	12	↓ Decreasing
T04 - Technology Services Disaster Recovery/Business Continuity	12	<→ Stable
E20 - Operations Technology Management - Electric	12	<→ Stable
H01 - Pensions	11	Decreasing
E11 - Infrastructure Maintenance - Electric Systems Assets	10	<→ Stable
C08 - Black Swan (High Impact - Low Probability Event)	9	<→ Stable
C09 - Other Regulatory Compliance	9	<→ Stable
E07 - Critical Infrastructure Protection (CIP) Compliance	9	<→ Stable
F04 - Counterparty Risk	8	<→ Stable
E15 - TEA Activities Risk Management	8	<→ Stable
E16 - Air Emissions Reduction Regulatory Initiatives	8	<→ Stable
C10 - Project Risk Assessment and Capital Allocation	8	↔ Stable
C12 - Capacity Plan Land Acquisition	8	<→ Stable
H04 - Benefits		<→ Stable
E08 - SJRPP	8	↓ Decreasing
C14 - Environmental Compliance Management		<→ Stable
E18 - Renewable Energy Standards		↔ Stable
F02 - Financial Regulatory Compliances: (e.g., Dodd-Frank Bill)	5	↔ Stable
E17 - Mercury and Air Toxics Standards (MATS)	4	<→ Stable
W05 - Numeric Nutrient Criteria Mandates		↔ Stable
C13 - Key Customer Accounts Management	4	↓ Decreasing
E03 - Coal Combustion Residual Rule (CCR)	2	↔ Stable
E02 - Effluent Limitation Guidelines		↓ Decreasing
F05 - IRS Bond Audit Records Requirements		↓ Decreasing
E19 - Plant Scherer Environmental Lawsuit		↓ Decreasing
E21 - Natural Gas Sales - Commercial Customers	2	↓ Decreasing

December 2018

Risk Score - New risk score includes the reputational risk component. Based on adding the Financial and Reputational Risk scores.



Tier One Top Corporate Risks Report - As of Current Quarter (Q4 FY18)

Risk Name	Risk Description	Long Term Risk Exposure Trend (>5 Years)	Risk Summary Status
E10 - Nuclear Power Portfolio Mike Brost Steve McInall Ryan Wannemacher Moody's from A2 to A3. Moody's rating for the COJ was also downgraded from Aa2 to A2.	JEA's decision to expand into nuclear power generation ownership and/or PPAs poses significant financial, reputational and regulatory risks and requires a coordinated effort to identify, address and manage. a) Plant Vogtle 3 & 4 are the first new nuclear units to be licensed since 1978. With these units still under construction, the potential for cost and schedule overruns are a concern for any large construction project, such as a nuclear plant. b) Westinghouse filed for bankruptcy in February 2017 and subsequently rejected the EPC contract. Toshiba fully funded a \$3.68B guarantee. c) Bechtel was awarded the replacement EPC contract under a cost plus arrangement with incentives. d) Additional cost overruns have resulted in pending amendments to the Ownership Agreement providing greater cost burden to Georgia Power in exchange for additional project control. e) Total project cost now estimated to be in excess of \$30B with MEAG Project J over \$2.9B.	Increasing*	Current mitigations focus on (1) the filing of a complaint in Duval County Circuit Court; (2) a petition requesting FERC determine that the PPA falls under the commission's Federal Power Act and (3) the pursuit of a significantly lower cost PPA to be made available to MEAG, Oglethorpe Power and PowerSouth. a) Nuclear adoption is primarily warranted in carbon-constrained environments (i.e. in response to carbon regulations). With current load growth forecasts, low gas prices, and no carbon regulations, nuclear is not cost-competitive. b) The proposal submitted to MEAG and PowerSouth demonstrated savings in excess of \$1B for JEA customers and \$2.5B for all three parties. c) Increased total project cost, coupled with the pending litigation, led to Standard & Poor's downgrading of JEA Electric System senior and subordinated bond ratings to A+ and A, respectively on 9/28/18. Moody's rating of JEA was downgraded from A2 to A3. Moody's rating for the COJ was downgraded from Aa2 to A2. As a note, the risk description/score does not reflect the possibility that the project may not be completed. Updated 10-4-18

Financial Risk Impact	Financial Risk Likelihood	Total Financial Risk Score
5	5	25
Reputational Risk Impact	Reputational Risk Likelihood	Total Reputational Risk Score
5	5	25

1. Financial Impact - 5 = Severe/Catastrophic (>\$100 M) 4 = Major (\$41-\$100M) 3 = Significant (\$16-\$40M) 2 = Moderate (\$1-\$15M) 1 = Minor (<\$1M)

2. Reputational Impact – Determined by specific event conditions.

Likelihood - 5 = Almost Certain (> 90%) 4 = Likely (65 - 90%) 3 = Possible (35 - 65%) 2 = Unlikely (5 - 35%) 1 = Rare (< 5%)

* Increase in risk may be based on external factors including economic factors and/or increased regulatory requirements

Worst Credible Total Risk Score

50

Total Risk Score will be based on the total combined score of the Financial and Reputational risks

Inherent

- 1. Total cost of Risk Financial Exposure =
- 2. Total Cost of Risk Mitigation Efforts =

II. B.

JEA Identity Theft Protection Program Fair and Accurate Credit Transactions Act (FACTA) Annual Risk Assessment II. B. 12/3/2018 Return to (F&A) Agenda



November 9, 2018

SUBJECT:	JEA IDENTITY THEFT PRO TRANSACTIONS ACT (FAC			
Purpose:		Action Required	Advice/Direction	
	ent provides the JEA Board of		ransactions Act (FACTA) Annual as mandated by federal regulations	
Significance: JEA's Identity Theft Protection Program is a critical program designed to protect customer's Personally Identifiable Information (PII). Various regulations listed below mandate JEA to maintain an effective identity theft protection program. Regulations governing PII are: FCRA – Fair Credit Reporting Act, 15 U.S.C. § 1681 FACTA – Fair and Accurate Credit Transactions Act of 2003 FIPA – Florida Information Protection Act, (501.171)				
Effect: The primary objective of JEA's Identity Theft Protection Program is to prevent identity fraud involving JEA customers. This program has been in effect since 2008, and since 2014 has been monitored by the Compliance Oversight Committee.				
Cost or Benefit: Identity theft has been a serious challenge and preventing customer identity fraud is one of the primary goals of JEA.				
Recommended Board action: This item is provided for information only and fulfills the requirement of an annual update per FACTA regulations.				
For additional information, contact: Ted Hobson, 904-665-7126				
Submitted by: AFZ/	TEH/DM			







Commitments to Action



2017 Risk Assessment

JEA Identity Theft Protection Program
Annual Risk Assessment

Dan Mishra - Director, CIP Compliance



Overview

 JEA has a program to comply with Federal and State regulations concerning identity theft (FCRA, FACTA and FIPA).

> FCRA – Fair Credit Reporting Act, 15 U.S.C. § 1681 FACTA – Fair and Accurate Credit Transactions Act of 2003 FIPA – Florida Information Protection Act, (501.171)

 These three acts address protection of Personally Identifiable Information (PII) of customers, employees, agents and contractors in JEA's possession.



Compliance Oversight Committee

- Compliance Oversight Committee (COC) oversees compliance with identity theft standards.
- Committee consists of Chief Compliance Officer, Chief Customer Officer, Chief Information Officer, and Chief Human Resources Officer.
- Objective of Risk Assessment Review performance and identify major weaknesses or improvement opportunities.
- Summary of Risk Assessment provided to Finance & Audit Committee to fulfill FACTA Annual Reporting requirement.



Program Metrics

Accounts Opened Annually vs. Confirmed Cases of Identity Theft

■ Accounts Opened Annually ■ Confirmed Cases of Identity Theft

42,869 41,792 43,042 44,702 19 28 27 44 31 36 29 17

2014

2015

2016

2017

Accounts Opened Annually vs. Confirmed Cases of Identity Theft

■ JEA Accounts Opened Annually ■ Confirmed Cases of Identity Theft





2011

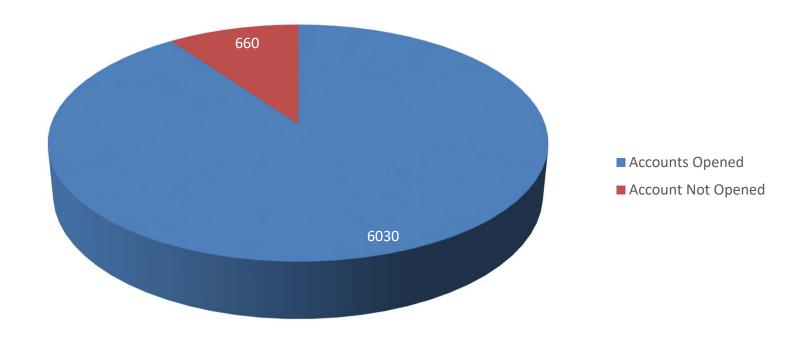
2012

2013

2010

Investigated Account Requests

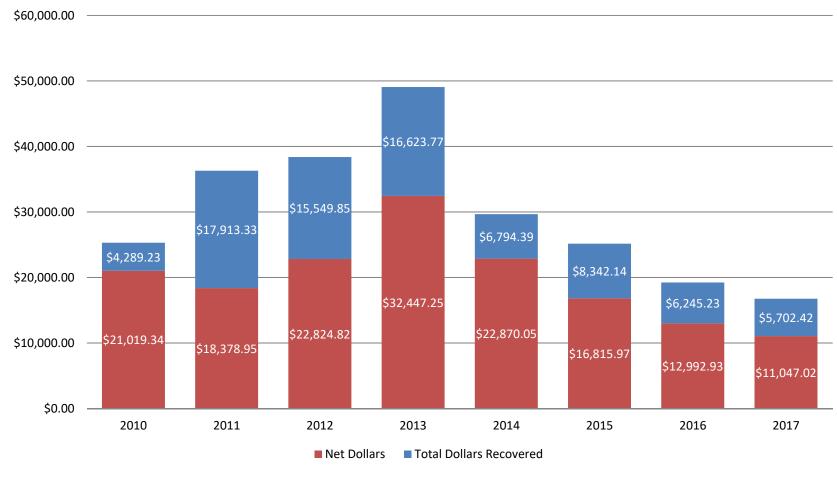
Directed to Customer Business Office Account Status





Program Metrics

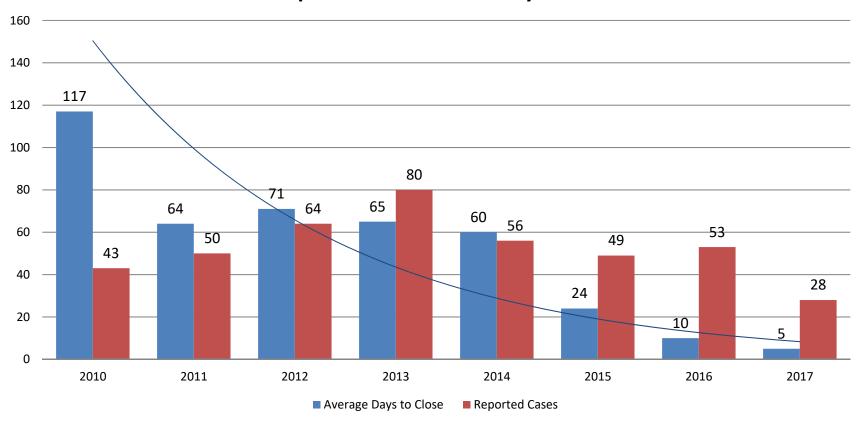
Annual Monetary Involvement Net Dollars Lost vs. Dollars Recovered





Operational Metrics

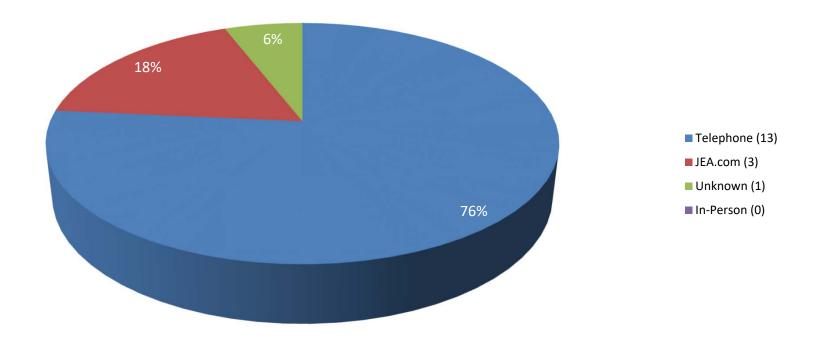
Average Resolution Time (days) Reported Cases of Identity Theft





Sources

Source of Account Opening Confirmed Cases 2017





2017 Summary of Results

Of the 17 confirmed cases in 2017:

- In 6 cases, an account was opened prior to the 2012 implementation of a more robust identity verification process using Experian
- In 9 cases, the account opener provided verifiable
 PII
- In 2 cases, (.00003% of accounts opened in 2017), the result was from human error and additional training was designed and provided



2017 Summary of Results

- Audit Services reported no cases of identity theft by JEA employees
- No reportable data breach has been recorded
- Three instances of failed security controls impacting PII data were recorded and corrected
- Time to close reported cases of identity theft decreased to <u>5 days</u> from 10 days recorded in the prior year



Process Improvements

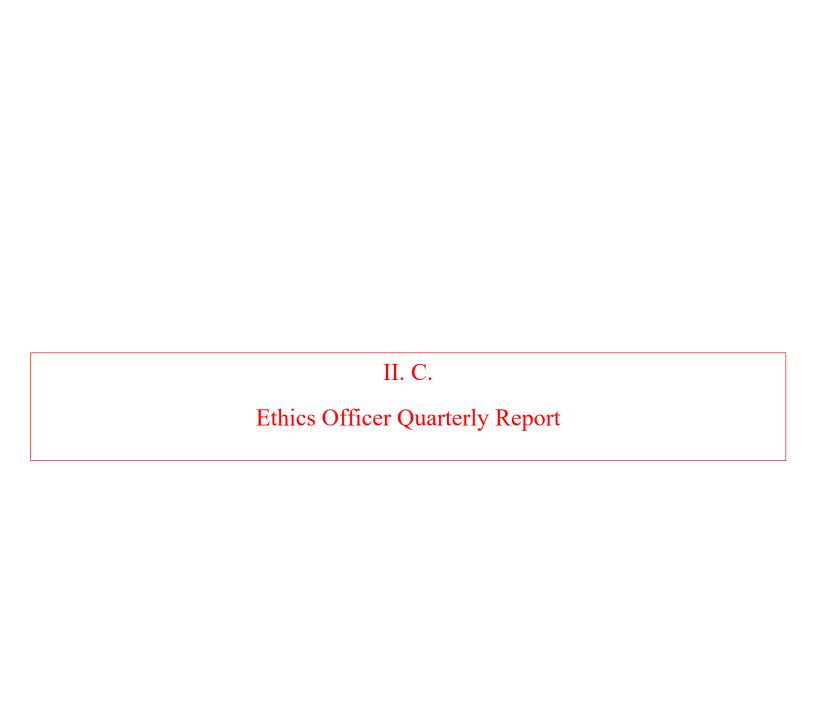
- Post-account opening audits implemented
 - Verify account SSN has corresponding Experian query
 - Verify segregation of duties principles are followed for SSN changes
- Enhanced script to identify duplicate SSN usage
- Enhanced script for online account openings
- Mobile Identity Verification tool



Conclusion

- JEA is compliant with FACTA, FCRA, and FIPA
- Appropriate controls are in place to prevent, detect and mitigate identity theft
- Improved cyber security controls testing recommended
- In the rare event identity theft occurs, steps are taken to identify the root cause, and corrective actions are taken
- Tracking was enhanced in 2013 and continuously enhanced to provide better metrics and root cause analysis





II. C. Return to 12/3/2018 (F&A)

Agenda



November 8, 2018

SUBJECT:	ETHICS OFFICER QUARTERLY REPORT
Purpose:	☐ Information Only ☐ Action Required ☐ Advice/Direction
	nics Officer Quarterly Report provides the JEA Board of Directors with information on the inquiries, hotline activity and training.
Significance: questions.	JEA's Ethics Officer ensures information is shared and advice given regarding issues and
	able to manage ethical concerns for the organization, ensuring compliance with business ntal regulations.
Cost or Benef	fit: JEA fosters an environment that ensures ethical behaviors.
Recommende	ed Board action: This item is for information only.
For additional	I information, contact: Walette Stanford, 904-665-4282

Submitted by: AFZ//TH/WS



Commitments to Action



II. C. Return to 12/3/2018 Agenda (F&A)

"Creating an Ethical Culture"

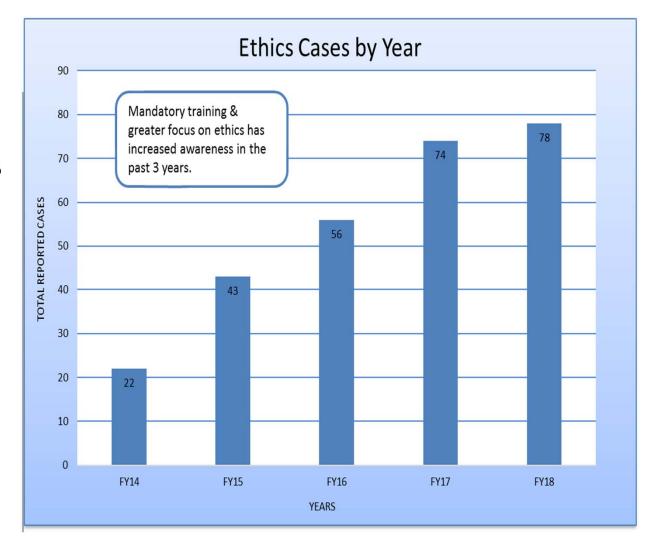
JEA will conduct its business fairly, impartially, in an ethical and proper manner, and in full compliance with all applicable laws and regulations.

December 2018

Ethics Officer Report Walette Stanford

Examples of Questions?

- 1. A vendor has a flashlight that I want to buy, can I use JEA's discount?
- 2. Walmart gift cards valued at \$25 were given to all attendees at my conference, do I need to log it?
- 3. Can I accept a \$25 gift card from a customer for my assistance during a hurricane?



Doing the right thing doesn't automatically bring success.

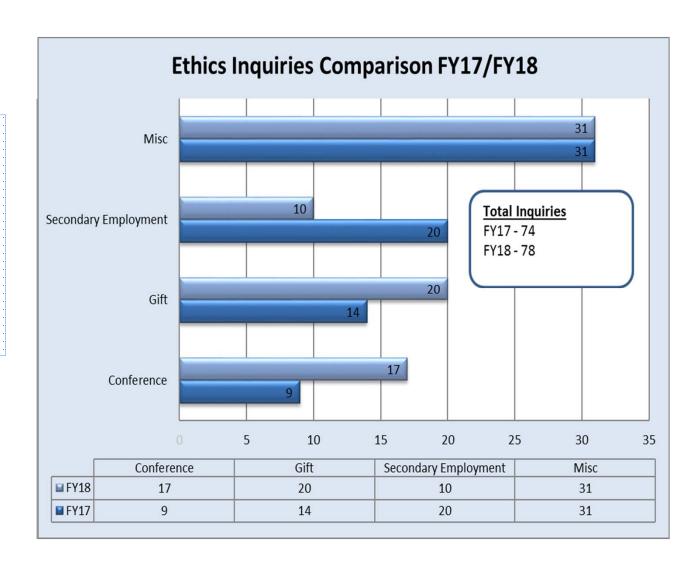
But compromising ethics almost always leads to failure.

Vivek Wadhwa

December 2018

WWW.

FY17/FY18 Comparisons



Taking Things



FY17/FY18 Gift Registry

December 2018





Meals: breakfast, lunch, dinners

Promotional Items: golf shirt, flashlight

Misc: canvas bag, coffee mug, candy

Partnership with the **Ethics Coordination Council** Group

December 2018

October Ethics Awareness Poster



JEA BUSINESS ETHICS



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



MISUSE OF TIME. SUPPLIES OR EQUIPMENT





MISUSE OF POSITION



SUNSHINE VIOLATIONS



HIRING OR PROMOTING RELATIVES



DESTROYING PUBLIC

IF YOU SEE SOMETHING, SAY SOMETHING

ETHICS HOTLINE 1-800-805-3569



December 2018

Business Ethics Update and What's Next

- Attended the Society of Corporate Compliance and Ethics Conference in October 2018.
- Partnered with Brand Management to distribute Quarterly Tips/Newsletters to the organization.
- Preparing for companywide Annual Business Ethics Training in March 2019.
- Developing the new Ethics database on SharePoint.
- Working on the Navex's PolicyTech Policy and Procedure implementation team. This system will automate management workflows, track readership and attestations.

II. D. 1.

Electric System and Water and Sewer System Reserve Fund Quarterly Report II. D. 1. Return to 12/3/2018 Agenda (F&A)



November 09, 2018

SUBJECT:	ELECTRIC SYSTEM AND W QUARTERLY REPORT	VATER AND SEWER SYSTEM	I RESERVE FUND
Purpose:		Action Required	Advice/Direction
		r System Reserve Fund Quarte cy into JEA's reserve fund acco	erly Report as of September 30, ounts and various cash
	High. JEA's liquidity position ical metrics, and carrying cost	is an important balance betwee of cash.	en operating security and
Effect: JEA op	erational needs, bond resoluti	ion requirements, and credit rat	ings.
Cost or Benef credit ratings fa	•	ortant component of operating s	security and flexibility, a critical
Recommende	d Board action: No action red	quired; provided for information	only.
For additional	information, contact: Joe O	orfano, Treasurer, 665-4541	

Submitted by: AFZ/RFW/JEO/BHG



Commitments to Action



II. D. 1. Return to 12/3/2018 Agenda (F&A)



INTER-OFFICE MEMORANDUM

November 09, 2018

SUBJECT: ELECTRIC SYSTEM AND WATER AND SEWER SYSTEM RESERVE

FUND QUARTERLY REPORT

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

TO: JEA Finance and Audit Committee

Kelly Flanagan, Chair

John Campion Husein Cumber

BACKGROUND:

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

DISCUSSION:

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

RECOMMENDATION:

No action required; provided for information only.

Aaron F. Zahn, Interim Managing Director/CEO

AFZ/RFW/JEO/BHG

II. D. 1. Return to 12/3/2018 Agenda (F&A)

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

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

Electric System	•	Fiscal Year FY 2015		Fiscal Year FY 2016		Fiscal Year FY 2017		Fiscal Year FY 2018		Fiscal Year FY 2019	Detail Page #
Unrestricted											
Operations/Revenue Fund	\$	46,624	\$	56,665	\$	54,800	\$	85,482	\$	77,859	
Debt Management Strategy Reserve		-		-		-		-		-	
Self Insurance Reserve Fund											_
Property Employee health incurance		10,000		10,000		10,000		10,000		10,000	3 4
Employee health insurance Rate Stabilization		10,937		11,179		9,214		8,138		8,138	4
• Fuel		150,742		180,115		131,716		74,376		58,225	5
DSM/conservation		2,886		3,515		3,695		3,470		3,021	6
Environmental		23,430		29,975		36,417		42,163		48,267	7
 Debt Management 		42,126		42,126		29,884		29,884		29,884	8
 Non-Fuel Purchased Power 		38,000		34,400		25,189		53,493		56,796	9
Environmental		18,662		18,556		17,672		16,818		16,818	10
Customer Deposits		42,389		41,084		42,105		44,242		44,242	11
Total Unrestricted		385,796		427,615		360,692		368,066		353,250	-
Days of Cash on Hand (2)		225		270		234		219		179	
Restricted											
Debt Service Funds (Sinking Funds)		134,927		136,232		174,529		159,656		148,745	12
Debt Service Reserve Funds		64,595		60,582		60,582		60,582		60,582	13
Renewal and Replacement Funds/OCO (3)		145,711		192,179		201,368		189,922		105,305	14
Construction Funds		-		-		-		203		1	15
Total Restricted		345,233		388,993		436,479		410,363		314,633	-
Total Electric System	\$	731,029	\$	816,608	\$	797,171	\$	778,429	\$	667,883	: :
Water and Sewer System											
Unrestricted											
Operations/Revenue Fund	\$	22,588	\$	42,948	\$	69,232	ς	43,461	\$	14,946	
Rate Stabilization	*	22,000	~	.2,5 .0	Ψ.	03,232	~	.0, .01	Ψ.	2.,5.0	
Debt Management		20,290		20,290		14,209		14,209		14,209	16
 Environmental 				1,699		5,214		12,914		12,914	17
Customer Deposit		13,255		13,910		15,086		15,616		15,616	18
Total Unrestricted		56,133		78,847		103,741		86,200		57,685	-
Days of Cash on Hand (2)		466		528		496		454		259	
Restricted											
Debt Service Funds (Sinking Funds)		67,720		65,410		82,208		81,241		83,544	19
Debt Service Reserve Funds		108,849		108,086		107,488		102,850		68,648	20
Renewal and Replacement Funds											
• R&R/OCO (4)		76,020		76,020		54,699		74,738		63,896	21
Capacity Fees/State Revolving Loans Figure 2 and 1		90,912		103,411		95,620		66,677		60,153	22
Environmental Construction Funds		19,245		2,659		1,839		1,159		999	23
Total Restricted		363,410		152 355,738		15 341,869		284 326,949		13,884 291,124	24
. 3.11		303,410		555,756		3-11,003		320,343		231,124	=
Total Water & Sewer System	\$	419,543	\$	434,585	\$	445,610	\$	413,149	\$	348,809	- :

⁽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 Debt Management Reserve

For the Fiscal Quarter Ending September 30, 2018

Reserve/Fund Authorization: Debt Management Policy

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

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

	Act Curre		09/30/2018	3	20	18	Full Year 2018	Prior	Year			Proje	ction		
(In Thousands)	Quar		Year -to-	-Date	Proje		Budget	Act		<u>20</u>	<u>19</u>	202	<u>20</u>	:	<u>2021</u>
Opening Balance Additions: Contributions	<u></u> \$		\$		\$	<u>-</u>	N/A	\$	<u>-</u>	\$		\$	<u>-</u>	\$	-
Sub-total Withdrawals	\$	<u> </u>	\$	-	\$	<u>-</u>	\$ -	\$	<u> </u>	\$	<u> </u>	\$	<u> </u>	\$	-
Sub-total Ending Balance	\$ \$	<u>-</u>	\$	<u>-</u>	\$	<u>-</u>	\$ - N/A	\$ \$	<u>-</u>	\$	<u>-</u>	\$	<u>-</u>	\$	-

				Hist	torical						Stati	stical			
	<u>2013</u>	<u>20</u>	<u>014</u>	<u> </u>	<u> 2015</u>	<u>2016</u>	2017		Low		Median		Mean		High
Opening Balance Additions: Contributions	\$ 12,257	\$	<u>-</u>	\$	<u>-</u>	\$ <u>-</u>	\$ 	\$	-	\$	-	\$	2,451	\$	12,257
Contributions	-		-		-	-			- - -		- - -		- - -		-
Sub-total Withdrawals	\$ 12,257	\$	<u> </u>	\$	<u>-</u>	\$ -	\$ <u>-</u>		12,257		12,257		12,257 -		12,257 -
Sub-total Ending balance	\$ 12,257	\$	<u>-</u>	\$	<u>-</u>	\$ <u>-</u>	\$ <u>-</u>	ė	-	ė	-	ė	-	ė	-

Observations:

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

Electric System Self Insurance - Property

For the Fiscal Quarter Ending September 30, 2018

Reserve/Fund Authorization: Budget Appropriation

Metric: Budgeted Deposit = \$10 million

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

	Actual as of	09/30/	2018		Full Y	ear			Р	rojection	
(In Thousands)	Current Quarter	Year	r -to-Date	2018 ojection	201 Budį		rior Year Actual	<u>2019</u>		2020	<u>2021</u>
Opening Balance Additions: Reserve Contribution	\$ 10,000	\$	10,000	\$ 10,000	N/		\$ 10,000	\$ 10,000	\$	10,000	\$ 10,000
Sub-total Deductions: Reserve Withdrawal	\$ <u> </u>	\$	<u>-</u>	\$ <u>-</u>	\$ N/		\$ <u> </u>	\$ -	\$		\$ -
Sub-total Ending Balance	\$ 10,000	\$	10,000	\$ 10,000	\$ N/		\$ 10,000	\$ 10,000	\$	10,000	\$ 10,000

			Hi	storical					Stat	istical		
	<u>2013</u>	<u>2014</u>		<u>2015</u>	<u>2016</u>	2017	Low	ľ	Median		Mean	High
Opening Balance Additions:	\$ 10,000	\$ 10,000	\$	10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$	10,000	\$	10,000	\$ 10,000
Reserve Contribution							-		-		-	-
Sub-total Deductions:	\$ -	\$ -	\$	-	\$ -	\$ -	-		-		-	-
Reserve Withdrawal							-		-		-	-
							-		-		-	-
Sub-total	\$ -	\$ -	\$	-	\$ -	\$ -						
Ending balance	\$ 10,000	\$ 10,000	\$	10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$	10,000	\$	10,000	\$ 10,000

Electric System Self Insurance - Employee Health Insurance

For the Fiscal Quarter Ending September 30, 2018

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

Metric: An actuary calculates amount annually

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

		Actual as of	09/30/	2018			F	ull Year					Projection	
		urrent				2018		2018		Prior Year				
(In Thousands)	a	uarter	Yea	r -to-Date	Pro	ojection	١	Budget		Actual		<u>2019</u>	<u>2020</u>	<u>2021</u>
Opening Balance	\$	7,905	\$	9,214	\$	9,214		N/A	\$	11,179	\$	8,138	\$ 8,138	\$ 8,138
Additions:														
Employee Contributions		1,531		6,158		6,158		N/A		5,862		6,466	6,789	7,128
Retiree & Other Contributions		1,989		7,273		7,273				6,443		7,709	8,172	8,662
Employer Contributions		4,552		18,378		18,378				19,004		21,225	23,139	25,210
Sub-total	\$	8,072	\$	31,809	\$	31,809	\$		- \$	31,309	\$	35,400	\$ 38,100	\$ 41,000
Deductions:											_			
Payments for Claims		7,192		30,933		30,933		N/A		30,994		33,389	36,029	38,867
Actuary & Other Payments		647		1,952		1,952				2,280		2,011	2,071	2,133
Sub-total	\$	7,839	\$	32,885	\$	32,885	\$		- \$	33,274	\$	35,400	\$ 38,100	\$ 41,000
Ending Balance	\$	8,138	\$	8,138	\$	8,138		N/A	\$	9,214	\$	8,138	\$ 8,138	\$ 8,138

			His	storical					Sta	tistical		
(In Thousands)	<u>2013</u>	<u>2014</u>		<u>2015</u>	<u>2016</u>	<u>2017</u>	Low	ſ	Median		Mean	High
Opening Balance	\$ 15,440	\$ 15,914	\$	10,749	\$ 10,937	\$ 11,179	\$ 10,749	\$	11,179	\$	12,844	\$ 15,914
Additions:	5 000	4.570		F 447	F 460	F 063	4.570		F 460		5 447	5 000
Employee Contributions	5,893	4,573		5,447	5,460	5,862	4,573		5,460		5,447	5,893
Retiree & Other Contributions	5,701	5,188		5,141	5,694	6,443	5,141		5,694		5,633	6,443
Employer Contributions	20,629	14,252		22,220	24,231	19,004	14,252		20,629		20,067	24,231
Sub-total	\$ 32,223	\$ 24,013	\$	32,808	\$ 35,385	\$ 31,309						
Deductions:					 <u>.</u>	 						
Payments for Claims	29,354	27,157		30,408	32,946	30,994	27,157		30,408		30,172	32,946
Actuary & Other Payments	2,395	2,021		2,212	2,197	2,280	2,021		2,212		2,221	2,395
Sub-total	\$ 31,749	\$ 29,178	\$	32,620	\$ 35,143	\$ 33,274						
Ending balance	\$ 15,914	\$ 10,749	\$	10,937	\$ 11,179	\$ 9,214	\$ 9,214	\$	10,937	\$	11,599	\$ 15,914

Observations:

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

Electric System Rate Stabilization - Fuel Management

For the Fiscal Quarter Ending September 30, 2018

Reserve/Fund Authorization: Bond Resolution and Pricing Policy Metric: Targeted 15% of total annual projected energy costs

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

		Actual as of	09/30	/2018			ı	ull Year					Pr	ojection		
	(Current				2018		2018	Р	rior Year						
(In Thousands)	(Quarter	Yea	ar -to-Date	Р	rojection		Budget		Actual		<u>2019</u>		2020		<u>2021</u>
Opening Balance	\$	75,056	\$	131,716	\$	131,716		N/A	\$	180,115	\$	74,376	\$	58,225	\$	75,118
Additions:																
Contributions						-				2,845				16,893		18,297
Sub-total	Ś		Ś		Ś		Ś		Ś	2,845	Ś		Ś	16,893	Ś	18,297
									<u> </u>		<u> </u>					-, -
Withdrawals		680		57,340		57,340		32,800		51,244		16,151				
Customer Fuel Rebate Credit				•		•		-		-		•				
Sub-total	\$	680	\$	57,340	\$	57,340	\$	32,800	\$	51,244	\$	16,151	\$		\$	-
Ending Balance	\$	74,376	\$	74,376	\$	74,376	-	N/A	\$	131,716	\$	58,225	\$	75,118	\$	93,415

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

Ohservations

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

Electric System Rate Stabilization - Demand Side Management (DSM)

For the Fiscal Quarter Ending September 30, 2018

Reserve/Fund Authorization: Bond Resolution and Pricing Policy

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

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

	Actual as of	09/30/	2018		Full Year			Pr	ojection	
(In Thousands)	Current Quarter	Year	-to-Date	2018 ojection	2018 Budget	or Year Actual	<u>2019</u>		<u>2020</u>	<u>2021</u>
Opening Balance Additions: Contributions Other	\$ 3,917 2,147	\$	3,695 7,088	\$ 3,695 7,088	 N/A 7,515	\$ 3,515 6,685	\$ 3,470 7,590	\$	3,021 6,855	\$ 3,247 6,855
Sub-total Withdrawals	\$ 2,147 2,594	\$	7,088	\$ 7,088	\$ 7,515 8,126	\$ 6,685 6,505	\$ 7,590 8,039	\$	6,855 6,629	\$ 6,855 6,629
Sub-total Ending Balance	\$ 2,594 3,470	\$ \$	7,313 3,470	\$ 7,313 3,470	\$ 8,126 N/A	\$ 6,505 3,695	\$ 8,039 3,021	\$	6,629	\$ 6,629 3,473

			His	storical				Stati	istical		
	<u>2013</u>	<u>2014</u>		<u>2015</u>	<u>2016</u>	2017	Low	Median		Mean	High
Opening Balance Additions:	\$ 6,912	\$ 3,891	\$	3,570	\$ 2,886	\$ 3,515	\$ 2,886	\$ 3,570	\$	4,155	\$ 6,912
Contributions Transfer from Rev Fd	6,683	6,929		7,059	7,232	6,685	6,683 -	6,929 -		6,918 -	7,232 -
Sub-total	\$ 6,683	\$ 6,929	\$	7,059	\$ 7,232	\$ 6,685	-	-		-	-
Deductions: Withdrawals	9,704	7,250		7,743	6,603	6,505	6,505 -	7,250 -		7,561 -	9,704 -
Cub total	 0.704	 7.250		7.742	 6 603	 6 505	-	-		-	-
Sub-total Ending balance	\$ 9,704 3,891	\$ 7,250 3,570	\$	7,743 2,886	\$ 6,603 3,515	\$ 6,505 3,695	\$ 2,886	\$ 3,570	\$	3,511	\$ 3,891

Observations

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

Electric System Rate Stabilization - Environmental

For the Fiscal Quarter Ending September 30, 2018

Reserve/Fund Authorization: Bond Resolution and Pricing Policy

Metric: \$0.62 per 1,000 kWh

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

		Actual as of	f 09/30/	'2018			F	ull Year					Pr	rojection		
(In Thousands)		Current Quarter	Yea	r -to-Date		2018 ojection		2018 Budget	P	rior Year Actual		2019		<u>2020</u>		<u>2021</u>
,		44.070				•		_								
Opening Balance Additions:	\$	41,072	\$	36,417	\$	36,417		N/A	\$	29,975	\$	42,163	\$	48,267	\$	53,687
Contributions		2,213		7,572		7,572		7,942		7,384		8,040		7,320		7,320
Sub-total	\$	2,213	\$	7,572	\$	7,572	\$	7,942	\$	7,384	\$	8,040	\$	7,320	\$	7,320
Withdrawals		1,122		1,827		1,827		2,051		942		1,936		1,900		1,938
Sub-total	Ś	1,122	<u> </u>	1,827	<u> </u>	1,827	<u> </u>	2,051	<u>\$</u>	942	Ś	1,936	Ś	1,900	<u> </u>	1,938
Ending Balance	\$	42,163	\$	42,163	\$	42,163		N/A	\$	36,417	\$	48,267	\$	53,687	\$	59,069

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

Observations:

• Rate Stabilization Fund for Environmental began in June 2010.

Electric System Rate Stabilization - Debt Management

For the Fiscal Quarter Ending September 30, 2018

Reserve/Fund Authorization: Bond Resolution and Pricing Policy

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

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

		Actual as of	09/30/	2018			F	ull Year					Pi	rojection		
	(Current				2018		2018	Pr	ior Year						
(In Thousands)	(Quarter	Yea	r -to-Date	Pr	ojection		Budget		Actual		2019		2020		2021
Opening Balance	\$	29,884	\$	29,884	\$	29,884		N/A	\$	42,126	\$	29,884	\$	29,884	\$	29,884
Additions: Contributions								N/A		-						
Sub-total	\$		\$	-	\$	-	\$	-	\$		\$		\$	-	\$	-
Withdrawals						_				12,242						
Sub-total	\$		\$		\$		\$	-	\$	12,242	\$		\$		\$	
Ending Balance	\$	29,884	Ś	29,884	Ś	29,884		N/A	Ś	29,884	Ś	29,884	Ś	29,884	Ś	29,884

			His	torical					Stat	istical		
	2013	<u>2014</u>		<u>2015</u>	<u>2016</u>	2017	Low	ľ	Median		Mean	High
Opening Balance Additions:	\$ 41,611	\$ 42,126	\$	42,126	\$ 42,126	\$ 42,126	\$ 41,611	\$	42,126	\$	42,023	\$ 42,126
Contributions	6,581						6,581 -		6,581		6,581 -	6,581 -
Sub-total Deductions:	\$ 6,581	\$ 	\$		\$ 	\$ -	-		-		-	-
Withdrawals	6,066					12,242	6,066 -		9,154 -		9,154 -	12,242 -
Sub-total	\$ 6,066	\$ -	\$	-	\$ -	\$ 12,242	-		-		-	-
Ending balance	\$ 42,126	\$ 42,126	\$	42,126	\$ 42,126	\$ 29,884	\$ 29,884	\$	42,126	\$	39,678	\$ 42,126

Observations:

Rate Stabilization Fund for Debt Management began in May 2009.

Electric System Rate Stabilization - Non-Fuel Purchased Power

For the Fiscal Quarter Ending September 30, 2018

Reserve/Fund Authorization: Bond Resolution and Pricing Policy

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

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

		Actual as of	09/30/	2018		Full Year				P	rojection	
(In Thousands)		Current Quarter	Vea	r -to-Date	2018 ojection	2018 Budget	P	rior Year Actual	<u>2019</u>		2020	<u>2021</u>
(iii riiousunus)	`	Zuarter	i ca	i to bate	 ojection	Dauget		Actual	2015		2020	2021
Opening Balance	\$	16,480	\$	25,189	\$ 25,189	 N/A	\$	34,400	\$ 53,493	\$	56,796	\$ 36,796
Additions: Contributions		40,000		40,000	40,000	-		-	17,630			
Sub-total	\$	40,000	\$	40,000	\$ 40,000	\$ 	\$	-	\$ 17,630	\$	-	\$ -
Withdrawals		2,987		11,696	11,696	11,745		9,211	14,327		20,000	24,194
Sub-total	\$	2,987	\$	11,696	\$ 11,696	\$ 11,745	\$	9,211	\$ 14,327	\$	20,000	\$ 24,194
Ending Balance	\$	53,493	\$	53,493	\$ 53,493	 N/A	\$	25,189	\$ 56,796	\$	36,796	\$ 12,602

				Hi	storical					Stat	istical		
	<u>20</u>	<u>13</u>	<u>2014</u>		<u>2015</u>	<u>2016</u>	2017	Low	1	Median		Mean	High
Opening Balance Additions:	\$	-	\$ 	\$	12,000	\$ 38,000	\$ 34,400	\$ -	\$	12,000	\$	16,880	\$ 38,000
Contributions			12,000		26,000			12,000		19,000		19,000	26,000
								-		-		-	-
			 			 	 	-		-		-	-
Sub-total	\$	-	\$ 12,000	\$	26,000	\$ 	\$ 						
Deductions:													
Withdrawals						3,600	9,211	3,600		6,406		6,406	9,211
								-		-		-	-
								-		-		-	-
Sub-total	\$	-	\$ -	\$	-	\$ 3,600	\$ 9,211						
Ending balance	\$	-	\$ 12,000	\$	38,000	\$ 34,400	\$ 25,189	\$ -	\$	25,189	\$	21,918	\$ 38,000

Observations

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

Electric System Environmental Reserve

For the Fiscal Quarter Ending September 30, 2018

Reserve/Fund Authorization: Pricing Policy

Metric: Target equals the balance in the environmental liability account

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

	urrent Juarter	Year	r -to-Date		2018	2018		Prio	or Year						
,					ojection	Budget		Ac	ctual		2019		2020		<u>2021</u>
<u>\$</u>	17,647	\$	17,672	\$	17,672	N/A		\$	18,556	\$	16,818	\$	16,818	\$	16,318
\$	<u> </u>	\$		\$		\$		\$		\$	<u>-</u>	\$		\$	-
	829		854		854	N/A			884				500		5,000
\$	829	\$	854	\$	854	\$	<u> </u>	\$	884	\$	16.010	\$	500	\$	5,000 11,318
	\$	\$ -	\$ - \$ 829 \$ 829 \$	\$ - \$ - 829 854 \$ 829 \$ 854	\$ - \$ - \$ 829 854 \$ 829 \$ 854 \$	\$ - \$ - \$ - 829 854 854 \$ 829 \$ 854 \$ 854	- N/A \$ - \$ - \$ - \$ 829 854 854 N/A \$ 829 \$ 854 \$ 854 \$	- N/A \$ - \$ - \$ - \$ 829 854 854 N/A \$ 829 \$ 854 \$ 854 \$ -	- N/A \$ - \$ - \$ - \$ 829 854 854 N/A \$ 829 \$ 854 \$ 854 \$ - \$	- N/A - S - S - S - S - S - S - S - S - S -	- N/A - \$ - \$ - \$ - \$ - \$ \$ - \$ \$ - \$ \$ - \$	- N/A - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	- N/A - \$ - \$ - \$ - \$ - \$ \$ - \$ \$ - \$ \$ - \$	- N/A - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	- N/A - \$ - \$ - \$ - \$ - \$ - \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$

			His	torical					Stat	istical		
	2013	<u>2014</u>		<u>2015</u>	<u>2016</u>	2017	Low	ı	Median		Mean	High
Opening Balance Additions:	\$ 18,359	\$ 18,662	\$	18,662	\$ 18,662	\$ 18,556	\$ 18,359	\$	18,662	\$	18,580	\$ 18,662
Contributions	970						970		970		970	970
							-		-		-	-
Sub-total	\$ 970	\$ -	\$	-	\$ -	\$ -						
Deductions: Withdrawals	667				106	884	106		667		552	884
							-		-		-	-
Sub-total	\$ 667	\$ -	\$	-	\$ 106	\$ 884						
Ending balance	\$ 18,662	\$ 18,662	\$	18,662	\$ 18,556	\$ 17,672	\$ 17,672	\$	18,662	\$	18,443	\$ 18,662

Observations:

• The Environmental Reserve began in FY 2008.

Electric System Customer Deposits

For the Fiscal Quarter Ending September 30, 2018

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

Metric: Internal procedure CR40400 MBC302 Credit and Collections

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

	Actual as of	09/30/	2018		2010	ıll Year	D.	i V		P	rojection		
(In Thousands)	Current Quarter	Yea	r -to-Date	Pr	2018 ojection	2018 Budget		ior Year Actual	<u>2019</u>		<u>2020</u>		<u>2021</u>
Opening Balance Additions: Net Customer Activity Loan Repayment to ES Revenue Fund	\$ 44,079 163	\$	42,105 2,137	\$	42,105 2,137	N/A N/A	\$	41,084 1,021	\$ 44,242	\$	44,242	<u>\$</u>	44,242
Sub-total	\$ 163	\$	2,137	\$	2,137	\$ -	\$	1,021	\$ -	\$		\$	-
Net Customer Activity Loan to ES Revenue Fund						N/A		-					
Sub-total	\$ -	\$	_	\$		\$ 	\$	-	\$ -	\$		\$	-
Ending Balance	\$ 44,242	\$	44,242	\$	44,242	N/A	\$	42,105	\$ 44,242	\$	44,242	\$	44,242

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

Observations:

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

Electric System Debt Service Sinking Fund

For the Fiscal Quarter Ending September 30, 2018

Reserve/Fund Authorization: Bond Resolution

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

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

	Actual as of	f 09/30,	/2018			-	Full Year			P	rojection	
(In Thousands)	Current Quarter	Yea	ar -to-Date	Pi	2018 rojection		2018 Budget	Prior Year Actual	<u>2019</u>		<u>2020</u>	<u>2021</u>
Opening Balance Additions: Revenue Fund Deposits Bond funded interest	\$ 111,332 50,539	\$	167,087 201,359	\$	167,087 201,359		N/A	\$ 136,232 209,450	\$ 159,656 196,034	\$	148,745 141,056	\$ 90,887
Sub-total	\$ 50,539	\$	201,359	\$	201,359	\$	-	\$ 209,450	\$ 196,034	\$	141,056	\$ 136,439
Principal and Int Payments	2,215		208,790		208,790		N/A	178,595	206,945		198,914	139,464
Sub-total	\$ 2,215	\$	208,790	\$	208,790	\$	-	\$ 178,595	\$ 206,945	\$	198,914	\$ 139,464
Ending Balance	\$ 159,656	\$	159,656	\$	159,656		N/A	\$ 167,087	\$ 148,745	\$	90,887	\$ 87,862

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

Observations:

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

Electric System Debt Service Reserve Account

For the Fiscal Quarter Ending September 30, 2018

Reserve/Fund Authorization: Bond Resolution

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

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

		Actual as of	09/30/	2018		Fu	ll Year	Budget Am	ounts				Projection	
	C	Current				2018		2018		Pri	or Year			
(In Thousands)	C	Quarter Quarter	Yea	r -to-Date	Pr	ojection		Budget		Α	ctual	2019	<u>2020</u>	<u>2021</u>
Opening Balance Additions:	\$	60,582	\$	60,582	\$	60,582		N/A		\$	60,582	\$ 60,582	\$ 60,582	\$ 60,582
Sub-total	\$		\$		\$		\$			\$	<u> </u>	\$ <u> </u>	\$ <u> </u>	\$ -
Release to Revenue Fund								N/A			-			
Sub-total	\$		\$	-	\$		\$	-		\$		\$ 	\$ -	\$ -
Ending Balance	\$	60,582	\$	60,582	\$	60,582		N/A		\$	60,582	\$ 60,582	\$ 60,582	\$ 60,582

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

Observations

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

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

For the Fiscal Quarter Ending September 30, 2018

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

Metric: Renewal and Replacement required to deposit from the revenue fund annually an amount equal to the greater of 10% of the prior year defined annual net revenues or 5% of the prior year defined gross revenues per JEA's Electric System bond resolutions. Operating Capital Outlay - by 2013 the goal is to fund all non-capacity capital expenditures.

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

	Actual as of	09/30	/2018			ı	ull Year					P	rojection	
	Current				2018		2018		Pı	ior Year				
(In Thousands)	Quarter	Yea	ar -to-Date	Pi	rojection		Budget			Actual	<u>2019</u>		<u>2020</u>	<u>2021</u>
Opening Balance	\$ 196,856	\$	201,368	\$	201,368		N/A		\$	192,179	\$ 189,922	\$	105,305	\$ 81,301
Additions:	 													
R&R/OCO Contribution	20,900		148,105		148,105					196,589	201,067		238,236	235,920
Loans betw Capital Fds								-		-				
Other	19,802		35,675		35,675			-		5,074	19,431		2,000	2,000
Sub-total	\$ 40,702	\$	183,780	\$	183,780	\$		-	\$	201,663	\$ 220,498	\$	240,236	\$ 237,920
Deductions:			<u>.</u>											
Capital Expenditures	47,636		181,263		181,263					113,987	300,358		254,240	144,856
Transfers betw Capital Fds								-		37,200	4,757		10,000	
R&R/OCO Contribution														
Debt Defeasance								-		41,287				
Other	-		13,963		13,963									
Sub-total	\$ 47,636	\$	195,226	\$	195,226	\$		-	\$	192,474	\$ 305,115	\$	264,240	\$ 144,856
Ending Balance	\$ 189,922	\$	189,922	\$	189,922		N/A		\$	201,368	\$ 105,305	\$	81,301	\$ 174,365

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

Observations:

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

Electric Construction / Bond Fund

For the Fiscal Quarter Ending September 30, 2018

Reserve/Fund Authorization: Bond Resolution

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

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

		Actual as of	f 09/30/2	018			Ful	l Year				P	rojection	
	Cı	urrent			2	2018	2	2018	Р	rior Year				
(In Thousands)	Q	uarter	Year	-to-Date	Pro	jection	В	udget		Actual	<u>2019</u>		<u>2020</u>	<u>2021</u>
Opening Balance	\$	223	\$	-	\$	-		N/A	\$	_	\$ 203	\$	1	\$ 1
Additions:						,		,						
Bond Proceeds		-		805		805		-		429				150,000
Line of Credit								-		-				
Transfers b/w Capital Fds		-						-		-	4,757		10,000	
Other								-		-	102			
Sub-total	\$	-	\$	805	\$	805	\$	-	\$	429	\$ 4,859	\$	10,000	\$ 150,000
Deductions:											 			
Capital Expenditures		-								-	4,757		10,000	150,000
Bond Funded Interest								-		-				
Transfers b/w Capital Fds										-	202			
Other		20		602		602		-		429	102			
Sub-total	\$	20	\$	602	\$	602	\$	-	\$	429	\$ 5,061	\$	10,000	\$ 150,000
Ending Balance	\$	203	\$	203	\$	203	-	N/A	\$	-	\$ 1	\$	1	\$ 1

			Hist	torical					Stat	istical		
(In Thousands)	<u>2013</u>	<u>2014</u>		<u>2015</u>	<u>2016</u>	2017	Low	N	Median		Mean	High
Opening Balance	\$ 40,034	\$ 5,184	\$	42	\$ 4	\$ 	\$ -	\$	123	\$	7,578	\$ 40,034
Additions: Bond Proceeds Line of Credit	1,550					429	429 -		990 -		990 -	1,550 -
Transfers b/w Capital Fds Other	34	3,091 340		37	2		3,091 2		3,091 36		3,091 103	3,091 340
Sub-total Deductions:	\$ 1,584	\$ 3,431	\$	37	\$ 2	\$ 429						
Capital Expenditures Bond Funded Interest Line of Credit	35,253	4,821		75	6		- -		2,448 -		10,039 -	35,253 -
Transfers b/w Capital Fds	35	3,091					35		1,563		1,563	3,091
Other	1,146	661				 429	429		661		745	1,146
Sub-total	\$ 36,434	\$ 8,573	\$	75	\$ 6	\$ 429						
Ending balance	\$ 5,184	\$ 42	\$	4	\$ -	\$ -	\$ -	\$	4	\$	1,046	\$ 5,184

Observations

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

Water and Sewer Rate Stabilization Debt Management

For the Fiscal Quarter Ending September 30, 2018

Reserve/Fund Authorization: Bond Resolution and Pricing Policy

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

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

	Actual as of	f 09/30/	2018		2018	Full Year 2018		Dri	or Year		Pi	ojection	
(In Thousands)	Quarter	Yea	r -to-Date	Pr	ojection	Budget			ctual	2019		<u>2020</u>	<u>2021</u>
Opening Balance	\$ 14,209	\$	14,209	\$	14,209	N/A		\$	20,290	\$ 14,209	\$	14,209	\$ 14,209
Additions: Contributions Financial Statement Rounding	-		-		-	N/A			-				
Sub-total Deductions:	\$ -	\$		\$	-	\$	<u>-</u> <u>-</u>	\$		\$ 	\$		\$ -
Withdrawals									6,081				
Sub-total	\$ 	\$	-	\$		\$	<u> </u>	\$	6,081	\$ 	\$	-	\$ -
Ending Balance	\$ 14,209	\$	14,209	\$	14,209	N/A		\$	14,209	\$ 14,209	\$	14,209	\$ 14,209

			His	torical					Stat	istical		
	2013	<u>2014</u>		<u>2015</u>	<u>2016</u>	2017	Low	ı	Median		Mean	High
Opening Balance Additions: Contributions	\$ 20,290	\$ 20,290	\$	20,290	\$ 20,290	\$ 20,290	\$ 20,290	\$	20,290	\$	20,290	\$ 20,290
Sub-total Deductions:	\$ -	\$ 	\$		\$ 	\$ 	-		-		-	-
Withdrawals						6,081	6,081 - -		6,081 - -		6,081 - -	6,081 - -
Sub-total	\$ -	\$ 	\$	_	\$ 	\$ 6,081						
Ending balance	\$ 20,290	\$ 20,290	\$	20,290	\$ 20,290	\$ 14,209	\$ 14,209	\$	20,290	\$	19,074	\$ 20,290

Observations:

Contributions began in June 2009.

Water & Sewer System Rate Stabilization - Environmental

For the Fiscal Quarter Ending September 30, 2018

Reserve/Fund Authorization: Bond Resolution and Pricing Policy

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

		Actual as of	f 09/30/	2018			F	ull Year				Pr	ojection	
	(Current				2018		2018		Prior Year				
(In Thousands)	C	Quarter	Yea	r -to-Date	Pr	ojection	E	Budget		Actual	<u>2019</u>		2020	<u>2021</u>
Opening Balance	\$	11,914	\$	5,214	\$	5,214		N/A	\$	1,699	\$ 12,914	\$	12,914	\$ 12,914
Additions:						•								
Contributions		6,173		23,829		23,829				24,362	28,361		25,536	26,019
Regulatory Receivable														
Sub-total	\$	6,173	\$	23,829	\$	23,829	\$. \$	24,362	\$ 28,361	\$	25,536	\$ 26,019
Deductions:											 			
Withdrawals		5,173		16,129		16,129				20,847	28,361		25,536	26,019
Regulatory Receivable														
Sub-total	\$	5,173	\$	16,129	\$	16,129	\$	-	\$	20,847	\$ 28,361	\$	25,536	\$ 26,019
Ending Balance	\$	12,914	\$	12,914	\$	12,914	<u> </u>	N/A	\$	5,214	\$ 12,914	\$	12,914	\$ 12,914

					His	torical							Stati	istical		
	2	013	<u>2</u>	014		<u>2015</u>		<u>2016</u>		<u>2017</u>	Low	ı	Median		Mean	High
Opening Balance Additions:	\$		\$		\$		\$		\$	1,699	\$ -	\$	-	\$	340	\$ 1,699
Contributions								23,635		24,362	23,635		23,999		23,999	24,362
											-		-		-	-
											-		-		-	-
Sub-total Deductions:	\$		\$		\$		\$	23,635	\$	24,362						
Withdrawals								21,936		20,847	20,847		21,392		21,392	21,936
											-		-		-	-
Sub-total	<u> </u>		<u> </u>		<u> </u>		<u> </u>	21 026	<u> </u>	20.947	-		-		-	-
Ending balance	\$		\$		\$	<u>-</u>	\$	21,936 1,699	\$	20,847 5,214	\$ -	\$	-	\$	1,383	\$ 5,214

Observations

• Rate Stabilization Fund for Environmental began in June 2010.

Water and Sewer System Customer Deposits

For the Fiscal Quarter Ending September 30, 2018

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

Metric: Internal procedure CR40400 MBC302 Credit and Collections

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

	Actual as of	09/30/	2018	2018	Full Year 2018		Prior Year		P	rojection	
(In Thousands)	Current Quarter	Yea	r -to-Date	ojection	Budget		Actual	2019		2020	<u>2021</u>
Opening Balance Additions:	\$ 15,446	\$	15,086	\$ 15,086	N/A	\$	13,910	\$ 15,616	\$	15,616	\$ 15,616
Allocated from Electric Loan Repayment	170		530	530 -	N/A		1,176				
Sub-total Deductions: Allocated from Electric	\$ 170	\$	530	\$ 530	\$	\$	1,176	\$ -	\$	-	\$ -
Loan to W&S Operations				-	N/A						
Sub-total	\$ -	\$	-	\$ -	\$.	- \$	-	\$ -	\$	-	\$ -
Ending Balance	\$ 15,616	\$	15,616	\$ 15,616	N/A	\$	15,086	\$ 15,616	\$	15,616	\$ 15,616

			His	storical					Stat	istical		
	2013	2014		<u>2015</u>	<u>2016</u>	2017	Low	1	Median		Mean	High
Opening Balance Additions:	\$ 12,627	\$ 13,860	\$	12,787	\$ 13,255	\$ 13,910	\$ 12,627	\$	13,255	\$	13,288	\$ 13,910
Allocated from Electric Loan Repayment	1,233			468	655	1,176	468 -		655 -		766 -	1,176 -
Sub-total	\$ 1,233	\$ <u> </u>	\$	468	\$ 655	\$ 1,176	-		-		-	-
Deductions: Allocated from Electric Loan to W&S Operations		1,073					-		-		-	-
Sub-total	\$ -	\$ 1,073	\$		\$ 	\$ 	-		-		-	-
Ending balance	\$ 13,860	\$ 12,787	\$	13,255	\$ 13,910	\$ 15,086	\$ 12,787	\$	13,860	\$	13,780	\$ 15,086

Observations:

• JEA is in the process of implementing a prepaid meter program which could reduce customer deposits at some future date.

Water and Sewer Debt Service Sinking Fund

For the Fiscal Quarter Ending September 30, 2018

Reserve/Fund Authorization: Bond Resolution

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

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

	Actual as of	09/30/	/2018			Full Year				ı	Projection	
(In Thousands)	Current Quarter	Yea	ar -to-Date	Р	2018 rojection	2018 Budget		rior Year Actual	2019		<u>2020</u>	<u>2021</u>
Opening Balance Additions: Revenue fund deposits	\$ 53,675 28,413	\$	82,208 113,636	\$	82,208 113,636	 N/A		\$ 65,410	\$ 81,241 118,536	\$	83,544 120,110	\$ 84,119 120,310
Sub-total Deductions: Principal and interest payments	\$ 28,413	\$	113,636 114,603	\$	113,636 114,603	\$ N/A	<u>-</u>	\$ 98,075	\$ 118,536 116,233	\$	120,110 119,535	\$ 120,310 118,867
Sub-total Ending Balance	\$ 847 81,241	\$	114,603 81,241	\$	114,603 81,241	\$ N/A	<u>-</u>	\$ 98,075 82,208	\$ 116,233 83,544	\$	119,535 84,119	\$ 118,867 85,562

			His	storical				Stat	tistical		
(In Thousands)	<u>2013</u>	<u>2014</u>		<u>2015</u>	<u>2016</u>	<u>2017</u>	Low	Median		Mean	High
Opening Balance Additions:	\$ 81,675	\$ 80,317	\$	75,019	\$ 67,720	\$ 65,410	\$ 203	\$ 71,370	\$	61,724	\$ 81,675
Revenue fund deposits Bond funded interest	119,535	117,444		102,789	97,077	114,873	97,077 -	114,873 -		110,344 -	119,535 -
Sub-total Deductions:	\$ 119,535	\$ 117,444	\$	102,789	\$ 97,077	\$ 114,873	-	-		-	-
Principal and interest payments	120,893	122,742		110,088	99,387	98,075	98,075 -	110,088 -		110,237 -	122,742 -
Sub-total	\$ 120,893	\$ 122,742	\$	110,088	\$ 99,387	\$ 98,075	-	-		-	-
Ending balance	\$ 80,317	\$ 75,019	\$	67,720	\$ 65,410	\$ 82,208	\$ 65,410	\$ 75,019	\$	74,135	\$ 82,208

Observations

- September 30th ending balances are used to pay Oct 1st interest and principal payments.
- Timing differences occur due to the accrual of debt service during one fiscal year and the payment in the following fiscal year (primarily fixed rate principal and interest on Oct 1st of the following fiscal year).

Water and Sewer Debt Service Reserve Account

For the Fiscal Quarter Ending September 30, 2018

Reserve/Fund Authorization: Bond Resolution

Metric: 125% of average annual debt service on outstanding senior fixed and variable rate bonds plus subordinated fixed rate bonds as required by the Bond Resolutions

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

		of 09/30/2018		Full Year			Projection	
(In Thousands)	Current Quarter	Year -to-Date	2018 Projection	2018 Budget	Prior Year Actual	<u>2019</u>	2020	<u>2021</u>
Opening Balance	\$ 102,850	\$ 107,488	\$ 107,488	N/A	\$ 108,086	\$ 102,850	\$ 68,648	\$ 68,648
Additions:								
Construction reserve fund/bond issues				N/A	-			
Revenue fund				N/A	-			
Rounding								
Sub-total Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Deductions:	·							
Revenue fund		4,638	4,638		598	318		
Construction fund						33,884		
Sub-total	\$ -	\$ 4,638	\$ 4,638	\$ -	\$ 598	\$ 34,202	\$ -	\$ -
Ending Balance	\$ 102,850	\$ 102,850	\$ 102,850	N/A	\$ 107,488	\$ 68,648	\$ 68,648	\$ 68,648

			Hi	storical				Stat	istical		
	<u>2013</u>	<u>2014</u>		<u>2015</u>	<u>2016</u>	<u>2017</u>	Low	Median		Mean	High
Opening Balance Additions:	\$ 119,131	\$ 119,915	\$	116,829	\$ 108,849	\$ 108,086	\$ 108,086	\$ 116,829	\$	114,562	\$ 119,915
Construction reserve fund/bond issues	784						784	784		784	784
Revenue fund	3,821						3,821	3,821		3,821	3,821
Sub-total	\$ 4,605	\$ 	\$		\$ -	\$ 	-	-		-	-
Deductions:											
Revenue fund	3,821	3,086		7,980	763	598	598	3,086		3,250	7,980
							-	-		-	-
Sub-total	\$ 3,821	\$ 3,086	\$	7,980	\$ 763	\$ 598	-	-		-	-
Ending balance	\$ 119,915	\$ 116,829	\$	108,849	\$ 108,086	\$ 107,488	\$ 107,488	\$ 108,849	\$	112,233	\$ 119,915

Observations:

- In 2008, debt service reserve sureties downgraded and JEA began replacing those downgraded sureties with cash/investments as required by the bond resolutions. Sureties of \$149.8 million are still outstanding but are not eligible to be utilized as debt service reserve deposits per the Bond Resolutions.
- 2018 Bond Resolution amendment will allow the use of \$33 million AA+ rated Berkshire Hathaway Assuarance surety policy to be included in Debt Service Reserve Fund funding calculation which allows the release of \$33.8 million to the Construction Fund.

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

For the Fiscal Quarter Ending September 30, 2018

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

Metric: Renewal and Replacement required to deposit from the revenue fund annually an amount equal to the greater of 10% of the prior year defined annual net revenues or 5% of the prior year defined gross revenues per JEA's Water and Sewer System bond resolutions. Operating Capital Outlay - by 2013 the goal is to fund all non-capacity capital expenditures.

Definitions and Goals: Pursuant to the Water and Sewer System bond resolutions and Article 21 of the City of Jacksonville Charter, JEA is required to deposit from the revenue fund annually an amount for Renewal and Replacement of system assets. According to the bond resolutions the amount is equal to the greater of 10% of the prior year defined annual net revenues or 5% of the prior year defined gross revenues. The funds shall be used for the purposes of paying the cost of extensions, enlargements or additions to, or the replacement of capital assets of the Electric System. In addition, as a portion of the base rate, JEA will recover from current revenue a formula driven amount for capital expenditures which is referred to as Operating Capital Outlay. This amount is calculated separately from the R&R deposit. In accordance with the Pricing Policy, by 2013, the objective is to fund an amount equal to all non-capacity capital expenditures with current year internally generated funds.

		Actual as of	09/30	/2018			F	ull Year				P	rojection	
	(Current				2018		2018	P	rior Year				
(In Thousands)	C	Quarter	Ye	ar -to-Date	Pi	rojection		Budget		Actual	<u>2019</u>		<u>2020</u>	<u>2021</u>
Opening Balance	\$	80,818	\$	54,699	\$	54,699		N/A	\$	76,020	\$ 74,738	\$	63,896	\$ 38,302
Additions:														
R&R/OCO Contribution		37,557		153,372		153,372		-		108,119	128,731		119,767	123,337
Transfer from Capital Fds								-		137				
Other		1,721		6,383		6,383		-		8,050	12,157		12,544	9,051
Sub-total	\$	39,278	\$	159,755	\$	159,755	\$	-	\$	116,306	\$ 140,888	\$	132,311	\$ 132,388
Deductions:														
Capital Expenditures		45,358		139,716		139,716		-		132,588	151,080		157,255	163,140
Transfer to Capacity Fund								-		86				
Transfer to Construction Fund														
Other								-		4,953	650		650	
Sub-total	\$	45,358	\$	139,716	\$	139,716	\$	-	\$	137,627	\$ 151,730	\$	157,905	\$ 163,140
Ending Balance	\$	74,738	\$	74,738	\$	74,738		N/A	\$	54,699	\$ 63,896	\$	38,302	\$ 7,550

			His	storical					Stati	istical		
	2013	<u>2014</u>		<u>2015</u>	<u>2016</u>	<u>2017</u>	Low	- 1	Median		Mean	High
Opening Balance	\$ 64,260	\$ 78,689	\$	59,295	\$ 37,337	\$ 76,020	\$ 37,337	\$	64,260	\$	63,120	\$ 78,689
Additions:												
R&R/OCO Contribution	91,245	48,373		62,793	124,574	108,119	48,373		91,245		87,021	124,574
Loans betw Capital Fds	-			22		137	-		22		53	137
Other (incl septic tank)	1,539	1,614		653	30,889	8,050	653		1,614		8,549	30,889
Sub-total	\$ 92,784	\$ 49,987	\$	63,468	\$ 155,463	\$ 116,306						
Deductions:						 						
Capital Expenditures	68,355	67,488		85,426	116,674	132,588	67,488		85,426		94,106	132,588
Loan Repayment	-	-				86	-		-		29	86
Transfer to Constr. Fund	10,000	1,893			106		106		1,893		4,000	10,000
Other (incl septic tank)	-	-		-	-	4,953	-		-		991	4,953
Sub-total	\$ 78,355	\$ 69,381	\$	85,426	\$ 116,780	\$ 137,627						
Ending balance	\$ 78,689	\$ 59,295	\$	37,337	\$ 76,020	\$ 54,699	\$ 37,337	\$	59,295	\$	61,208	\$ 78,689

Observations

- Other includes the Septic Tank Phase-out project, Sale of Property, and the transfer of RSF Environmental in FY 2016 2019
- Includes \$20 million for Maximum Annual Debt Service calculation.
- \$57 million is projected to be withdrawn from this capital balance in FY 2016-2017 to support the capital program with lower Net Revenues as planned with the June 2012 approved reduction in the October 1, 2012 rate increase.

Water and Sewer Capacity Fees / State Revolving Fund Loans

For the Fiscal Quarter Ending September 30, 2018

Reserve/Fund Authorization: Florida Statute and Rate Tariff

Metric: Tariff rate

Definitions and Goals: Capacity fees are charged to customers as a one- time fee for a new connection to the Water System and a one- time fee for a new connection to the Sewer System. Capacity charges may be used and applied for the purpose of paying costs of expansion of the Water and Sewer System or paying or providing for the payment of debt that was issued for the same purpose. In addition, the Water and Sewer System has received funds from the State Revolving Fund (SRF) program for the construction of water and wastewater treatment facilities. SRF loans are subordinated to all Water and Sewer System Revenue Bonds and Water and Sewer System Subordinated Revenue Bonds.

	Actual as of	09/30/	/2018			F	ull Year			Р	rojection	
(In Thousands)	Current Quarter	Yea	ar -to-Date	Pr	2018 ojection		2018 Budget	Prior Year Actual	<u>2019</u>		2020	<u>2021</u>
Opening Balance Additions:	\$ 87,243	\$	95,620	\$	95,620		N/A	\$ 103,411	\$ 66,677	\$	60,153	\$ 54,468
Capacity Fees	8,613		28,002		28,002		-	24,777	25,394		23,994	23,994
State Revolving Fd Loan Transfer from R&R/OCO Fund					-		-	-	650		650	
Other Sub-total	\$ 8,613	\$	28,002	\$	28,002	\$	-	\$ 24,863	\$ 26,044	\$	24,644	\$ 23,994
Deductions:												
Capital Expenditures Other	29,179		56,921		56,921		-	32,654 -	32,568		30,329	43,748
			24		24		-	-				
Sub-total	\$ 29,179	\$	56,945	\$	56,945	\$	-	\$ 32,654	\$ 32,568	\$	30,329	\$ 43,748
Ending Balance	\$ 66,677	\$	66,677	\$	66,677		N/A	\$ 95,620	\$ 60,153	\$	54,468	\$ 34,714

			His	torical				Stat	istical		
(In Thousands)	2013	<u>2014</u>		<u>2015</u>	<u>2016</u>	2017	Low	Median		Mean	High
Opening Balance Additions:	\$ 45,454	\$ 60,360	\$	76,887	\$ 90,912	\$ 103,411	\$ 45,454	\$ 76,887	\$	75,405	\$ 103,411
Capacity Fees State Revolving Fd Loan	17,394 -	18,298		19,579	21,995	24,777	17,394 -	19,579 -		20,409	24,777 -
Loan Repayments	-	-		246	145		-	73		98	246
Other	12	-		5	7	86	-	7		22	86
Sub-total	\$ 17,406	\$ 18,298	\$	19,830	\$ 22,147	\$ 24,863					
Deductions: Capital Expenditures Loans betw Capital Fds	2,270	1,758		5,805	9,648	32,654	1,758 -	5,805 -		10,427	32,654 -
Other	230	13					13	122		122	230
Sub-total	\$ 2,500	\$ 1,771	\$	5,805	\$ 9,648	\$ 32,654					
Ending balance	\$ 60,360	\$ 76,887	\$	90,912	\$ 103,411	\$ 95,620	\$ 60,360	\$ 90,912	\$	85,438	\$ 103,411

Observations:

Water and Sewer Environmental

For the Fiscal Quarter Ending September 30, 2018

Reserve/Fund Authorization: Pricing Policy Metric: Unit tariff rates times consumption

Definitions and Goals: The Environmental Charge will be applied to all water, sewer, irrigation and non bulk user reclaimed consumption. The environmental charge revenue will be collected from customers to partially offset current and future environmental and regulatory needs as specified in the Pricing Policy for specific environmental and regulatory programs.

		Actual as of	09/30/2	2018			Fu	ull Year				Pi	rojection	
		urrent				2018		2018		ior Year				
(In Thousands)	Qı	uarter	Year	r-to-Date	Pro	jection		Budget	,	Actual	<u>2019</u>		<u>2020</u>	<u>2021</u>
Opening Balance	\$	407	\$	1,839	\$	1,839		N/A	\$	2,659	\$ 1,159	\$	999	\$ 999
Additions:				_				_				•		
Environmental Contributions		2,342		6,691		6,691		-		12,394	17,530		20,217	11,252
Loans betw Capital Fds								-		-				
Other								-		-				
Sub-total	\$	2,342	\$	6,691	\$	6,691	\$	-	\$	12,394	\$ 17,530	\$	20,217	\$ 11,252
Deductions:														
Capital Expenditures		1,589		7,370		7,370		-		13,214	17,690		20,217	11,252
Septic Tank Phase Out								-		-				
Other		1		1		1		-		-				
Sub-total	\$	1,590	\$	7,371	\$	7,371	\$	-	\$	13,214	\$ 17,690	\$	20,217	\$ 11,252
Ending Balance	\$	1,159	\$	1,159	\$	1,159		N/A	\$	1,839	\$ 999	\$	999	\$ 999

			His	storical				Stati	stical		
(In Thousands)	<u>2013</u>	<u>2014</u>		<u>2015</u>	<u>2016</u>	2017	Low	Median		Mean	High
Opening Balance	\$ (8,158)	\$ (9,857)	\$	5,299	\$ -	\$ 2,659	\$ (9,857)	\$ -	\$	(2,011)	\$ 5,299
Additions:	 					 					
Environmental Contributions	21,193	21,018		22,056	15,539	12,394	12,394	21,018		18,440	22,056
Loans betw Capital Fds	-	-					-	-		-	-
Other					 	 	-	-		-	-
Sub-total	\$ 21,193	\$ 21,018	\$	22,056	\$ 15,539	\$ 12,394					
Deductions:											
Capital Expenditures	22,892	5,862		7,318	12,880	13,214	5,862	12,880		12,433	22,892
Septic Tank Phase Out				203			203	203		203	203
Other	 			19,834	 	 	19,834	19,834		19,834	19,834
Sub-total	\$ 22,892	\$ 5,862	\$	27,355	\$ 12,880	\$ 13,214					
Ending balance	\$ (9,857)	\$ 5,299	\$	-	\$ 2,659	\$ 1,839	\$ (9,857)	\$ 1,839	\$	(12)	\$ 5,299

Observations:

Water and Sewer Construction / Bond Fund

For the Fiscal Quarter Ending September 30, 2018

Reserve/Fund Authorization: Bond Resolution

Metric: Capital expenditures per year minus internal funding available

Definitions and Goals: JEA maintains a senior and subordinated construction fund of which bonds proceeds are deposited and used for the payment of the costs of additions, extensions and improvements to the

Water and Sewer System.

		Actual as of	f 09/30/2	2018			F	ull Year					Pr	ojection		
	Cu	irrent			2	018		2018	Pri	or Year						
(In Thousands)	Quarter		Year -to-Date		Projection		Budget		Actual		<u>2019</u>		<u>2020</u>		2	2021
Opening Balance	\$	320	\$	15	\$	15		N/A	\$	152	\$	284	\$	13,884	\$	_
Additions:																
Bond Proceeds				894		894		-		-		33,884				
Line of Credit						-		-		-						
Transfer from R&R/OCO Fund								-		-						
Other								-		-						
Sub-total	\$	-	\$	894	\$	894	\$	-	\$	-	\$	33,884	\$	-	\$	-
Deductions:																
Capital Expenditures		36		623		623		-		-		20,000		13,884		
Bond Proceeds								-		-						
Other				2		2		-		137		284				
Sub-total	\$	36	\$	625	\$	625	\$	-	\$	137	\$	20,284	\$	13,884	\$	-
Ending Balance	\$	284	\$	284	\$	284		N/A	\$	15	\$	13,884	\$	-	\$	-

			Hist	torical					Stati	istical		
(In Thousands)	<u>2013</u>	<u>2014</u>		<u> 2015</u>	2	<u>2016</u>	2017	Low	Median		Mean	High
Opening Balance Additions:	\$ 7,419	\$ 2,305	\$	326	\$	664	\$ 152	\$ 152	\$ 664	\$	2,173	\$ 7,419
Bond Proceeds	486	_						_	243		243	486
Line of Credit	-	-						-	-		-	-
Loans/trnsf btw CapFds	10,000	1,893						1,893	5,947		5,947	10,000
Other	3	476		344		17		3	181		210	476
Sub-total	\$ 10,489	\$ 2,369	\$	344	\$	17	\$ -					
Deductions:												
Capital Expenditures	14,855	3,784		6				6	3,784		6,215	14,855
Bond Proceeds	411	48						48	230		230	411
Line of Credit	-	-						-	-		-	-
Loans/trnsf btw CapFds	337	516						337	427		427	516
Other	-	-				529	137	-	69		167	529
Sub-total	\$ 15,603	\$ 4,348	\$	6	\$	529	\$ 137					
Ending balance	\$ 2,305	\$ 326	\$	664	\$	152	\$ 15	\$ 15	\$ 326	\$	692	\$ 2,305

Observations

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

II. D. 2.

JEA Calendar Years 2019 and 2020 Fixed Rate Refunding Debt Parameter Resolutions for Electric, Water and Sewer, St. Johns River Power Park and Bulk Power Supply Systems II. D. 2. Return to 12/3/2018 Agenda (F&A)



November 13, 2018

	IEA GALENDAD VEADO CO	40 AND 0000 FIVED 5 - TE	DEELINDING DEDT						
SUBJECT:	JEA CALENDAR YEARS 20 PARAMETER RESOLUTION RIVER POWER PARK AND	S FOR ELECTRIC, WATER	AND SEWER, ST. JOHNS						
Purpose:	☐ Information Only		Advice/Direction						
Issue: Staff is requesting Board approval of all bond legal documents (listed in Attachment A) relating to delegated fixed rate debt refunding parameters and authorizations for the Electric System, Water and Sewer System and St. Johns River Power Park System.									
Significance:	High. Potential refunding trans	actions currently being evalua	ated require Board authorization.						
	the bond issuance delegation p ty in meeting the fluctuating de								
	fit: Potential debt service saving based on favorable market cor		refundings can be executed in a						
2018-15, 2018 Agreement, Pr Managing Dire System, Water	ed Board action: Staff recomm -16, 2018-17, 2018-18, 2018-1 reliminary Official Statement, Est ector/CEO the authorization to p r and Sewer System, Subordina Three and Bulk Power Supply S	9 and 2018-20 and the relate scrow Deposit Agreement an orice and execute Electric Sys ated Water and Sewer Syster	ed forms of Bond Purchase d Bond that will provide the stem, Subordinated Electric m, St. Johns River Power Park						

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

Submitted by: AFZ/RFW/JEO/RLH

stated parameters.



Commitments to Action





INTER-OFFICE MEMORANDUM

November 13, 2018

JEA CALENDAR YEARS 2019 AND 2020 FIXED RATE REFUNDING

SUBJECT: DEBT PARAMETER RESOLUTIONS FOR ELECTRIC, WATER AND

SEWER, ST. JOHNS RIVER POWER PARK AND BULK POWER

SUPPLY SYSTEMS

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

TO: JEA Finance and Audit Committee

Kelly Flannigan, Chair

John Campion Husein Cumber

BACKGROUND:

Since FY2010, JEA staff has utilized a debt financing approval process in which the Board delegated parameters, consistent with the current year budget, within which the Managing Director/CEO is authorized to price and execute future fixed rate bond issues. The process includes both fixed rate new money and refunding transactions. However, certain bond transactions, including but not limited to variable rate and synthetic fixed rate financings, continue to be brought to the Board on a deal-by-deal basis for approval. This provides staff with additional flexibility to move quickly and take advantage of market-related opportunities in the post financial crisis marketplace.

Staff, operating under subsequent Board approvals utilized this process for FY2011 and FY2012. For FY2013, the Managing Director/CEO utilized a variation of this delegation process whereby staff requested Board authorizations for fixed rate refunding transactions under delegated parameters on a deal-by-deal basis. In FY2014, and for CY2015 through 2018, the Board then returned to a delegation authorization process similar to that used in FY2010, 2011 and 2012, but limited the delegation authorizations to fixed rate refundings.

DISCUSSION:

To provide for efficiency in the Board's review time and provide staff with flexibility in taking advantage of market opportunities to lower debt service costs, staff is recommending the Board continue the delegation process most recently authorized in December 2016 for CY2019 and 2020. Under this process, the Board has authorized the Managing Director/CEO to price and execute future fixed rate bond refunding transactions (which may include full or partial terminations of interest rate swaps associated with the refunded variable rate bonds) within delegated parameters. The current action delegates such authorization for a period through the end of calendar year 2020 to refund existing variable rate and/or fixed rate bonds.

Board members will continue to have the opportunity to review and provide comments to staff, which is appropriate practice under federal securities laws, regarding all preliminary and final Official Statements prior to posting. These documents will be distributed to members electronically throughout the term of this delegated authorization, outside of regularly scheduled Board meetings, as specific bond issues are sold. The results of all bond issues sold will be reported back to the Board through quarterly reports to the Finance and Audit Committee.

These authorizations pertain only to refunding transactions. For the Electric, Water and Sewer, St. Johns River Power Park System (SJRPP) Issue Three and Bulk Power Supply System refunding transactions, only the use of tax-exempt debt is authorized. All other types of bond transactions not specifically described in the attached resolutions, including but not limited to new money, taxable, or new synthetic fixed rate financings and variable-to-variable rate refundings, would continue to be brought to the Board on a deal-by-deal basis for approval.

Bond counsel has prepared Resolutions No. 2018-15, 2018-16, 2018-17, 2018-18, 2018-19 and 2018-20 for the Electric System (Senior and Subordinated), Water and Sewer System (Senior and Subordinated), SJRPP Issue Three and Bulk Power Supply System, respectively, to authorize the Managing Director/CEO to price and execute certain refundings and pay the cost of issuance within the following amounts and issuance parameters:

	Fixed-to-Fixed Rate Refunding Authorization Level	Variable-to-Fixed Rate Refunding Authorization Level
Electric System – Senior	\$170 million	\$459 million
Electric System – Subordinated	\$130 million	\$133 million
Water and Sewer System – Senior	\$175 million	\$138 million
Water and Sewer System – Subordinated	\$45 million	\$106 million
St. Johns River Power Park – Issue Three	\$250 million	Not applicable
Bulk Power Supply System	\$60 million	Not applicable

For St. Johns River Power Park Bonds only:

• Final maturity for the SJRPP refunding bonds no later than October 1, 2039 for bonds that are refunding SJRPP Issue Three refunded bonds (final maturity of existing bonds)

For Electric System (Senior and Subordinated), Water and Sewer System (Senior and Subordinated), SJRPP Issue Three and Bulk Power Supply System bonds:

- Weighted average life no greater than the weighted average life of the refunded bonds plus one year.
- For fixed-to-fixed refunding bonds, bonds maturing on the October 1 next following the delivery date must have net present value savings, on an October 1 occuring at least one year and less than three years after the delivery date at least 3% present value savings, on an October 1 occuring at least three years and less than nine years after the delivery date at least 4% present value savings, and at least 5% present value savings thereafter. In lieu of this, present value savings for fixed-to-fixed rate current refundings shall not be less than 5%, measured on an aggregate basis.
- For variable rate bonds being refunded by fixed bonds, true interest cost for the fixed rate bonds shall not exceed 5%.
- If subject to optional redemption, optional redemption price shall not exceed 101% of the principal amount and the optional redemption date shall not be less than four years nor more than ten years from the date of issuance.
- Semiannual interest payments commencing on either the April 1 or October 1 next following the delivery date, as determined by the Managing Director/CEO.

Resolutions No. 2018-15, 2018-16, 2018-17, 2018-18, 2018-19 and 2018-20 authorize the sale of the bonds to JEA's Underwriters pursuant to negotiated sales. Resolutions No. 2018-15, 2018-16, 2018-17,

Page 3

2018-18 and 2018-19 also supersede and repeal unutilized authorizations previously approved in Resolutions No. 2016-21, 2016-22, 2016-23, 2016-24 and 2016-25, respectively, as amended.

Staff will select senior underwriters from the group of investment banking firms under contract with JEA for the purpose of underwriting negotiated sales of JEA's debt. The resolutions state that the bonds must be sold no later than December 31, 2020, as determined by the signing date of the bond purchase agreement.

The resolutions also approve the forms of and authorize the execution of various legal documents that have been prepared by counsel in connection with the issuance of any fixed rate refunding bonds issued authorized under these resolutions included with this agenda item:

Bond Purchase Agreement;

Escrow Deposit Agreement;

Bond Form and, available seperately upon request,

Preliminary Official Statement (published Preliminary Official Statement from each system's most recent bond transaction)

Staff will report back to the Finance and Audit Committee the results of any transaction(s) pursuant to authorizations at the next regularly scheduled meeting following the closing date of the refunding bonds.

RECOMMENDATION:

Staff recommends that the Board approve and adopt Resolutions No. 2018-15, 2018-16, 2018-17, 2018-18, 2018-19 and 2018-20 and the related forms of Bond Purchase Agreement, Preliminary Official Statement, Escrow Deposit Agreement and Bond that will provide the Managing Director/CEO the authorization to price and execute Electric System, Subordinated Electric System, Water and Sewer System, Subordinated Water and Sewer System, St. Johns River Power Park System Issue Three and Bulk Power Supply System fixed rate refunding transactions, respectively, within the stated parameters.

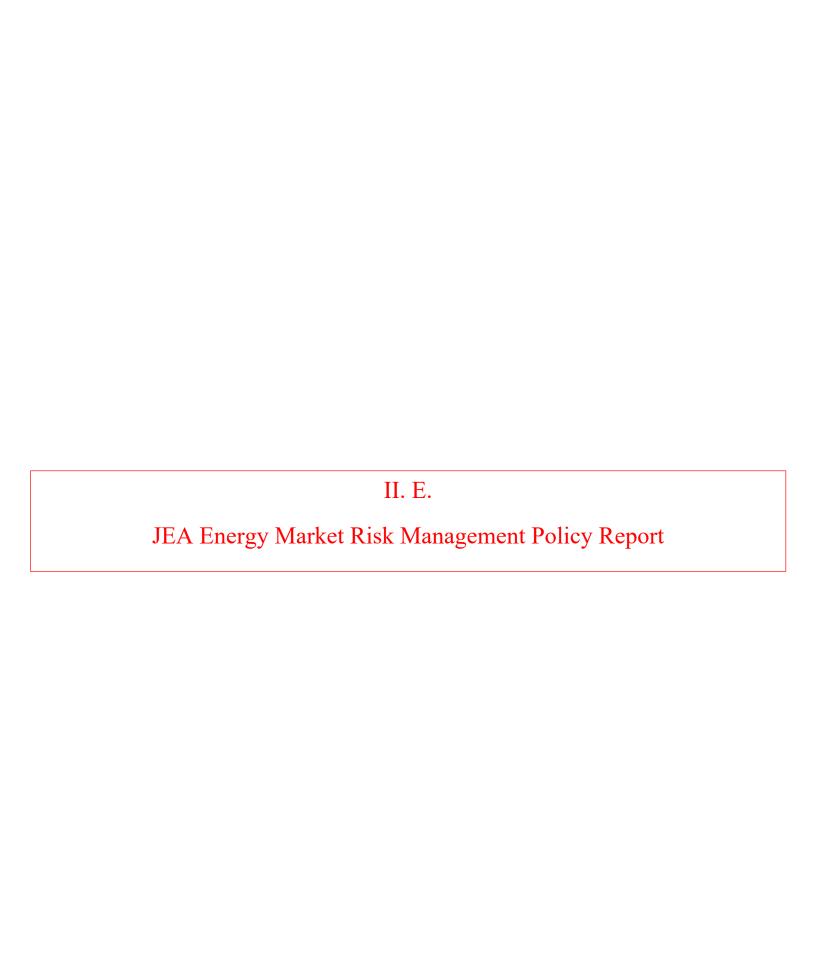
Aaron F. Zahn, Interim Managing Director/CEO

AFZ/RFW/JEO/RLH

II. D. 2.

JEA Calendar Years 2019 and 2020 Fixed Rate Refunding Debt Parameter Resolutions for Electric, Water and Sewer, St. Johns River Power Park and Bulk Power Supply Systems

Copies of the attachments will be provided at the Finance and Audit Committee.



II. E. Return to 12/3/2018 Agenda (F&A)



November 9, 2018

SUBJECT:	JEA ENERGY MARKET RI	SK MANAGEMENT POLICY	REPORT
Purpose:		Action Required	Advice/Direction
Policy was dev market exposu Protection Act.	reloped to codify the risk, gov ire, and to comply with require The reporting section of the and power transactions. This re	ernance, limits, and criteria as ements of the Dodd-Frank Wa Policy requires a quarterly rep	EMRM) Policy in March 2014. The ssociated with managing energy all Street Reform and Consumer port on JEA's financial and actions one year or greater and all
to execute cert	ain physical and financial trai		risk management and allows JEA t is provided to the Board Finance on of the EMRM Policy.
Effect: Financ	ial and physical transactions	allow the JEA Fuels group to	manage the risks inherent in the
	and energy markets. The atta		nmittee report summarizes JEA's
	it: The costs of financial transe e establishment of a stable fu		parison to market indices. The
Recommende provided as inf		red. The report is required by	the EMRM Policy and is
For additional	information, contact: Steve	e McInall, 665-4309	
Submitted by: AFZ/	MJB/SGM		



Commitments to Action



(F&A)

Energy Market Risk Management: Physical and Financial Positions

Summary as of 11/1/2018									
Projected FY19 Expense (Budget = \$418M)	\$426M	(1)							
Projected FY19 Fuel Fund Ending Balance (Target = \$95M)	\$52M	8							
EMRM Compliance	Yes	0							
Counterparty Credit Limit Exceptions	No	0							
Any Issues of Concern	No	0							

Table 1: Physical Conterparties (Contracts One Year or Greater) as of 11/1/2018

Generating Unit	Fuel Type	Supplier/Counterparty	Contract Type	Remaining Contract Value	Remaining Contract Term
Scherer 4	Coal	CY18 Blackjewel - Eagle Butte - 003	Fixed Price	\$325,356	2 months
Scherer 4	Coal	CY18 Peabody Caballo - 009	Fixed Price	\$376,106	2 months
Scherer 4	Coal	CY18 Buckskin - 010	Fixed Price	\$115,890	2 months
Scherer 4	Coal	CY19 Blackjewel - Eagle Butte - 001	Fixed Price	\$2,806,571	12 months
Scherer 4	Coal	CY19 Blackjewel - Eagle Butte - 004	Fixed Price	\$862,826	12 months
Scherer 4	Coal	CY19 Peabody Caballo -005	Fixed Price	\$2,334,578	12 months
Scherer 4	Coal	CY20 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	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	CY22 Blackjewel - Eagle Butte - 001	Fixed Price	\$426,657	12 months
Scherer 4	Coal	CY22 Peabody Caballo - 002	Fixed Price	\$315,968	12 months
NG Fleet	Natural Gas	Shell Energy	Index w/Fixed Price Option	\$159,023,096	2.58 years

Table 2: Financial Positions as of 11/1/2018

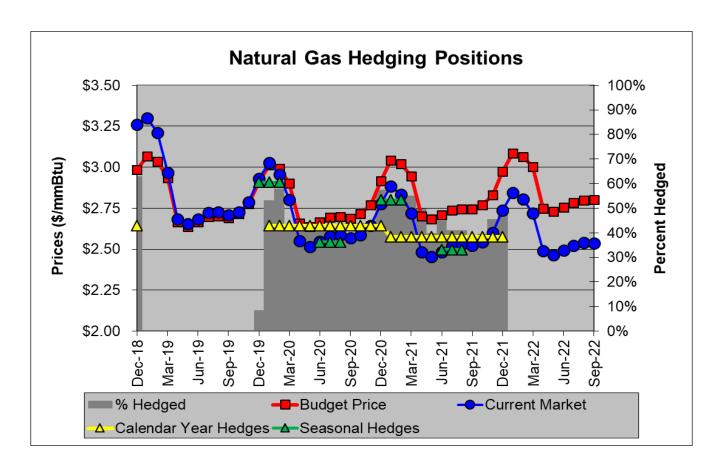
Year	Commodity	Physical Volume (mmBtu)	Hedged Volume (mmBtu)	Percent Hedged	Unhedged Cost (\$/mmBtu)	Hedge Type	Hedge Price	Mark-to-Market Value	Counter Party
FY19	Natural Gas	42,699,100	1,820,000	4.3%	\$ 2.89	Swap	\$ 2.65	\$ (1,121,120)	Wells Fargo
FY20	Natural Gas	51,521,600	18,270,000	35.5%	\$ 2.71	Swap	\$ 2.65	\$ (676,980)	Wells Fargo & RBC
FY21	Natural Gas	51,306,800	23,720,000	46.2%	\$ 2.62	Swap	\$ 2.60	\$ (619,400)	Wells Fargo & RBC
FY22	Natural Gas	55,220,500	5,520,000	10.0%	\$ 2.63	Swap	\$ 2.57	\$ (290,480)	RBC

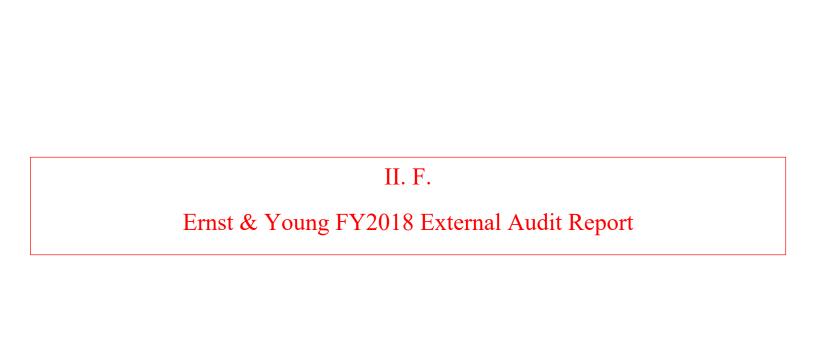
Table 3: Fuel Procurement as of 11/1/2018

Fuel Type	Natural Gas	Coal	Petcoke	Purchased Power	Oil/Diesel	Renewables
FY19 Remaining / Energy Mix	47%	19%	14%	18%	0%	2%
Expected Spend (\$)	126.1M	75.9M	47.8M	60.3M	1.8M	15.9M
% Procured	48%	57%	20%	62%	100%	100%
% Hedged	4%	57%	20%	6%	100%	100%
FY20 Budget / Energy Mix	51%	16%	13%	15%	0%	5%
Expected Spend (\$)	142.2M	71.3M	53.0M	49.7M	2.0M	29.3M
% Procured	78%	42%	7%	17%	100%	100%
% Hedged	34%	42%	7%	2%	100%	100%
FY21 Projection / Energy Mix	50%	17%	14%	13%	0%	6%
Expected Spend (\$)	136.9M	72.9M	56.5M	45.1M	5.3M	32.2M
% Procured	88%	38%	8%	0%	100%	100%
% Hedged	45%	38%	8%	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 and quarterly at Northside; CY2018-2022 for Scherer
- Table 3: FY Energy Mix based on MWH
- In Table 3, the procured percent relates to inventory on hand, or contracted and the percent hedged is inventory on hand or contracted with fixed pricing or financial hedges
- · Renewables in Table 3 represent signed agreements and an estimated cost for pending contracts









November 14, 2018

SUBJECT:	ERNST & YOUNG FY2018	8 EXTERNAL AUDIT REPO	ORT						
Purpose:	☐ Information Only	Action Required	Advice/Direction						
Issue: Ernst & Young, LLP (E&Y) presented their audit plan for FY2018 at the Finance and Audit Committee (FAC) meeting on August 13, 2018. At that meeting, they outlined the scope of their services, identified the E&Y team that will perform the audit and presented the key considerations that will affect the FY2018 audit. On a yearly basis, the independent auditors meet with the FAC to review the results of the annual audit.									
Board that may Coordinating F	Auditing standards require the y assist the Board in overseein Partner from E&Y, has been inveting to discuss the FY2018 at	ng management's financial repolitied to attend the December 3	oorting process. John DiSanto,						
	ng with auditors to discuss the financial reporting process.	audit results will assist the Bo	ard in overseeing						
Cost or Benef	it: There is no cost. See effect	t above for benefits.							
Recommende information, or	d Board action: No action by aly.	the Committee is required. T	his item is submitted for						
For additional	information, contact: Janice	e Nelson							
Submitted by: AFZ/	RFW/ JRN								



Commitments to Action







INTER-OFFICE MEMORANDUM

November 14, 2018

SUBJECT: Ernst & Young FY2018 External Audit Report

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

TO: JEA Finance and Audit Committee

Kelly Flanagan, Chair

John Campion Husein Cumber

BACKGROUND:

Auditing standards require the auditors to communicate certain matters to the Governing Board, that may assist the Board in overseeing management's financial reporting process. Ernst & Young, LLP (E&Y) presented their audit plan for fiscal year 2018 at the Finance and Audit Committee (FAC) meeting on August 13, 2018. At that meeting, they outlined the scope of their services, identified the E&Y team that will perform the audit and presented the key considerations that will affect the 2018 audit. Representatives from E&Y have been invited to attend the December 3, 2018 Finance and Audit Committee meeting to discuss FY2018 audited results.

DISCUSSION:

Attached is a draft copy of JEA's Audited Financial Statements. In addition, attached is a copy of the Audit Report on the Allocation of Net Pension Liability of the City of Jacksonville General Employees Retirement Plan (GERP) performed by Carr, Riggs & Ingram (CRI). This report summarizes the results of the audit and also contains communications required by auditing professional standards. E&Y relies on the audit performed by CRI to support JEA's allocations (deferred inflows of resources, deferred outflows of resources, pension expense and net pension liability) of GERP that is included in JEA's financial statements.

RECOMMENDATION:

No action by the Committee is required. This item is submitted for information, only.

Aaron F. Zahn, Interim Managing Director/CEO

AFZ/RFW/JRN

II. F. Return to 12/3/2018 Agenda (F&A)

City of Jacksonville General Employees Retirement Plan

Audit Report on Schedules of Pension-Related Amounts

September 30, 2017



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Carr, Riggs & Ingram, LLC 4010 N.W. 25th Place Gainesville, Florida 32606 P.O. Box 13494 Gainesville, Florida 32604

(352) 372-6300 (352) 375-1583 (fax) www.cricpa.com

INDEPENDENT AUDITOR'S REPORT

Jacksonville City Council Board of Directors, JEA

We have audited the accompanying schedule of employer allocations and net pension liability of the City of Jacksonville Retirement System's General Employees Retirement Plan (the "Plan") as of September 30, 2017, (the "Schedule") and the related notes. We have also audited the columns titled net pension liability at September 30, 2017, total deferred outflows of resources, total deferred inflows of resources, and pension plan expense ("Specified Column Totals") included in the accompanying schedule of collective pension amounts of the Plan as of and for the year ended September 30, 2017, and the related notes.

Management's Responsibility for the Schedules

Management is responsible for the preparation and fair presentation of these schedules in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the schedules that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on the Schedule and the Specified Column Totals based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the Schedule and Specified Column Totals are free from material misstatement.

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

used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the Schedule and Specified Column Totals.

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

Opinions

In our opinion the Schedule and Specified Column Totals referred to above present fairly, in all material respects, the employer allocations and net pension liability as of September 30, 2017, and the total deferred outflows of resources, total deferred inflows of resources, and pension expense for the Plan as of and for the year ended September 30, 2017, in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 2 to the financial statements, the Schedule and the Specified Column Totals are not intended to be a complete presentation of the Plan's financial statements. Our opinions are not modified with respect to this matter.

Restriction on Use

This report is intended solely for the information and use of the City of Jacksonville, JEA, Jacksonville Housing Authority (JHA), North Florida Transportation Planning Organization and their auditors and is not intended to be and should not be used by anyone other than these specified parties.

Gainesville, Florida

Can Rigge & Ingram, L.L.C.

October 26, 2018

City of Jacksonville General Employees Retirement Plan Schedule of Employer Allocations and Net Pension Liability

September 30, 2017

	C	Employer ontributions	Proportion of Net Pension Liability	Net Pension Liability
Entity				
City of Jacksonville	\$	43,911,000	46.37%	\$ 473,462,095
JEA		48,942,000	51.68%	527,679,989
Jacksonville Housing Authority		1,697,000	1.79%	18,276,842
North Florida Transportation Planning Organization		150,000	0.16%	 1,633,684
Total	\$	94,700,000	100.00%	\$ 1,021,052,610

City of Jacksonville General Employees Retirement Plan Schedule of Collective Pension Amounts

As of and for the year ended September 30, 2017

					Deferred Outflov	vs of Resources		_				Deferred Inflo	ws of Resources				
									Net Difference								
								Е	Between Projected								
				Differences					and Actual		Differences						
		Net Pension	Be	tween Expected			Total Deferred		Earnings on	Be	tween Expected			-	Total Deferred		
		Liability		and Actual	Changes of	Changes in	Outflows of		Pension Plan		and Actual	Changes of	Changes in		Inflows of	Pε	ension Plan
Entity	Sep	otember 30, 2017		Experience	Assumptions	Proportion	Resources		Investments		Experience	Assumptions	Proportion		Resources		Expense
City of Jacksonville	\$	473,462,095	\$	22,858,978	\$ 53,603,046	\$ -	\$ 76,462,024	\$	33,879,861	\$	1,384,259	\$ 3,346,886	\$ 17,753,152	\$	56,364,158	\$	59,143,068
JEA		527,679,989		25,476,644	59,741,328	16,451,686	101,669,658		37,759,569		1,542,776	3,730,152	-		43,032,497		77,110,506
Jacksonville Housing Authority		18,276,842		882,415	2,069,214	1,796,356	4,747,985		1,307,849		53,436	129,198	658,556		2,149,039		3,210,841
North Florida Transportation Planning Organization		1,633,684		78,875	184,958	306,759	570,592		116,903		4,776	11,548	143,093		276,320		332,927
Total	\$	1,021,052,610	\$	49,296,912	\$ 115,598,546	\$ 18,554,801	\$ 183,450,259	\$	73,064,182	\$	2,985,247	\$ 7,217,784	\$ 18,554,801	\$	83,267,213	\$	139,797,342

NOTE 1 - SUMMARY OF THE PLAN

The City of Jacksonville sponsors the City of Jacksonville Retirement System (JRS) which includes the General Employees Retirement Plan (the "Plan"). The JRS arises out of Chapter 16 of the City Charter, Chapter 120 of Ordinance Code of the City of Jacksonville, and Chapter 112, Part VII, Florida Statutes. Provided other criteria are met, the Plan is available to City employees who are employed by one of the following entities: City of Jacksonville, JEA, Jacksonville Housing Authority (JHA), and North Florida Transportation Planning Organization (TPO). Effective October 1, 2009, the City added an employee choice defined contribution alternative to the defined benefit plan for all members of the Plan. The City hired a third party administrator to assist employees with the management of their individual accounts within a number of investment options including model portfolios. All full-time City employees, the employees of JEA, JHA and the employees of TPO are eligible to participate in the Plan upon employment.

As of September 30, 2017, the General Employees Retirement Plan membership consisted of the following:

Retirees and beneficiaries currently receiving benefits	5,105
Terminated employees vested, not yet receiving benefits	195
Active employment plan members:	
Vested	3,534
Non-vested	<u>1,110</u>
Total plan membership	9,944

The Plan is open to employees of the JEA, JHA, TPO, and City of Jacksonville, other than police officers and firefighters. Appointed officials and permanent employees not in the civil service system may opt to become members of the Retirement System. Elected officials are members of the Florida Retirement System Elected Officer Class. Participation in the Retirement System is mandatory for all full time employees of the City who otherwise meet the requirements for participation. Members of the Plan are eligible to retire with a normal pension benefit upon achieving one of the following:

- (a) Completing thirty (30) years of credited service, regardless of age;
- (b) Attaining age fifty-five (55) with twenty (20) years of credited service; or
- (c) Attaining age sixty-five (65) with five (5) years of credited service.

There is no mandatory retirement age.

Upon reaching one of the three conditions for retirement described above, a member is entitled to a retirement benefit of two and one-half (2.5) percent of final average compensation, multiplied by the number of years of credited service, up to a maximum benefit of eighty (80) percent of final monthly compensation. A time service retirement benefit is payable bi-weekly to commence upon the first

NOTE 1 – SUMMARY OF THE PLAN (CONTINUED)

payday coincident with or next payday following the member's actual retirement and will continue until death, or the death of their surviving beneficiary, if this option is selected.

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

NOTE 2 – SIGNIFICANT ACCOUNTING POLICIES

Governmental Accounting Standards Board (GASB) Statement No. 67

The Plan is required to report pension information in its financial statements in accordance with Governmental Accounting Standards Board (GASB) Statement No. 67, Financial Reporting for Pension Plans, as amended.

The accompanying schedules relate only to certain pension-related amounts and they do not constitute a full set of financial statements for the Plan.

The accompanying schedules are a specific element of the City's financial statements and were prepared in accordance with U.S. generally accepted accounting principles as applicable to governmental organizations. In doing so, the accompanying schedules, adhere to the reporting requirements established by the GASB to the extent that they relate to the accompanying schedules.

Basis of Accounting

The Plan prepares its financial statements using the accrual basis of accounting.

Proportionate Share Allocation Methodology

The basis for each entity's proportion is actuarially determined by comparing the entity's employer contributions for the year ended September 30, 2017. This basis is intended to measure the proportion of each entity's long term funding requirements.

NOTE 2 – SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Use of Estimates in the Preparation of the Schedules

The preparation of these schedules in conformity with accounting principles generally accepted in the U.S. requires management to make estimates and assumptions that affect certain amounts and disclosures. Actual results could differ from those estimates.

Relationship to the Basic Financial Statements

The net pension liability, pension expense, deferred inflows of resources and deferred outflows of resources reported in the Schedules of Pension-Related Accounts have been determined on the same basis as they will be reported by the Plan in the Comprehensive Annual Financial Report of The City of Jacksonville, Florida.

Investments

Investments are recorded at fair value. Investment values fluctuate and are subject to market volatility.

NOTE 3 – NET PENSION LIABILITY AND ACTUARIAL ASSUMPTIONS AND METHODS

The components of the net pension liability are as follows:

Total pension liability	\$ 3,040,720,610
Plan fiduciary net position	2,019,668,000
Net pension liability	\$ 1,021,052,610

The total pension liability was determined as of a measurement date of September 30, 2017, using an actuarial valuation date of October 1, 2017, and the following actuarial assumptions, applied to all periods included in the measurement:

NOTE 3 - NET PENSION LIABILITY AND ACTUARIAL ASSUMPTIONS AND METHODS (CONTINUED)

Inflation 2.75%

Salary increases assumption 3.00% - 6.00%, of which 2.75% is the Plan's long-term payroll

inflation.

Investment rate of return 7.20%, net of pension plan investment expense, including

inflation.

Pre-retirement mortality rates 50% RP2000 Combined Healthy White Collar and 50% RP2000

Combined Healthy Blue Collar, set forward 2.5 years, projected generationally with Scale BB for males; RP2000 Combined Healthy White Collar, set forward 2.5 years, projected

generationally with Scale BB for females.

Healthy annuitant mortality rates 50% RP2000 White Collar Annuitant and 50% RP2000 Blue

Collar Annuitant, set forward 2.5 years, projected

generationally with Scale BB for males; RP2000 White Collar Annuitant, set forward 2.5 years, projected generationally with

Scale BB for females.

Disabled annuitant mortality rates RP-2000 Disabled Retiree Mortality Table, setback four years

for males and set forward two years for females

The actuarial assumptions used in the October 1, 2017 valuation were based on the results of an experience study for the period October 1, 2007 to September 30, 2012, with additional changes based on an interim study of mortality experience through September 30, 2017.

The following changes in key actuarial assumptions occurred in 2017:

• The long-term expected rate of return and the discount rate used to determine the total pension liability decreased from 7.40% to 7.20%.

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

NOTE 3 - NET PENSION LIABILITY AND ACTUARIAL ASSUMPTIONS AND METHODS (CONTINUED)

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

Discount Rate

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

Sensitivity Analysis

The following tables demonstrate the sensitivity of the net pension liability to changes in the discount rate. The sensitivity analysis shows the impact to the net pension liability if the discount rate was 1.00% higher or 1.00% lower than the current discount rate.

Proportional share of the Net Pension Liability	1% Decrease (6.20%)		Current Discount (7.20%)		1% Increase (8.20%)		
City of Jacksonville	\$	640,438,131	\$	473,462,095	\$	334,242,565	
JEA		713,777,068		527,679,989		372,517,915	
Jacksonville Housing Authority North Florida Transportation		24,722,542		18,276,842		12,902,614	
Planning Organization		2,209,836		1,633,684		1,153,306	

NOTE 3 - NET PENSION LIABILITY AND ACTUARIAL ASSUMPTIONS AND METHODS (CONTINUED)

Plan Fiduciary Net Position

The Plan's fiduciary net position as a percentage of total pension liability is 66.42%.

NOTE 4 – INVESTMENTS

Fair Value Measurements

The Plan categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

Investment Type	Ţ	otal Fair Value	A	uoted Prices in active Markets For Identical ssets (Level 1)	Obs	Significant servable Inputs (Level 2)		Significant Unobservable Inputs (Level 3)
		E 42 7E4 622		F 42 7F4 622	_		_	
Corporate Stock - Common	\$	542,751,622	\$	542,751,622	\$	-	\$	-
Registered Investment Companies		17,264,047		17,264,047		-		-
U.S. Government Securities		97,637,366		49,704,717		47,932,649		-
Corporate Debt Instruments		126,912,977		-		126,912,977		-
Common/Collective Trust		479,801,099		-		-		479,801,099
Partnership/Joint Venture Interest		435,915,236		74,918,474		-		360,996,762
Pooled Separate Accounts		85,445,689		-		-		85,445,688
*Other Investments		233,939,964		2,694,444		806,613		230,438,907
	\$	2,019,668,000	\$	687,333,304	\$	175,652,239	\$	1,156,682,457

^{*} Composed of 103-12 investments, Other Short Term Bonds, Derivatives, and Cash/Dividend/Interest/Misc., Payables/Pending trades as of 9/30/17.

The Plan has the following recurring fair value measurements as of September 30, 2017:

- <u>Corporate Stock (Common)</u> Values using the
- Registered Investment Co. Valued at the daily closing net asset value (NAV) as reported by the
 fund and as supplied by third party vendors to the Plan's custodian. Short term fixed income
 investment funds (security maturities that do not exceed one year) may be valued using book
 value.
- <u>U.S. Government Securities</u> Short term US government fixed income securities (with maturities that do not exceed one year) are valued using book value. Securities with maturities greater than one year are valued using prevailing market bids and based upon calculations that reflect the expected price to an investor in an orderly transaction.

NOTE 4 – INVESTMENTS (CONTINUED)

- <u>Corporate Debt Instruments</u> Short term corporate debt securities (with maturities that do not exceed one year) are valued using book value. Securities with maturities greater than one year are valued using prevailing market bids or a measurable market close and are based upon calculations that reflect the expected price to an investor in an orderly transaction.
- <u>Common/Collective Trusts</u> Valued based on an appraisal or calculated and assigned by a general or managing partner of the vehicle in which the security is held.
- <u>Partnership/Joint Venture Interests</u> Underlying equity investments valued using the primary exchange close price. Underlying non-equity investments valued based on an appraisal or calculated and assigned by a general or managing partner of the vehicle in which the investment is held.
- <u>Pooled Separate Accounts</u> Valued based on an appraisal or calculated and assigned by a general or managing partner of the vehicle in which the investment is held.

Interest Rate Risk

Interest rate risk is controlled primarily through duration, which is a measure that approximates the change in value of a bond, or bond portfolio, for a given change in interest rates. In general, shorter duration measures are less sensitive to interest rate shifts, while longer durations are more sensitive. To limit the portfolio volatility associated with changes in interest rates, the Plan's investment policy statement restricts the average duration of the overall portfolio to a range of 0.75 – 5.00 years, of which, no more than 7.5% of the individual securities in the portfolio can have a duration greater than eight and one-half (8.5) years. This guideline applies to all investment types underlying the portfolio including, but not limited to, government, agency, corporate, international, and mortgage backed securities.

Credit Quality

The portfolio measures credit quality of the fixed income holdings contained therein using Moody's rating schedule. Credit quality is reported on a quarterly basis and is monitored by the Pension Board of Trustees, staff to the board, and by the plan's consultant. Credit quality reports are provided on the overall portfolio to illustrate the credit risk at fiscal-year end.

Quality Breakdown	Portfolio (%)
Aaa	34%
Aa1-Aa3	3%
A1-A3	19%
Baa1-Baa3	17%
Ba1-Ba3	1%
Other	1%
Commingled	25%
	100%

NOTE 4 – INVESTMENTS (CONTINUED)

Rating definitions:

Treasury – United States Treasury Securities (Included in Aaa)

Agency – Government Agency Securities (Included in Aaa)

Aaa (AAA) – Highest Investment Grade Quality Rating

Aa1-Aa3 (AA+ to AA-) – Medium Investment Grade Quality Rating

A1-A3 (A+ to A-) – Medium Low Investment Grade Quality Rating

Baa1-Baa3 (BBB+ to BBB-) – Lowest Investment Grade Quality Rating

Ba1-Ba3 (BB+ to BB-) – Highest Non-Investment Grade Quality Rating

Commingled – Securities that are not applicable to Quality Ratings – they predominantly represent mutual funds that are listed and valued as a whole, not individual holdings, as well as minor exposure to non-investment grade securities.

Custodial Credit Risk

The custodial relationship is governed by written agreements that are executed by all parties and specifies that, all securities owned and cash held by the Plan shall be held in the City's, or its nominee's, name in an account separate from all other accounts maintained by the custodian and shall at all times, while in the custody of the Custodian, be designated as an asset of the City's Pension Trust.



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(352) 372-6300 (352) 375-1583 (fax) www.cricpa.com

October 26, 2018

To the Jacksonville City Council Board of Directors, JEA

We are pleased to present the results of our audit of the schedule of employer allocations and net pension liability, and the column totals specified in our auditor's report of the schedule of collective pension amounts (the "Schedules") of the City of Jacksonville Retirement System's General Employees Retirement Plan (the "Plan").

This communication summarizes our audit, the report issued and various analyses and observations related to the financial accounting and reporting practices followed. The document also contains the communications required by our professional standards.

The audit was designed, primarily, to express an opinion on the Schedules. We considered an assessment of risks that could materially affect the financial statements and aligned our audit procedures accordingly. We conducted the audit with the objectivity and independence that you expect. We received the full support and assistance of your personnel.

At Carr, Riggs & Ingram, LLC ("CRI"), we are continually evaluating the quality of our professionals' work in order to deliver audit services of the highest quality that will meet or exceed your expectations. We encourage you to provide any feedback you believe is appropriate to ensure that we do not overlook a single detail as it relates to the quality of our services.

This information is intended solely for the information and use of you and management and is not intended to be, and should not be, used by anyone other than these specified parties.

We appreciate this opportunity to work with you. If you have any questions or comments, please contact us.

Very truly yours,

CARR, RIGGS & INGRAM, LLC

CERTIFIED PUBLIC ACCOUNTANTS

Can, Rigge & Ingram, L.L.C.

Our audit plan represented an approach responsive to the assessment of risk. Specifically, we planned and performed our audit to:

- Perform audit services in accordance with auditing standards generally accepted in the United States of America and Government Auditing Standards issued by the Comptroller General of the United States, in order to express an opinion on the Schedules as of and for the year ended September 30, 2017;
- Communicate directly with you and management regarding the results of our procedures;
- Address with you and management any accounting and financial reporting issues;
- Anticipate and respond to your concerns and those of management; and
- Address other audit-related projects as they arise and upon request.

We have audited the Schedules as of and for the year ended September 30, 2017, and have issued our report thereon dated October 26, 2018. Professional standards require that we provide you with the following information related to our audit:

MATTER TO BE COMMUNICATED	AUDITOR'S RESPONSE
Auditor's responsibility under Generally Accepted Auditing Standards	As stated in our engagement letter dated July 30, 2018, our responsibility, as described by professional standards, is to express an opinion about whether the financial statements prepared by management with your oversight are fairly presented, in all material respects, in conformity with accounting principles generally accepted in the United States of America (GAAP). Our audit of the financial statements does not relieve you or management of your responsibilities. As part of our audit, we considered the internal control of the Plan. Such considerations were solely for the purpose of determining our audit procedures and not to provide any assurance concerning such internal control.
Client's responsibility	Management, with oversight from those charged with governance, is responsible for establishing and maintaining internal controls, including monitoring ongoing activities; for the selection and application of accounting principles; and for the fair presentation in the financial statements of financial position, results of operations, and cash flows in conformity with the applicable framework. Management is responsible for the design and implementation of programs and controls to prevent and detect fraud.
Planned scope and timing of the audit	Our initial audit plan was not significantly altered during our fieldwork.
Management judgments and accounting estimates The process used by management in forming particularly sensitive accounting estimates and the basis for the auditor's conclusion regarding the reasonableness of those estimates.	Please see the following section titled "Accounting Policies, Judgments and Sensitive Estimates and CRI Comments on Quality."
Potential effect on the financial statements of any significant risks and exposures Major risks and exposures facing the Plan and how they are disclosed.	No such risks or exposures were noted.

MATTER TO BE COMMUNICATED

Significant accounting policies, including critical accounting policies and alternative treatments within generally accepted accounting principles and the auditor's judgment about the quality of accounting principles

- The initial selection of and changes in significant accounting policies or their application; methods used to account for significant unusual transactions; and effect of significant policies in controversial or emerging areas for which there is a lack of authoritative guidance or consensus.
- The auditor should also discuss the auditor's judgment about the quality, not just the acceptability, of the Plan's accounting policies as applied in its financial reporting. The discussion should include such matters as consistency of accounting policies and application, and clarity completeness of the financial statements, including disclosures. Critical accounting policies and practices applied by the Plan in its financial statements and our assessment of management's disclosures regarding such policies and practices (including significant modifications to such disclosures proposed by us but management), the reasons why certain policies and practices are or are not considered critical, and how current and anticipated future events impact those determinations;
- Alternative treatments within GAAP for accounting policies and practices related to material items, including recognition, measurement, presentation and disclosure alternatives, that have been discussed with client management during the current audit period, the ramifications of the use of such alternative disclosures and treatments, and the treatment preferred by the auditor; Furthermore, if the accounting policy selected by management is not the policy preferred by us, discuss the reasons why management selected that policy, the policy preferred by us, and the reason we preferred the other policy.

AUDITOR'S RESPONSE

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used are described in Note 2 of the audit report. We noted no transactions entered into during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the Schedules in the proper period.

MATTER TO BE COMMUNICATED	AUDITOR'S RESPONSE
Significant difficulties encountered in the audit Any significant difficulties, for example, unreasonable logistical constraints or lack of cooperation by management.	None.
Disagreements with management Disagreements, whether or not subsequently resolved, about matters significant to the financial statements or auditor's report. This does not include those that came about based on incomplete facts or preliminary information.	None.
Other findings or issues Matters significant to oversight of the financial reporting practices by those charged with governance. For example, an entity's failure to obtain the necessary type of audit, such as one under Government Auditing Standards, in addition to GAAS.	None.
Matters arising from the audit that were discussed with, or the subject of correspondence with, management Business conditions that might affect risk or discussions regarding accounting practices or application of auditing standards.	None.
Corrected and uncorrected misstatements All significant audit adjustments arising from the audit, whether or not recorded by the Plan, that could individually or in the aggregate have a significant effect on the financial statements. We should also inform the Committee about uncorrected misstatements aggregated by us during the current engagement and pertaining to the latest period presented, that were determined by management to be immaterial, both individually and in the aggregate, to the financial statements taken as a whole. Any internal control deficiencies that could have prevented the misstatements.	No misstatements were detected as a result of our audit procedures.

MATTER TO BE COMMUNICATED	AUDITOR'S RESPONSE
Major issues discussed with management prior to retention Any major accounting, auditing or reporting issues discussed with management in connection with our initial or recurring retention.	None.
Consultations with other accountants When management has consulted with other accountants about significant accounting or auditing matters.	None of which we are aware.
Written representations A description of the written representations the auditor requested (or a copy of the representation letter).	See "Management Representation Letter" section.
Internal control deficiencies Any significant deficiencies or material weaknesses in the design or operation of internal control that came to the auditor's attention during the audit.	See "Internal Control Findings" section.
Fraud and illegal acts Fraud involving senior management, the Plan Administrator or those responsible for internal controls, or causing a material misstatement of the financial statements, where the auditor determines there is evidence that such fraud may exist. Any illegal acts coming to the auditor's attention involving senior management and any other illegal acts, unless clearly inconsequential.	We are unaware of any fraud or illegal acts involving management or causing material misstatement of the financial statements.
Other information in documents containing audited financial statements The external auditor's responsibility for information in a document containing audited financial statements, as well as any procedures performed and the results.	Our responsibility related to documents (including annual reports, websites, etc.) containing the financial statements is to read the other information to consider whether: • Such information is materially inconsistent with the financial statements; and • We believe such information represents a material misstatement of fact. We have not been provided any such items to date and are unaware of any other documents that contain the audited financial statements.

Accounting Policies, Judgments and Sensitive Estimates & CRI Comments on Quality

We are required to communicate our judgments about the quality, not just the acceptability, of the Plan's accounting principles as applied in its financial reporting. We are also required to communicate critical accounting policies and sensitive accounting estimates. Management may wish to monitor throughout the year the process used to compute and record these accounting estimates. The table below summarizes our communications regarding these matters.

AREA	ACCOUNTING POLICY	CRITICAL POLICY?	JUDGMENTS & SENSITIVE ESTIMATE	COMMENTS ON QUALITY OF ACCOUNTING POLICY & APPLICATION
Investments	Based on our procedures performed with respect to the Plan's investments, we noted that it appears the Plan accounts for investments in accordance with all applicable standards.	X	The Plan relies on valuations from investment managers for approximately 100% of the asset values.	The Plan's policies are in accordance with all applicable accounting guidelines.
Pension- Related Amounts	Based on our procedures performed with respect to the Plan's total pension liability, we noted that it appears the Plan accounts for investments in accordance with all applicable standards.	X	The Plan relies on valuations from actuarial experts to estimate the pension related amounts and how they should be allocated to the participating entities.	The Plan's policies are in accordance with all applicable accounting guidelines.



City of Jacksonville, Florida

Lenny Curry, Mayor

City Hall at St. James 117 W. Duval St. Jacksonville, FL 32202 (904) 630-CITY www.coj.net

October 26, 2018

Carr, Riggs & Ingram, LLC 4010 NW 25th Place Gainesville, FL

This representation letter is provided in connection with your audit of the Schedules of Pension-Related Amount of the City of Jacksonville General Employees Retirement Plan, as of September 30, 2017, for the purpose of expressing an opinion as to whether the Schedule of Employee Allocations and Schedule of Collective Pension Amounts is presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America.

Certain representations in this letter are described as being limited to matters that are material. Items are considered material, regardless of size, if they involve an omission or misstatement of accounting information that, in light of surrounding circumstances, makes it probable that the judgment of a reasonable person relying on the information would be changed or influenced by the omission or misstatement. An omission or misstatement that is monetarily small in amount could be considered material as a result of qualitative factors.

We confirm, to the best of our knowledge and belief, as of October 26, 2018, the following representations made to you during your audit.

Presentation of Specified Element

- 1) We have fulfilled our responsibilities, as set out in the terms of the audit engagement letter dated July 30, 2018, including our responsibility for the preparation and fair presentation of the Schedules of Pension-Related Amounts.
- 2) The Schedules of Pension-Related Amounts referred to above is fairly presented in conformity with accounting principles generally accepted in the United States of America.
- 3) We acknowledge our responsibility for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the Schedules of Pension-Related Amounts that is free from material misstatement, whether due to fraud or error.
- 4) We acknowledge our responsibility for the design, implementation, and maintenance of internal control to prevent and detect fraud.
- 5) Significant assumptions we used in making accounting estimates, including those measured at fair value, are reasonable.
- 6) Related party relationships and transactions have been appropriately accounted for and disclosed in accordance with the accounting principles generally accepted in the United States of America.
- 7) All events subsequent to the date of the Schedules of Pension-Related Amounts and for which accounting principles generally accepted in the United States of America requires adjustment or disclosure have been adjusted or disclosed.
- 8) The effects of all known actual or possible litigation, claims, and assessments have been accounted for and disclosed in accordance with accounting principles generally accepted in the United States of America.
- 9) Material concentrations have been properly disclosed in accordance with accounting principles generally accepted in the United States of America.

10) Guarantees, whether written or oral, under which the entity is contingently liable, have been properly recorded or disclosed in accordance with accounting principles generally accepted in the United States of America.

Information Provided

- 11) We have provided you with:
 - Access to all information, of which we are aware, that is relevant to the preparation and fair presentation of the specified element, such as records, documentation, and other matters.
 - b) Additional information that you have requested from us for the purpose of the audit.
 - c) Unrestricted access to persons within the entity from whom you determined it necessary to obtain audit evidence.
- 12) All material transactions have been recorded in the accounting records and are reflected in the Schedules of Pension-Related Amounts.
- 13) We have disclosed to you the results of our assessment of the risk that the Schedules of Pension-Related Amounts may be materially misstated as a result of fraud.
- 14) We have no knowledge of any fraud or suspected fraud that affects the entity and involves:
 - a) Management,
 - b) Employees who have significant roles in internal control, or
 - c) Others where the fraud could have a material effect on the Schedules of Pension-Related Amounts.
- 15) We have no knowledge of any allegations of fraud or suspected fraud affecting the entity's Schedules of Pension-Related Amounts communicated by employees, former employees, analysts, regulators, or others.
- 16) We have no knowledge of any instances of noncompliance or suspected noncompliance with laws and regulations whose effects should be considered when preparing the Schedules of Pension-Related Amounts.
- 17) We have disclosed to you all known actual or possible litigation, claims, and assessments whose effects should be considered when preparing the Schedules of Pension-Related Amounts.
- 18) We have disclosed to you the identity of the entity's related parties and all the related party relationships and transactions of which we are aware.
- 19) The entity has satisfactory title to all owned assets, and there are no liens or encumbrances on such assets nor has any asset been pledged as collateral.

Signature:

Title:

Signature:

Title:



Board of Directors, JEA

October 26, 2018

To the Jacksonville City Council

Carr, Riggs & Ingram, LLC 4010 N.W. 25th Place Gainesville, Florida 32606 P.O. Box 13494 Gainesville, Florida 32604

(352) 372-6300 (352) 375-1583 (fax) www.cricpa.com

In planning and performing our audit of the Schedules of Pension-Related Amounts (the "Schedules") for the City of Jacksonville's General Employees Retirement Plan (the "Plan") as of and for the year ended September 30, 2017, in accordance with auditing standards generally accepted in the United States of America, we considered the Plan's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the Schedules, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, we do not express an opinion on the effectiveness of the Plan's internal control.

Our consideration of internal control was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and, therefore, material weaknesses or significant deficiencies may exist that were not identified.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. We did not identify any deficiencies in internal control that we consider to be material weaknesses.

A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. We did not identify any deficiencies in internal control that we consider to be significant deficiencies.

However, we identified a deficiency in internal control that did not rise to the level of a significant deficiency or material weakness and is not required to be communicated but has been included to assist management in the evaluation of their procedures. This deficiency has been described in the table on the following page.

This communication is intended solely for the information and use of management, and others within the General Employees Retirement Plan for the City of Jacksonville, and is not intended to be and should not be used by anyone other than these specified parties.

CARR, RIGGS & INGRAM, LLC
CERTIFIED PUBLIC ACCOUNTANTS

Can, Rigge & Ingram, L.L.C.

The following legend should be used in conjunction with reviewing the "Rating" of each of the identified internal control items:

IP =	D =	SD =	MW =
Improvement Point	Control Deficiency	Significant Deficiency	Material Weakness

ITEM	RATING	AREA	ITEM NOTED	SUGGESTION
1	D	Census data	When testing the September 30, 2017 year-end census data errors were noted relating to: the participant's date of hire, eligible compensation, and the supplement amount. The impact of these errors was not material.	The census data should be periodically reviewed to ensure it is accurate and has been updated for all changes which have been communicated by the participants.

II. F.

Ernst & Young FY2018 External Audit Report

A draft of the JEA Audited Financial Statements and the 2018 Audit Results Book will be provided electronically, prior to the Finance and Audit Committee Meeting. A hard copy will be provided at the meeting.