

**JEA
FINANCE & AUDIT COMMITTEE AGENDA**

DATE: May 9, 2016
TIME: 8:00 – 10:00 AM
PLACE: 21 W. Church Street
 8th Floor Conference Room

Committee Members will meet on the 8th Floor
 Other Board Members may join via conference call by dialing:
1-866-907-1051 / Attendee access code: 317619

			Responsible Person	Action (A) Info (I)	Total Time
I.	OPENING CONSIDERATIONS		Kelly Flanagan		
	A.	Call to Order			
	B.	Adoption of Agenda		A	
	C.	Approval of Minutes – March 7, 2016	Melissa Charleroy	A	
II.	NEW BUSINESS				
	A.	FY2017 Budget Presentation	Melissa Dykes/ Ryan Wannemacher	I	55 mins.
	B.	Update on Procurement for External Auditor	Janice Nelson	I	5 mins.
	C.	Audit Services - Quarterly ERM/Audit Update	Steve Tuten	I	15 mins.
	D.	Chief Information Officer Report	Paul Cosgrave	I	10 mins.
	E.	Identity Theft Protection Program Fair and Accurate Credit Transactions Act (FACTA) Annual Risk Assessment	Dan Mishra	I	5 mins.
	F.	Ethics Officer Quarterly Report	Walette Stanford	I	5 mins.
	G.	Treasury			
	1.	Electric System and Water and Sewer System Reserve Fund Quarterly Report	Joe Orfano	I	5 mins.
	H.	JEA Energy Market Risk Management Policy Report	Mike Brost	I	5 mins.
	I.	Announcements			
	1.	Next Meeting, August 8, 2016, 8:00 – 10:00 AM			
	J.	Committee Discussion Sessions			
	1.	Director, Audit Services	Steve Tuten	I	5 mins.
	2.	Ernst & Young	Mike Pattillo	I	5 mins.
	3.	Council Auditor's Office	Robert Campbell	I	5 mins.
	K.	Adjournment			

I. C.
5/9/2016
FAC

JEA FINANCE & AUDIT COMMITTEE MINUTES
March 2, 2016

The Finance & Audit Committee of JEA met on Wednesday, March 2, 2016, in the 8th Floor Conference Room, JEA Plaza Tower, 21 W. Church Street, Jacksonville, Florida.

Agenda Item I – Opening Considerations

- A. Call to Order – Chair Kelly Flanagan called the meeting to order at 8:00 AM with Member Tom Petway in attendance. Member Ed Burr attended telephonically. Member Husein Cumber was absent and excused. Others in attendance were Paul McElroy, Melissa Dykes, Mike Brost, Angie Hiers, Brian Roche, Joe Orfano, Steve Tuten, Walette Stanford, Janice Nelson, Ryan Wannemacher, Jane Upton, David Jolley, and Judi Spann. Jody Brooks, Office of General Counsel, Mike Pattillo and Chris Edmunds, Ernst & Young, and Robert Campbell, Council Auditors Office, were also in attendance.

Due to a lack of quorum physically present, agenda items were received for information only. Action items will be brought before the March 15, 2016 full Board for action.

- B. Adoption of Agenda – Due to a lack of quorum, the agenda was received for information.
- C. Approval of Minutes – Due to a lack of quorum, the August 10, 2015 Minutes were received for information.

Agenda Item II – New Business

- A. FY2017 Budget Assumptions – Melissa Dykes, Chief Financial Officer, presented and reviewed the FY2017 Budget Assumptions and process, requesting Committee feedback and discussion. Items covered included key strategic issues, risks, challenges, and assumptions. Strategic issues focus on emphasizing business excellence opportunities, workforce readiness, financial performance and flexibility, with risks relating to future environmental constraints on electric generation, water resource management, and the health of the St. Johns River. Major cost challenges relate to fuel, purchased power, and labor. Ms. Dykes stated staff will prepare a draft budget, as well as related agenda items for review at the May 9, 2016 Finance and Audit Committee. This presentation was received for information.
- B. Audit Services & Enterprise Risk Management (ERM) Report – Steve Tuten, Director, Audit Services, presented the purpose and mission of JEA’s Audit Services department, the departmental structure including three teams: Internal Audit, Ethics and Investigations Audit, and Enterprise Risk Management. Mr. Tuten provided the Committee with key FY2015 highlights, future challenges, FY2016 Internal Audit Plan, structure and risks reviewed by the Enterprise Compliance & Risk Committee (ECRC), ERM Trend Report, and the Ethics Hotline Report. This presentation was received for information.
- C. External Auditors Contract Extension – Janice Nelson, Controller, presented the current contract with Ernst and Young (E&Y) expires on June 30, 2016. At the January 19, 2016 Board Meeting, Board Members approved a one-year extension of the contract with E&Y. The duration of the contract extension will be from July 1, 2016 through June 30, 2017. Ms. Nelson stated staff has completed contract negotiations with E&Y. E&Y’s fees for FY2016 are \$355,000, and includes: first year of comparative financials for the changes implemented in FY2015; complete audit of JEA financial statements; implementation of Governmental Accounting Standards Board (GASB) 72, Fair Value Measurement and Application; and continued emphasis on auditing IT controls in order to achieve a controls base audit approach. The proposed fee for the St. Johns River Power Park (SJRPP) Pension Audit is \$18,500, a \$2,602 increase over the 2015 audit. The primary

driver for the increase is additional audit hours related to GASB 68, Accounting for Pension. The proposed fee for the single audit is \$20,000, a \$4,102 increase over 2015 audit. The increase is due to uniform Office of Management and Budget (OMB) grant guidance, effective for fiscal year 2016. Committee Members held discussions regarding the process for external auditor vendor selection. Due to a lack of quorum, this item was received for information and will be presented at the March 15, 2016 Board Meeting for action.

- D. Report from COJ Auditors Regarding JEA GERP Pension Liability – Janice Nelson, Controller, presented the implementation of GASB 68, Accounting and Financial Reporting for Pensions, which requires component unit auditors to obtain audit evidence from the primary government on the allocation of employer allocations and net pension liability. As a result, Carr Riggs & Ingram (CRI), the auditors for the City of Jacksonville and General Employees Retirement Plan (GERP), audited the employer allocations and net pension liability allocations to support the financial audit of JEA performed by Ernst & Young for FY2015 ended September 30, 2015. This item was received for information.
- E. Resolution Determining the Sufficiency of Revenues – St. Johns River Power Park – Joe Orfano, Treasurer, presented an annual requirement under the St. Johns River Power Park (SJRPP) Bond Resolution for JEA to determine that for the upcoming fiscal year, the Electric System’s revenues will be sufficient to make all required payments under the bond resolution. JEA staff recommends that the Board approve and adopt Resolution No. 2016-8, determining that the estimated revenues for the Fiscal Year ending September 30, 2017, will be sufficient for their intended purposes. Due to a lack of quorum, this item was received for information and will be presented at the March 15, 2016 Board Meeting for action.
- F. JEA Annual Disclosure Policy Report – Melissa Dykes, Chief Financial Officer, presented JEA’s Disclosure Policies and Procedures require that the Chief Financial Officer shall provide the Finance and Audit Committee each year with a report regarding the compliance with those policies, to report any issues or problems complying with those policies in the preceding twelve-month period and to present recommendations, if any, for changes to those policies. Ms. Dykes stated staff is in the process of preparing the Annual Disclosure Reports for the fiscal year ended September 30, 2015, and plans to seek the Board’s approval and authorization to disseminate those reports at its April 19, 2016 Board Meeting. Additionally, in accordance with past practice and prior Boards’ requests, staff intends to provide Board Members with substantially final drafts for their review at the March 15, 2016 Board Meeting. This item was received for information.
- G. Ethics Officer Quarterly Report – The Ethics Officer Quarterly Report, reviewed by Walette Stanford, Ethics Officer and Director, Workforce Strategies, was received for information. Ms. Stanford stated that March is National Ethics Awareness Month and JEA is rolling out its new Business Ethics Computer-Based Training module to employees for 100% completion prior to fiscal year-end 2016. This presentation was received for information.
- H. JEA Energy Market Risk Management Policy Report – Mike Brost, Vice President/General Manager, Electric Systems, reviewed the Energy Market Risk Management Policy Report, which was received for information.
- I. Treasury
 - 1. 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.
- J. Announcements
 - 1. The next Finance and Audit Committee meeting will be held on May 9, 2016, at 8:00 AM.

K. Committee Discussion Sessions

1. Ernst & Young – At 9:51 AM, Ms. Flanagan dismissed staff and the Committee held a general conversation with Mike Pattillo and Chris Edmunds.
2. Director, Audit Services – At 10:00 AM, Ms. Flanagan and the Committee held a general conversation with Steve Tuten, Director, Audit Services.
3. Council Auditor’s Office – At 10:05 AM, Ms. Flanagan and the Committee held a general conversation with Robert Campbell, Council Auditor’s Office.

Closing Considerations

With no further business claiming the attention of this Committee, the meeting was declared adjourned at 10:09 AM.

APPROVED BY:

Kelly Flanagan, Committee Chair
Date: _____

Submitted by:

Melissa Charleroy
Executive Assistant

II. A.
5/9/2016
FAC



April 25, 2016

SUBJECT:	FY2017 BUDGET PRESENTATION
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Purpose:	<input type="checkbox"/> Information Only	<input type="checkbox"/> Action Required	<input checked="" type="checkbox"/> Advice/Direction
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Issue: Obtain feedback and direction from the Finance and Audit Committee regarding the FY2017 Budget prior to submittal to the Board at the June meeting.

Significance: High: The budget is the plan and basis for appropriating revenues and expenses, as well as capital expenditures and debt financing.

Effect: The budget effects customers and the City of Jacksonville, and is integral to JEA's strategic planning, financial performance and resulting metrics, and regulatory accounting.

Cost or Benefit: The budget process benefits from the Committee providing feedback and direction regarding the key strategic issues, risks, major challenges, and assumptions for the FY2017 Budget covering: revenue; fuel revenue and expense; O&M expense levels; interest rates and the resulting financial metrics; capital expenditures and related financing plan; and regulatory accounting items.

Recommended Board action: Staff recommends that the Finance and Audit Committee provide feedback and direction regarding the key strategic issues and major budget assumptions used in preparing the FY2017 operating and capital budgets including revenue, O&M expense levels, interest rates and debt structure, financial metrics, and regulatory accounting items. Staff also recommends that the Finance and Audit Committee provide feedback and direction in its report or staff presentation to the Board at the May 2016 meeting for final Board approval at the June 2016 meeting.

For additional information, contact: Melissa Dykes

Submitted by: PEM/ MHD/ DRJ



Commitments to Action

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

II. A.
5/9/2016
FAC



INTER-OFFICE MEMORANDUM

April 25, 2016

SUBJECT: FY2017 BUDGET PRESENTATION

FROM: Paul E. McElroy, Managing Director/CEO

TO: JEA Finance and Audit Committee

Kelly Flanagan, Chair
Tom Petway
Husein Cumber
Edward Burr

BACKGROUND:

Annually, JEA Staff recommends and, after the JEA Board’s review and action, transmits JEA’s recommended Electric System, Water and Sewer System, and District Energy System operating and capital budgets to the Jacksonville City Council for final action. By law, JEA must submit its proposed budget to the City Council by July 1, 2016.

DISCUSSION:

Staff will present key strategic initiatives and major budget assumptions for the FY2017 operating and capital budgets. Budget assumptions include: no rate adjustments for Electric or Water and Sewer systems; and financial metrics that are within Pricing Policy goals. The proposed budgets include considerable internal funding for the capital program in an effort to support the “pay-go” philosophy for all recurring capital expenditures. The proposed budgets address key strategic initiatives to support the quality of service delivery, climate change, Total Water Resource Plan, regulatory compliance, workforce readiness, communications, conservation, and customer satisfaction initiatives. In addition, the budget includes a record high contribution to the City of Jacksonville General Fund in the amount of \$115.3 million. The operating and capital budget schedules that will be transmitted to the City Council upon JEA Board approval are attached as Schedule A and B. As required by the City of Jacksonville, JEA transmits its Five-Year Capital Improvement Program during the annual budget process and is attached as Schedule C.

The proposed budgets include the following:

1. Consolidated Operating Budget and Capital Budget Schedules
The proposed budgets include considerable internal funding for the capital program in an effort to support the “pay-go” philosophy for all recurring capital expenditures.
2. Electric System
There are no planned rate increases in FY2017. The FY2017 operating budget includes a \$22.7 million reduction from FY2016. Budget assumptions include a \$37.5 million reduction in Fuel and Purchased Power. The proposed Salaries and Benefits budget includes a \$3.9 million increase in net pension payments. FY2017 Budget assumptions include stable debt service coverage and an increase of \$32.4 million in debt service which includes \$38.6 million prepayment of debt.

3. Water and Sewer System

There are no planned rate increases in FY2017. The FY2017 operating budget includes a \$10.9 million increase from FY2016. Budget assumptions include stable debt service coverage and an increase of \$12.9 million in debt service. The proposed Salaries and Benefits budget includes a \$1.4 million increase in net pension payments.

4. Government Transfers

The budget includes a record high contribution to the City of Jacksonville General Fund in the amount of \$115.3 million.

5. Regulatory Accounting

In connection with the Pricing Policy, the budget was prepared using the Utility Basis, resulting in the inclusion of regulatory accounting items such as Pension, Demand-side Management (DSM)/ Conservation, Debt Management, Environmental, Fuel, Purchased Power and Self-Funded Health Plan.

Under the terms of the St. Johns River Power Park (SJRPP) Joint Operating Agreement (JOA), the co-owners share the cost of constructing, operating, and maintaining the two coal-fired units. The JEA Board approves the annual operating and capital budget for JEA's ownership interest in SJRPP. The total SJRPP budget is approved by the SJRPP Executive Committee representing the two co-owners. The SJRPP budget is not approved by the City Council. JEA's share of the SJRPP budget is a component of fuel and purchased power expense in JEA's Electric System Operating budget. Schedule D, attached, summarizes JEA's share of the proposed FY2017 operating and capital budgets for SJRPP.

JEA owns a 23.64 percent interest in Unit 4 of the Robert W. Scherer Electric Generating Plant (Scherer Unit 4). As with SJRPP, JEA's share of the operating and capital budgets for this unit is a component of the JEA Electric System fuel and purchased power expense. Decisions regarding the operation of Unit 4 are made by majority vote of the co-owners. The JEA Board approves JEA's share of the annual budget for Scherer Unit 4, but the City Council does not review or approve the Plant Scherer budget. Schedule D, attached, summarizes JEA's share of the FY2017 operating and capital budgets for Plant Scherer. Note that this budget is subject to approval by the other co-owners.

RECOMMENDATION:

Staff recommends that the Finance and Audit Committee provide feedback and direction regarding the key strategic issues and major budget assumptions used in preparing the FY2017 operating and capital budgets including revenue, O&M expense levels, interest rates and debt structure, financial metrics, and regulatory accounting items. Staff also recommends that the Finance and Audit Committee provide feedback and direction in its report or staff presentation to the Board at the May 2016 meeting for final Board approval at the June 2016 meeting.

Paul E. McElroy, Managing Director/CEO

PEM/MHD/DRJ

**JEA
CONSOLIDATED OPERATING BUDGET
FISCAL YEAR 2017**

	Electric System	Water & Sewer System	District Energy System	Total
FUEL RELATED REVENUES & EXPENSES:				
FUEL REVENUES:	\$ 472,264,680	\$ -	\$ -	\$ 472,264,680
Total Net Revenues	<u>\$ 472,264,680</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 472,264,680</u>
FUEL EXPENSES:				
Fuel & Purchased Power	\$ 472,264,680	\$ -	\$ -	\$ 472,264,680
FUEL SURPLUS/(DEFICIT)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
BASE RELATED REVENUES & EXPENSES				
BASE OPERATING REVENUES:				
Base Rate Revenues	\$ 762,971,975	\$ 381,678,122	\$ 9,247,921	\$ 1,153,898,018
Environmental Charge Revenue	7,942,200	23,908,290	-	31,850,490
Conservation Charge & Demand Side Revenue	1,000,000	-	-	1,000,000
Other Revenues	29,966,575	11,638,859	-	41,605,434
Natural Gas Pass Through Revenue	7,188,723	-	-	7,188,723
Total Base Related Revenues	<u>\$ 809,069,473</u>	<u>\$ 417,225,271</u>	<u>\$ 9,247,921</u>	<u>\$ 1,235,542,664</u>
BASE OPERATING EXPENSES:				
Operating and Maintenance	\$ 209,105,373	\$ 141,698,943	\$ 5,252,918	\$ 356,057,234
Environmental	7,942,200	2,449,584	-	10,391,783
Conservation & Demand-side Management	7,510,000	-	-	7,510,000
Natural Gas Pass Through Expense	6,880,298	-	-	6,880,298
Non-Fuel Purchased Power	83,394,296	-	-	83,394,296
Non-Fuel Uncollectibles & PSC Tax	1,749,583	844,390	-	2,593,973
Emergency Reserve	5,000,000	1,000,000	-	6,000,000
Total Base Related Expenses	<u>\$ 321,581,750</u>	<u>\$ 145,992,917</u>	<u>\$ 5,252,918</u>	<u>\$ 472,827,585</u>
BASE OPERATING INCOME:	<u>\$ 487,487,723</u>	<u>\$ 271,232,354</u>	<u>\$ 3,995,002</u>	<u>\$ 762,715,079</u>
NON-OPERATING REVENUE:				
Investment Income	4,631,588	3,152,787	-	7,784,375
Transfer To/From Fuel Recovery	-	-	-	-
Capacity Fees	-	19,000,000	-	19,000,000
Total Non Operating Revenues	<u>\$ 4,631,588</u>	<u>\$ 22,152,787</u>	<u>\$ -</u>	<u>\$ 26,784,375</u>
NON-OPERATING EXPENSES:				
Debt Service	229,481,927	122,572,849	3,022,454	355,077,230
Total Non Operating Expenses	<u>\$ 229,481,927</u>	<u>\$ 122,572,849</u>	<u>\$ 3,022,454</u>	<u>\$ 355,077,230</u>
BASE INCOME BEFORE TRANSFERS	<u>\$ 262,637,384</u>	<u>\$ 170,812,292</u>	<u>\$ 972,549</u>	<u>\$ 434,422,225</u>
City Contribution Expense	92,637,384	22,692,030	-	115,329,413
Interlocal Payments	-	-	-	-
Renewal and Replacement Fund	59,953,918	21,324,415	433,635	81,711,968
Operating Capital Outlay	110,046,082	94,937,141	538,914	205,522,137
Environmental Capital Outlay	-	12,858,706	-	12,858,706
Capacity Fees	-	19,000,000	-	19,000,000
Operating Contingency	-	-	-	-
Total Non-Fuel Expenses	<u>\$ 262,637,384</u>	<u>\$ 170,812,292</u>	<u>\$ 972,549</u>	<u>\$ 434,422,225</u>
SURPLUS/(DEFICIT)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
TOTAL REVENUES	<u>\$ 1,285,965,741</u>	<u>\$ 439,378,058</u>	<u>\$ 9,247,921</u>	<u>\$ 1,734,591,720</u>
TOTAL APPROPRIATIONS	<u>\$ 1,285,965,741</u>	<u>\$ 439,378,058</u>	<u>\$ 9,247,921</u>	<u>\$ 1,734,591,720</u>
BUDGETED EMPLOYEE POSITIONS	1,554	599	5	2,158
BUDGETED TEMPORARY HOURS	208,000	20,800	0	228,800

**JEA
CONSOLIDATED CAPITAL BUDGET
FISCAL YEAR 2017**

	Electric System	Water & Sewer System	District Energy System	Total
CAPITAL FUNDS:				
Renewal & Replacement Deposits	\$ 59,953,918	\$ 21,324,415	\$ 433,635	\$ 81,711,968
Operating Capital Outlay	110,046,082	94,937,141	538,914	205,522,137
Environmental Capital Outlay	-	12,858,706	-	12,858,706
Capacity Fees	-	19,000,000	-	19,000,000
Debt Proceeds	-	-	-	-
Other Proceeds	-	77,379,738	2,766,999	80,146,737
Total Capital Funds	<u>\$ 170,000,000</u>	<u>\$ 225,500,000</u>	<u>\$ 3,657,000</u>	<u>\$ 399,157,000</u>
CAPITAL PROJECTS:				
Generation Projects	\$ 33,340,000	\$ -	\$ -	\$ 33,340,000
Transmission & Distribution Projects	82,368,000	-	-	82,368,000
District Energy Projects	-	-	3,657,000	3,657,000
Water Projects	-	60,238,000	-	60,238,000
Sewer Projects	-	127,854,000	-	127,854,000
Other Projects	54,292,000	37,408,000	-	91,700,000
Total Capital Projects	<u>\$ 170,000,000</u>	<u>\$ 225,500,000</u>	<u>\$ 3,657,000</u>	<u>\$ 399,157,000</u>

JEA
Five Year Capital Improvement Program
Fiscal Years 2017-2021
(\$000'S Omitted)

Project Title	FY2017	FY2018	FY2019	FY2020	FY2021	Project Total
Expanded Generation Capacity	\$0	\$0	\$0	\$0	\$0	\$0
Electric System Distribution Projects	49,044	45,991	37,995	39,324	37,733	210,087
Electric System Substation & Transmission	33,324	26,586	20,456	16,886	20,850	118,102
Electric System Generation Projects	33,340	18,486	25,049	15,568	10,500	102,943
Electric System Other Projects	54,292	72,831	50,802	32,747	34,742	245,414
Total	\$170,000	\$163,894	\$134,302	\$104,525	\$103,825	\$676,546
Water Treatment	\$27,626	\$24,798	\$22,039	\$15,775	\$24,120	\$114,358
Water Distribution	32,612	28,238	28,372	24,784	28,988	142,994
Sewer Collection	33,476	37,042	34,815	29,793	33,371	168,497
Sewage Pump Stations	26,673	19,791	8,928	6,521	8,650	70,563
Wastewater Treatment	67,705	45,599	27,383	26,570	38,890	206,147
Reclaimed Water Distribution	12,936	10,452	20,830	17,694	23,876	85,788
Other Capital Projects	24,472	21,240	19,221	19,517	19,564	104,014
Total	\$225,500	\$187,160	\$161,588	\$140,654	\$177,459	\$892,361
District Energy System	\$3,071	\$1,424	\$1,442	\$1,350	\$1,783	\$9,070

**JEA
ST. JOHNS RIVER POWER PARK (SJRPP)
AND PLANT SCHERER (SCHERER)
OPERATING AND CAPITAL BUDGET
FISCAL YEAR 2017**

	SJRPP	SCHERER
OPERATING BUDGET:		
Revenue:		
Operating Revenue from JEA	\$ 140,120,853	\$ 65,586,003
Expenses:		
Fuel and O & M	\$ 121,094,956	\$ 44,328,973
Transmission	-	4,700,000
Debt Service	39,704,711	9,679,445
Renewal & Replacement	(20,678,814)	6,877,585
Total Expenses	\$ 140,120,853	\$ 65,586,003
CAPITAL BUDGET :	\$ 12,926,000	\$ 6,877,585

MWHs Purchased by JEA Electric System	2,640,500	1,244,600
Employee Positions	239	

Note: all Plant Scherer employees are Georgia Power Co. employees.

II. A.
5/9/2016
FAC

FY2017 Budget

Finance & Audit Committee

May 9, 2016



Agenda

Budget Process Summary

JEA Budget Summary and Consolidated Schedules

Electric System

Water and Sewer System

District Energy System

Rate Stabilization Funds

Summary

Supplemental Schedules



JEA Budget Process Summary

Background

JEA Budget development is a continuous process where the annual Budget is constructed for the following fiscal year beginning each fall, a full year prior to the Budget being in effect. The formation of the annual Budget begins with the Five-Year Financial Plan component of the annual Rating Agency presentation which includes key current inputs such the Annual Resource Master Plans and the prior year's unit sales and financial results for the fiscal year ending September 30th. The annual Budget development process follows the steps and timeline displayed below, culminating in the formation of the annual Operating and Capital Budgets for JEA Board approval in June and submission to the City Council by July 1st for their approval prior to October 1st. In recent years, the JEA Board's Finance and Audit Committee has reviewed the proposed Budget assumptions in March and the proposed Budget in May, with the full Board receiving a report or presentation in May and then approving the Budget in June.

Budget Cycle Timeline



Process Steps

Executive Management Strategy Initiatives are incorporated in the financial plans and annual Budgets such as Climate Change, Consumptive Use Permit requirements, September 2008 cost reductions, Succession Planning, Customer Satisfaction and Strategic Technology Services and Sourcing initiatives.

Annual Resource Master Plans provides long term investment plans for non-recurring investments in major assets such as electric generation or transmission, water / wastewater / reclaim production or transmission, distribution, system reliability and regulatory needs, and serve as the direct input of non-recurring projects into to the five-year and ten-year Capital Plans and Annual Budget.

Five-Year Financial Plan is based on integrated ten-year financial projection models for each utility System (Electric, Water/Wastewater/Reclaim, and District Energy) which utilize input variables including projected unit sales and revenues, fixed expenditures such as Debt Service, City Contribution, and Renewal and Replacement (R&R) funding required by bond covenants along with variable expenditures such as Fuel, O&M, and Other Capital Outlay. The JEA Pricing Policy provides guidelines centered on issuing debt only for non-recurring, growth related or major regulatory projects, and target financial metric ranges for Debt Service Coverage, Debt/Asset and Liquidity ratios. The Five-Year Financial Plan assumptions and final plan are presented and discussed with the Board each fall in October and/or November prior to its inclusion as a major component in the annual Rating Agency Presentation conducted each December.

The ten-year financial projections and Five-Year Financial Plan include the following years' targeted Operating and Capital Budgets and serve as a foundation in developing the following year's annual Budget. In addition, the ten-year projections serve as the Revenue Requirements in each system's Utility Cost of Service report, produced every five years per the Pricing Policy that support both overall system and class rate design.

Capital Investment Program for the annual Budget is based on the multi-year Annual Resource Plan and Five-Year Financial Plan, with updates made each February, reflecting timing, scope, cost or other changes to the unique, non-recurring major capital investments. In addition, annual updates are received from the organization's project owners each February on all other capital project requests which include recurring capital R&R projects, such as electric pole replacement, wastewater pump station renewal, new services, meters, fleet, and technology projects. All capital projects greater than \$200,000 are itemized requiring project definitions to include scope, justification, process design, schedule, project delivery methodology, and cost estimates prior to approval, and milestone updates at 30% design and 100% design. A Core Team, consisting of the VP/GM of Electric Systems, VP/GM of Water Wastewater Systems and representatives from Operations and Finance, lead the development of the five-year capital plan, the annual Capital Budget and monthly monitoring/reporting. The Capital Core Team reviews the project requests, prioritizes and formulates the annual Capital Program of itemized projects such that the targeted expenditures are within the allocation of funding based on the prior Five-Year Financial Plan.

Operating Budget Preparation each spring begins with the input variables of unit sales, revenue, fuel, O&M expenses, interest rates and debt service, and capital expenditure assumptions based on the prior Five-Year Financial Plan and then updated with the most current information and results which are monitored and reported on a continuous basis during monthly financial forecast meetings.

The business units' O&M expenses line item totals \$356 million or 21% of the \$1.7 billion proposed FY2017 JEA Consolidated Budget consisting of \$261 million of payroll expenses and the remaining \$95 million is in material and supplies, other services and charges, insurance payments, succession planning and other expenses.

- Payroll expenses are monitored throughout the year through Human Resources and business unit processes along with monthly budget variance reporting. The payroll expenses in the annual Budget is formed based on a selected payroll period in January, summing each filled personnel allocation and the employees current salary plus all active recruitments and budgeted vacancies with their targeted salaries. If there are new or emerging positions needed to be added to the organization they would also be added to the budgeted baseline salary expense. Benefit costs, primarily medical expenses and pension expenses including unfunded liability payments associated with prior employees no longer on the payroll, are added to the salary and benefit expense. If any bargaining unit or other specific planned salary increases are known, including step increases or general increases, the amounts are added to form the salary and benefit expense. Overtime expenses that are budgeted via the bullet below are added to salary and benefit roll-up amount. Then a "salary lapse" credit is utilized to account for the natural or strategic variances in position vacancies through attrition, and wage differences associated with the hiring of staff at entry level wages replacing staff retiring or leaving at higher level wages. The FY2017 budgeted salary lapse is 6.25% for the Electric System and 4.00% for the Water and Sewer System, which are representative of recent year's activity.
- Material and Supplies, and Other Services and Charges include chemicals and supplies, information technology and other licensing and maintenance contracts, industrial services, professional services, supplemental workforce, training, utility services and vehicle fuel expense types. All planned expenditures of these expense types over \$20,000 (and many lower than the threshold) are included in a Budget Detail listing. Each year during the month of March, the Budget Detail along with prior year and year-to-date variance reports by expense types are provided to the business unit's VP/GM's or Chiefs. The VP/GM's or Chiefs work with their staff to update the requirements for the next fiscal years' Budget by denoting betterments and reductions to each line item as required to meet customer service levels and strategy initiatives.
- Capitalization Credits, Fuel and Byproduct Handling Credits, and Shared Services Credits are utilized to allocate payroll, material and supplies, other services and charges, and motor pool costs initially charged to business units' O&M expenses, and then transferred to capital work orders, fuel expenses or to the Water and Sewer System O&M expenses.
- Reductions are made by the team, if necessary, to meet the financial targets depicted in the prior Five-Year Financial Plan or new targets updated with current business strategies and objectives.

JEA Board Review and Approval formation of the annual Operating and Capital Budgets for JEA Board approval prior to submission to the City Council by July 1st. In recent years, the JEA Board's Finance and Audit Committee has reviewed the proposed Budget assumptions in March and the proposed Budget in May. The full Board receives the presentations and budget schedules prepared for discussion at the Finance and Audit (F&A) Committee meetings in the monthly Board

packages, and either receives a report from the F&A Committee chair or staff presentation in May. At the June Board meeting, the Board is scheduled to approve the Budget to be submitted to the City Council.

City Council Review and Approval process formally begins each year with the JEA budget transmittal letter and Consolidated Operating and Capital Budget schedules from JEA's Board Chair to the incoming City Council President by July 1st. There is ongoing communication with the City Council throughout the year via Quarterly Financial Schedules that JEA prepares for the City Council Auditor's review and inclusion in the Council Auditor's financial reports to the Council.

- JEA's Five-Year Capital Improvement Plan (CIP) is transmitted to either the City Planning Department or Budget Department as requested each year after the JEA Board approves the annual Budget, and accompanying Five-Year CIP schedule. In recent years, the COJ Budget Department has requested this schedule early, June 1st, thus will receive the Five-Year CIP schedule in Draft Final form pending JEA Board approval.
- After submittal of the Consolidated Operating and Capital Budget schedules, JEA prepares Council Auditor prescribed budget schedules which depict the current year budget, current year projections, and prospective year proposed budget, along with variance analysis and comments.
- JEA CEO, CFO, Legislative Affairs and Director of Financial Planning and Analysis meet individually with the Council Finance Committee members to review JEA's Financial Plan and proposed JEA Board approved Budget.
- In recent years, lead Council Auditor staff provides a report of the JEA Budget to the Council Finance Committee and then the full Council during sessions held in August and September. The Council Auditor has communicated that JEA presentations are not wanted, but JEA CEO, CFO or other designee should be present at scheduled meeting times to answer questions the Council Members may have prompted by the Council Auditor led report.
- Note: the Council Auditor staff and the City Council Liaison to JEA attend most JEA Board Meetings, the Council Auditor is offered Agenda time at JEA's Finance and Audit Committee Meetings, and JEA has ongoing communication with the Council Auditor staff throughout the year on JEA budget and financial related matters.

Agenda

Budget Process Summary

JEA Budget Summary and Consolidated Schedules

- ✓ **FY2017 Proposed Budget Summary**
- ✓ **Government Transfers**

Electric System

Water and Sewer System

District Energy System

Rate Stabilization Funds

Summary

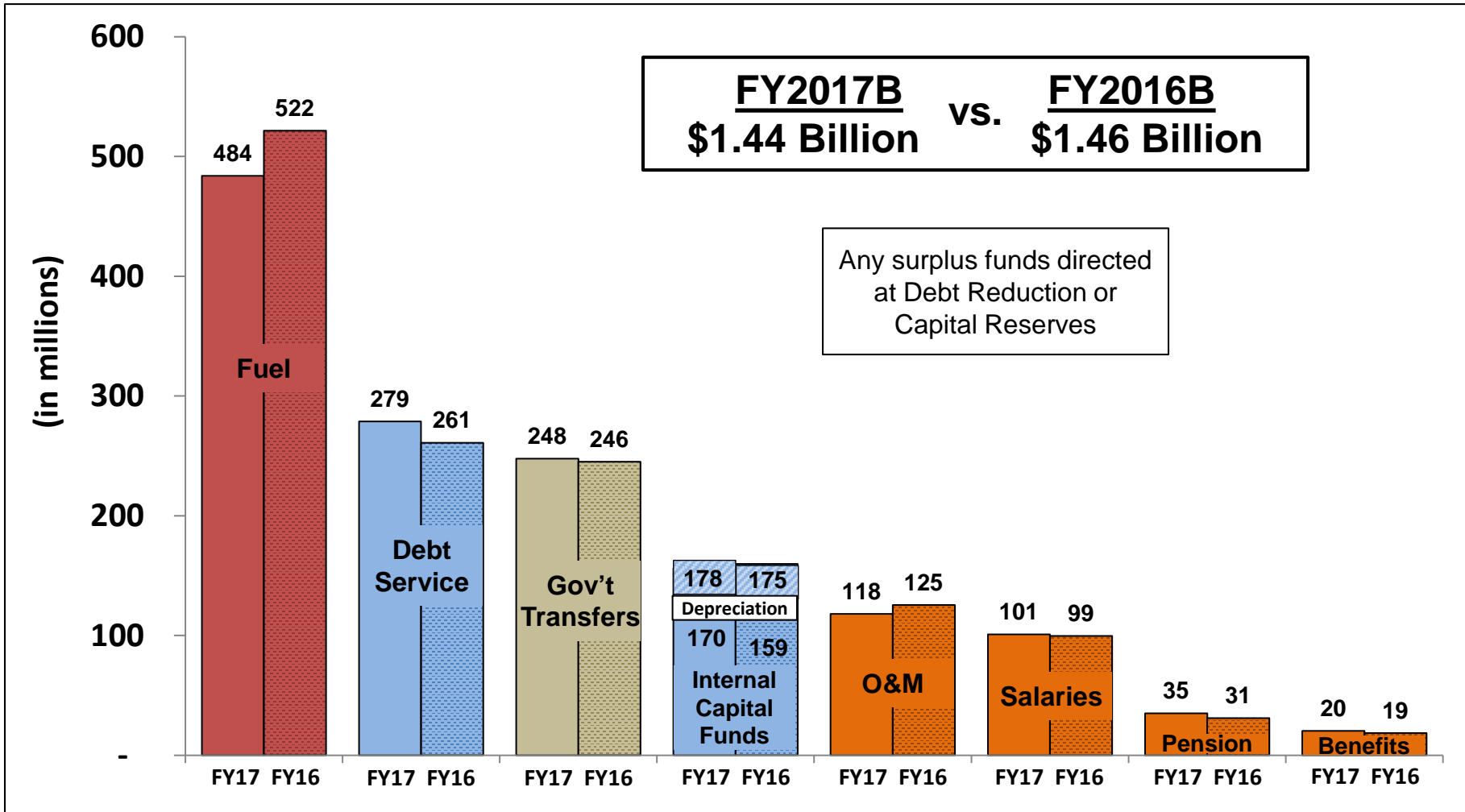
Supplemental Schedules



Proposed Budget Summary

Electric System					Water and Sewer System						
Revenue	<u>FY17B</u>	<u>FY16B</u>	<u>Δ</u>	<u>FY16F</u>	Revenue	<u>FY17B</u>	<u>FY16B</u>	<u>Δ</u>	<u>FY16F</u>		
(in millions)	\$1,286	\$1,309	(\$23)	\$1,178	(in millions)	\$439	\$428	\$11	\$426		
Unit Sales Growth					Unit Sales Growth						
3.3% increase to system sales from FY2016B 7.1% increase to system sales from FY2016F to FY2017B 5.0% weather contingency					6.1% increase to water sales from FY2016B 8.2% increase to water sales from FY2016F to FY2017B 5.0% weather contingency						
Pricing					Pricing						
Variable Fuel Rate decreased to \$36.75/MWh in FY2016, no change for FY2017					There are no planned rate changes for FY2017						
COJ Transfer	<u>FY07</u>	<u>FY14</u>	<u>FY15</u>	<u>FY16F</u>	<u>FY17P</u>	COJ Transfer	<u>FY07</u>	<u>FY14</u>	<u>FY15</u>	<u>FY16F</u>	<u>FY17P</u>
Total (\$ in millions)	\$121	\$187	\$191	\$189	\$193	Total (\$ in millions)	\$27	\$45	\$45	\$46	\$46
O&M					O&M						
Increases by \$8.5 million or 4.2% versus prior year's budget					Increases by \$5.4 million or 4.0% over prior year's budget						
<ul style="list-style-type: none"> Generating Unit Outages, \$9.4 million Includes net pension increase of \$3.9 million Includes funding for strategic initiatives 					<ul style="list-style-type: none"> Includes net pension increase of \$1.4 million Includes funding for strategic initiatives 						
Capital (millions)	<u>FY16F</u>	<u>FY17*</u>	<u>FY18</u>	<u>FY19</u>	Capital (millions)	<u>FY16F</u>	<u>FY17*</u>	<u>FY18</u>	<u>FY19</u>		
Depreciation	\$ 179	\$178	\$184	\$191	Depreciation	\$ 133	\$ 131	\$133	\$138		
Expenditures	\$ 161	\$170	\$164	\$134	Expenditures	\$ 163	\$ 225	\$ 187	\$162		
Funding					Funding						
R&R	\$ 62	\$ 60			R&R	\$ 21	\$ 21				
OCO	\$ 86	\$110			OCO/Capacity Fee	\$116	\$114				
Prior	\$ 13	\$ 0			Environmental	\$ 11	\$ 18				
Debt	\$ 0	\$ 0			Prior	\$ 15	\$ 72				
	\$ 161	\$170			Debt	\$ 0	\$ 0				
						\$163	\$225				
* FY17 Budget includes 10% contingency					* FY17 Budget includes 10% contingency and \$5.0 million of Environmental transferred from rate stabilization						
Metrics	<u>FY2017B</u>	<u>Rating Agency</u>	<u>Pricing Policy</u>		Metrics	<u>FY2017B</u>	<u>Rating Agency</u>	<u>Pricing Philosophy</u>			
Coverage	2.7x	2.5x	≥2.2x		Coverage	2.6x	2.2x	≥1.8x			
Debt to Asset	64%	64%	≤60%		Debt to Asset	50%	50%	≤50%			
Days of Liquidity	329	293	150 – 250 days		Days of Liquidity	261	250	≥100 days			
Total Debt	\$2.76 billion	\$2.76 billion	-----		Total Debt	\$1.61billion	\$1.61 billion	-----			
Δ Debt	(\$231) million	(\$231) million	-----		Δ Debt	(\$34) million	(\$34) million	-----			

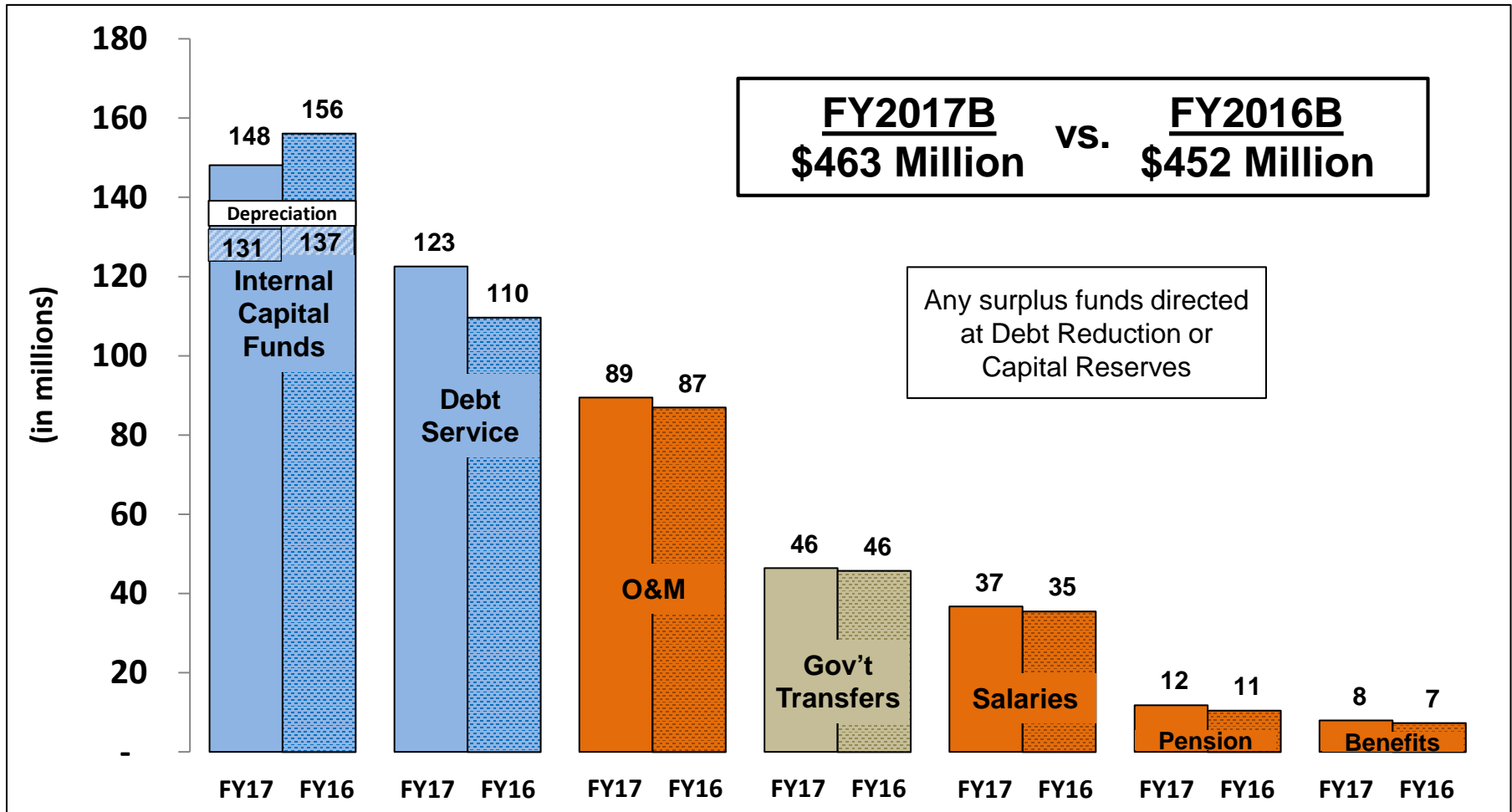
FY2017 Budget: Customer Electric Bill by Expense Category



Notes:

1. Fuel includes Scherer transmission and capacity expenses
2. SJRPP and Scherer non-fuel purchase power expenses included in Debt Service, Internal Capital and O&M
3. Government Transfers include City Contribution, COJ Public Service Tax, COJ Franchise Fee, State Gross Receipt Tax, and State and COJ Sales Tax (Commercial customers only)
4. O&M Salaries, Benefits, and Pension are net of capital
5. FY2017 O&M includes \$6.9 M Natural Gas retail sale operations
6. Internal Capital Funds include JEA Electric System R&R and OCO, SJRPP R&R, and Scherer R&R, no new debt is required
7. Debt Service in FY2017 reflects a \$14 million drop in SJRPP Debt Service Requirements and \$39 million of bond buy back

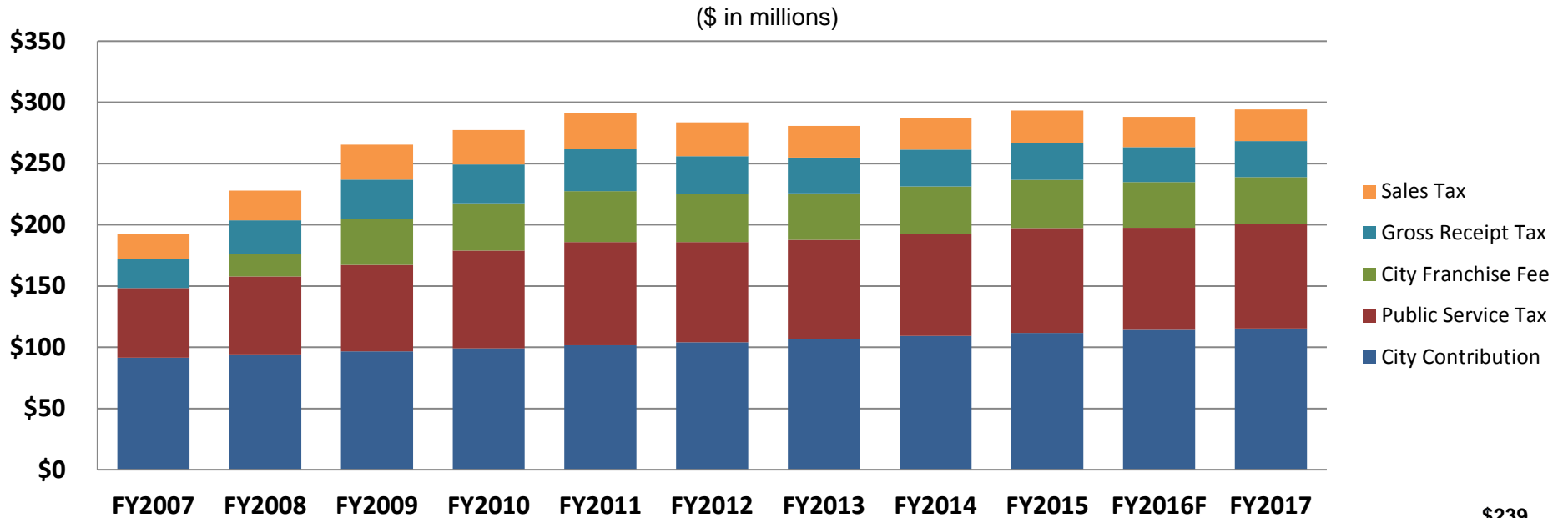
FY2017 Budget: Customer Water and Sewer Bill by Expense Category



Notes:

1. Government Transfers include City Contribution, COJ Public Service Tax, and COJ Franchise Fee
2. O&M Salaries, Benefits, and Pension are net of capital
3. The FY2017 capital program is funded by Internal Capital, no new debt is required
4. FY2017 Debt Service increase reflects higher principal payments
5. Internal capital funds for FY2017 are greater than annual depreciation but less than the annual capital plan for FY2017. The capital budget for FY2017 is \$205.5m.

Government Transfers via the JEA Bill



Description	Paid To	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016F	FY2017P
City Contribution	COJ	\$91.4	\$94.2	\$96.7	\$99.2	\$101.7	\$104.2	\$106.7	\$109.2	\$111.7	\$114.2	\$115.3
Public Service Tax	COJ	56.9	63.6	70.5	79.7	84.2	81.8	80.9	83.1	85.6	83.5	85.2
City Franchise Fee	COJ	-	18.3	37.5	38.6	41.7	39.3	38.1	39.0	39.4	37.2	38.4
Gross Receipt Tax	State	23.7	27.6	32.1	31.7	34.1	30.8	29.3	30.2	30.2	28.5	29.5
Sales Tax	State and COJ	20.6	24.1	28.5	28.1	29.7	27.7	25.8	26.1	26.4	24.8	25.7
Total		\$192.6	\$227.8	\$265.3	\$277.3	\$291.4	\$283.8	\$280.8	\$287.6	\$293.3	\$288.2	\$294.1
Percent increase from FY2007			18%	38%	44%	51%	47%	46%	49%	52%	50%	53%

Discussion and Analysis

- JEA transfers to the City of Jacksonville have increased to \$239 million



¹Excludes \$15m additional one-time payment to the City of Jacksonville for Water & Sewer infrastructure expansion.

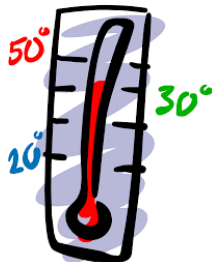
Budget to Rating Agency Comparison



Electric System	FY17 Budget*	FY17 R/A	Variance	%
Fuel and Purchased Power	448,708,681	456,495,250	7,786,569	1.7%
O&M (excl. DSM, Env, Nat. Gas)	209,105,374	198,905,468	(10,199,906)	-5.1%
Non-Fuel Purchased Power	83,394,296	85,670,941	2,276,645	2.7%
Debt Service	193,710,525	190,898,917	(2,811,608)	-1.5%
City Contribution	92,637,384	91,720,182	(917,202)	-1.0%
R&R and OCO	170,000,000	165,175,576	(4,824,424)	-2.9%
Other (DSM/Env, Em. Reserve etc.)	29,210,540	34,230,332	5,019,792	14.7%
	<u>1,226,766,800</u>	<u>1,223,096,666</u>	<u>(3,670,134)</u>	<u>-0.3%</u>



Water and Sewer System	FY17 Budget*	FY17 R/A	Variance	%
O&M (excl. DSM, Env, Nat. Gas)	\$ 141,698,943	\$ 139,683,998	\$ (2,014,945)	-1.4%
Debt Service	122,572,849	122,482,849	(90,000)	-0.1%
City Contribution	22,692,030	22,467,356	(224,674)	-1.0%
R&R and OCO	136,987,295	134,210,822	(2,776,473)	-2.1%
Other (DSM/Env, Em. Reserve etc.)	4,270,748	4,054,094	(216,654)	-5.3%
	<u>\$ 428,221,865</u>	<u>\$ 422,899,119</u>	<u>\$ (5,322,746)</u>	<u>-1.3%</u>



District Energy System	FY17 Budget*	FY17 R/A	Variance	%
O&M (excl. DSM, Env, Nat. Gas)	\$ 5,077,918	\$ 4,922,491	\$ (155,427)	-3.2%
Debt Service	3,022,454	3,019,303	(3,151)	-0.1%
City Contribution	-	-	-	0.0%
R&R and OCO	680,935	841,080	160,145	19.0%
Other (DSM/Env, Em. Reserve etc.)	-	-	-	0.0%
	<u>\$ 8,781,307</u>	<u>\$ 8,782,874</u>	<u>\$ 1,567</u>	<u>0.0%</u>



* Does not include the 5% weather contingency

Agenda

Budget Process Summary

JEA Budget Summary and Consolidated Schedules

Electric System

- ✓ **Operating Budget**
- ✓ **Capital Budget**
- ✓ **Fuel Rate**
- ✓ **O&M**
- ✓ **Capital Plan**
- ✓ **Debt Service**
- ✓ **Financial Metrics and Ratios**

Water and Sewer System

District Energy System

Rate Stabilization Funds

Summary

Supplemental Schedules



**JEA
ELECTRIC SYSTEM
OPERATING BUDGET**

	FY 2017 Budget	FY 2016 Budget	Change	FY 2016 Forecast
FUEL RELATED REVENUES & EXPENSES:				
FUEL REVENUES:	\$ 472,264,680	\$ 509,884,201	\$ (37,619,521)	\$ 410,938,896
Transfer To/From Fuel Recovery	-	-	-	(11)
Total Net Revenues	<u>\$ 472,264,680</u>	<u>\$ 509,884,201</u>	<u>\$ (37,619,521)</u>	<u>\$ 410,938,885</u>
FUEL EXPENSES:				
Fuel & Purchased Power	<u>\$ 472,264,680</u>	<u>\$ 509,884,201</u>	<u>\$ (37,619,521)</u>	<u>\$ 410,938,885</u>
FUEL SURPLUS/(DEFICIT)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
BASE RELATED REVENUES & EXPENSES				
BASE OPERATING REVENUES:				
Base Rate Revenues	\$ 762,971,975	\$ 738,360,001	\$ 24,611,974	\$ 716,371,675
Environmental Charge Revenue	7,942,200	7,686,000	256,200	7,431,986
Conservation Charge & Demand Side Revenue	1,000,000	989,059	10,941	753,002
Other Revenues	29,966,575	35,447,663	(5,481,088)	31,881,606
Natural Gas Pass Through Revenue	7,188,723	12,491,417	(5,302,694)	6,321,222
Total Base Related Revenues	<u>\$ 809,069,473</u>	<u>\$ 794,974,140</u>	<u>\$ 14,095,333</u>	<u>\$ 762,759,491</u>
BASE OPERATING EXPENSES:				
Operating and Maintenance	\$ 209,105,373	\$ 200,570,314	\$ 8,535,059	\$ 192,914,976
Environmental	7,942,200	7,686,000	256,200	7,431,986
Conservation & Demand-side Management	7,510,000	7,289,059	220,941	6,876,429
Natural Gas Pass Through Expense	6,880,298	12,140,876	(5,260,578)	6,222,464
Non-Fuel Purchased Power	83,394,296	113,015,053	(29,620,757)	97,045,252
Non-Fuel Uncollectibles & PSC Tax	1,749,583	1,703,452	46,131	1,632,609
Emergency Contingency	5,000,000	5,000,000	-	5,000,000
Total Base Related Expenses	<u>\$ 321,581,750</u>	<u>\$ 347,404,754</u>	<u>\$ (25,823,004)</u>	<u>\$ 317,123,716</u>
BASE OPERATING INCOME:	<u>\$ 487,487,723</u>	<u>\$ 447,569,386</u>	<u>\$ 39,918,337</u>	<u>\$ 445,635,774</u>
NON-OPERATING REVENUE:				
Investment Income	4,631,588	3,776,585	855,003	3,965,423
Transfer To/From Fuel Recovery	-	-	-	11
Total Non Operating Revenues	<u>\$ 4,631,588</u>	<u>\$ 3,776,585</u>	<u>\$ 855,003</u>	<u>\$ 3,965,434</u>
NON-OPERATING EXPENSES:				
Debt Service	229,481,927	197,132,899	32,349,028	197,997,791
Total Non Operating Expenses	<u>\$ 229,481,927</u>	<u>\$ 197,132,899</u>	<u>\$ 32,349,028</u>	<u>\$ 197,997,791</u>
BASE INCOME BEFORE TRANSFERS	<u>\$ 262,637,384</u>	<u>\$ 254,213,072</u>	<u>\$ 8,424,312</u>	<u>\$ 251,603,417</u>
City Contribution Expense	92,637,384	91,720,182	917,202	91,720,182
Interlocal Payments	-	-	-	12,000,000
Renewal and Replacement Fund	59,953,918	66,155,208	(6,201,290)	62,374,400
Operating Capital Outlay	110,046,082	96,337,682	13,708,400	85,508,835
Contingencies & Working Capital	-	-	-	-
Total Non-Fuel Expenses	<u>\$ 262,637,384</u>	<u>\$ 254,213,072</u>	<u>\$ 8,424,312</u>	<u>\$ 251,603,417</u>
SURPLUS/(DEFICIT)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
TOTAL REVENUES	<u>\$ 1,285,965,741</u>	<u>\$ 1,308,634,926</u>	<u>\$ (22,669,185)</u>	<u>\$ 1,177,663,810</u>
TOTAL APPROPRIATIONS	<u>\$ 1,285,965,741</u>	<u>\$ 1,308,634,926</u>	<u>\$ (22,669,185)</u>	<u>\$ 1,177,663,810</u>
BUDGETED EMPLOYEE POSITIONS	1,554	1,554	-	1,554
BUDGETED TEMPORARY HOURS	104,000	208,000	(104,000)	208,000

**ELECTRIC SYSTEM
CAPITAL BUDGET**

	FY 2017 Budget	FY 2016 Budget	Change	FY 2016 Forecast
CAPITAL FUNDS:				
Renewal & Replacement Deposits	\$ 59,953,918	\$ 66,155,208	\$ (6,201,290)	\$ 62,374,400
Operating Capital Outlay	110,046,082	96,337,682	13,708,400	85,508,835
Environmental Capital Outlay	-	-	-	-
Debt Proceeds	-	-	-	-
Construction Fund Investment Income	-	-	-	-
Other Proceeds	-	7,507,110	(7,507,110)	12,766,337
Total Capital Funds	<u>\$ 170,000,000</u>	<u>\$ 170,000,000</u>	<u>\$ (0)</u>	<u>\$ 160,649,572</u>
CAPITAL PROJECTS:				
Generation Projects	\$ 33,340,000	\$ 27,466,000	\$ 5,874,000	\$ 40,474,466
Transmission & Distribution Projects	82,368,000	93,824,000	(11,456,000)	81,281,434
Other Projects	54,292,000	48,710,000	5,582,000	38,893,672
Total Capital Projects	<u>\$ 170,000,000</u>	<u>\$ 170,000,000</u>	<u>\$ -</u>	<u>\$ 160,649,572</u>

Operating Variance Analysis (\$ millions)	Budget FY2017	Budget FY2016	Change	Percent Chg
MWh sales	13,020,000	12,600,000	420,000	3.3%
Fuel Revenues ¹	\$472.26	\$509.88	(\$37.62)	-7.4%
Variable Fuel Rate per MWh	\$36.75	\$41.00	(\$4.25)	-10.4%
Fuel (excluding reserve adj & discounts) ²	\$434.56	\$484.63	(\$50.07)	-10.3%
Gas & Oil per MWh produced	\$25.34	\$26.49	(\$1.15)	-4.3%
Solid Fuel per MWh produced	\$26.21	\$31.36	(\$5.15)	-16.4%
Base Revenues	\$762.97	\$738.36	\$24.61	3.3%
Electric O&M (see O&M schedule)	\$209.11	\$200.57	\$8.54	4.3%
Non-Fuel Purchased Power ³	\$83.39	\$113.02	(\$29.62)	-26.2%
Scherer O&M and R&R ³	\$16.92	\$28.58	(\$11.66)	
SJRPP R&R	(\$20.68)	(\$19.21)	(\$1.47)	
Debt Service	\$229.48	\$197.13	\$32.35	16.4%
Renewal & Replacement ⁴	\$59.95	\$66.16	(\$6.21)	-9.4%
Operating Capital Outlay ⁴	\$110.05	\$96.34	\$13.71	14.2%
City Contribution	\$92.64	\$91.72	\$0.92	1.0%
Capital Budget Variance Analysis				
Capital Funds ⁵	\$170.00	\$170.00	-	0.0%
Capital Projects ⁶	\$170.00	\$170.00	-	0.0%
<p>(1) Reduced Fuel Rate from \$41.00 to \$36.75 (2) See fuel rate detail sheet (3) Increased Scherer capital expenses. Lower SJRPP debt service (4) The FY17 R&R is based on FY16 forecasted revenues. The FY17 OCO is the remaining amount to fully fund the FY17 capital expenses (5) FY17 Capital Fund Sources are from Current Year Internal Funding and prior year balances (6) Includes Management target of \$154M plus a 10% contingency</p>				

Electric System Capital Budget

Budget Line Items (000's Omitted)	FY2017B	FY2016B	FY2016F
Expanded Generation Capacity	\$0	\$0	\$0
Electric System Generation Projects	33,340	27,466	40,474
Electric System Distribution Projects	49,044	58,493	53,560
Electric System Substation & Transmission	33,324	35,331	27,722
Electric System Other Projects	54,292	48,710	38,894
Total	\$170,000	\$170,000	\$160,650

Note: Detailed FY2017 project list is included in the CIP Schedules within the Supplemental section



Fuel Rate per MWh

	<u>FY2015</u>	<u>FY2016F</u>	<u>FY2017B</u>	<u>FY2018</u>
<u>Variable Fuel Rate per MWh</u>				
Rate for Budgeted Fuel Cost	\$43.60	\$41.00¹	\$36.75	\$36.75
Fuel Rate Change per \$/MWh	-	\$36.75	-	-
Reserve as a % of Target Expense	24%	15%²	15%	15%
Annual Fuel Cost (millions)	\$441	\$378	\$431	\$378

Discussion and Analysis

- The Fuel Fund Rate Stabilization Reserve is currently at 29% of the historical maximum 12-month fuel expense
- Current projections are based on the PIRA and NYMEX natural gas price forecasts and assume no major market disruption due to regulations

¹ Variable Fuel Rate decreased to \$36.75/MWh per Board approval in January 2016 and made effective February 1, 2016.

² Assumes additional fuel credit to reduce balance to target amount.

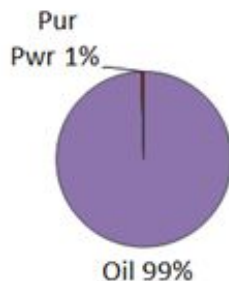


Historical Fuel Mix

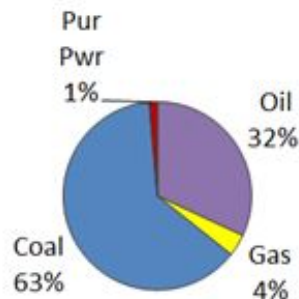
1970



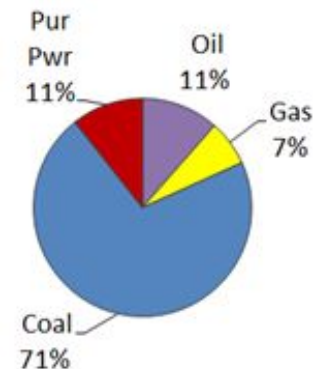
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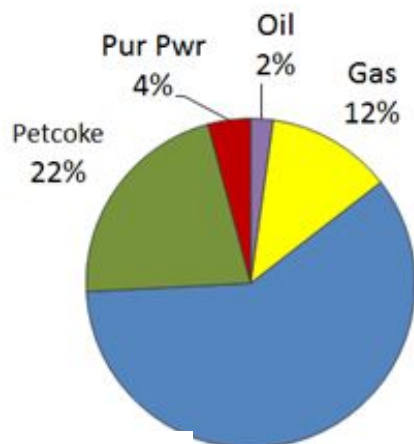
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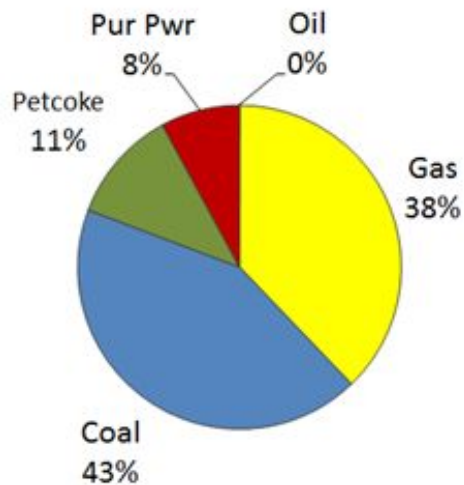
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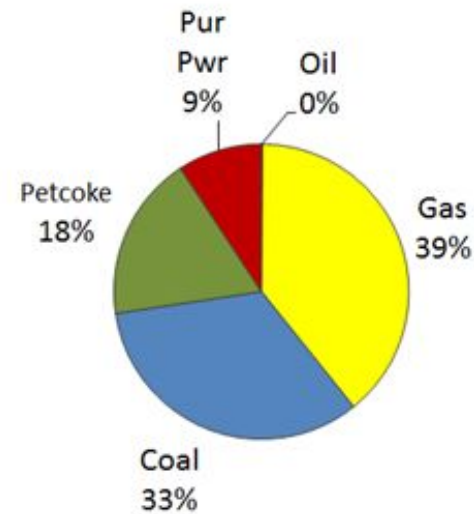
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2015



2016 (Forecast)



FY2017 Electric System Budget: Operating Expenses

(\$ in millions)	<u>FY2016</u>	-----FY2017-----	
	<u>Budget¹</u>	<u>Budget¹</u>	<u>Rating Agency</u>
Salaries & Benefits	\$174.7*	\$183.9*	
Other Services	96.0	101.4	
Material & Supplies	15.8	15.9	
Other	15.6	12.8	
Credits – Shared Services	(48.2)	(49.2)	
Credits – Capitalization	(36.9)	(38.7)	
Credits – Fuel Handling	(13.9)	(14.4)	
Credits – SJRPP Support	(2.5)	(2.6)	
Total	\$200.6	\$209.1	\$198.9
		4.2%	

Key Strategic Issues Included in Budget			
	<u>FY2016</u>		<u>FY2017</u>
Generating Unit Outages	\$13.5	Generating Unit Outages	\$9.4
Succession Planning Staffing Risks	2.6	Succession Planning Staffing Risks	2.6
Climate Change	1.0	Climate Change	1.0
Net Pension Increase	2.0	Net Pension Increase	3.9
		Strategic Initiatives	1.9
Compensation	*	Compensation	*
Total	\$19.1	Total	\$18.8

¹Excludes Customer Benefit, Environmental, and Retail Natural Gas

FY2017 Electric System Budget: Operating Expenses

Discussion and Analysis

- FY2017 Salaries and Benefits budget includes step increases for applicable bargaining unit employees, market adjustments for appointed employees, and an increase in pension rate from 33.5% of salaries to 37.1% of salaries
- FY2017 Other Services and Materials budget increased 4.9% from FY2016
- FY2017 Credits for Shared Services and Capitalization are estimated to be \$104.9 million
- FY2017 Customer Benefit total budget of \$8.1 million, \$7.5 million from current year revenues and \$0.6 million from rate stabilization reserve
 - Continuing focus on electrification strategy to mitigate declines in sales
- FY2017 Environmental Charge total budget \$7.9 million, \$2.1 million in current year expenditures and \$5.8 million transfer to rate stabilization reserve
- Natural Gas new business expenses estimated to be \$6.9 million

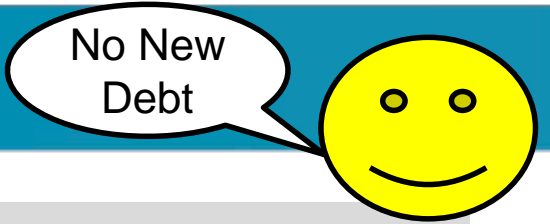
Current JEA ¹ Salary Adjustment Summary					
Unit	Annual % Gen. Increase – Prior Period				Gen. Increase – Current Contract ²
	FY13	FY14	FY15	FY16	FY17
IBEW	0%	0%	3%	2%	TBD
JSA	0%	0%	0%	2%	TBD
LIUNA	0%	0%	2%	2%	TBD
AFSCME	0%	0%	0%	1.5%	TBD
M&C	0%	0%	0%	2%	TBD
PEA	0%	0%	0%	3%	TBD
Appointed ³	0%	0%	0%	0% - 6%, avg 2%	Market

¹ Total JEA for both Electric and Water and Sewer Systems

² Collective Bargaining negotiations for current contract in progress

³ Adjustments per market study

Electric System: Capital Funding



FY2017 – Electric System Capital Budget: \$170 Million

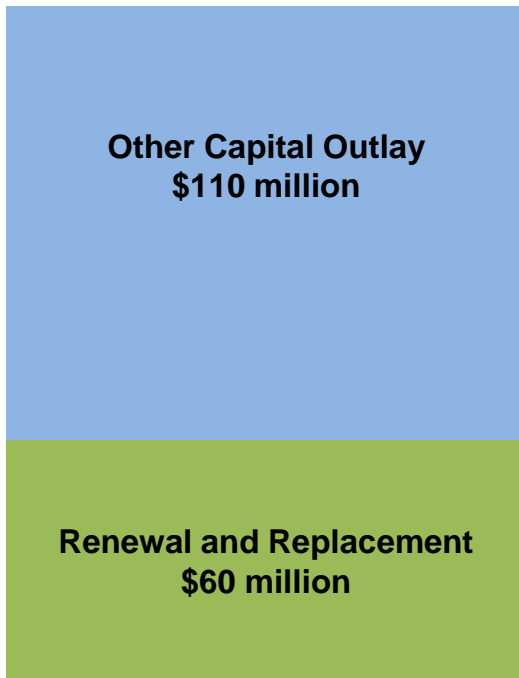
System Maintenance: \$149 Million

System Expansion: \$21 Million

- Renewal and Replacement
- Distribution
- Facilities, Fleet, Technology

- New or Expanded Generation
- New Transmission lines
- New or Expanded Substations

Source of Capital Funding



Discussion and Analysis

- FY2017 capital funding plan utilizes existing capital cash balances to fund the “long-term eligible funds” qualified projects, resulting in no new debt issuance for FY2017
- FY2016 capital plan budget was \$170 million, current forecast is \$161 million
- December 2015 rating agency FY2017 capital program was projected to be \$169 million

FY2017 Electric System Budget: Debt Service

	<u>FY2015</u>	<u>-----FY2016-----</u>		<u>-----FY2017-----</u>	
	<u>Actual</u>	<u>Budget</u>	<u>Forecast</u>	<u>Budget</u>	<u>Rating Agency</u>
Debt Service – Principal	\$95.0	\$89.8	\$96.2	\$90.0	\$90.0
Debt Service – Prepayment	65.8	---	---	38.6	---
Debt Service – Interest	<u>104.3</u>	<u>107.3</u>	<u>101.8</u>	<u>100.9</u>	<u>100.9</u>
Total (see note below)	<u>\$265.1</u>	<u>\$197.1</u>	<u>\$198.0</u>	<u>\$229.5</u>	<u>\$190.9</u>
Debt Service Coverage	2.6x	2.4x	2.5x	2.7x	2.5x
Debt to Asset %	68%	71%	66%	64%	64%
Variable Rate Debt %					
Gross	19%	21%	20%	21%	21%
Net of Swaps	6%	8%	7%	7%	7%
Variable Interest Rate %	0.7%	3.0%	1.8%	3.0%	3.0%
Liquidity – days cash	182	172	205	212	182

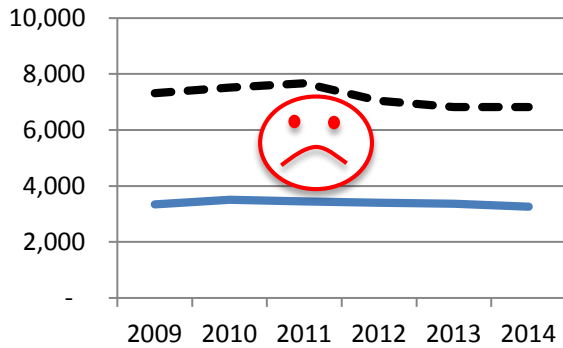
Discussion and Analysis

- Compared to FY2016F, higher FY2017 budgeted debt service is due to increased principal repayment
- JEA's senior lien credit ratings of AA- for S&P, Aa2 for Moody's, and AA for Fitch are stable

Note: Includes scheduled interest and principal payments to bondholders, variable rate financing costs, and swap payments

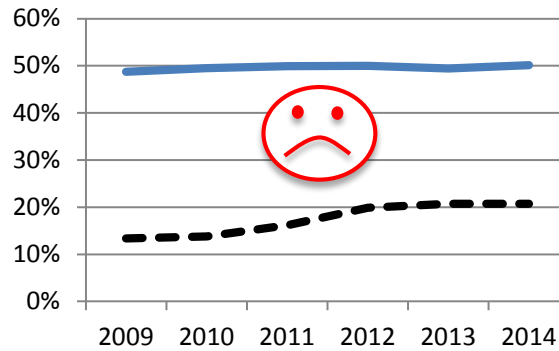
FY2017 Budget: Critical Issues – Financial Health

Debt/Customer (Retail)



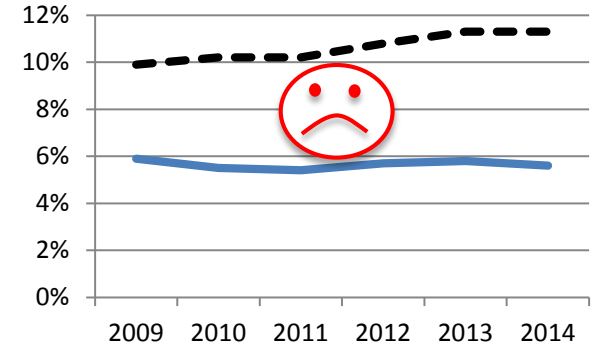
Provides a measure for relative comparison of leverage.

Equity/Capitalization



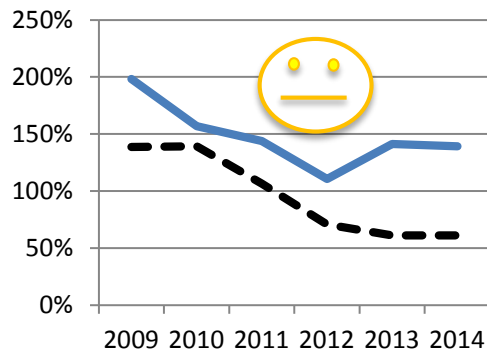
Provides a measure of cost recovery.

Transfer Payments as % of Operating Revenues



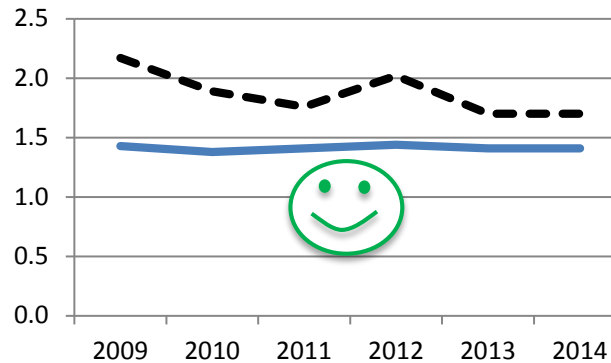
Indicates the degree to which a utility supports city general fund operations.

Capex/Depreciation



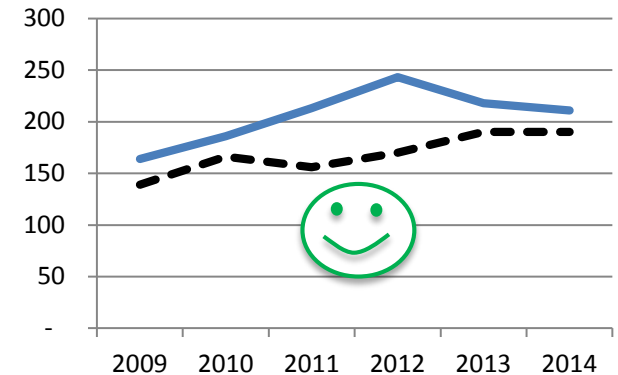
Indicates whether annual capital spending keeps pace with depreciation.

Coverage of Full Obligations



Indicates the margin available to meet current debt service and other fixed obligations.

Days Liquidity on Hand



Indicates financial flexibility, including all available sources of cash and liquidity, relative to expenses.

--- JEA — AA MEDIAN

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Water and Sewer System

- ✓ **Operating Budget**
- ✓ **Capital Budget**
- ✓ **O&M**
- ✓ **Capital Plan**
- ✓ **Debt Service**
- ✓ **Financial Metrics and Ratios**

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**JEA
WATER AND SEWER SYSTEM
OPERATING BUDGET**

	FY2017 Budget	FY2016 Budget	Change	FY2016 Forecast
BASE RELATED REVENUES & EXPENSES				
BASE OPERATING REVENUES:				
Base Rate Revenues	\$ 381,678,122	\$ 371,123,321	\$ 10,554,801	\$ 369,266,864
Environmental Charge Revenue	23,908,290	22,804,950	1,103,340	22,191,721
Other Revenues	11,638,859	14,769,077	(3,130,218)	13,341,960
Total Base Related Revenues	<u>\$ 417,225,271</u>	<u>\$ 408,697,348</u>	<u>\$ 8,527,923</u>	<u>\$ 404,800,545</u>
BASE OPERATING EXPENSES:				
Operating and Maintenance	\$ 141,698,943	\$ 136,320,816	\$ 5,378,127	\$ 134,077,130
Environmental CUP - DSM	2,449,584	2,046,800	402,784	1,228,166
Non-Fuel Uncollectibles & PSC Tax	844,390	858,999	(14,608)	738,609
Emergency Contingency	1,000,000	1,000,000	-	1,000,000
Total Base Related Expenses	<u>\$ 145,992,917</u>	<u>\$ 140,226,615</u>	<u>\$ 5,766,302</u>	<u>\$ 137,043,905</u>
BASE OPERATING INCOME:	\$ 271,232,354	\$ 268,470,733	\$ 2,761,621	\$ 267,756,640
NON-OPERATING REVENUE:				
Investment Income	3,152,787	2,759,926	392,861	3,051,698
Capacity Fees	19,000,000	17,000,000	2,000,000	18,636,051
Total Non Operating Revenues	<u>\$ 22,152,787</u>	<u>\$ 19,759,926</u>	<u>\$ 2,392,861</u>	<u>\$ 21,687,749</u>
NON-OPERATING EXPENSES:				
Debt Service	122,572,849	109,655,149	12,917,701	114,578,639
Total Non Operating Expenses	<u>\$ 122,572,849</u>	<u>\$ 109,655,149</u>	<u>\$ 12,917,701</u>	<u>\$ 114,578,639</u>
BASE INCOME BEFORE TRANSFERS	\$ 170,812,292	\$ 178,575,510	\$ (7,763,218)	\$ 174,865,750
City Contribution Expense	22,692,030	22,467,356	224,674	22,467,356
Interlocal Payments	-	-	-	3,000,000
Renewal and Replacement Fund	21,324,415	20,825,400	499,015	20,825,400
Operating Capital Outlay	94,937,141	97,524,604	(2,587,462)	97,524,604
Operating Capital Outlay - Environmental	12,858,706	20,758,150	(7,899,444)	12,412,335
Capacity Fees	19,000,000	17,000,000	2,000,000	18,636,055
Contingencies & Working Capital	-	-	-	-
Total Non-Fuel Expenses	<u>\$ 170,812,292</u>	<u>\$ 178,575,510</u>	<u>\$ (7,763,218)</u>	<u>\$ 174,865,750</u>
SURPLUS/(DEFICIT)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
TOTAL REVENUES	<u>\$ 439,378,058</u>	<u>\$ 428,457,274</u>	<u>\$ 10,920,784</u>	<u>\$ 426,488,294</u>
TOTAL APPROPRIATIONS	<u>\$ 439,378,058</u>	<u>\$ 428,457,274</u>	<u>\$ 10,920,785</u>	<u>\$ 426,488,294</u>
BUDGETED EMPLOYEE POSITIONS	599	599	0	599
BUDGETED TEMPORARY HOURS	20,800	41,600	(20,800)	41,600

**JEA
WATER AND SEWER SYSTEM
CAPITAL BUDGET**

	FY2017 Budget	FY2016 Budget	Change	FY2016 Forecast
CAPITAL FUNDS:				
Renewal & Replacement Deposits	\$ 21,324,415	\$ 20,825,400	\$ 499,015	\$ 20,825,400
Operating Capital Outlay	94,937,141	97,524,604	(2,587,463)	97,524,604
Environmental Capital Outlay	12,858,706	20,758,150	(7,899,444)	10,824,382
Capacity Fees	19,000,000	17,000,000	2,000,000	18,636,055
Debt Proceeds	-	-	-	
Construction Fund Investment Income	-	-	-	
Other Proceeds	77,379,738	38,891,846	38,487,892	15,538,438
Total Capital Funds	<u>\$ 225,500,000</u>	<u>\$ 195,000,000</u>	<u>\$ 30,500,000</u>	<u>\$ 163,348,879</u>
CAPITAL PROJECTS:				
Water Projects	60,238,000	67,128,000	(6,890,000)	74,761,378
Sewer Projects	127,854,000	105,644,000	22,210,000	84,206,027
Other Projects	37,408,000	22,228,000	15,180,000	4,381,474
Total Capital Projects	<u>\$ 225,500,000</u>	<u>\$ 195,000,000</u>	<u>\$ 30,500,000</u>	<u>\$ 163,348,879</u>

Operating Variance Analysis (\$ millions)	Budget FY2017	Budget FY2016	Change	Percent Chg
kGal Sales	36,750	34,650	2,100	6.1%
Base Rate Revenues ¹	\$381.68	\$371.12	\$10.56	2.8%
Operating and Maintenance (See O&M Schedule)	\$141.70	\$136.32	(\$5.38)	-3.9%
Debt Service ²	\$122.57	\$109.66	(\$12.91)	-11.8%
Renewal & Replacement ³	\$21.32	\$20.83	(\$0.49)	-2.3%
Operating Capital Outlay ⁴	\$94.94	\$97.52	\$2.58	2.6%
Capacity Fees ⁵	\$19.00	\$17.00	\$2.00	11.8%
Capital Budget Variance Analysis (\$ millions)				
Capital Funds ⁶	\$225.50	\$195.00	\$30.50	15.6%
Capital Projects ⁶	\$225.50	\$195.00	\$30.50	15.6%
(1) 4.8% increase in total system sales (2) FY2017 Debt Service increase reflects higher P&I payments. (3) FY17 R&R is based upon forecasted FY16 total revenues (4) OCO is based on forecasted projected FY16 revenues (5) Adjusted to recent trends (6) Includes management budget of \$205m plus 10% contingency				

Water and Sewer System Capital Budget

Budget Line Items (000's Omitted)	FY2017B	FY2016B	FY2016F
Water Treatment	\$27,626	\$32,951	\$20,889
Water Distribution	32,612	34,177	32,439
Sewer Collection	33,476	43,000	36,291
Sewage Pump Stations	26,673	14,624	12,565
Wastewater Treatment	67,705	40,839	35,350
Reclaimed Water Distribution	12,936	7,181	4,381
Other Capital Projects	24,472	22,228	21,433
Total	\$225,500	\$195,000	\$163,348

Note: Detailed FY2017 project list is included in the CIP Schedules within the Supplemental section



FY2017 Water and Sewer System Budget: Operating Expenses

(\$ in millions)	FY2016	-----FY2017-----	
	Budget¹	Budget¹	Rating Agency
Salaries & Benefits	\$64.0*	\$67.8*	
Other Services	24.8	25.2	
Material & Supplies	12.6	13.2	
Shared Services	48.1	49.1	
Other	3.4	3.4	
Credits - Capitalization	(16.1)	(16.5)	
Credits – Fuel Handling	(0.5)	(0.5)	
Total	<u>\$136.3</u>	<u>\$141.7</u>	<u>\$139.7</u>

4.0%

Key Strategic Issues Included in Budget			
	FY2016		FY2017
Total Water Resource Plan	\$1.0	Total Water Resource Plan	\$1.0
Succession Planning Staffing Risks	0.5	Succession Planning Staffing Risks	1.0
Net Pension Increase	0.6	Net Pension Increase	1.4
Compensation	*	Compensation	*
Total	<u>\$2.1</u>	Total	<u>\$3.4</u>

¹Excludes Customer Benefit and Environmental



FY2017 Water and Sewer System Budget: Operating Expenses

Discussion and Analysis

- FY2017 Salaries and Benefits budget includes step increases for applicable bargaining unit employees, market adjustments for appointed employees, and an increase in pension rate from 33.5% of salaries to 37.1% of salaries
- FY2017 Other Services and Materials budget is projected to increase by \$1.0 million
- FY2017 Shared Services are estimated to be \$49.1 million
- FY2017 Credits for Capitalization are estimated to be \$17.0 million
- FY2017 Environmental Charge total budget of \$23.9 million, \$2.4 million in operating expenditures and \$21.5 million transfer to operating capital outlay
- Salary increases consistent with page 13:

Current JEA ¹ Salary Adjustment Summary					
Unit	Annual % Gen. Increase – Prior Period				Gen. Increase – Current Contract ²
	FY13	FY14	FY15	FY16	FY17
IBEW	0%	0%	3%	2%	TBD
JSA	0%	0%	0%	2%	TBD
LIUNA	0%	0%	2%	2%	TBD
AFSCME	0%	0%	0%	1.5%	TBD
M&C	0%	0%	0%	2%	TBD
PEA	0%	0%	0%	3%	TBD
Appointed ³	0%	0%	0%	0% - 6%, avg 2%	Market



¹ Total JEA for both Electric and Water and Sewer Systems

² Collective Bargaining negotiations for current contract in progress

³ Adjustments per market study

Water and Sewer System: Capital Funding



FY2017 – Water and Sewer System Capital Budget: \$225 Million

Environmental: \$18 Million

- BMAP¹/ TMDL²/ Reclaim
- Total Water Management Plan
- Major Environmental Initiatives
- Support COJ Septic Tank Phase-Out

System Maintenance: \$117 Million

- Renewal and Replacement
- Distribution
- Facilities, Fleet, Technology

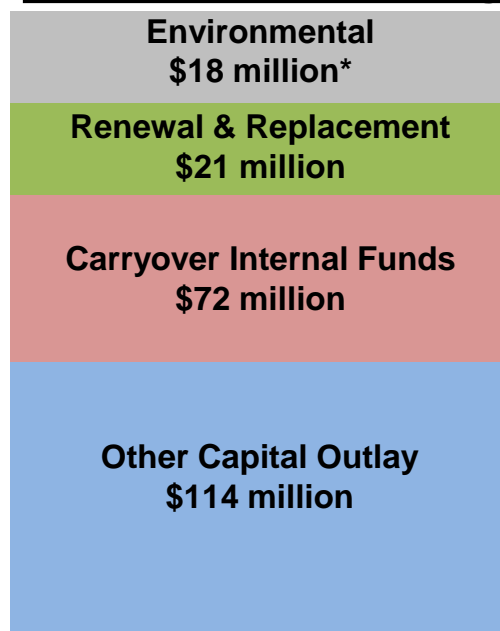
System Expansion: \$90 Million

- New or Expanded Treatment
- New Transmission lines
- New or Expanded Master Pump Stations

¹Basin Management Action Plan

²Total Maximum Daily Limit of Nitrogen

Source of Capital Funding



Discussion and Analysis

- FY2017 capital funding plan utilizes existing capital cash balances to fund the “long-term eligible funds” qualified projects, resulting in no new debt issuance for FY2017
- FY2016 capital plan budget was \$175 million, current forecast is \$163 million
- December 2015 rating agency FY2017 capital program was projected to be \$205 million

* \$13 million from current year revenues and \$5 million from the rate stabilization fund

FY2017 Water and Sewer System Budget: Debt Service

	<u>FY2015</u>	<u>-----FY2016-----</u>		<u>-----FY2017-----</u>	
	<u>Actual</u>	<u>Budget</u>	<u>Forecast</u>	<u>Budget</u>	<u>Rating Agency</u>
Debt Service - Principal	\$36.2	\$33.9	\$33.9	\$51.0	\$ 51.0
Debt Service - Prepayment	73.7	---	10.3	---	---
Debt Service - Interest	<u>72.0</u>	<u>75.8</u>	<u>70.4</u>	<u>71.6</u>	<u>71.5</u>
Total (see note below)	<u>\$181.9</u>	<u>\$109.7</u>	<u>\$114.6</u>	<u>\$122.6</u>	<u>\$122.5</u>
Debt Service Coverage	2.8x	2.7x	2.7x	2.6x	2.2x
Debt to Asset %	55%	53%	53%	50%	50%
Variable Rate Debt %					
Gross	17%	17%	17%	18%	18%
Net of Swaps	10%	9%	10%	10%	10%
Variable Interest Rate %	0.7%	3.0%	1.8%	3.0%	3.0%
Liquidity – days cash	149	109	155	150	138

Discussion and Analysis

- Compared to FY2016F, higher FY2017 budgeted debt service is due to increased principal repayment
- Debt to Asset and Liquidity metrics are expected to remain within current targeted objectives
- JEA credit ratings of AAA for S&P, Aa2 for Moody's, and AA for Fitch are stable

Note: Includes scheduled interest and principal payments to bondholders, variable rate financing costs, swap payments, and Revolving Credit Agreement payments

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**JEA
DISTRICT ENERGY SYSTEM
OPERATING BUDGET**

	FY2017 Budget	FY2016 Budget	Change	FY2016 Forecast
BASE RELATED REVENUES & EXPENSES				
BASE OPERATING REVENUES:				
Base Rate Revenues	\$ 9,247,921	\$ 9,089,118	\$ 158,803	\$ 8,675,491
Total Base Related Revenues	<u>\$ 9,247,921</u>	<u>\$ 9,089,118</u>	<u>\$ 158,803</u>	<u>\$ 8,675,491</u>
BASE OPERATING EXPENSES:				
Operating and Maintenance	\$ 5,252,918	\$ 5,175,137	\$ (77,781)	\$ 5,124,471
Total Base Related Expenses	<u>\$ 5,252,918</u>	<u>\$ 5,175,137</u>	<u>\$ (77,781)</u>	<u>\$ 5,124,471</u>
BASE OPERATING INCOME:	\$ 3,995,003	\$ 3,913,981	\$ 81,022	\$ 3,551,020
NON-OPERATING EXPENSES:				
Debt Service	3,022,454	3,023,980	1,526	3,023,980
Total Non Operating Expenses	<u>\$ 3,022,454</u>	<u>\$ 3,023,980</u>	<u>\$ 1,526</u>	<u>\$ 3,023,980</u>
BASE INCOME BEFORE TRANSFERS	\$ 972,549	\$ 890,001	\$ 82,548	\$ 527,040
City Contribution Expense	-	-	-	-
Renewal and Replacement Fund	433,635	457,185	23,550	448,167
Operating Capital Outlay	538,914	432,816	(106,098)	78,873
Total Non-Fuel Expenses	<u>\$ 972,549</u>	<u>\$ 890,001</u>	<u>\$ (82,548)</u>	<u>\$ 527,040</u>
SURPLUS/(DEFICIT)	\$ -	\$ -	\$ -	\$ -
TOTAL REVENUES	\$ 9,247,921	\$ 9,089,118	\$ 158,803	\$ 8,675,491
TOTAL APPROPRIATIONS	\$ 9,247,921	\$ 9,089,118	\$ 158,803	\$ 8,675,491
BUDGETED EMPLOYEE POSITIONS	5	5	0	5
BUDGETED TEMPORARY HOURS	0	0	0	0

**JEA
DISTRICT ENERGY SYSTEM
CAPITAL BUDGET**

	FY2017 Budget	FY2016 Budget	Change	FY2016 Forecast
CAPITAL FUNDS:				
Renewal & Replacement Deposits	\$ 433,635	\$ 457,185	\$ (23,550)	\$ 448,167
Operating Capital Outlay	538,914	432,816	106,098	78,873
Construction Fund Investment Income	-	-	-	-
Other Proceeds	2,098,451	2,766,999	(668,548)	1,974,352
Total Capital Funds	<u>\$ 3,071,000</u>	<u>\$ 3,657,000</u>	<u>\$ (586,000)</u>	<u>\$ 2,501,392</u>
CAPITAL PROJECTS:				
District Energy Projects	3,071,000	3,657,000	(586,000)	2,501,392
Total Capital Projects	<u>\$ 3,071,000</u>	<u>\$ 3,657,000</u>	<u>\$ (586,000)</u>	<u>\$ 2,501,392</u>

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Rate Stabilization Funds

(\$ in thousands)	FY2015	Forecast FY2016			Budget FY2017		
	Ending Balance	Deposits	Withdrawals	Ending Balance	Deposits	Withdrawals	Ending Balance
<u>Electric System</u>							
DSM/Conservation	\$ 2,886	\$ 6,833	\$ (6,840)	\$ 2,879	\$ 7,510	\$ (8,117)	\$ 2,272
Debt Management	42,126	-	-	42,126	-	-	42,126
Environmental	23,430	7,432	(1,353)	29,509	7,942	(2,077)	35,374
Fuel ¹	150,742	90,015	(56,608)	184,149	41,365	-	225,514
Purchased Power	38,000	-	(3,598)	34,402	-	(9,232)	25,170
Self Funded Health Plan	10,937	34,341	(35,451)	9,827	36,441	(36,671)	9,597
<u>Water & Sewer System</u>							
Debt Management	\$ 20,290	\$ -	\$ -	\$ 20,290	\$ -	\$ -	\$ 20,290
Environmental ²	-	22,344	(22,344)	-	23,908	23,908	-

Notes

¹ If fuel prices continue to be lower than the fuel rate, staff will evaluate the Fuel Stabilization balances and current market price volatility and will recommend to the Board an action to bring the fund in line with the Pricing Policy

² Includes \$17.9 million in Environmental capital projects and \$8.6 million in funds repaid to the Water and Sewer system R&R fund.

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Finance and Audit Committee Action

- Provide feedback and direction regarding the key issues for the FY2017 Budget specifically covering:
 - Revenue
 - O&M Expense Levels
 - Interest Rates and Debt Structure
 - Financial Metrics
- Provide feedback and direction for staff to present the Proposed Budget to the full Board

Staff

- Prepare Draft Final Budget, agenda items for the June Board Meeting
- Prepare budget package for approval at the June Board meeting
- Communicate with the Council Auditor
- Begin communication plan for other key stakeholders



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Total JEA Labor Costs

Budget FY2017 labor costs, Baseline Payroll Expense, are projected to be 7% above FY2008

(\$ in millions)	FY2008	FY2011	FY2012	FY2013	FY2014	FY2015	Budget FY2016	Budget FY2017	Budget FY2017 vs FY2008
Payroll Expense	\$159.9	\$151.8	\$153.5	\$154.6	\$155.2	\$161.8	\$166.4	\$171.1	7.0%
Benefits	29.7	28.8	33.3	32.2	26.0	37.7	31.0	34.8	17.2%
Subtotal	\$189.6	\$180.6	\$186.8	\$186.8	\$181.2	\$199.5	\$197.4	\$205.9	8.6%
Pension	14.4	18.4	23.4	28.4	35.7	41.6	48.5	54.6	279.2%
Total	\$204.0	\$199.0	\$210.2	\$215.2	\$216.9	\$241.1	\$245.9	\$260.5	27.7%

Discussion and Analysis

- By operating with multiple years of no general wage or salary increases, reducing overtime, temporary and contract workforce, as well as tightly controlling new replacement employees, base payroll expense for FY2017 will be 7.0% above FY2008 levels
- The current 33.5% pension payment is expected to be 37.1% for FY2017

Notes

- 1) Labor costs include salary, wages, temporary and contract, as well as benefits for the Electric, Water and DES systems
- 2) Does not include Succession Planning of \$4.9 million in FY2011 and FY2012; \$4.1 million in FY2013; \$3.1million FY2014, FY2015, FY2016; and \$3.6 million FY2017



Preliminary FY2017 Budget: FY2017 Electric System Fuel and Purchase Power Expense

	Costs				Units Produced				Cost Per Unit		
	FY 17 Budget	FY 16 Budget	FY 16 Budget vs Budget Variance	FY 16 % Change	FY 17 Budget	FY 16 Budget	FY 16 Budget vs Budget Variance	FY 16 % Change	FY 17 Budget \$/MWH	FY 16 Budget \$/MWH	% Change
	(\$ in millions)				(MWh's in millions)						
Solid Fuel											
SJRPP	\$ 95.0	\$ 114.0			2.64	3.21	(0.57)		\$ 35.99	\$ 35.50	1.4%
Scherer	34.3	34.7			1.24	1.29	(0.04)		27.55	26.91	2.4%
NS 1 & 2	78.3	78.8			4.04	2.90	(1.13)		19.39	27.13	-28.5%
Subtotal	207.6	227.5	\$ (19.9)	-8.7%	7.92	7.40	0.52	7.0%	26.21	30.72	-14.7%
Gas and Oil											
Gas	123.7	133.4			4.95	4.67	0.28		24.99	28.58	-12.6%
Oil	1.5	1.1			0.01	0.01	0.00		196.80	189.44	3.9%
Diesel	0.5	5.8			0.00	0.03	(0.03)		140.46	182.11	-22.9%
Subtotal	125.7	140.4	(14.7)	-10.5%	4.96	4.71	0.25	5.4%	25.34	29.83	-15.1%
Other Purchases	35.5	55.9			0.82	1.15	(0.33)	-28.8%	43.15	48.48	-11.0%
Off System Sales	(3.8)	(3.6)			(0.18)	(0.14)	(0.04)	31.7%	20.50	26.16	-21.7%
By-Product Exp	20.3	23.7							5.02	8.18	-38.6%
TEA Equity	(5.5)	(6.7)									
Other Expense	51.3	46.8									
Reserve Adjustment	41.8	26.4									
Rate Discount	5.6	6.3									
Total	\$ 478.5	\$ 516.7	\$ (38.2)	-7.4%	13.52	13.12	0.40	3.0%	\$ 35.39	\$ 39.36	-10.1%
MWH Sales	13.02	12.60	0.4	3.3%							
\$ per MWH Sold	\$ 36.75	\$ 41.00	\$ (4.25)	-10.4%							
Fuel Rate	\$ 36.75	\$ 41.00	\$ (4.25)	-10.4%							

Discussion and Analysis

- FY2017 natural gas prices are based upon current industry projections that are lower than prices used for the FY2016 Budget.
- FY2017 solid fuel prices are projected to fall compared to FY2016 Budget.

Current Year: FY2016 Electric System Fuel and Purchase Power Expense

	Costs				Units Produced				Cost Per Unit		
	FY 16 Forecast @ 4/5/16	FY 16 Budget	FY 16 Forecast vs Budget Variance	FY 16 % Change	FY 16 Forecast @ 4/5/16	FY 16 Budget	FY 16 Forecast vs Budget Variance	FY 16 % Change	FY 16 Forecast \$/MWH	FY 16 Budget \$/MWH	% Change
	(\$ in millions)				(MWh's in millions)						
Solid Fuel											
SJRPP	\$ 77.9	\$ 114.0			2.06	3.21	(1.15)		\$ 37.78	35.50	6.4%
Scherer	25.0	34.7			0.92	1.29	(0.37)		27.30	26.91	1.4%
NS 1 & 2	70.7	78.8			3.57	2.90	0.67		19.82	27.13	-26.9%
Subtotal	173.6	227.5	\$ (53.8)	-23.7%	6.55	7.40	(0.85)	-11.4%	26.52	30.72	-13.7%
Gas and Oil											
Gas	103.3	133.4			4.97	4.67	0.30		20.78	28.58	-27.3%
Oil	2.7	1.1			0.01	0.01	0.00		188.99	189.44	-0.2%
Diesel	0.2	5.8			0.00	0.03	(0.03)		230.39	182.11	26.5%
Subtotal	106.2	140.4	(34.2)	-24.3%	4.98	4.71	0.27	5.8%	21.34	29.83	-28.5%
Other Purchases	37.7	55.9			1.18	1.15	0.03	2.8%	32.03	48.48	-33.9%
Off System Sales	(1.6)	(3.6)			(0.08)	(0.14)	0.06	-43.7%	20.78	26.16	-20.6%
By-Product Exp	21.2	23.7							5.95	8.18	-27.2%
TEA Equity	(2.9)	(6.7)									
Other Expense	43.4	46.8									
Reserve Adjustment*		26.4									
Rate Discount	4.9	6.3									
Total	\$ 382.5	\$ 516.7	\$ (134.1)	-26.0%	12.63	13.12	(0.49)	-3.8%	\$ 30.28	\$ 39.36	-23.1%
MWH Sales	12.16	12.60	(0.4)	-3.5%							
\$ per MWH Sold	\$ 31.46	\$ 41.00	\$ (9.5)	-23.3%							
Fuel Rate	\$ 31.46	\$ 41.00									

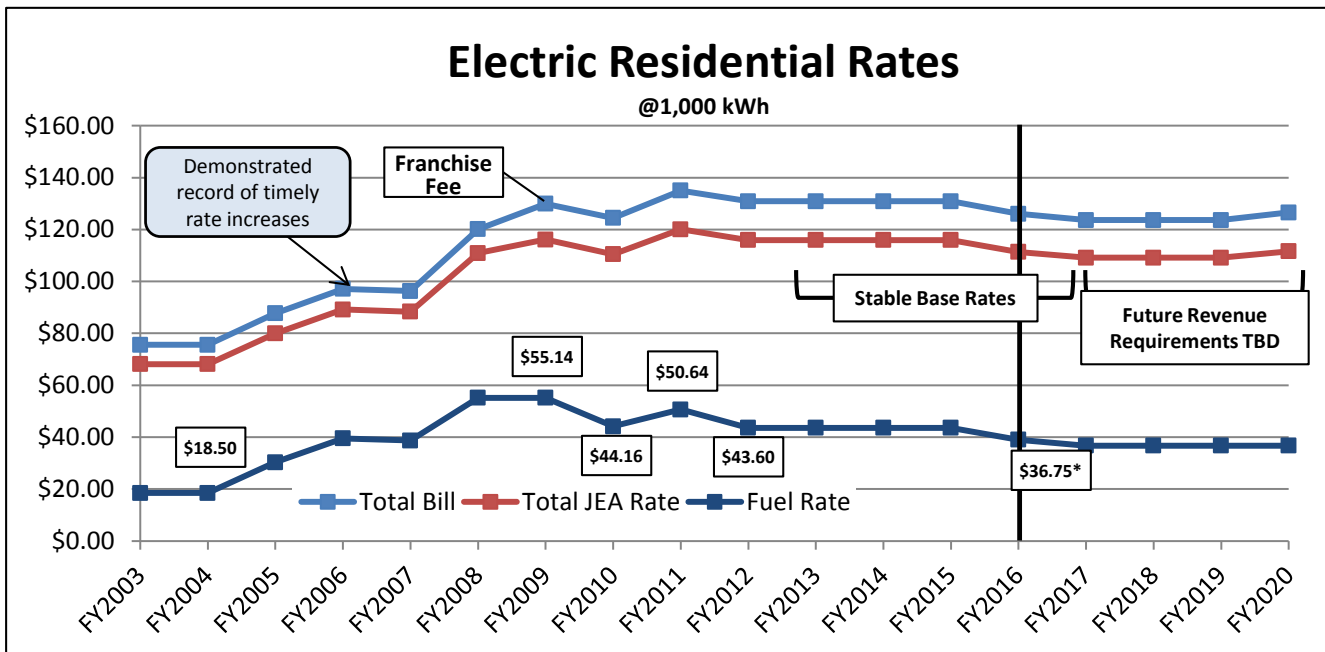
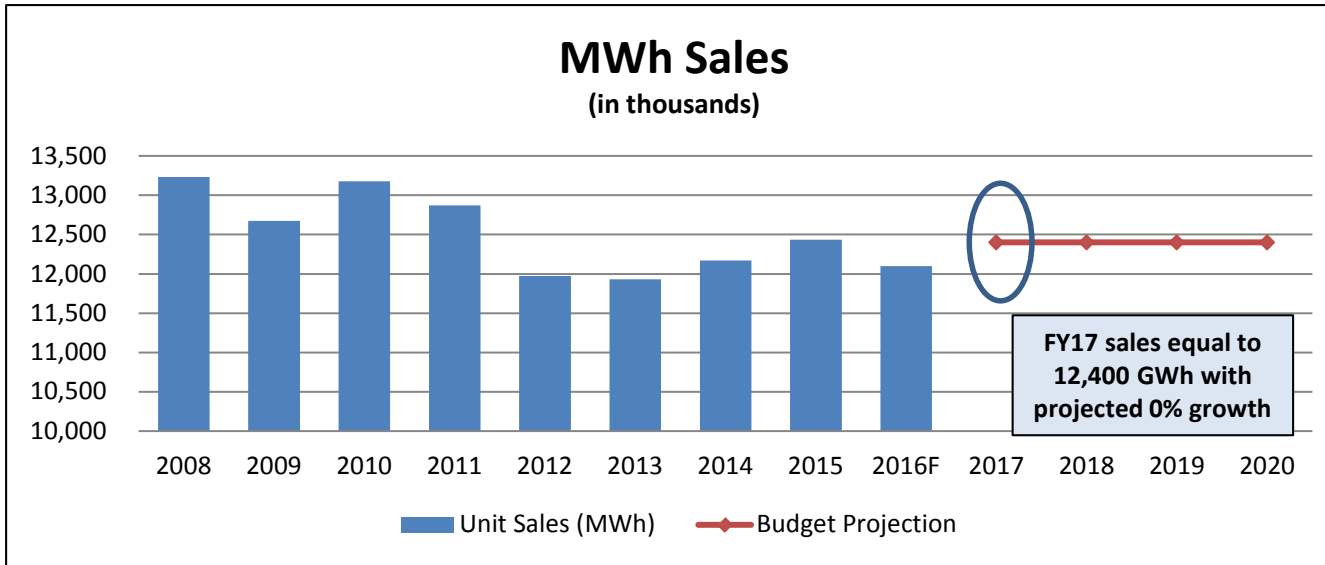
Discussion and Analysis

- FY2016 Fuel and Purchased Power expense is projected to be \$134.1 million lower than budgeted. This variance is due to weather impacted lower unit MWh sales and production units (\$18.1M), and lower than budgeted fuel cost (\$116.0M).
- The FY2016 forecasted fuel reserve is expected to be 29% of highest 12-month fuel cost.
- FY2017 variable fuel rate decreased by \$4.25 to \$36.75 based on Fuel and Purchased Power expenses.

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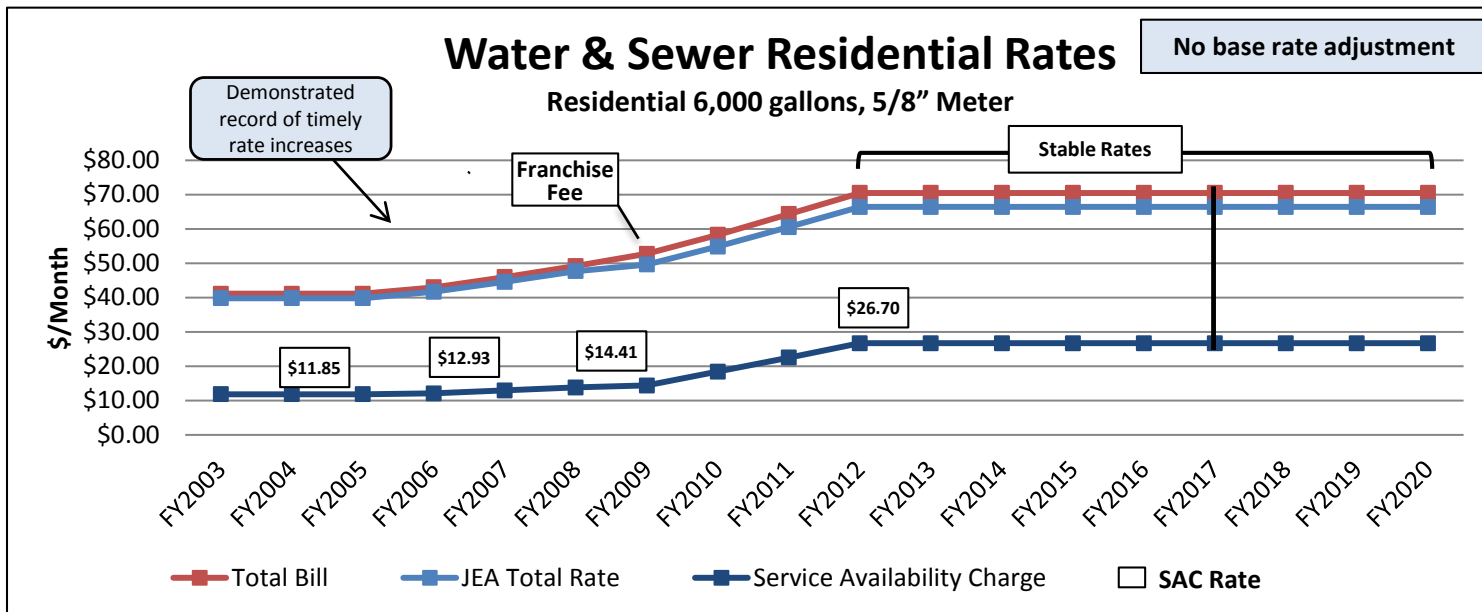
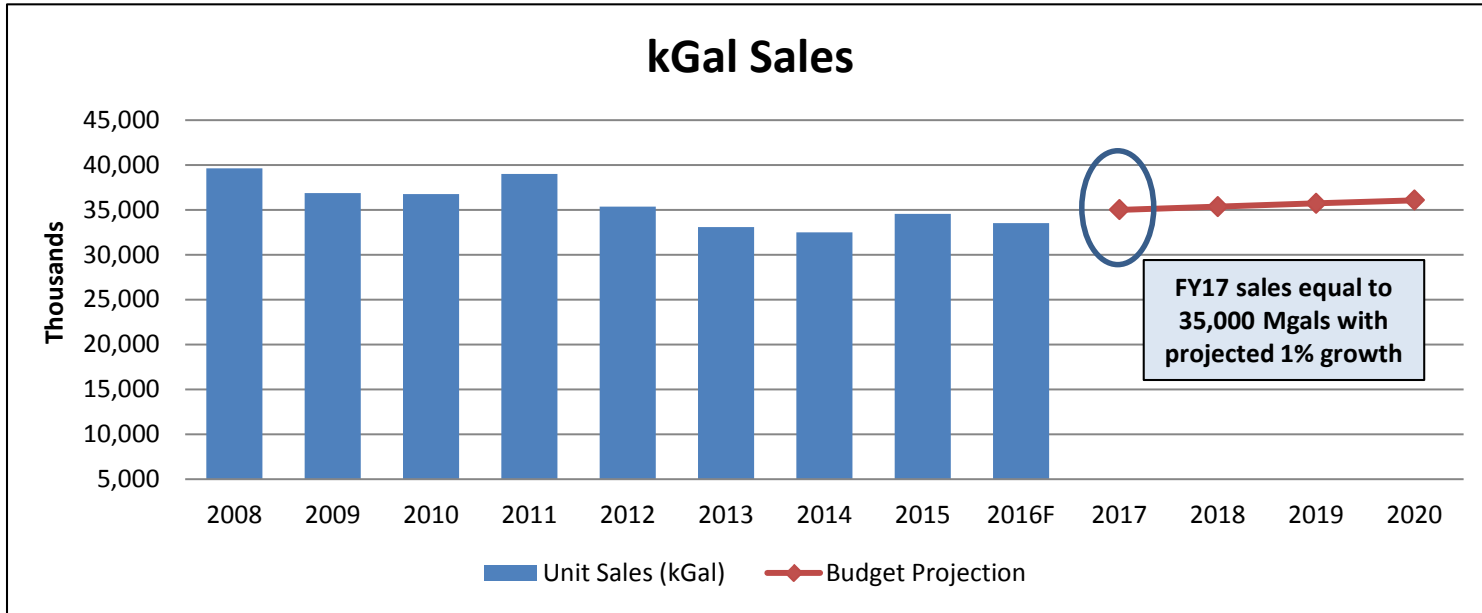
* Reserve contribution of \$33.4 million omitted to calculate true fuel cost per MWh

FY2017 Electric System Budget: Revenue Drivers



* Board approved a decrease in the Variable Fuel Rate to \$36.75/MWh effective Feb-2016.

FY2017 Water and Sewer System Budget: Revenue Drivers



FY2017 Budget: Electric System Capital Improvement Plan

(in thousands) Project Description	Proposed					
	FY17 TOTAL	FY18 TOTAL	FY19 TOTAL	FY20 TOTAL	FY21 TOTAL	FY17-21 TOTAL
EXPANDED GENERATION CAPACITY SUBTOTAL	0	0	0	0	0	0
ELECTRIC SYSTEM GENERATION PROJECTS						
Greenland Energy Center Diesel Fuel Oil Tanks Installation	6,360	0	0	0	0	6,360
Northside Units 1, 2, and 3 Capital Improvement Projects	6,000	6,000	6,000	6,000	6,000	30,000
Brandy Branch Combustion Turbine 1- Hot Gas Path Inspection #2	5,550	0	0	0	0	5,550
Northside Generating Station - Discharge Basin - Wall - Phase 2	3,027	0	0	0	0	3,027
Steam Plant General Capital Improvements	2,000	2,000	2,000	2,000	2,000	10,000
Brandy Branch - Greenland Energy Center - General Capital Improvements	2,000	2,000	2,000	2,000	2,000	10,000
Northside Generating Station - Controller Replacement	1,662	0	0	0	0	1,662
Brandy Branch-Recovery Steam Generator 2 - Selective Catalytic Reduction	1,450	0	0	0	0	1,450
Brandy Branch-Recovery Steam Generator 3 - Selective Catalytic Reduction	1,450	0	0	0	0	1,450
Brandy Branch - Low Voltage Ride Through System Installation	934	0	0	0	0	934
Northside - Units N33, N34, N35, N36 - Major Inspection Parts	750	0	0	0	0	750
Brandy Branch - Heat Recovery Steam Generator - Seal Replacement	560	0	0	0	0	560
Northside Generating Station - Tank 4 Demolition	499	0	0	0	0	499
Northside Units 1 and 2 - Distributed Control System - Replacement	359	359	360	0	0	1,078
Northside - Ash Silos 1 and 2 - Slurry Pump and Piping Replacement	317	563	553	0	0	1,433
Kennedy Combustion Turbine 7 - Hot Gas Path Inspection #3	250	5,182	0	0	0	5,432
Northside Generating Station - 1 and 2 Flyash Diverter Valves	115	0	0	0	0	115
Brandy Branch - Units 52 and 53 - Selective Catalytic Replacement	57	882	0	0	0	939
Potential Gas Line Capacity Upgrades	0	1,500	3,000	0	0	4,500
Brandy Branch Combustion Turbine 2 - Hot Gas Path Inspection #5	0	0	5,568	0	0	5,568
Brandy Branch Combustion Turbine 3 - Hot Gas Path Inspection #5	0	0	5,568	0	0	5,568
Kennedy Combustion Turbine 8 - Hot Gas Path Inspection #1	0	0	0	5,568	0	5,568
Brandy Branch Combustion Turbine 2 - Hot Gas Path Inspection #6	0	0	0	0	250	250
Brandy Branch Combustion Turbine 3 - Hot Gas Path Inspection #6	0	0	0	0	250	250
ELECTRIC SYSTEM GENERATION PROJECTS SUBTOTAL	33,340	18,486	25,049	15,568	10,500	102,943
ELECTRIC SYSTEM DISTRIBUTION						
New Electric Service Additions	7,300	7,600	8,000	8,500	7,500	38,900
Electric Distribution Maintenance Capital Upgrades	7,000	7,000	7,000	7,000	7,000	35,000
CEM-5 Electric Distribution Betterment	6,000	3,000	2,000	2,000	2,000	15,000
Development Driven Projects	5,000	5,000	5,000	5,000	5,000	25,000
13kV Electric Distribution Network Improvements	5,000	5,000	0	0	0	10,000
Electric Meter Replacement	4,728	4,553	4,320	4,398	4,477	22,476
Joint Participation Electric Relocation Projects	2,000	2,000	2,000	2,000	2,000	10,000
Electric Meter Growth	1,591	1,620	1,650	1,679	1,709	8,249

FY2017 Budget: Electric System Capital Improvement Plan

(in thousands) Project Description	Proposed					
	FY17 TOTAL	FY18 TOTAL	FY19 TOTAL	FY20 TOTAL	FY21 TOTAL	FY17-21 TOTAL
General Underground Network and Commercial Repairs and Upgrades	1,500	1,500	1,500	1,500	1,500	7,500
Automatic Recloser Deployment	1,050	1,210	1,210	1,000	1,000	5,470
Pole Replacement Program	1,000	1,000	1,000	1,300	1,300	5,600
Electric Distribution System Improvements	1,000	1,000	1,000	1,000	1,000	5,000
Baldwin 23KV to 26 KV Conversion	717	0	0	0	0	717
Distribution System - Pole Removal	600	600	600	600	600	3,000
Underground Cable Replacement Program - Existing Developments	500	500	500	500	500	2,500
4KV Rehabilitation – Distribution Projects	500	500	500	500	500	2,500
General Distribution Improvements	500	500	500	500	500	2,500
Point Meadows Substation Distribution Feeders	482	0	0	0	0	482
Church Reconductor Phase III - 182, 183, 185, 186 - Forest to Fuller Warren	430	0	0	0	0	430
Ritter Park 429 Reconductor	400	640	71	0	0	1,111
Church - Automated Skyway Service - Move to Church 187 to 188	375	0	0	0	0	375
26KV Reliability - Distribution Feeder Relay System Replacement	350	0	0	0	0	350
26KV Reconductor 417 to 418 - Woodley Rd from New Kings Rd to Old Kings	300	620	0	0	0	920
4KV Conversion - Fairfax and 21st to Hubbard	189	1,446	319	0	0	1,953
Capital Tools and Equipment	125	125	125	125	125	625
Hamilton 311 26KV Reconductor - Ortega Blvd - Verona to Robert Gordon Rd	95	0	0	0	0	95
Capital Tools and Equipment - E1	80	80	80	80	80	400
Electric Customer Service Response Tools and Equipment	54	92	92	92	92	422
Dinsmore Distribution Feeders	51	355	228	0	0	634
Electric Customer Service Response Lateral and Quick Response Work	50	50	50	50	50	250
Blair Rd Solar Center Project	38	0	0	0	0	38
Normandy 361 - Blair Rd to Blair Rd Solar Center - Electric and Fiber	30	0	0	0	0	30
Ortega Substation 26KV Feeds and 4KV Getaways	10	0	0	0	0	10
Nocatee Substation Distribution Feeders	0	0	250	1,500	500	2,250
Cecil Commerce South Distribution	0	0	0	0	300	300
ELECTRIC SYSTEM DISTRIBUTION PROJECTS SUBTOTAL	49,044	45,991	37,995	39,324	37,733	210,087
ELECTRIC SYSTEM SUBSTATION & TRANSMISSION PROJECTS						
Point Meadows 230 to 26KV Substation	8,055	0	0	0	0	8,055
Substation Repair and Rehabilitate Projects	3,000	3,000	3,000	3,000	3,000	15,000
Transmission Repair and Rehabilitate Projects	2,500	2,500	2,500	2,500	2,500	12,500
McDuff 13 to 4KV - Substation Rebuild	1,792	0	0	0	0	1,792
500 KV Transmission Line Upgrades	1,700	1,800	0	0	0	3,500
Southside GIS 69KV Controller Replacement	1,700	0	0	0	0	1,700
Rosselle 26 to 4KV Substation Rebuild	1,593	0	0	0	0	1,593
Substation Repair and Rehabilitate Project - Transformer Replacements	1,400	1,400	1,400	1,400	1,400	7,000
Preliminary Study - Riverside Area Substation Feasibility Review	1,300	0	0	0	0	1,300

FY2017 Budget: Electric System Capital Improvement Plan

(in thousands) Project Description	Proposed					
	FY17 TOTAL	FY18 TOTAL	FY19 TOTAL	FY20 TOTAL	FY21 TOTAL	FY17-21 TOTAL
Kennedy Substation - 13KV Switchgear Replacement	1,125	2,425	0	0	0	3,550
Transmission Lines Protection and Control Updates - System Protection	1,000	750	750	750	0	3,250
Transmission - Circuits 821 to 822 to 853 Structure Rebuild – Improvements	936	0	0	0	0	936
Dinsmore 230 to 26 kV Substation	860	6,020	3,870	0	0	10,750
Imeson 138 to 26KV Substation Reconfiguration	700	800	0	0	0	1,500
General Substation Improvements	500	500	500	500	500	2,500
230KV / 138KV / 69KV - Pole Refurbishment	500	500	500	500	500	2,500
230KV / 138KV / 69KV - Insulator Refurbishment	500	500	500	500	500	2,500
Transmission Tower Warning Light Systems - Replacement	495	0	0	0	0	495
Kennedy and Dillon HPFF Pipe - Type Cable Pumping Skid Replacements	420	835	0	0	0	1,255
Transmission Circuit 666 - Replace Structures 31, 32, 33, 34, 35 36 and 37	375	1,010	0	0	0	1,385
Ft Caroline Substation Protection Improvement	341	34	0	0	0	375
Lane Ave - T1 Transformer Replacement	330	470	0	0	0	800
General Transmission Improvements	300	300	300	300	300	1,500
General Protection System Improvements Transmission	300	300	300	300	300	1,500
Transmission - Point Meadows 230KV Circuit Interconnect	299	0	0	0	0	299
Imeson 138 to 26kV Substation Reconfiguration - Protection and Control	295	105	0	0	0	400
West Jax Substation Protection Improvement	202	32	0	0	0	234
Southside Gas Insulated Switchgear - 6C1 Capacitor Bank Replacement	190	0	0	0	0	190
Dinsmore 230 to 26KV Substation - System Protection and Controls Project	182	468	0	0	0	650
College Street Substation - 13KV Protection and Arc Flash Upgrade	111	0	0	0	0	111
Dinsmore 230KV Circuit 937 Interconnect	100	200	200	0	0	500
OM - General Transmission Improvements	100	100	100	100	100	500
Energy Management System - Remote Terminal Unit Upgrade Project	100	50	50	50	50	300
Southeast Substation Protection Improvement	23	0	0	0	0	23
Greenland Energy Center to Nocatee 230KV Circuit 911 Addition	0	1,887	1,886	1,386	500	5,659
Greenland Energy Center 230KV Bay and Breaker Addition for Circuit 911	0	400	400	200	0	1,000
Nocatee 230KV Circuit 911 Interconnect	0	100	100	200	100	500
Greenland Energy Center 230KV Circuit 911 Interconnect	0	100	100	200	100	500
Nocatee 230 to 26KV Substation	0	0	4,000	5,000	1,000	10,000
Cecil Commerce South Transmission	0	0	0	0	5,000	5,000
Cecil Commerce South Substation	0	0	0	0	2,000	2,000
West Jax - Autotransformer Addition	0	0	0	0	2,000	2,000
Mayport T3 Addition	0	0	0	0	1,000	1,000
ELECTRIC SYSTEM SUBSTATION & TRANSMISSION SUBTOTAL	33,324	26,586	20,456	16,886	20,850	118,102

FY2017 Budget: Electric System Capital Improvement Plan

(in thousands) Project Description	Proposed					
	FY17 TOTAL	FY18 TOTAL	FY19 TOTAL	FY20 TOTAL	FY21 TOTAL	FY17-21 TOTAL
ELECTRIC OTHER CAPITAL PROJECTS						
General Administration Office Building	10,000	25,000	16,000	0	0	51,000
Electric Capital Administrative Overhead	10,000	9,000	9,000	9,000	9,000	46,000
Technology Services - Projects	9,802	9,680	9,480	9,480	11,590	50,032
Fleet - Replacement	7,690	6,256	6,257	6,482	6,367	33,052
Streetlight Improvements	5,000	5,000	5,000	5,000	5,000	25,000
Westside Service Center - Administrative and Warehouse Space	3,000	0	0	0	0	3,000
Southside Service Center - Safety Restroom and Door Upgrades	1,380	0	0	0	0	1,380
Security - 69KV Substations Security Enhancements	1,080	0	0	0	0	1,080
Facilities Improvements - Security	620	620	620	620	620	3,100
Westside Service Center - Paving Upgrades	500	130	0	0	0	630
Critical Infrastructure Protection - Version 5 Implementation	500	0	0	0	0	500
Westside and Commonwealth Service Center - Parking Improvements	500	0	0	0	0	500
Byproduct Heavy Duty Equipment	460	0	0	0	0	460
Facilities Improvements - Heating, Ventilation, and Air	430	430	430	430	430	2,150
Facilities Improvements - Building Upgrades	425	425	425	200	200	1,675
Security - Commonwealth Warehouse Sprinkler System	360	0	0	0	0	360
New Operations Center (South)	350	14,700	0	0	0	15,050
Facilities Improvements - Lighting	305	100	100	100	100	705
Enabling Technologies	300	0	0	0	0	300
Security - Northside Generating Station - Access Control System Upgrades	290	0	0	0	0	290
Facilities Improvements - Paving and Site	250	250	250	250	250	1,250
Energy Management System - Base Upgrade Project	250	130	130	130	130	770
Security - Fire System Sprinklers	200	200	200	200	200	1,000
Facilities Improvements - Roof Replacement	150	450	450	450	450	1,950
Facilities Improvements - Plumbing and Fire System Upgrades	135	155	155	100	100	645
Security - Fencing	130	130	130	130	130	650
Laboratory Equipment Upgrades	75	75	75	75	75	375
Utility Locate Group - Capital Equipment	50	50	50	50	50	250
Facilities Improvements - Elevators	50	50	50	50	50	250
Energy Management System - Situational Awareness Mapboard Project	10	0	0	0	0	10
Commonwealth Service Center - Interior and Roof Upgrades	0	0	2,000	0	0	2,000
ELECTRIC OTHER CAPITAL PROJECTS SUBTOTAL	54,292	72,831	50,802	32,747	34,742	245,414
ELECTRIC TOTAL	169,999	163,893	134,301	104,525	103,825	676,543

FY2017 Budget: Water System Capital Improvement Plan

(in thousands) Project Description	Proposed					
	FY17 TOTAL	FY18 TOTAL	FY19 TOTAL	FY20 TOTAL	FY21 TOTAL	FY17-21 TOTAL
WATER TREATMENT						
Northwest Regional - New 6.0 Million Gallons per Day Water Treatment Plant	7,056	2,000	0	0	0	9,056
West Nassau Regional Water Treatment Plant - Expansion 1.0 to 5.0 MGD	3,550	3,828	0	0	0	7,378
Greenland Water Treatment Plant - Sulfide Removal	3,359	0	0	0	0	3,359
Southeast Water Treatment Plant - High Service Pump and Pump Building	1,899	0	0	0	0	1,899
Well Rehabilitation and Maintenance - McDuff Wells	1,250	1,562	116	0	0	2,928
Well Rehabilitation and Maintenance - Fairfax Wells	1,157	1,013	800	235	0	3,205
Water Plant Capital Renewal and Replacement	1,000	1,000	1,000	1,000	1,000	5,000
Norwood Water Treatment Plant Reservoir Rehabilitation	915	0	0	0	0	915
Main St Water Treatment Plant - Well #15 - New Lower Florida Aquifer Well	858	607	0	0	0	1,465
South Grid Water Quality - Well Improvement	800	800	600	0	0	2,200
Marietta Water Treatment Plant - High Service Pump - Upgrade	800	191	0	0	0	991
Main St Water Treatment Plant - Well #13	651	0	0	0	0	651
RiverTown - New 6.0 Million Gallons per Day Water Treatment Plant	700	2,750	8,550	200	0	12,200
Well Field Repair and Replace	400	700	700	700	700	3,200
Fairfax Water Treatment Plant - High Service Pump Rehabilitation	387	0	0	0	0	387
Otter Run Water Treatment Plant Renewal and Replacement	337	1,441	0	0	0	1,778
McDuff Water Treatment Plant - Aeration Improvements	310	0	0	0	0	310
Arlington Water Treatment Plant - High Service Pump Replacement	300	874	0	0	0	1,174
Water Treatment Plants - Sodium Hypochlorite Storage Tank Upgrades	300	440	440	440	440	2,060
Woodmere Water Treatment Plant - Well #3 and Storage Tank Replacement	277	2,522	351	0	0	3,150
Main St Well #6A - Rehabilitation	277	0	0	0	0	277
Cecil Water Treatment Plant - Ground Storage Tank and High Service Pump	358	1,690	1,540	0	0	3,588
Main St Water Treatment Plant - Well #14 - New Lower Florida Aquifer Well	137	0	0	0	0	137
Ponce de Leon Water Treatment Plant - Building and Reservoir Replacement	125	0	0	0	0	125
Brierwood Water Treatment Plant - Well 4 and 5 Backplugging	125	0	0	0	0	125
Water Treatment Plant Reservoir Repair and Replace	100	100	100	100	100	500
McDuff Water Treatment Plant - High Service Pump Replacement	98	1,810	77	0	0	1,985
Lakeshore Water Treatment Plant - Reservoir Rehabilitation	50	400	2,300	1,000	0	3,750
East 1st St Main St to East 4th St - Raw Water - New	50	300	1,500	500	0	2,350
Alternative Water Supply - Pilot Plant	0	500	2,000	1,500	11,000	15,000
Lofton Oaks Water Treatment Plant Improvements	0	120	700	0	0	820
Greenland Water Treatment Plant - Expansion 6 to 12 Million Gallons per Day	0	50	600	3,250	2,600	6,500
Norwood Water Treatment Plant High Service Pump	0	50	200	1,000	500	1,750
Main St Water Treatment Plant - Ozone Generator - Addition	0	50	45	2,500	0	2,595
Westlake Water Treatment Plant - Expansion 3 to 7 Million Gallons per Day	0	0	320	2,000	4,180	6,500
St Johns Forest Wells	0	0	50	1,000	500	1,550
Main St Water Treatment Plant - Wells 7 and 12 Lining	0	0	50	250	250	550

FY2017 Budget: Water System Capital Improvement Plan

(in thousands) Project Description	Proposed					
	FY17 TOTAL	FY18 TOTAL	FY19 TOTAL	FY20 TOTAL	FY21 TOTAL	FY17-21 TOTAL
Southeast Water Treatment Plant Ground Storage Tank	0	0	0	50	2,000	2,050
Beacon Hills Ground Storage Tank	0	0	0	50	750	800
Oakridge Water Treatment Plant High Service Pump Expansion	0	0	0	0	50	50
Brierwood Water Treatment Plant High Service Pump Expansion	0	0	0	0	50	50
WATER TREATMENT SUBTOTAL	27,626	24,798	22,039	15,775	24,120	114,358
WATER DISTRIBUTION						0
Residential Network Meter and Module Replacement Project	7,700	0	0	0	0	7,700
OM - Water Delivery System Repair and Replace	4,400	5,500	5,500	5,500	5,500	26,400
JP - FDOT - San Jose Blvd - Cornell Road to San Marco Blvd - W	2,411	179	0	0	0	2,590
Water Meter Growth	2,160	1,992	2,041	2,041	2,010	10,244
Water Meter Replacement	2,100	3,500	3,600	3,700	6,500	19,400
Water Transmission Replacement Program	2,000	5,000	5,000	5,000	5,000	22,000
Joint Participation Projects - W	2,000	2,000	2,000	2,000	2,000	10,000
Large Meter Change - Out Project	1,897	0	0	0	0	1,897
Roosevelt Blvd - Birmingham Gate to Collins Rd - Transmission - New - W	1,312	0	0	0	0	1,312
Integrated Water Supply Testing Evaluation and Rehabilitation (iWATER)	1,000	1,750	2,000	2,000	0	6,750
JP - JTA - Collins Road - W	776	360	0	0	0	1,136
JP - FDOT Beaver Street Water Improvements - Stockton to Ocean - W	538	5	0	0	0	543
Yellow Bluff - Marshland Drive to Tisons Bluff Road - Transmission - New - W	508	1,735	0	0	0	2,243
Main Extensions and Taps - W	500	750	750	750	750	3,500
JP - FDOT - State Road 134 at I295 Intersection Improvements - W	497	0	0	0	0	497
JP - JTA - Alta Drive Roadway Improvements - W	290	1,711	0	0	0	2,001
Nocatee - Snowden Parkway - W	270	0	0	0	0	270
Grid - Cost Participation - New - W	250	250	250	250	250	1,250
JP - JTA - Girvin Road - Atlantic Blvd to Wonderwood Drive - W	240	0	0	0	0	240
Nocatee - Crosswater to Pod Entrance - W	235	0	0	0	0	235
Rivertown - Main Stream Crossing - W	200	0	0	0	0	200
Ponte Vedra - Pablo Rd - Pablo Dr - San Juan Dr to Pablo Rd - Transmission	197	0	0	0	0	197
Nocatee - Crosswater Pkwy - Coastal Oaks to South Village - W	193	0	0	0	0	193
Rivertown - Homestead - W	185	0	0	0	0	185
Development Driven - RiverTown - Water	100	100	100	100	100	500
Development Driven - Nocatee - Water	100	100	0	0	0	200
JP - FDOT - Pecan Park Rd - I-95 - W	82	0	0	0	0	82
William Burgess - Harts Road to Nevada Ave - Transmission - New - W	67	231	462	0	0	760
JP - FDOT - Beach Blvd and University Blvd Intersection Improvements - W	60	0	0	0	0	60
Beaver Street - Lane Ave to Carnegie Street - Transmission - W	52	193	0	0	0	245
JP - COJ - Lower Eastside Drainage Improvements - Water	50	625	285	0	0	960
Main St Water Treatment Plant - 1st St to Franklin St - Transmission - New	50	594	2,475	781	0	3,900

FY2017 Budget: Water System Capital Improvement Plan

(in thousands) Project Description	Proposed					
	FY17 TOTAL	FY18 TOTAL	FY19 TOTAL	FY20 TOTAL	FY21 TOTAL	FY17-21 TOTAL
Rivertown - Parcel 13 - Southern Plan of Development - W	39	0	0	0	0	39
JP - FDOT - State Road 200 (A1A) Rubin to O'Neil Scott - Section 3 - W	35	36	36	0	0	107
JP - FDOT - Beaver Street - McDuff Ave to Stockton Street - W	32	0	0	0	0	32
JP - FDOT - Emerson Street - W	31	0	0	0	0	31
JP - FDOT - Kings Road -Cleveland Street to Darrow Road - W	28	0	0	0	0	28
JP - FDOT - State Road 200 (A1A) I-95 to Still Quarters Road - Section 1 - W	11	11	11	2	0	35
JP - FDOT - State Road 9A (I-295) - Managed Lanes - JTB - 9B Extension	11	-29	0	0	0	-18
JP - FDOT - Cassat Ave - Lenox Ave to Blanding Blvd - W	10	1,553	0	0	0	1,563
JP - FDOT - I95 and I295 US17 North Interchange - W	6	2	0	0	0	8
JP - FDOT - 9B - Duval - St Johns County Line to County Road 2209	3	3	4	0	0	10
JP - FDOT - State and Union St - Resurfacing - (I-95 to Main Street) - W	3	0	0	0	0	3
JP - COJ - 11th and 12th Street Connector - Boulevard to Davis - W	0	87	0	0	0	87
103rd Street - Pressure Sustaining Valve - Addition	0	0	2,250	0	0	2,250
Ft. Caroline Road - McCormick Road to Fulton Road - Distribution - New - W	0	0	1,028	0	0	1,028
North Main Street Drive - Setzer Road to Gun Club Rd - Transmission - New	0	0	280	1,100	2,382	3,762
Jones Road - Teague Road to Prichard Road - Transmission - New - W	0	0	250	1,000	2,476	3,726
Fire Hydrant In-Fill	0	0	50	50	50	150
Cisco Dr - Westlake Treatment Plant to Garden St - Transmission - New	0	0	0	220	850	1,070
Trout River Blvd - US1 to Sibald Ave - Transmission - New - W	0	0	0	150	580	730
Pritchard Road - Old Plank Road to Cisco Drive West - Transmission - New	0	0	0	140	540	680
JP - FDOT - A1A - Still Quarters Road to Scott Road - Section 2 - W	-17	0	0	0	0	-17
WATER DISTRIBUTION SUBTOTAL	32,612	28,238	28,372	24,784	28,988	142,994
SEWER COLLECTION						
Alachua 24 inch Force Main - Alachua Pump Station to Wilson Blvd - New	6,594	222	0	0	0	6,816
Trunk Sewer Replacement Program	3,000	9,331	10,000	10,000	10,000	42,331
District 2 - Dunn - Key Haven Blvd - Wingate Rd - Transmission - Force Main	2,892	30	0	0	0	2,922
OM - Sewer Collection System Repair and Replace	2,700	3,000	5,200	5,200	5,200	21,300
Philips Highway - Emerson Street to Spring Park Road - Force Main - S	2,247	0	0	0	0	2,247
OM - Sewer Collection System Trenchless Repair and Replace	2,200	3,200	3,200	3,200	3,200	15,000
Huffman Blvd - Tulip Circle North to St. Johns Bluff Road - Force Main - S	2,177	0	0	0	0	2,177
William Burgess Road - State Road 200 to Harts Road - Transmission - New	2,011	185	0	0	0	2,196
Southwest 30 inch Force Main - Wilson Blvd to Timuquana Road - S	1,135	4,000	4,777	0	0	9,912
District 2 - T-Line to Busch Drive - Transmission - New - Force Main	1,042	4,468	0	0	0	5,510
Joint Participation Projects - S	1,000	2,000	2,000	2,000	2,000	9,000
District 2 - Main Street to Pulaski Road- Transmission - Force Main	834	1,741	0	0	0	2,575
District 2 - Main Street - Sara Drive to Noah Road - Force Main	690	20	0	0	0	710
Development Driven - RiverTown - S	500	500	750	500	500	2,750

FY2017 Budget: Water System Capital Improvement Plan

(in thousands) Project Description	Proposed					
	FY17 TOTAL	FY18 TOTAL	FY19 TOTAL	FY20 TOTAL	FY21 TOTAL	FY17-21 TOTAL
Grid - Cost Participation - New - FM	500	500	500	500	500	2,500
Ductile Iron FM Replacement - Program - Repair and Replace	400	1,500	1,500	1,500	1,500	6,400
Main Extensions and Taps – S	400	500	500	500	500	2,400
Development Driven - Nocatee - S	300	300	0	0	0	600
Nocatee - Snowden Parkway - S	270	0	0	0	0	270
Nocatee - Crosswater to Pod Entrance - S	260	0	0	0	0	260
JP - FDOT - San Jose Blvd - Cornell Road to San Marco Blvd - S	248	6	0	0	0	254
T - Line - JTB to Town Center Parkway - Transmission - New - FM	230	890	1,975	0	0	3,095
Greenland Energy Center to US-1 - Transmission - FM	225	860	1,915	0	0	3,000
Rivertown - Homestead - S	185	0	0	0	0	185
Lenox Ave - Palisades Dr to Alachua Pump Station - New - FM	180	1,685	0	0	0	1,865
Ponte Vedra - San Juan Dr to Pablo Rd - Transmission - Replace - FM	177	0	0	0	0	177
Nocatee - Crosswater Parkway - Coastal Oaks to South Village - S	174	0	0	0	0	174
JP - JTA - Collins Road - S	153	69	0	0	0	222
JP - JTA - Alta Drive Roadway Improvements - S	114	524	6	0	0	644
JP - JTA - Girvin Road - Atlantic Blvd to Wonderwood Drive - S	105	0	0	0	0	105
JP - FDOT - State Road 134 at I295 Intersection Improvements - S	104	0	0	0	0	104
Air Relief Valves - Repair and Replace	100	100	100	100	100	500
District 2 - Key Haven to Harts Road - S	62	0	0	0	0	62
JP - COJ - Lower Eastside Drainage Improvements - Sewer	50	395	0	0	0	445
Manhole Supervisory Control and Data Acquisition - Repair and Replace	50	50	50	50	50	250
JP - FDOT - State Road 200 (A1A) I-95 to Still Quarters Road - Section 1 - S	50	25	14	2	0	91
South Shores Second Sub-Aqueous FM Crossing	50	0	0	0	0	50
JP - FDOT - State Road 200 (A1A) Rubin to O'Neil Scott - Section 3 - S	30	30	13	0	0	73
JP - FDOT - Pecan Park Road - I-95 - S	29	0	0	0	0	29
Rivertown - Parcel 13 - Southern Plan of Development - S	27	0	0	0	0	27
JP - FDOT - SR 9A (I-295) - Managed Lanes - JTB - 9B Extension - S	10	-29	0	0	0	-19
JP - FDOT - I95 and I295 US17 North Interchange - S	8	3	0	0	0	11
Kings Road - Cleveland Street to Darrow Road - S	4	0	0	0	0	4
JP - FDOT - 9B - Duval - St. Johns County Line to County Road 2209	2	2	3	0	0	7
JP - FDOT - State and Union Street - Resurfacing - (I-95 to Main St) - S	2	0	0	0	0	2
OM - Turberculated Iron Gravity Pipe Repair and Replace	0	500	500	500	500	2,000
5th St West - Imeson Rd to Melson Ave - Transmission - New - FM	0	405	1,500	3,507	0	5,412
JP - COJ - 11th and 12th Street Connector - Boulevard to Davis - S	0	30	0	0	0	30
St Johns Bluff Rd - UNF to Bradley Pump Station - Transmission - New	0	0	300	1,100	2,570	3,970
Deercreek Club Rd - Southside Blvd to Waterton Ln - Distribution - New - FM	0	0	12	144	249	405
T-Line - Brandy Branch to Beaver Street - Distribution - New - FM	0	0	0	360	1,300	1,660
District 2 - New Berlin Rd - Yellow Bluff Rd to Eastport Rd - New - FM	0	0	0	300	1,260	1,560

FY2017 Budget: Water System Capital Improvement Plan

(in thousands) Project Description	Proposed					
	FY17 TOTAL	FY18 TOTAL	FY19 TOTAL	FY20 TOTAL	FY21 TOTAL	FY17-21 TOTAL
Old Middleburg Rd - Argyle Forest Blvd to Maynard Pl - Trans - New - FM	0	0	0	250	950	1,200
Deerwood Park - Burnt Mill to JTB - Transmission - New - FM	0	0	0	80	310	390
Old Middleburg Road - Maynard Place to Shindler Drive - New - FM	0	0	0	0	935	935
118th St - Kinkaid Rd to Ricker Rd - Transmission - New - FM	0	0	0	0	680	680
US-1 - Twin Creeks Pump Station to Alphons St - Transmission - FM	0	0	0	0	300	300
Reedy Branch Pump Station to Greenland - Transmission - FM	0	0	0	0	300	300
District 2 - Woodley to Key Haven - Transmission - FM	0	0	0	0	190	190
District 2 - Yellow Bluff Rd - New Berlin to Victoria Lakes - Trans - FM	0	0	0	0	177	177
Dunn Ave - Ross Blvd to Wingate Road - Transmission - FM	0	0	0	0	100	100
JP - FDOT - A1A - Still Quarters Rd to Scott Rd - Section 2 - S	-45	0	0	0	0	-45
SEWER COLLECTION SUBTOTAL	33,476	37,042	34,815	29,793	33,371	168,497
SEWAGE PUMP STATIONS						
2304 McMillan - Class III/IV Pump Station	6,828	0	0	0	0	6,828
Bradley Road Pump Station Improvements	5,273	3,481	0	0	0	8,754
Pumping Stations - Capital Equipment Replacement	2,600	2,600	2,600	2,500	2,500	12,800
Argyle Forest Booster Station and Related Stations Upgrades	2,520	1,604	0	0	0	4,124
Pumping Stations - Class 1 and 2 Rehabilitation	2,000	2,000	1,900	1,900	1,900	9,700
Supervisory Control and Data Acquisition - RTU and Control Panel Upgrades	1,200	1,200	1,200	1,200	1,200	6,000
834 Bay Street Bar Screens - Class III/IV Pump Stations	1,022	0	0	0	0	1,022
Nocatee - Crosswater to Pod Entrance - Pump Station	950	0	0	0	0	950
Alachua Master Pump Station Improvements	930	598	0	0	0	1,528
4511 Spring Park Road Lift Station	540	1,900	0	0	0	2,440
Rivertown - Homestead - Pump Station	430	0	0	0	0	430
Monterey Wastewater Plant - Pump Station Discharge Main Replacement	391	0	0	0	0	391
District 2 - 3641 Dunn Booster Wastewater Pump Station	364	1,050	0	0	0	1,414
District 2 - Teate Road Booster Wastewater Pump Station	307	858	0	0	0	1,165
Arlington East - 201 Ponte Vedra Blvd Pump Station Replacement - Class I	258	0	0	0	0	258
Southwest - 4881 Timuquana Rd - Class III/IV Pump Station	192	1,724	431	0	0	2,347
Rivertown - Parcel 13 - Southern Plan of Development - Pump Station	158	0	0	0	0	158
Cedar Bay - Supervisory Control and Data Acquisition - Repair and Replace	150	0	0	0	0	150
7696 Lenox Ave - Class III/IV Pump Station	111	1,012	0	0	0	1,123
District 2 - 10800 Key Haven Blvd - Class III/IV Pump Station	109	875	19	0	0	1,003
District 2 - 11308 Harts Road - Class III/IV Pump Station	100	250	485	0	0	835
Waste Water Pumping Station Safety Improvements - Guard Rail Installation	100	100	100	100	100	500
Ponte Vedra Influent Pump Station Replacement	90	0	0	0	0	90
Diesel-Driven Backup Pump - Repair and Replace	50	50	50	50	50	250
Diesel-Driven Backup Pumps - New	0	300	300	300	300	1,200

FY2017 Budget: Water System Capital Improvement Plan

(in thousands) Project Description	Proposed					
	FY17 TOTAL	FY18 TOTAL	FY19 TOTAL	FY20 TOTAL	FY21 TOTAL	FY17-21 TOTAL
7703 Blanding Blvd - Class III/IV Pump Station	0	139	1,088	0	0	1,227
District 2 - 10800 Keyhaven Pump Station - Site Piping Modifications	0	50	0	0	0	50
1638 Talleyrand Ave - Class III/IV Pump Station	0	0	717	0	0	717
8431 Springtree Road - Class III/IV Pump Station	0	0	38	438	0	476
210 HollyBrook Ave - Class III/IV Pump Station	0	0	0	33	313	346
Class III and IV Pump Station Rehabilitation	0	0	0	0	2,187	2,187
District 2 - 10340 Woodley Pump Station - Pump Modifications	0	0	0	0	100	100
SEWAGE PUMP STATIONS SUBTOTAL	26,673	19,791	8,928	6,521	8,650	70,563
WASTEWATER TREATMENT						
Blacks Ford Reclamation Facility - Expansion from 3 to 6 MGD	37,122	11,893	0	0	0	49,015
Arlington East Secondary Clarifier Addition	10,089	3,000	1,206	0	0	14,295
Mandarin Water Reclamation Facility - High Level Ultraviolet Upgrade	4,186	0	0	0	0	4,186
Ponce De Leon Wastewater Treatment Plant - Package Treatment Plant	2,825	550	0	0	0	3,375
Mandarin WRF - Equalization Storage Tank and Transfer Pump Station	2,202	0	0	0	0	2,202
Wastewater Treatment Facilities - Capital Equipment Replacement	2,000	2,000	2,000	2,000	2,000	10,000
Buckman Aeration System Main Header Replacement	1,795	0	0	0	0	1,795
Southwest WRF - Screening Conveyance and Grit Removal System Removal	1,055	373	0	0	0	1,428
Arlington East Water Reclamation Facility - Influent Channel Rehabilitation	896	0	0	0	0	896
Biosolids Process Renewal and Replacement	800	900	740	740	740	3,920
Buckman Ultraviolet Disinfection System Replacement	780	4,502	1,593	0	0	6,875
Mandarin WRF - Headworks Bar Screen Replacement and Grit System	600	0	0	0	0	600
Buckman WRF - Primary Clarifier Scum Removal System Replacement	363	0	0	0	0	363
Southwest Water Reclamation Facility - Replace Valves	304	86	0	0	0	390
Mandarin Water Reclamation Facility - Bio-Filter Bed Replacement	290	0	0	0	0	290
Nassau Regional Water Reclamation Facility Equalization Tank Addition	262	0	0	0	0	262
Wastewater Odor Control - All Plants and Pump Stations	250	250	250	250	250	1,250
District 2 WTP - Engineering Study, Piping, Tanks, and Pumps	200	263	2,435	0	0	2,898
Buckman WRF - Aeration System Conduit Support Replacement	195	78	0	0	0	273
Buckman Biosolids Reuse Line Replacement	170	0	0	0	0	170
Supervisory Control and Data Acquisition Renewal and Replacement	150	150	150	150	150	750
Southwest Water Reclamation Facility - Upgrade Aeration Blowers	125	591	0	0	0	716
Julington Creek WTF - Influent Structure Rehabilitation	115	1,408	0	0	0	1,523
Southwest Water Reclamation Facility - Replace Main Breakers	112	291	0	0	0	403
Nassau Regional Water Reclamation Facility - Modification	105	955	20	0	0	1,080
Buckman Biosolids - Rebuild	100	500	10,000	10,000	10,000	30,600
Buckman Influent Pump Station MCC Replacement	100	0	0	0	0	100
Buckman - 1636 Talleyrand Ave - Sluice Gate Replacement	78	318	54	0	0	450

FY2017 Budget: Water System Capital Improvement Plan

(in thousands) Project Description	Proposed					
	FY17 TOTAL	FY18 TOTAL	FY19 TOTAL	FY20 TOTAL	FY21 TOTAL	FY17-21 TOTAL
Mandarin Water Reclamation Facility - Headworks Channels Rehabilitation	63	0	0	0	0	63
Nassau Regional Water Reclamation Facility - Drainage Improvements	60	310	0	0	0	370
Buckman Water Reclamation Facility Turbo Blower Improvements	60	0	0	0	0	60
Buckman Water Reclamation Facility - Gallery Pipe Support Replacement	53	520	0	0	0	573
Greenland Water Reclamation Facility - Land Purchase	50	14,950	0	0	0	15,000
District 2 Effluent Outfall Extension	50	100	1,000	0	0	1,150
Reuse Facility - Capital Equipment Replacement	50	50	50	50	50	250
Monterey Supervisory Control and Data Acquisition Renewal	50	0	0	0	0	50
Blacks Ford and Ponte Vedra Treatment Plant	0	481	1,345	0	0	1,826
Greenland Wastewater Treatment Plant	0	400	0	1,600	2,000	4,000
District 2 Wastewater Treatment Facility Ultraviolet Upgrades	0	300	2,920	3,780	0	7,000
Southwest Wastewater Treatment Facility Expansion from 14 to 18 MGD	0	200	2,000	5,000	10,000	17,200
Southwest Wastewater Treatment Plant - Bio-filter Bed Replacement	0	180	1,620	0	0	1,800
Buckman Water Reclamation Facility - Bio-Nutrient Reduction - Phase 2	0	0	0	3,000	12,500	15,500
T-Line - Park Ave to Pulaski Rd Pump Station - Easement Acquisitions	0	0	0	0	1,000	1,000
Nassau Wastewater Treatment Facility Expansion to 4 MGD	0	0	0	0	200	200
WASTEWATER TREATMENT SUBTOTAL	67,705	45,599	27,383	26,570	38,890	206,147
RECLAIM WATER DISTRIBUTION						
Nocatee North - Reclaim Water Storage Tank - New	2,110	0	0	0	0	2,110
William Burgess Rd - State Road 200 to Harts Rd - Transmission - New - R	1,953	196	0	0	0	2,149
Bartram Park Water Treatment Plant - Reclaim Water - Storage Expansion	1,635	0	0	0	0	1,635
RG Skinner - 9B to Parcels 10A - 11 - R	1,114	0	0	0	0	1,114
RG Skinner - 9B to T-Line - R	1,026	0	0	0	0	1,026
County Road 210 - Old Dixie Highway to Twin Creeks - Transmission - R	750	750	0	0	0	1,500
Gate Parkway - Glen Kernan to T-Line - Transmission - New - R	500	2,895	3,825	1,530	0	8,750
Grid - Cost Participation - New - R	500	500	500	500	500	2,500
Nassau Reclaim Water Main - Radio Ave to Harts Road - Transmission - R	400	840	1,260	0	0	2,500
Nassau Regional WTF Reclaim Water Storage Tank, UV, and Pumps - R	400	711	5,207	0	0	6,318
Arlington East Water Reclamation Facility - Replace Auto-Transfer Switch	339	116	0	0	0	455
Nocatee - Snowden Parkway - R	270	0	0	0	0	270
Nocatee - Crosswater to Pod Entrance - R	235	0	0	0	0	235
Gate Parkway - Shiloh Mill Blvd to Town Center Parkway - R	216	66	0	0	0	282
Nassau - Radio Ave - Storage Tank and Booster Pump Station - R	200	415	2,672	0	0	3,287
Rivertown - Main Stream Crossing - R	200	0	0	0	0	200
Nocatee - Crosswater Parkway - Coastal Oaks to South Village - R	193	0	0	0	0	193
Rivertown - Homestead - R	185	0	0	0	0	185
Tredinick Parkway - Millco Road to Mill Creek Road - Transmission - R	150	566	850	0	0	1,566

FY2017 Budget: Water System Capital Improvement Plan

(in thousands) Project Description	Proposed					
	FY17 TOTAL	FY18 TOTAL	FY19 TOTAL	FY20 TOTAL	FY21 TOTAL	FY17-21 TOTAL
Arlington East Water Reclamation Facility - Biotrickling Filter Rehabilitation	130	570	0	0	0	700
Monument Rd - Cancun Dr to Hidden Hills Ln - Transmission - New - R	100	535	0	0	0	635
JP - JTA - Alta Drive Roadway Improvements - R	75	352	9	0	0	436
St Johns Parkway - Racetrack Rd to Espada Ln - Transmission - New - R	60	196	295	0	0	551
County Road 210 - South Hampton to Ashford Mills - Transmission - R	50	572	0	0	0	622
Development Driven - RiverTown - R	50	50	50	50	50	250
OM - Reuse Delivery Repair and Replace	50	50	50	50	50	250
Rivertown - Parcel 13 - Southern Plan of Development - R	31	0	0	0	0	31
JP - FDOT - 9B - Duval - St Johns County Line to County Road 2209 - R	10	10	11	0	0	31
JP - FDOT - SR 9A (I-295) - Managed Lanes - JTB - 9B Extension - R	4	0	0	0	0	4
Nocatee South Reclaim Water Storage Tank and Booster Pump Station - R	0	300	2,030	2,670	0	5,000
RG Skinner - North Road - Transmission - R	0	300	1,080	1,620	0	3,000
Baymeadows Rd - Point Meadows Rd to Old Still PUD - Transmission - R	0	200	320	480	0	1,000
CR210 - St Johns Pkwy to Leo Maguire Pkwy - Transmission - New - R	0	100	409	614	0	1,123
Station Creek Rd - Beach Blvd to Hunt Club Rd N. - Transmission - New - R	0	50	225	0	0	275
Glen Kernan Pkwy - Kernan Blvd to Royal Troon Ln - Transmission - New	0	50	212	0	0	262
Bartram Trail High School - Longleaf Pine Parkway - Transmission - New - R	0	50	193	0	0	243
T-Line - Amelia Concourse to Amelia National - Transmission - R	0	12	132	510	146	800
US 1 - Greenland WRF to County Road 210 - Transmission - New - R	0	0	300	2,600	3,500	6,400
Twin Creeks Recalim Water Storage Tank and Booster Pump Station - R	0	0	300	1,280	1,920	3,500
CR210 - Twin Creeks to Russell Sampson Rd - Transmission - R	0	0	300	1,080	1,620	3,000
RiverTown WTP - Reclaim Water - New Storage and Pumping System	0	0	200	1,620	2,130	3,950
Greenbriar Rd - Longleaf Pine Pkwy to Spring Haven Dr - Transmission - R	0	0	200	1,320	1,980	3,500
Russell Sampson Rd - St. Johns Pkwy to CR210 - Transmission - R	0	0	200	920	1,380	2,500
Southwest WTF Public Access Reclaim Water System - R	0	0	0	550	5,750	6,300
Southwest WTF to Clay County Utilities - Transmission - R	0	0	0	300	3,400	3,700
Monument Rd - Arlington East WRF to St. Johns Bluff Rd - Trans - New - R	0	0	0	0	300	300
Arlington East WRF - Filter - Increase Capacity from 8 to 10 MGD	0	0	0	0	300	300
Veterans Pkwy - Longleaf Pine Pkwy to CR 210 - Transmission - R	0	0	0	0	300	300
District 2 Wastewater Treatment Facility RIB - Transmission and Pumping	0	0	0	0	300	300
CR210 - Longleaf Pine Pkwy to Ashford Mills Rd - Transmission - R	0	0	0	0	250	250
RECLAIM WATER DISTRIBUTION SUBTOTAL	12,936	10,452	20,830	17,694	23,876	85,788
WATER OTHER CAPITAL PROJECTS						
Technology Services - Projects	5,598	5,870	5,670	5,670	5,810	28,618
Capital Administrative Overhead	4,500	4,500	4,500	4,500	4,500	22,500
Fleet - Replacement	4,394	3,900	3,806	4,067	3,974	20,141
Buckman - New Administration Building	2,225	400	0	0	0	2,625

FY2017 Budget: Water System Capital Improvement Plan

(in thousands) Project Description	Proposed					
	FY17 TOTAL	FY18 TOTAL	FY19 TOTAL	FY20 TOTAL	FY21 TOTAL	FY17-21 TOTAL
JEA Tower - Building Renovations	1,000	1,000	1,000	1,000	1,000	5,000
Facilities Generators	850	850	850	850	850	4,250
Fleet - Expansion	815	0	0	0	0	815
Pearl Street Service Center - New HVAC and Locker Room Upgrade	650	0	0	0	0	650
Facilities Security - Water	635	635	635	635	635	3,175
Facilities Improvements - Heating, Ventilation, and Air	520	520	400	400	400	2,240
Facilities Improvements - Building Upgrades	480	400	400	400	400	2,080
Facilities Improvements - Roof Replacement	400	400	400	435	435	2,070
Arlington East Exterior Yard Lighting	400	0	0	0	0	400
Facilities Improvements - Electric and Lighting Systems	300	300	400	400	400	1,800
Security - Fire Alarm and Sprinkler Systems	300	300	300	300	300	1,500
Ridenour Administrative Upgrades	300	0	0	0	0	300
Facilities Improvements - Plumbing Upgrades	275	275	250	250	250	1,300
Facilities Improvements - Paving	210	210	210	210	210	1,050
Laboratory Equipment Upgrades	195	100	100	100	100	595
Easement Location and Acquisitions	150	150	150	150	150	750
Facilities Improvements - Elevators	100	150	0	0	0	250
Security - Fencing	100	100	100	100	100	500
Utility Locate Group - Capital Equipment	50	50	50	50	50	250
Disposal of Radio Frequency Meter Interface Units	25	0	0	0	0	25
Buckman Control Building Renovation	0	500	0	0	0	500
Springfield Lab Hood Upgrade	0	400	0	0	0	400
Plaza 1 (Tower) - Restroom and Plumbing Upgrades	0	230	0	0	0	230
WATER OTHER CAPITAL PROJECTS SUBTOTAL	24,472	21,240	19,221	19,517	19,564	104,014
WATER WASTEWATER TOTAL	225,500	187,160	161,588	140,654	177,459	892,361

FY2017 Budget: Environmental Capital Improvement Plan

(in thousands) Project Description	Proposed					
	FY17 TOTAL	FY18 TOTAL	FY19 TOTAL	FY20 TOTAL	FY21 TOTAL	FY17-21 TOTAL
ENVIRONMENTAL						
Mandarin WRF - Equalization Storage Tank and Transfer Pump Station - New	2,202	0	0	0	0	2,202
Nocatee North - Reclaim Storage Tank - New	2,110	0	0	0	0	2,110
William Burgess Rd - State Road 200 to Harts Rd - Transmission - New - R	1,953	196	0	0	0	2,149
Bartram Park Water Treatment Plant - Reclaim Water - Storage Expansion	1,635	0	0	0	0	1,635
Well Rehabilitation and Maintenance - McDuff Wells	1,250	1,562	116	0	0	2,928
RG Skinner - 9B to Parcels 10A - 11 - R	1,114	0	0	0	0	1,114
RG Skinner - 9B to T-Line - R	1,026	0	0	0	0	1,026
Integrated Water Supply Testing Evaluation and Rehabilitation (iWATER)	1,000	1,750	2,000	2,000	0	6,750
Norwood Water Treatment Plant Reservoir Rehab	915	0	0	0	0	915
South Grid Water Quality - Well Improvement	800	800	600	0	0	2,200
CR210 - Old Dixie Hwy to Twin Creeks - Transmission - R	750	750	0	0	0	1,500
Main St Water Treatment Plant - Well #13 - W	651	0	0	0	0	651
Grid - Cost Participation - New - R	500	500	500	500	500	2,500
Fairfax Water Treatment Plant - High Service Pump Rehabilitation	387	0	0	0	0	387
Main St Well #6A - W	277	0	0	0	0	277
Gate Parkway - Shiloh Mill Blvd to Town Center Pkwy - R	216	66	0	0	0	282
Nassau - Radio Av - Reclaim Storage Tank and Booster Pump Station - R	200	415	2,672	0	0	3,287
Nocatee - Crosswater Parkway - Coastal Oaks to South Village - R	193	0	0	0	0	193
Tredinick Pkwy - Millcoe Rd to Mill Creek Rd - Trans - RW	150	566	850	0	0	1,566
Main St Water Treatment Plant - Well #14 - New Lower Florida Aquifer Well - W	137	0	0	0	0	137
Arlington East Water Reclamation Facility - Biotrickling Filter Rehabilitation	130	570	0	0	0	700
Monument Rd - Cancun Dr to Hidden Hills Ln - Transmission - New - R	100	535	0	0	0	635
McDuff Water Treatment Plant - High Service Pump Replacement	98	1,810	77	0	0	1,985
Main St Water Treatment Plant - 1st St to Franklin St - Transmission - New - W	50	594	2,475	781	0	3,900
Development Driven - RiverTown - R	50	50	50	50	50	250
Rivertown - Parcel 13 - Southern Plan of Development - R	31	0	0	0	0	31
JP - FDOT - 9B - Duval - St Johns County Line to CR2209 - R	10	10	11	0	0	31
JP - FDOT - I-295 - Managed Lanes - JTB - 9B Extension - R	4	0	0	0	0	4
Nocatee South Reclaim Storage Tank and Booster Pump Station - R	0	300	2,030	2,670	0	5,000
Baymeadows Rd - Point Meadows Rd to Old Still PUD - Transmission - R	0	200	320	480	0	1,000
US 1 - Greenland Water Reclamation Facility to CR 210 - Transmission - New - R	0	0	300	2,600	3,500	6,400
Twin Creeks Reclaim Storage Tank and Booster Pump Station - R	0	0	300	1,280	1,920	3,500
CR210 - Twin Creeks to Russell Sampson Rd - Transmission - R	0	0	300	1,080	1,620	3,000
RiverTown Water Treatment Plant - Reclaim - New Storage and Pumping System	0	0	200	1,620	2,130	3,950
Buckman Water Reclamation Facility - Bio-Nutrient Reduction - Phase 2	0	0	0	3,000	12,500	15,500
Arlington East Water Reclamation Facility - Increase Capacity from 8 to 10 MGD	0	0	0	0	300	300
ENVIRONMENTAL SUBTOTAL	17,939	10,674	12,801	16,061	22,520	79,995

FY2017 Budget: District Energy System Capital Improvement Plan

(in thousands) Project Description	Proposed					
	FY17 TOTAL	FY18 TOTAL	FY19 TOTAL	FY20 TOTAL	FY21 TOTAL	FY17-21 TOTAL
Downtown Development	2,000	0	0	0	0	2,000
Facilities Improvements	694	550	658	700	700	3,302
Springfield - Replace Variable Frequency Drives	286	0	0	0	0	286
Springfield - Additional Back-Up Generator	91	874	784	0	0	1,749
Springfield - Replace Chiller - 1	0	0	0	650	0	650
Springfield - Replace Chiller - 4	0	0	0	0	650	650
Hogan's Creek - Building Rehabilitation and Paint	0	0	0	0	300	300
Downtown Plant - Tower Repair and Replace	0	0	0	0	133	133
DES SUBTOTAL	3,071	1,424	1,442	1,350	1,783	9,070

II. B.
5/9/2016
FAC



JEA
Building Community
AGENDA ITEM SUMMARY

April 25, 2016

SUBJECT:	UPDATE ON PROCUREMENT FOR EXTERNAL AUDITOR
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Purpose:	<input type="checkbox"/> Information Only	<input type="checkbox"/> Action Required	<input checked="" type="checkbox"/> Advice/Direction
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Issue: The current contract with Ernst and Young (E&Y) expires on June 30, 2016. At its meeting on January 19, 2016, the Board approved a one-year extension of the contract with E&Y. The duration of the contract extension will be from July 1, 2016 through June 30, 2017. At its meeting on March 15, 2016, the Board approved the contract extension with the proposed fee schedule. As part of the recommendation for approval of the contract extension, the Finance and Audit Committee stated that staff will evaluate and issue a Request for Proposal (RFP) for independent audit services the next fiscal year.

Significance: The fiduciary responsibilities of JEA and the Board include the engagement of an external auditor.

Effect: Not having a nationally qualified firm in place could leave room for exposure in such a highly regulated environment. JEA is required under its bond resolutions to provide financial statements audited by a "nationally recognized" firm. In addition, JEA's large debt balances place particular importance on producing high-quality audits from a firm with which investors are comfortable.

Cost or Benefit: An update is provided to assist the Finance and Audit Committee in the selection of an audit firm that has the expertise and knowledge to provide the services to meet JEA's needs.

Recommended Board action: Staff requests the Finance and Audit Committee provide direction regarding issuing a Request for Proposal for independent audit services.

For additional information, contact: Janice Nelson

Submitted by: PEM/MHD/JRN



MISSION
Energizing our community through high-value energy and water solutions.

VISION
JEA is a premier service provider, valued asset and vital partner in advancing our community.

VALUES
• Safety
• Service
• Growth
• Accountability
• Integrity

Commitments to Action

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

II. B.
5/9/2016
FAC



INTER-OFFICE MEMORANDUM

April 25, 2016

SUBJECT: UPDATE ON PROCUREMENT FOR EXTERNAL AUDITOR

FROM: Paul E. McElroy, Managing Director/CEO

TO: JEA Finance and Audit Committee

Kelly Flanagan, Chair
Tom Petway
Ed Burr
Husein Cumber

BACKGROUND:

The current contract with Ernst and Young (E&Y) expires on June 30, 2016. At its meeting on January 19, 2016, the Board approved a one-year extension of the contract with E&Y. The duration of the contract extension will be from July 1, 2016 through June 30, 2017. At its meeting on March 15, 2016, the Board approved the contract extension with the proposed fee schedule. As part of the recommendation for approval of the contract extension, the Finance and Audit Committee stated that staff will evaluate and issue a Request for Proposal (RFP) for independent audit services the next fiscal year.

DISCUSSION:

Attached is a schedule of the audit firms used by other Large Power Public Council (LPPC) members. In the attached schedule, staff has indicated the 2015 Accounting Today ranking for each of the CPA firms based upon total revenues. JEA's various bond resolutions and bank liquidity agreements require that its financial statements be audited by a nationally recognized independent firm of certified public accountants. Nixon Peabody, Bond Counsel, stated that JEA has discretion on the interpretation of the term "nationally recognized firm of independent CPAs". In addition, staff spoke with four of JEA's investor analysts and four bank liquidity providers to obtain their views on the audit firms. The general feedback received was that they had a slight preference for the Big Four firms, but were comfortable with the middle-tier Top 25 firms. Of note is the fact that the 12th ranked firm, Baker Tilly, is the independent auditor for 5 of the 26 LPPC members.

Staff reached out to the Big Four firms, Baker Tilly and McGladrey to obtain their interest in submitting a proposal. All of the firms expressed an interest in receiving the RFP. The Big Four firms stated that they would use local office resources and supplement with specific utility experience, as needed, from other offices. Baker Tilly stated their audit would be staffed out of Madison, Wisconsin or Austin, Texas offices. McGladrey stated their audit would be staffed out of their Morehead, North Carolina office or New England office, and possibly supplemented with staff from their offices in Florida. Based on the feedback received, staff is recommending sending RFPs to the following firms:

Baker Tilly
Deloitte
Ernst & Young
KPMG
McGladrey
PwC

Upon receipt of direction from the Finance and Audit Committee, staff will prepare the RFP, evaluation matrix, and timeline for the RFP and evaluation process.

RECOMMENDATION:

Staff requests the Finance and Audit Committee provide direction regarding issuing a Request for Proposal for independent audit services.

Paul E. McElroy, Managing Director/CEO

PEM/MHD/JRN

II. B.
5/9/2016
FAC

LPPC Utilities External Auditors

Utility Name	Total Revenues (in thousands)	Total Debt (in thousands)	Auditors	Accounting Today Ranking
Austin Electric & Water Utility Dept.	\$1,839,748	\$3,912,713	Deloitte- Austin, Texas	1
Chelan County Public Utility District	400,388	672,798	PwC- Portland, Oregon	2
Clark Public Utilities	496,537	478,105	Moss Adams- Portland, Oregon	15
Colorado Springs Utilities	868,846	2,409,876	Baker Tilly- Madison, Wisconsin	12
CPS	2,629,677	5,591,381	Baker Tilly; Garza, Preis & Co; Robert Williams, CPA- San Antonio, Texas & Madison, Wisconsin	12
ElectricCities of NC, Inc., NCEMPA, NCEMPA1	563,828	1,269,124	McGladrey- Morehead City, N.C.	5
Grand River Dam Authority	475,159	1,166,811	Deloitte - Tulsa, Oklahoma	1
Grant County PUD	308,665	1,222,305	PwC- Portland, Oregon	2
Imperial Irrigation District	601,389	547,742	Moss Adams- Portland, Oregon	15
JEA	1,749,380	4,968,099	E&Y-Jacksonville, Florida	3
Long Island Power Authority	3,613,982	5,532,551	KPMG- New York, NY	4
Los Angeles Department of Power	3,336,963	8,568,281	KPMG- Los Angeles, California	4
Los Angeles Department of Water	1,082,581	4,496,962	KPMG- Irvine, California	4
Lower Colorado River Authority	1,021,300	3,323,300	Baker Tilly- Madison, Wisconsin	12
MEAG	748,571	3,512,442	PwC- Atlanta, Georgia	2
Nebraska Public Power District (NPPD)	1,122,454	1,802,850	PwC- St. Louis, Missouri	2
New York Power Authority	3,175,000	1,055,000	KPMG- New York, NY	4
Omaha Public Power District	1,126,458	2,135,390	Deloitte- Omaha, Nebraska	1
Orlando Utilities Commission	859,452	1,527,787	E&Y- Orlando, Florida	3
Platte River Power Authority	199,867	201,572	BKD CPAs- Denver, Colorado	13
Puerto Rico Electric Power Authority	4,468,922	8,247,006	E&Y- San Juan, Puerto Rico	3
Sacramento Municipal Utility District (SMUD)	1,529,344	2,881,701	Baker Tilly-Madison, Wisconsin	12
Salt River Project	3,033,109	4,274,885	PwC- Phoenix, Arizona	2
Santee Cooper	1,879,553	6,961,336	Cherry Bekaert- Raleigh, N.C.	25
Seattle City Light	886,400	1,925,200	Baker Tilly- Madison, Wisconsin	12
Snohomish County PUD	645,198	504,247	Baker Tilly- Madison, Wisconsin	12
Tacoma Public Utilities - Light Division	441,246	530,581	Moss Adams- Tacoma, Washington	15

Note: Information obtained from most recent financial statements posted on the company's website.

II. C.
5/9/2016
EAC

Audit Services Update

Steve Tuten
Director, Audit Services



Audit Services Update – Table of Contents

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2Q16 Highlights

- **New Information Technology Auditor – Rashid Brittain.** Rashid joined JEA in April from One Call Care Management, and has four years of audit experience. Rashid holds a BS and MBA from FSU, as well as a Masters of Accountancy from FAU. He is a CPA, and has also successfully completed the Certified Information Systems Auditor (CISA) exam.
- **Two Open Positions** - Recruitments underway for Senior Ethics Auditor and Internal Auditor positions. Interviews will begin this month.
- **New Corporate-Level Enterprise Risk Management Training Sessions** - Seven sessions have been completed to date for various Directors, Managers and Functional Specialists. This training will be continued across the entire company over several quarters.
- **New Internal Audit Report Template** – Two report drafts currently in distribution.
- **FY17 Internal Audit Plan** - Planning now underway. Development process will include updating list of auditable areas, conducting interviews with Senior Leadership Team and Directors, rescoring risk assessments, and selecting the final roster of audits to perform. The final plan will be presented to the Finance & Audit Committee for approval at the August meeting.



FY16 Internal Audit Plan Status

Audit/Project	Budgeted Hours	Auditor-in-Charge	Estimated Draft Report Date	FY 2016 Hours												
				Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	
2015 Neighbor to Neighbor Program Review <i>(carryover)</i>	5	Doris Champ	11/23/15													
2015 TEA <i>(carryover)</i>	75	Troy England (TE)	Completed (No Report)													
2015 HIPAA Audit <i>(carryover)</i>	20	Laurie Gaughan (LG)	11/18/15													
2016 FY15 Performance Pay Review	150	TE	12/02/15													
2016 SJRPP Fuels	400	LG	12/21/15													
2015 Investment Recovery Limited Scope <i>(carryover)</i>	230	TE	04/01/16													
2016 JEA Fuels	450	LG	04/22/16													
2016 P-Card Audit	375	David Arnold (DA)	04/30/16													
2015 Fleet Services <i>(carryover)</i>	130	Julie Moore / DA	06/30/16													
2016 Distribution, Development & Joint Projects	400	TE	07/30/16													
2016 Disaster Recovery	375	Rashid Brittain (RB)	07/30/16													
2016 Emerging Workforce Strategies	200	LG	06/30/16													
2016 System Protection & Controls	500	LG	08/30/16													
2016 Facilities Management	550	DA	09/30/16													
2015 Customer Billing & Payment Processing <i>(carryover)</i>	295	TE	09/30/16													
2016 Technology Infrastructure	400	RB	12/15/16													
2016 PMO	550	Not Assigned	TBD													
2016 Information Security	400	Not Assigned	TBD													
2016 SJRPP Electric Production, Operations, and Bulk Material Handling	350	New Hire	TBD													
2016 SJRPP Electric Production Maintenance	350	New Hire	TBD													
2016 Debt Management	500	Postponed														
New Auditor Training	300	DA / RB	N/A													
2016 Action Plan Follow-Up	800	TE	N/A													
2017 Annual Risk Assessments	375	DA/ LG / RB / TE	N/A													



Summary of Internal Audit Action Plans

- Action plans are management's specific commitments to correct the internal control deficiencies noted in the recommendations included in Audit Services' internal audit and investigative reports.
- Twenty-three (23) action plans were outstanding as of 3/31/16.
- Fourteen (14) of the action plans are aged twelve months or less, originating from more recently issued audit reports.
- The other nine (9) action plans (*one year or longer*), are mostly attributable to additional time needed to meet regulatory requirements or system enhancements.
- Internal Audit sometimes grants target date extensions, upon management's request, for more time to complete their action plans.
- Our new audit report template should reduce the future need for granting extensions, as each issue can be addressed separately, as opposed to parsing a multi-point recommendation. This will more easily allow for milestone updates from management regarding progress toward completion.

ERM Top Corporate Risk Trends (Tier 1)

Risk	FY2012		FY2013				FY2014				FY2015				FY2016		Change
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
Electric Risks																	
E01 - Carbon Emission Mitigation	20	20	20	20	20	20	20	20	25	25	25	25	25	25	25	25	
E02 - Effluent Limit Guidelines for Steam Units	8	8	8	12	12	16	16	16	16	16	16	16	16	16	16	16	
E04 - Adverse Electric Commodity Supply and Pricing	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
E03 - Coal Combustion Residual Rule (CCR)	10	10	10	15	15	15	15	15	15	15	15	15	10	10	10	10	
E05 - Cooling Water Intake Structures 316(b)	16	12	12	12	10	10	10	10	10	10	10	10	10	10	10	10	
E06 - Long-term Planning/Load Forecast - Electric	6	6	6	6	6	6	6	6	10	10	10	10	10	10	10	10	
E07 - Critical Infrastructure Protection (CIP) Compliance	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
Water/Wastewater Risks																	
W01 - Water Supply Management/Long Term Planning	9	9	8	12	12	12	12	12	12	15	15	15	15	15	15	15	
Corporate Wide Risks																	
H01 - Pensions	12	20	16	16	20	20	20	20	20	20	20	20	20	20	20	20	
F01 - Revenues and Expenses Management	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	
C16 - Weather and Climate Change Impact																15	
C01 - Customer Relationship Management	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
C02 - Physical Security (Facilities Infrastructure Security and Regulatory Compliance)	9	9	9	9	9	9	9	12	12	12	12	12	12	12	12	12	
C03 - New Technology									12	12	12	12	12	12	12	12	



ERM Top Corporate Risk Summaries (Tier 1)

E01	Carbon regulations (Clean Power Plan – CPP) could require very expensive mitigations such as building new gas plants, more purchase power, decommissioning existing solid fuel plants, etc. State specific plans were expected by 2016, and implementation is expected in 5-10 years. However, the recent legal stay may delay the state plan and extend out the implementation date. The expansion of solar power generation, the new Distributed Generation Policy and the proposed Net Metering Policy will help JEA effectively address and mitigate customer-side generation issues.
E02	JEA is developing a strategy for compliance with the rule. Risk impact is based on cost estimates for potential biological treatment of power plant effluent. The rule became effective January 2016. JEA will determine its method of compliance as part of the permit renewal, expected in November 2016. Estimated Compliance Date: December 2017-2023.
E04	In progress mitigations focus on continuing to maximize dispatch of natural gas and solid fuels as economically as possible, to minimize the impact of future regulations, and improve the deliverability of gas to JEA's units.
E03	The published rule treats CCR as a non-hazardous material but increases the operational processes, monitoring, recordkeeping, notification, and internet posting requirements. Since SJRPP costs (approx. \$25 M) are known and will be funded as part of the annual budget process, this cost is no longer included in the risk score. The score reflects the estimated (approx. \$15.9M) but still unknown cost of compliance at Plant Scherer. \$15.9 million represents only JEA's portion.
E05	The rule was finalized on 5/19/14. Although additional studies are required, it is expected that JEA can comply utilizing fish screens, which are less expensive than building cooling towers. Estimated Compliance Date: FY24-FY27, depending upon biological study results.
E06	Environmental mandates and difficulty in forecasting the various scenarios impacting demand, raise the inherent risk impact. Other top corporate risks both increase and help mitigate this risk. The ability to effectively manage this risk remains unlikely.
E07	JEA has implemented processes to comply with CIP V5 Cyber Security regulations. The CIP V5 standards have been expanded to include certain power plants and substations. The first FERC audit of CIP V5 is expected in 2017.
W01	Compliance with the Consumptive Use Permit (CUP) provisions may be costly depending on weather conditions and the need to address minimum flow levels (MFL's), alternate water sources, and expansion of reuse. The Water Management Districts may also require participation in regional MFL and other projects, which may be costly. Mitigation efforts focus on developing a Water Management plan to meet long term water needs and expand reclaimed and alternative water sources.
H01	The cost of funding the current pension program may result in a significant increase in employee contributions, and/or a reduction in benefits, which could negatively affect employee morale and retention. Reductions in the rate of return for the pension fund has increased JEA's annual cost. JEA is monitoring the proposed initiative by the COJ and state legislature to add a 1/2 cent sales tax increase, which may address the shortfall in financing of pension obligations. The change to JEA 's pension plan from a Defined Benefits Plan to a Defined Contribution Plan, for new employees, should reduce the long-term financial impact to JEA.
F01	Insufficient revenues and inadequately controlled expenses may result in a reduced credit rating, increased cost of debt, deterioration of the financial and structural health of the organization, AND inability to adequately serve our customers.
C16	Long-term weather patterns and/or short-term or seasonal extreme weather may negatively impact long-term planning and JEA's financial and reliability performance. The variance in weather patterns is a significant factor and is mitigated to the extent possible in a number of other top corporate risks. The timeframe for significant impact from climate change may be in excess of 20+ years.
C01	Customers may have a negative opinion of JEA caused by past, present and future pricing actions, customer service policies and practices, and negative press. The risk covers relationships with the ratepayers. Managing relationships with other external stakeholders is covered in risk R3. JEA continued its strong performance, finishing in the first quartile nationally as rated by commercial customers. Residential Customer Satisfaction score continues to improve.
C02	Additional security measures were implemented to comply with ever-increasing regulatory requirements, including aspects of CIP V5 and 14 and to better safeguard company assets and employees. Other initiatives are underway to improve JEA's overall security infrastructure, including an active shooter policy, increased access security and enhanced security at substations. The risk also reflects the inherent risk associated with ensuring effective security protocols, and the reliance for employees to follow established safety practices.
C03	Emerging new technologies are providing customers with an increasing number of options in terms of distributed generation, increasingly efficient appliances, as well as alternate energy providers such as natural gas and propane. The Net Metering policy was modified in 2014 to credit avoided cost to customers who put energy on the grid instead of the full retail rate. This helps protect against subsidization of net metering customers by non-net metering customers, and help protect against raising rates.



ERM Tier 2 Corporate Risk Trends

Risk	FY2012		FY2013				FY2014				FY2015				FY2016		Change
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
Electric Risks																	
E08 - SJRPP	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	
E09 - FERC/NERC (Section 693) O&P Reliability & Compliance	9	9	9	9	9	9	9	9	9	8	8	8	8	8	8	8	
E10 - Nuclear Power Portfolio	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	
E21 - Natural Gas Sales - Commercial Customers													6	6	6	6	
E11 - Infrastructure Maintenance - Electric Systems Assets	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
E20 - Operations Technology Management - Electric	4	4	4	4	4	4	4	4	4	4	4	4	6	6	6	6	
E12 - By Product Management	9	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
E13 - Infrastructure Destruction Due to Severe Weather	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Water/Wastewater Risks																	
W02 - Operations Technology Management - Water/Wastewater Systems	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	
W03 - Sanitary Sewer Overflow Management	6	6	6	6	6	6	6	6	6	6	6	8	8	8	8	8	
W04 - Infrastructure Maintenance - Water/Waste Water Systems	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Corporate Wide Risks																	
C05 - Records Management	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	
C06 - Fraud Risk Management	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	
T02 - Cyber Security Information Protection						9	9	9	9	9	9	9	9	9	9	9	
T05 - Technology Services Resource Optimization															9	9	
H02 - Staffing	16	16	16	16	16	12	12	9	9	9	9	9	9	9	9	9	
H03 - Public and Employee Safety	6	6	6	6	6	6	6	6	9	9	9	9	9	9	9	9	
T01 - Technology Infrastructure Reliability	12	12	12	12	12	12	12	12	12	12	4	4	4	4	8	8	
T03 - Cyber Security Business Disruption												8	8	8	8	8	
T04 - Technology Services Disaster Recovery/Business Continuity												8	8	8	8	8	
C04 - External Influence on Policy	9	9	9	9	9	9	9	10	10	10	10	10	10	10	10	8	X
C07 - Disaster Recovery/Business Continuity	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	
C08 - Black Swan (High Impact - Low probability event)	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	
F03 - Credit Availability/Cost	9	9	9	6	6	6	6	6	6	6	6	6	6	6	6	6	
C09 - Other Regulatory Compliance	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
F04 - Counterparty Risk	6	6	10	10	5	5	5	5	5	5	5	5	5	5	5	5	



ERM Tier 2 Corporate Risk Summaries

E08	Eventual changes to JEA's power sharing agreement may require more integration of operational and financial processes.
E09	While an effective compliance program is in place, the score is based on the need to continue to strengthen our compliance efforts as regulations continue to tighten, and to meet regulatory requirements to implement an internal control infrastructure, instead of just a "check the box" approach. The inherent risk remains that a serious reliability event could occur despite documented compliance with FERC/NERC regulatory requirements. The likelihood of such an event occurring is low.
E10	This risk is associated with JEA's current 20-year PPA with MEAG for 206 MW from Vogtle units 3 and 4, primarily relating to potential cost overruns, loss of power due to schedule delays, as well as potential misallocation of costs.
E21	JEA's entry into the Natural Gas sales market potentially poses some operational, financial and reputational risks that could result in negative media coverage and/or reduced commercial customer satisfaction.
E11- W04	Physical inspections have noted no major structural issues. Enterprise Asset Management systems are in the process of being implemented. Additional mitigations are noted as part of the Tier 1 Physical Security Risk which address the risk of internal/external tampering or terrorist activities.
E20	The likelihood of a disruption to our electric systems from cyber security breaches continues to be a significant risk.
W02	Although water/wastewater mechanical processes can function manually for some time if the computer systems (SCADA system) go down, the impact of a cyber and/or physical intrusion could result in the inability to properly monitor the infrastructure, causing significant operational and reputational risk. Additional mitigations are noted as part of the Tier 1 Physical Security Risk.
W03	Although ongoing infrastructure maintenance makes it unlikely a non-weather related significant SSO event will occur, a major SSO event could have a major impact.
C05	The risk focuses on effective records retention policies and managing public records requests.
T02	Unauthorized intrusion into JEA's critical systems could cause a loss of sensitive data and may occur without effective, fully-functioning cyber security protections in place. This risk focuses on protecting information. The risk of preventing business disruptions (e.g., DOS attack) is covered under risk T3 below.
T05	High demand from business units exceeds Technology Services' capabilities to provide timely service; resulting in outsourcing work to meet business needs. This leaves JEA resources without the knowledge to effectively support these efforts.
H02	Critical employees may be eligible for retirement or could be recruited away mid-career, impacting business objectives and service levels. Retirement impact is reduced as the average age of employees decreases, but flight risk may increase. In addition, current practices may not maximize the staffing flexibility, and/or utilize the full skillsets of the workforce. A process is in place to identify at-risk positions and recruit/train in time to mitigate retirements and loss of critical staff.
H03	Additional safety related initiatives are being implemented to further reduce both the number and severity/impact of the incidents.
T01	Although unlikely, the impact of a significant disruption of the technology infrastructure would have a major impact on JEA's ability to provide essential services.
T03	Cyber intrusion can be in the form of a Denial of Service (DOS) attack or Grid disruption, causing disruption of services and the inability to meet operational and customer needs.
T04	The inability to recover our technology services timely, in an event of a loss of an application(s) or the Data Center, impacts our ability to meet operational and customer needs.
C04	External parties may continue to increase demands on JEA's resources, which may significantly impact JEA's finances. However, interactions with external stakeholders are deemed to be effectively managed, limiting the negative impact to JEA. As such, the total risk score was lowered from a 5/2 (Tier 1) to a 4/2 (Tier 2).
C07	Formal process is underway for developing Business Continuity (BC) or Continuity of Operation Plans (COOP) for each business group. The process includes developing, reviewing and assessing the effectiveness and completeness of current Disaster Recovery/Business Continuity plan.
C08	Although deemed extremely unlikely, high impact events that are out of JEA's control may pose significant risks to JEA, and require mitigation strategies. Examples of Black Swan events include: 1. Pandemic/Reduced workforce; 2. Hurricanes greater than Cat 1; 3. River crossing transmission line failure; 4. the Loss of the Downtown Substation; and 5. Electromagnetic Pulse (EMP) and Geomagnetic Disturbances (GMD).
F03	JEA continues to convert increasing amounts of variable debt to fixed. Historical trending from the Interest Rate risk is used in the trending above, as it better reflects market volatility.
F04	Current efforts focus on increasing committed funding positions, increased diversification of JEA's counterparties, and monitoring available lines of credit.



2Q FY16 Ethics Hotline (EHL) Cases

Open Cases 1/1/2016	Cases Opened During 2Q FY16	Cases Closed During 2Q FY16	Open Cases 3/31/2016
16	7	15	8

Categories For Cases Opened During 2Q FY16	
Alleged Misuse of Resources	4
Alleged Discrimination/Harassment	1
Other (Environmental/Substance Abuse)	2
Total	7

Summary of Closed EHL Cases - 2Q FY16

Reporting Source	Allegation	Investigation Results
Internal	15-01-0002 – An employee may have insulted a JEA customer after his employment with JEA was terminated.	We determined the JEA employee used his JEA e-mail account to send a customer’s complaint to his personal email account. After the individual was no longer employed by JEA, he sent the customer an email that contained an insulting comment. Recommendations were made to modify the current annual training modules to better communicate the inappropriate use of JEA customer data. Further, the former employee’s personnel record was amended to state that he is not eligible for re-hire.
Internal	15-07-0002 – SJRPP Management reported that an employee was possibly falsifying time card hours in Oracle.	A fact-finding was conducted, and the employee admitted to timecard hour falsification. A thorough examination revealed fraudulent hours and payroll payments totaling \$23,863. JEA is seeking restitution from the terminated employee through a Felony Pretrial Intervention Program (Deferred Prosecution Agreement). Recommendations were also made to strengthen the controls over timecard processing.
EHL	15-07-0003 – It was alleged that a JEA Manager and Supervisor were harassing and disrespecting an employee.	The caller did not provide enough information to conduct a full investigation. We attempted to contact the caller through the hotline; however, the caller did not respond. Labor Relations was also contacted to see if there had been any complaints involving the identified manager or supervisor; but none were noted. We did not have enough information to proceed further with this investigation.
EHL	15-08-0002 – A caller reported that a JEA Supervisor allowed a Randstad employee to work overtime and not record it on the timecard. The individual later took three days off work by using this accumulated overtime although the timecard indicated regular time worked. The caller also alleged that two JEA Managers were regularly reporting a full day’s work although not on premises the full day, as they sometimes came to work late and took extended lunch breaks to go shopping or go home.	We determined the JEA supervisor allowed the Randstad employee to work extra hours over a period of time to be used later as comp-time; however, these extra hours were not recorded on the Randstad timecard. The Randstad contract does not address flex or comp-time, nor is there a Human Resources procedure for guidance. Recommendations were made for management to provide the appropriate guidance for the administration of time and attendance of Randstad employees. A comprehensive analysis was performed of the JEA Managers’ time/attendance. Due to tailgating and insufficient badging data, we could not find conclusive evidence to confirm the caller’s allegations. We provided the results of our time and attendance analysis to the Director and discussed the perception of timecard abuse by the two Managers.



Summary of Closed EHL Cases - 2Q FY16 (Continued)

Reporting Source	Allegation	Investigation Results
Internal	15-09-0001 – A Meter Specialist reported a possible stolen JEA fire hydrant located in the front yard of a residence.	Our investigation revealed the fire hydrant was not stolen, but was obtained from a scrap dealer, who apparently purchased it from a contractor. It had been common practice for JEA contractors to take possession of scrap materials from jobsites, as indicated in the respective contract or utility plan. However, there may be environmental and reputational risks associated with old hydrants due to the potential for high lead content. As a result, management decided that contract documents for future projects will contain language to address the appropriate disposal of fire hydrants.
EHL	15-09-0002 – The caller alleged that on a regular basis, a JEA Manager works fewer than eight hours daily, and the Manager may be taking time off without the Director's knowledge.	A comprehensive review revealed multiple instances where the Manager's timecard hours were not consistent with hours on-site due to the Director allowing the employee to work from home periodically. The Director was able to provide information that indicated the Manager was doing JEA work on the dates in question.
Internal	15-09-0003 – Labor Relations requested our assistance for a case they were working on related to alleged threats made to a SOCC employee by another SOCC employee and a JSO Officer.	The investigation did not produce sufficient evidence to conclude the SOCC employee had actually received threats from anyone.
EHL	15-09-0004 – The caller observed a JEA employee urinating in the street in front of the caller's house.	Based on the caller's limited physical description of the JEA employee in conjunction with multiple JEA vehicles in the vicinity of the caller's address, we were unable to identify the employee in question.
Internal	15-09-0005 – While reviewing UPS invoices, a Supervisor discovered that a JEA employee appeared to have sent a personal letter/package using JEA's UPS Express Service.	Evidence was found to sufficiently conclude the employee used JEA's UPS account to send a personal envelope. The employee was subsequently terminated for this and other infractions, and the City Civil Service Board upheld the termination.
EHL	15-10-0001 – A caller reported that Service Center associates were told not to enter inventory receipts at the end of fiscal year 2015. The caller alleged this was to keep the 2015 fiscal budget at a certain level so management would receive a larger bonus.	We confirmed that Service Center employees were instructed at 2015 fiscal year-end to only enter invoices that needed to be processed, and hold the rest until the beginning of fiscal year 2016. Management contends the intent of doing this was to meet department goals to reduce inventory values at fiscal year-end. Based on our review, there was no conclusive evidence that management's actions directly impacted the amount of their performance pay. We informed the Director of the accounting implications associated with delayed invoice booking.



Summary of Closed EHL Cases - 2Q FY16 (Concluded)

Reporting Source	Allegation	Investigation Results
EHL	15-11-0001 – It was alleged that a Director berates the caller for no legitimate reason, favors certain groups over others, and has been uninvolved in his/her job duties. The caller reported the matter to management and as a result, the caller continued to be belittled and talked down to. Additionally, the caller said that Human Resources falsified information on a review of the caller's Manager and denied an employee a higher pay bracket on the basis of age.	The caller subsequently called back and requested the investigation be stopped. At the request of the caller, we discontinued the investigation, but also informed the caller that retaliation is prohibited per JEA's Harassment Procedure EWS A0202 LR 652.
EHL	15-11-0003 – A caller reported that a SJRPP employee made sexually inappropriate comments about another employee's appearance, making the caller and other employees uncomfortable. The caller said this was not the first time this has happened, and that management has addressed the issue before; however, the employee's behavior has continued.	Based on our investigation, we were able to verify the SJRPP employee made inappropriate comments to another employee; however, we could not verify that management had addressed this issue previously with the employee. We discussed our findings with SJRPP management, and they performed a formal counseling with the employee.
EHL	15-11-0004 – It was alleged that for the past four years, a customer witnessed the dumping of waste by JEA in the St. Johns River and surrounding creeks.	The investigation revealed the effluent discharge from the Julington Creek Wastewater Facility is within the limits of the wastewater discharge permit. The results of the investigation were communicated to the caller through the Ethics Hotline.
EHL	16-01-0002 – The caller reported that two JEA employees should have removed themselves from the three-person interview committee due to a conflict of interest with the job applicant. The caller believes that the best candidate may not have been chosen for the position.	We determined there was consistent scoring of the candidates amongst the interview committee. The order of selection of candidates from an external eligibility list is subjective, and is not prescribed by the Civil Service or Personnel Rules and Regulations. From the eight candidates, the individual in question was the fourth to be offered the position. There was no evidence to conclude that the interview committee violated any recruitment procedures.
External	16-01-0003 – We received a complaint through jea.com that SJRPP employees are purchasing and selling drugs during work. A subsequent complaint also alleged use of drugs by a SJRPP employee.	In conjunction with law enforcement, we performed an investigation and did not find evidence that drugs were being purchased or sold on SJRPP property. Two employees were found to be on medications that necessitated reporting to management per procedures. The employees were disciplined for non-reporting, and they were cleared to work without restriction by JEA's medical facility.





Finance and Audit Committee

Technology Services Overview May 9, 2016

Paul Cosgrave
Chief Information Officer



Paul Cosgrave Background

- Paul joined JEA in 2014 as the Chief Information Officer (CIO) of JEA and oversees the Technology Services (TS) Organization. He has over 40 years of Senior information technology experience.
- Prior to JEA, Paul held the following positions:
 - City of New York – Commissioner and CIO
 - Internal Revenue Service – CIO
 - United States Department of Transportation (USDOT) – Special Advisor to the Secretary and Acting CIO
 - Claremont Technology Group – Chairman and Chief Executive Officer
 - AGS Computers – President
 - AEC global – President
 - Technology Solutions Company – Executive Vice President
 - Crown Consulting, Inc. – Executive Vice President
 - Andersen Consulting (aka Accenture) – Managing Partner
- Paul has served on the Boards of Directors of three public companies and five not-for-profits.





Technology Services At-A-Glance

- **TS is one of eight departments that report directly to the JEA CEO**
 - 110 employees, \$30M operating & maintenance budget – split 50/50 between salaries/benefits/pension and other expenses, and a \$15M CapEx budget
- **Services provided to all other departments include:**
 - **Telecommunications/Network Support**
 - JEA owns/manages 650 miles of fiber and operates a state-of-the-art, Cisco based Ethernet network, which is connected to all JEA generating stations, sub-stations, and water/wastewater (W/WW) facilities
 - JEA owns/operates a number of cell towers to reach the more remote locations of our territory
 - JEA recently agreed to offer these capabilities to other companies in Jacksonville that require communications across multiple locations and/or connect to the Internet
 - **Data Center/Customer Services**
 - JEA currently maintains two production data centers
 - JEA's website, jea.com, provides numerous self-service capabilities and is highly rated, supporting JEA's top tier J.D. Power ranking (#3 in the country)
 - **Application Development, Maintenance & Support**
 - Support 12 essential business systems; 245 other systems
 - JEA is an innovator in Internet of Things (IoT) due to a significant distributed environment of meters and sensors
 - **Program Management Office (PMO), Enterprise Architecture, Analytics, GIS, & Information Security** are additional services offered



Cyber Security Protection @ JEA

JEA has a number of organizations cooperatively working to improve Cyber Security:

1. Technology Services – 12 person Information Security Office
 - Develop/maintain Cyber Security Policies
 - Computer/system use policies, password policies, etc.
 - Install/administer Cyber Security Protective software
 - Review event logs and identify potential problems
 - Administer Information Technology system permissions across the company
2. Physical Security
 - Physical access control to all JEA facilities
 - Physical and cyber permissions are jointly managed through a common integrated identity management system
 - Video surveillance of facilities
3. Operational Technology
 - Electrical System Operations manages Grid Operations
 - Water/Wastewater Supervisory Control And Data Acquisition (SCADA) operations
4. Compliance and Internal Audit
 - Compliance plays a major coordinating role on the North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection (CIP) activities



Cyber Security Activities

- JEA's cyber security activities focus on a number of critical activities
 - Protecting the security of the electric grid
 - Protecting the security of the W/WW systems
 - Ensuring that JEA's essential systems are available
 - Protecting JEA's assets, systems and data
 - Protecting employee and customer Personal Identifiable Information (PII)
 - Protecting against ransomware or other personal attacks
 - Educating employees and customers on good cyber security practices
 - Administering employee and contractor system access
 - Meeting compliance requirements – NERC-CIP, Fair and Accurate Credit Transactions Act (FACTA), and Health Insurance Portability and Accountability (HIPAA)

- JEA's cyber and physical security activities are well coordinated
 - The TS organization staff of 12 is dedicated to cyber security activities
 - Compliance has a dedicated CIP team of four individuals
 - Physical security has over 120 security guards. The physical security systems are integrated with the same system we use to determine cyber security permissions
 - Electric Operations have dedicated resources to secure the Bulk Electric System and detailed procedures to secure and protect cyber assets
 - Internal Audit has a dedicated IT audit function

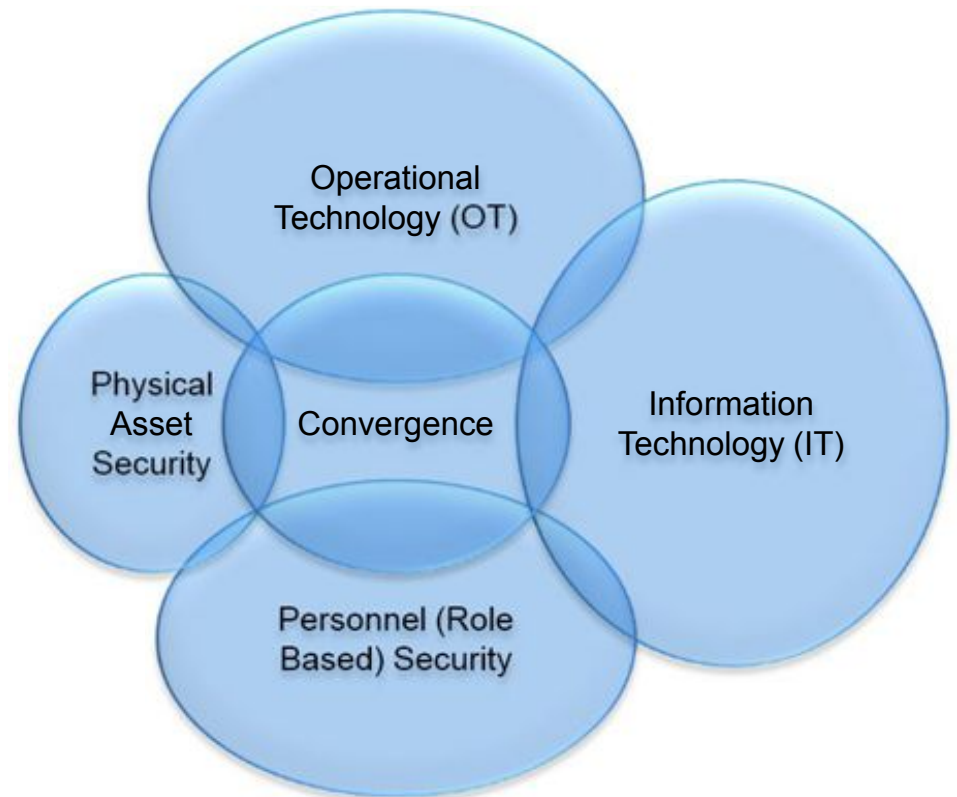


Cyber Security Activities (con't)

- All JEA employees and contractors are required to take an annual cyber security awareness training. Employees involved in the grid operation are engaged in additional NERC/CIP training.
- JEA employs a multi-layered, state-of-art defensive strategy to provide protection to its assets, systems and data.
 - The perimeter is protected by traditional firewalls, intrusion detection software, denial of service protection and other defensive security services
 - 90+% of all incoming email traffic is stopped and not even transmitted to the intended recipient
 - Employee internet access is restricted to known sites
 - JEA uses Citrix to manage remote encrypted communications
 - Access to critical systems are logged. A security information and event system (SIEM) is employed to log events and provide a holistic view of JEA's cyber security
 - A Zero-day threat prevention solution is employed
 - Common Vulnerabilities and Exposures (CVE) testing is regularly performed
- JEA's essential systems are fully backed-up with secondary off-site disaster recovery capability
 - jea.com operates in an active-active recovery mode with Domain Name System Security (DNSS) protection

Cyber Security Assessments

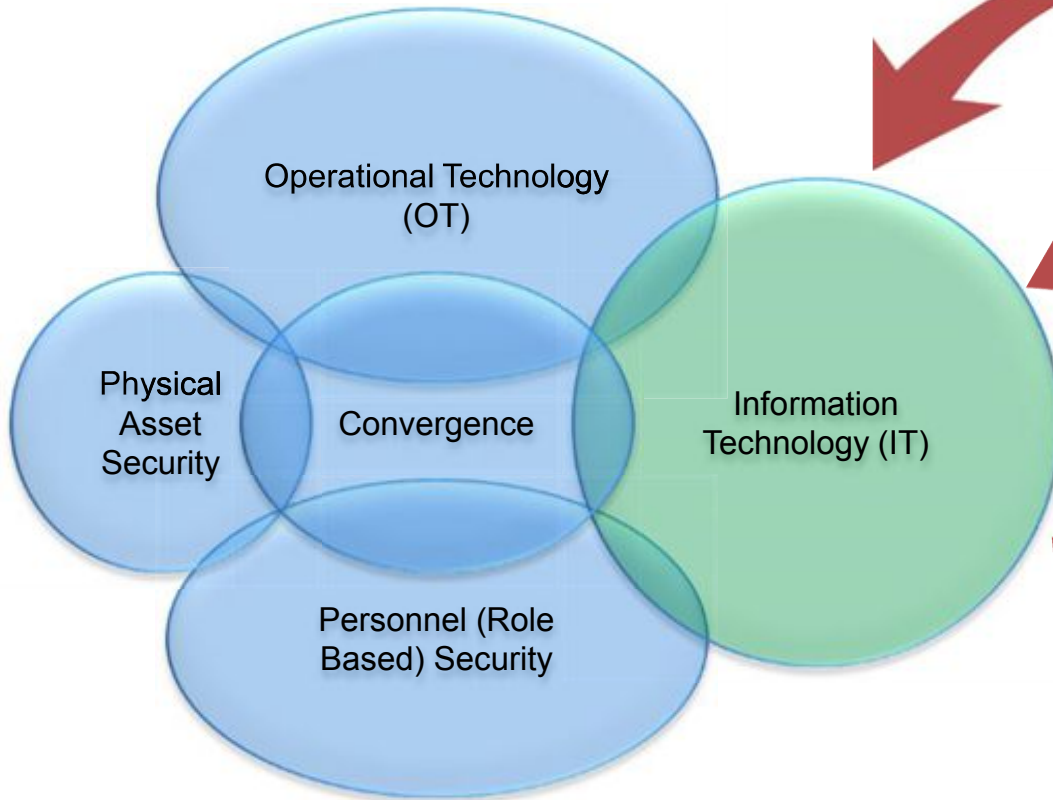
- Five major areas
- Regularly review each area, paying particular attention to the overlaps and convergence
- The assessments provide risks, insights, and actions needed to mitigate potential threats
 - ✓ Verizon study
 - ✓ Common Vulnerabilities and Exposures (CVE) tests/NERC-CIP Audit
 - ✓ Internal & external audits
 - ✓ Detailed project reviews
 - ✓ Third-party contractor/service provider reviews
 - ✓ Encryption assessments of data bases
 - ✓ Social Engineering Test (Phishing)





Adversarial Threats

"The price of freedom is eternal vigilance"
~ Thomas Jefferson



92%



Emails blocked as Malicious!

7 Million+



Probes detected from top 10 countries

2.25 Million+



Website Hits Blocked



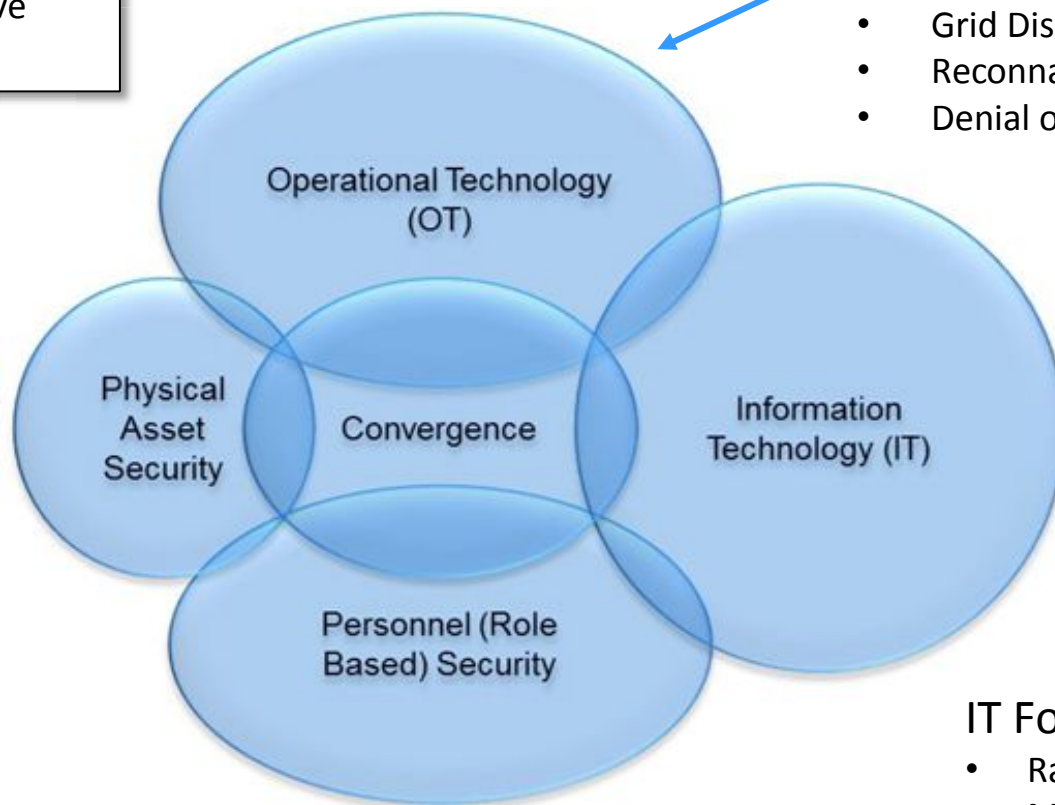
Types of Adversarial Threats

89% of all breaches had a financial or espionage motive -- (Verizon DBI Report 2016)

Major Operational Threats

- Grid Disruption
- Reconnaissance
- Denial of Service

Physical Attacks



IT Focused Attacks

- Ransomware
- Malware Intrusion

Personnel Focus

- Compromised Employees
- Payment Scams



Cyber Security Threats (non-adversarial)

Governance

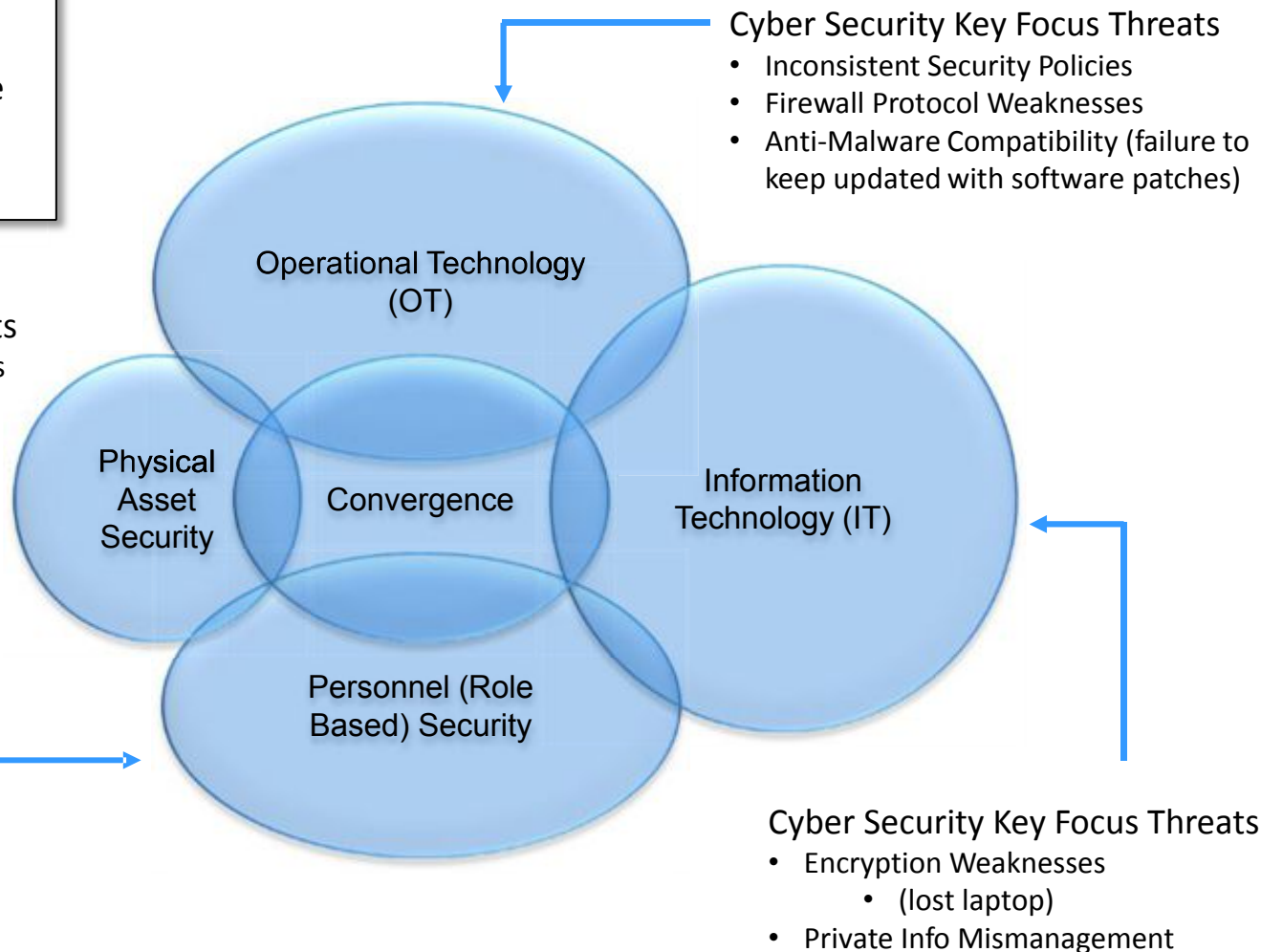
- 1) Internal Audit/ECRC
- 2) Information Security Office
- 3) Physical Security Office
- 4) Compliance/CIP Team

Physical Security & Hardware Threats

- Inactive Contractors with Facility Access
- Physical Access Policy in Remote Locations

Training & Process Focus

- Information Security Awareness
- Access for Items not needed for Job





Critical Infrastructure Protection

- Critical Infrastructure Protection (CIP) Compliance
 - Ensuring and protecting the grid is of primary importance
 - JEA is regulated by NERC
 - NERC sets very exacting CIP standards which have a high penalty for non-compliance
 - TS is responsible, along with Electric Systems Operations and Physical Security for meeting the CIP regulations. Compliance (reporting to Ted Hobson) oversees our performance
 - All employees involved with CIP assets are required to take additional annual training courses
 - JEA will be audited in 2017 for CIP Compliance
 - CIP Version 5 goes into effect July 1, 2016, and increases the number of assets (additional sub-stations) that must be protected
 - Remote access into the CIP environment is heavily protected with a multi-authentication technique in place



NERC-Risk Assessment

(for reference only)

Worst-Case Scenario for Grid Outage Due to Cyberattack Is One to Two Weeks: NERC

Rachel King, Wall Street Journal, April 14, 2016

The North American Electric Reliability Corp., the non-profit organization that acts as a watchdog and standards-bearer for North America's power grid, said that physical attacks on electric substations are potentially more damaging than a cyberattack.

In a worst-case scenario, a power outage due to a cyberattack on the electric grid would last one to two weeks, NERC president and CEO Gerry W. Cauley told lawmakers Thursday. "It's very technically challenging to go from an electronic cyberattack to causing physical damage to equipment." Mr. Cauley was speaking at a Congressional hearing devoted to threats to the electrical grid and potential consequences.

While officials say they have not yet seen a blackout in the U.S. due to a cyberattack, foreign attacks are cause for concern. The December 2015 cyberattack on Ukraine's electric grid affected four dozen substations and left 250,000 people without power, said Rep. Lou Barletta (R-Pa.), chairman of the subcommittee on economic development, public buildings and emergency management.

In most cases, outages due to cyberattacks would likely last anywhere from several hours to a few days, said Mr. Cauley, who said he spent 35 years working in substations. Even with threats such as BlackEnergy malware, which was used in the attacks against the Ukrainian electrical grid, it's difficult to cause widespread outages, said Mr. Cauley. "There was no damage to equipment," he said.

Instead, on December 23, attackers entered the industrial control system remotely through hijacked connections to the computer system and opened up breakers which took a string of substations off the grid, [reported Wired's Kim Zetter](#). In order to get the power back up, the Ukrainian power companies had to disconnect the industrial control system and manually operate the breakers. Power was restored because the equipment still worked, said Mr. Cauley.

The more likely cause of an outage that lasts weeks or months are physical attacks such as shootings or explosive devices against transformers in substations, he said. One such attack happened in 2013 [against a Silicon Valley substation](#), reported [the Journal's Rebecca Smith](#). In particular, [the loss of a large transformer](#) in an attack could pose a big problem. They need to be delivered by rail cars or barges and it can take months to get a new one.

To create a blackout using this method would require simultaneously physically attacking many sites, which would be difficult with efforts they've taken with law enforcement to improve security, he said. Still, Mr. Cauley added, "it's the one I worry about the most."

II. E.
5/9/2016
FAC



JEA
Building Community
AGENDA ITEM SUMMARY

April 25, 2016

SUBJECT:	IDENTITY THEFT PROTECTION PROGRAM FAIR AND ACCURATE CREDIT TRANSACTIONS ACT (FACTA) ANNUAL RISK ASSESSMENT
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Purpose:	<input type="checkbox"/> Information Only	<input type="checkbox"/> Action Required	<input checked="" type="checkbox"/> Advice/Direction
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Issue: JEA's Identity Theft Protection Program, as per the regulations listed below, requires an assessment of JEA's Identity Theft Risk and presentation to an appointed committee of the JEA Board. The current report covers the JEA performance for the period of January thru December 2015.

Significance: JEA's Identity Theft Protection Program is a critical program designed to protect JEA customers' Personally Identifiable Information (PII). Various regulations listed below mandate JEA to maintain an effective identity theft protection program.

Regulation:
 FCRA: Fair Credit Reporting Act – enacted 1970 (Enforced by the Federal Trade Commission)
 FACTA: Fair and Accurate Credit Transactions Act – enacted 2003 (Enforced by the Federal Trade Commission)
 FIPA: Florida Information Protection Act – enacted 2014 (Enforced by the Florida State Department of Legal Affairs)

Effect: This assessment is a regulatory compliance activity required for governance of JEA's Identity Theft Protection Program.

Cost or Benefit: This is a compliance program which limits the risk of customer identity theft. JEA can be fined up to \$5,000 per customer data breach, as per the directive of FIPA.

Recommended Board action: Staff requests the members of the Finance and Audit Committee review the assessment data and provide feedback for any improvements to the program.

For additional information, contact: Daniel D. Mishra, Director, CIP Compliance, JEA, (904) 665-7655

Submitted by: PEM/ TEH/ DDM



MISSION
Energizing our community through high-value energy and water solutions.

VISION
JEA is a premier service provider, valued asset and vital partner in advancing our community.

VALUES
 • Safety
 • Service
 • Growth
 • Accountability
 • Integrity

Commitments to Action

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

II. E.
5/9/2016
FAC

2015 JEA FACTA Risk Assessment

JEA Identity Theft Protection Program
(Red Flags)



Overview

- JEA has a program to comply with Federal and State regulations concerning identity theft (Fair Credit Reporting Act (FCRA), Fair and Accurate Credit Transactions Act (FACTA) and Florida Information Protections Act (FIPA)).
- These three acts address protection of Personally Identifiable Information (PII) of customers, employees, agents and contractors in JEA's possession.



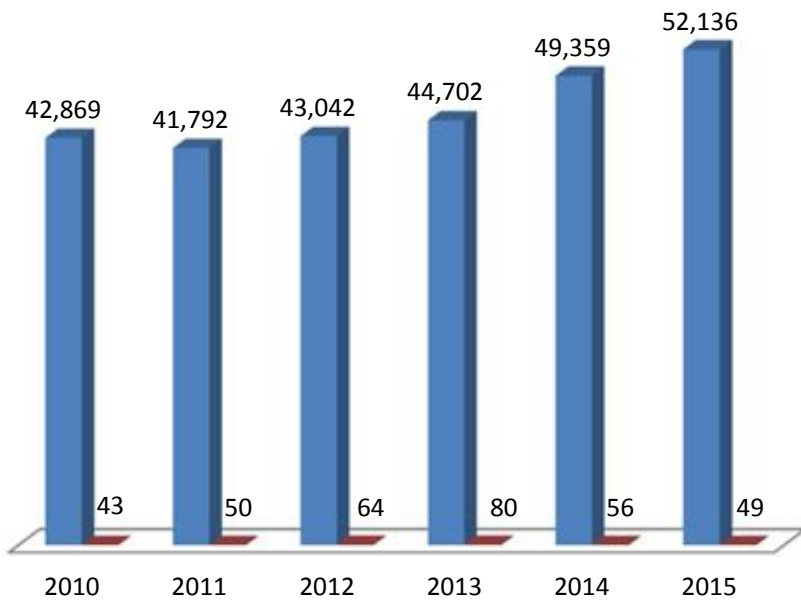
Compliance Oversight Committee

- 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 COC's Risk Assessment – Review performance and identify major weaknesses or improvement opportunities.
- Summary of Risk Assessment is provided to the Finance & Audit Committee to fulfill the FACTA Annual Reporting requirement.

Program Metrics

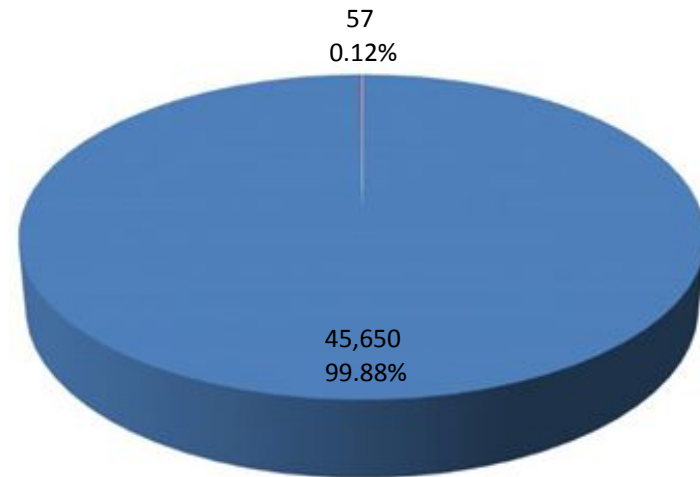
Accounts Opened Annually vs. Reported Cases of Identity Theft

■ JEA Accounts Opened Annually ■ Reported Cases of Identity Theft



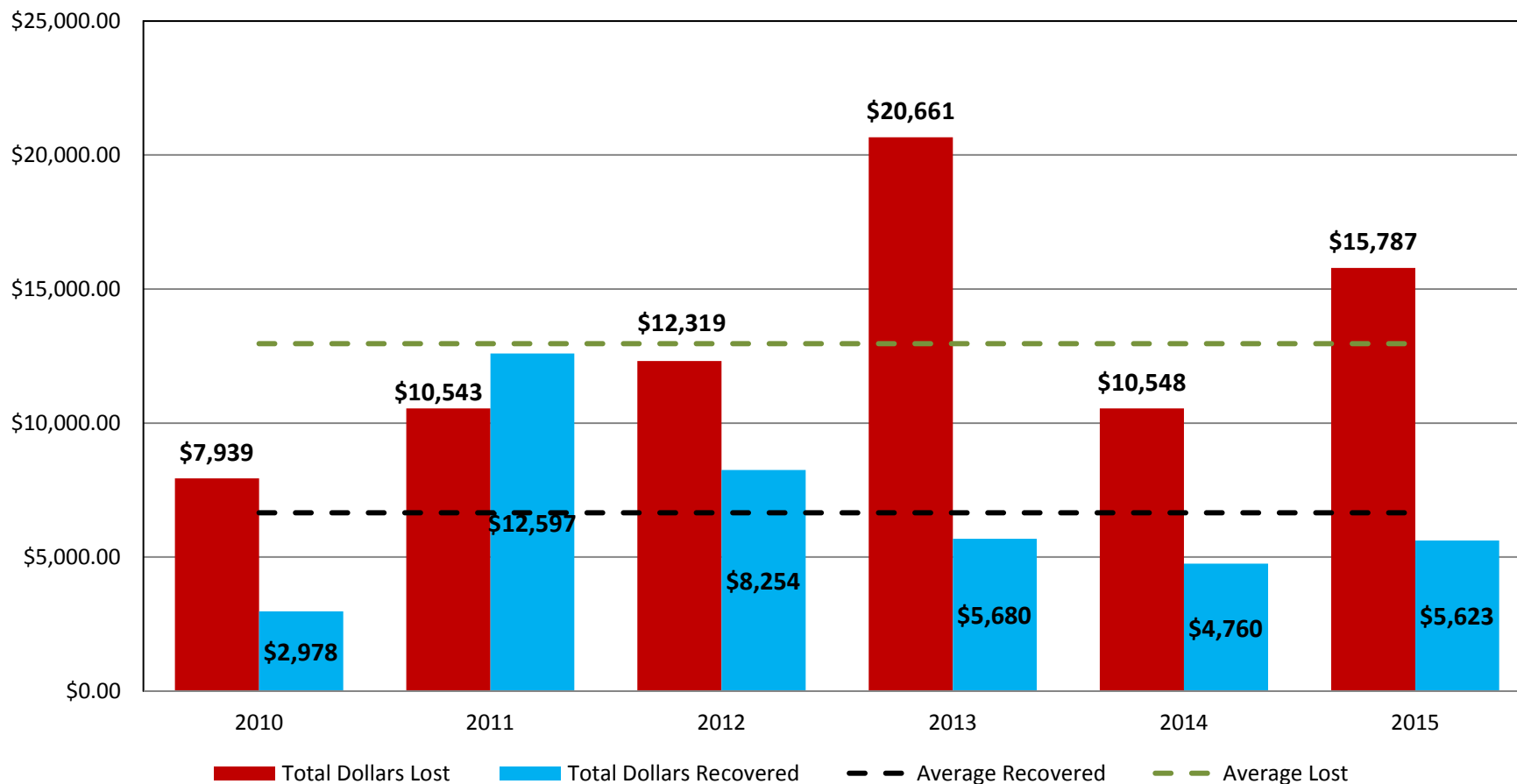
Accounts Opened Annually vs. Reported Cases of Identity Theft (Average 2010 to 2015)

■ JEA Accounts Opened Annually ■ Reported Cases of Identity Theft



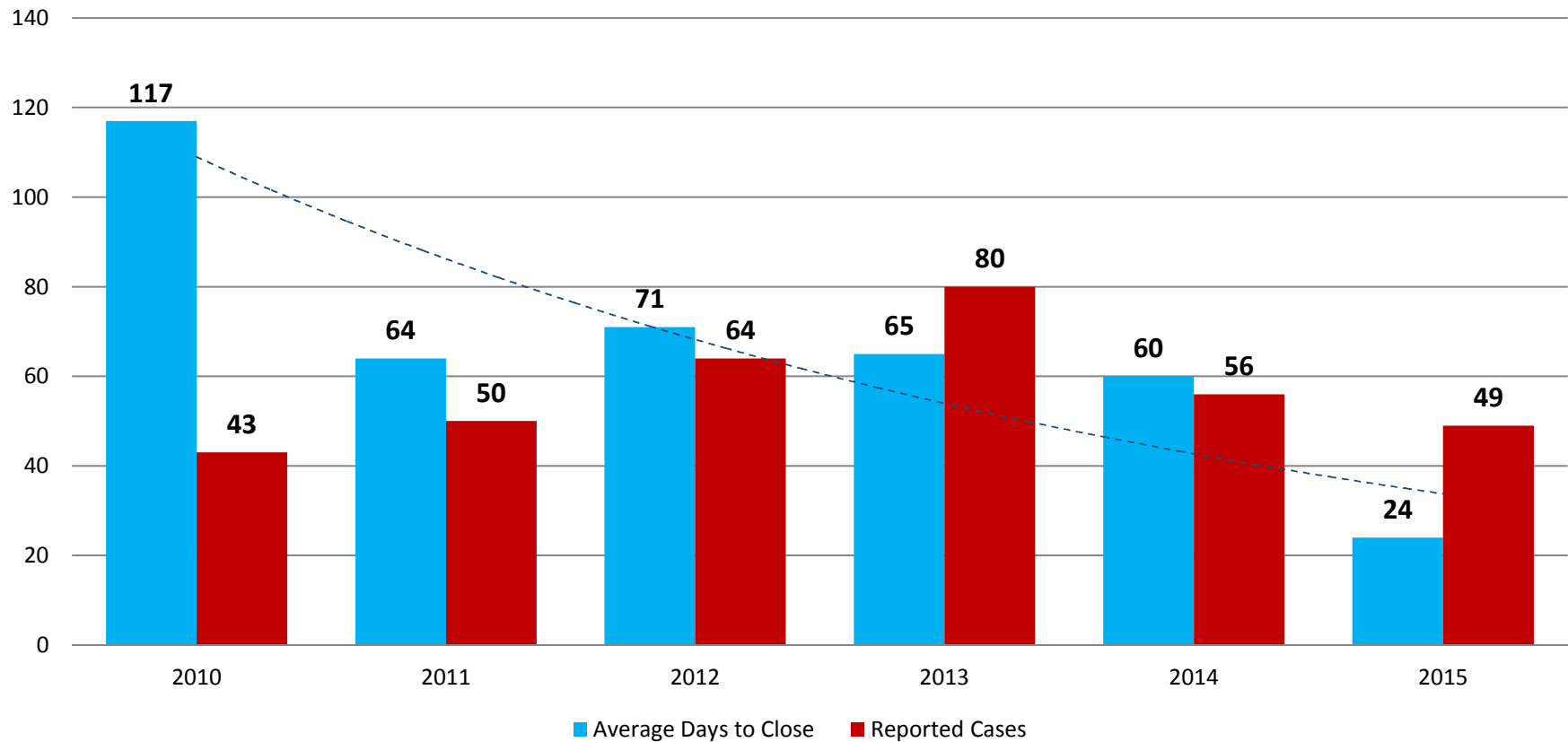
Program Metrics

Verified Cases - Annual Monetary Involvement Dollars Lost vs. Dollars Recovered



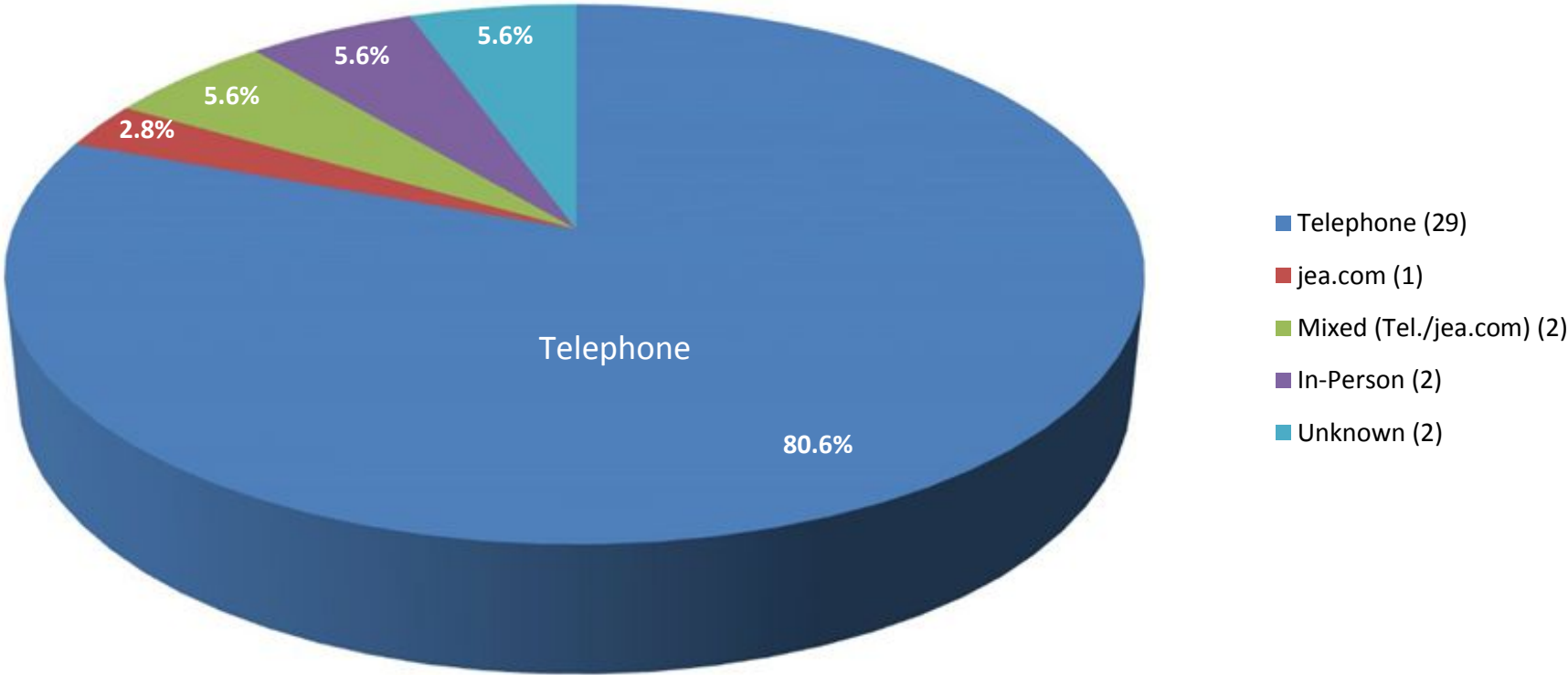
Operational Metrics

Average Resolution Time (Days) Reported Cases of Identity Theft



Sources

Source of Account Opening Verified Cases 2015



2015 Summary of Results

36 Confirmed Cases of Identity Theft Reported in 2015

- In 20 of the cases, the account was opened prior to the 2012 implementation of a more robust identity verification process using Experian.
- In 12 of the cases, the person opening the account provided verifiable PII.
- In 4 of the cases (.0077% of the accounts opened in 2015), there was human error. As a result, additional training was designed and provided to staff.



2015 Summary of Results

- Audit Services reported no cases of identity theft by JEA employees.
- Information Security reported no detection of data extraction or access indicative of identity theft.
- Time to close reported cases of identity theft decreased to 24 days from a previous high of 117 days.



Conclusion

- JEA is compliant with FACTA, FCRA, and FIPA.
- Appropriate controls are in place to prevent, detect and mitigate identity theft.
- 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. F.
5/9/2016
FAC

JEA

Finance and Audit Committee Report

May 9, 2016

Creating an Ethical Culture



Business Ethics Update and What's Next

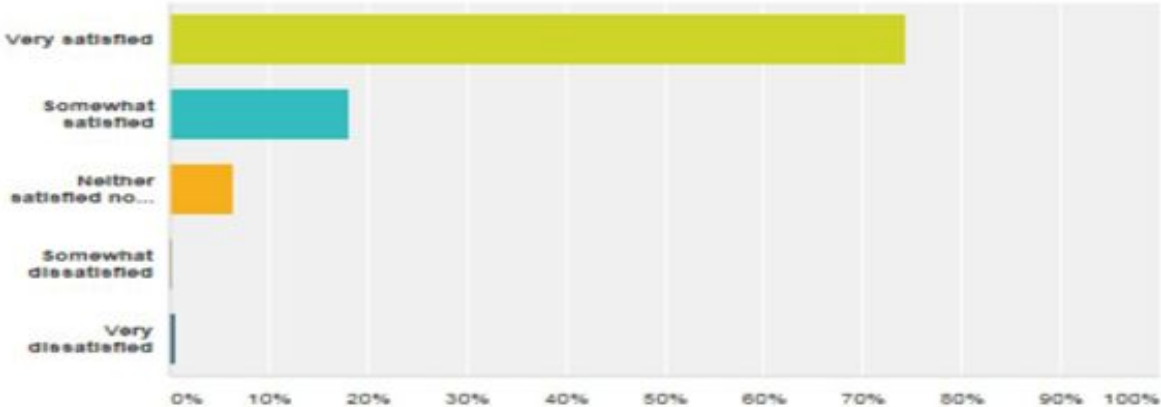
- **100 % compliant with ethics training requirements in FY2016, including new employees who must take training within 10 days of employment.**
- **Update the JEA/SJRPP Ethical Conduct Guidelines**
 - The Code of Conduct, our Values, examples of ethical questions you might face, information about business compliance issues, and resources you can use when you need ethical advice or help.
- **Implement new Business Ethics tools on The Grid Ethics page.**
- **Bi-Annual Meeting with Business Group Ethics Representatives in May 2016**



Business Ethics Training Survey Results

Overall, how satisfied were you with the knowledge you obtained in the Business Ethics Refresher?

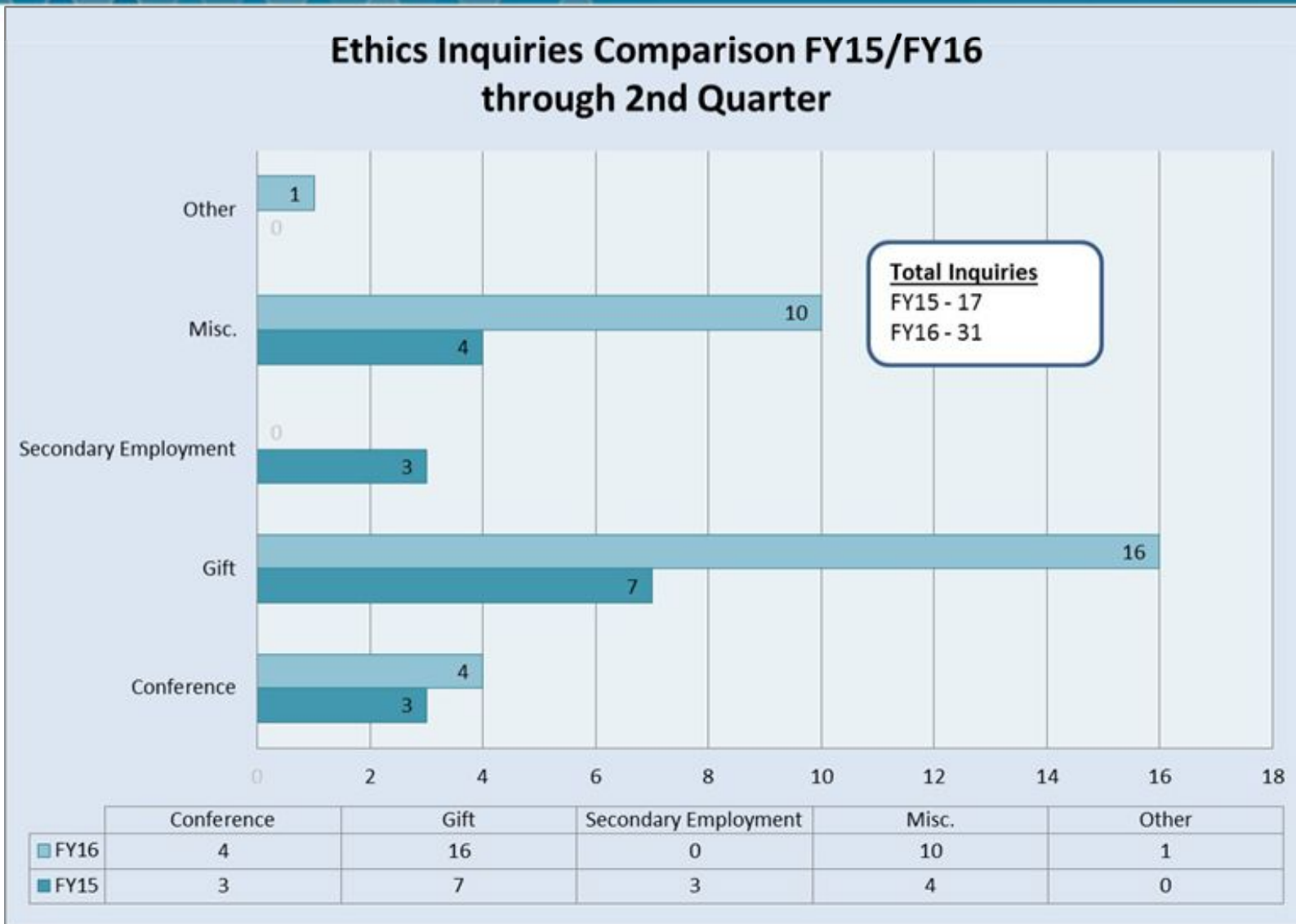
Answered: 625 Skipped: 0



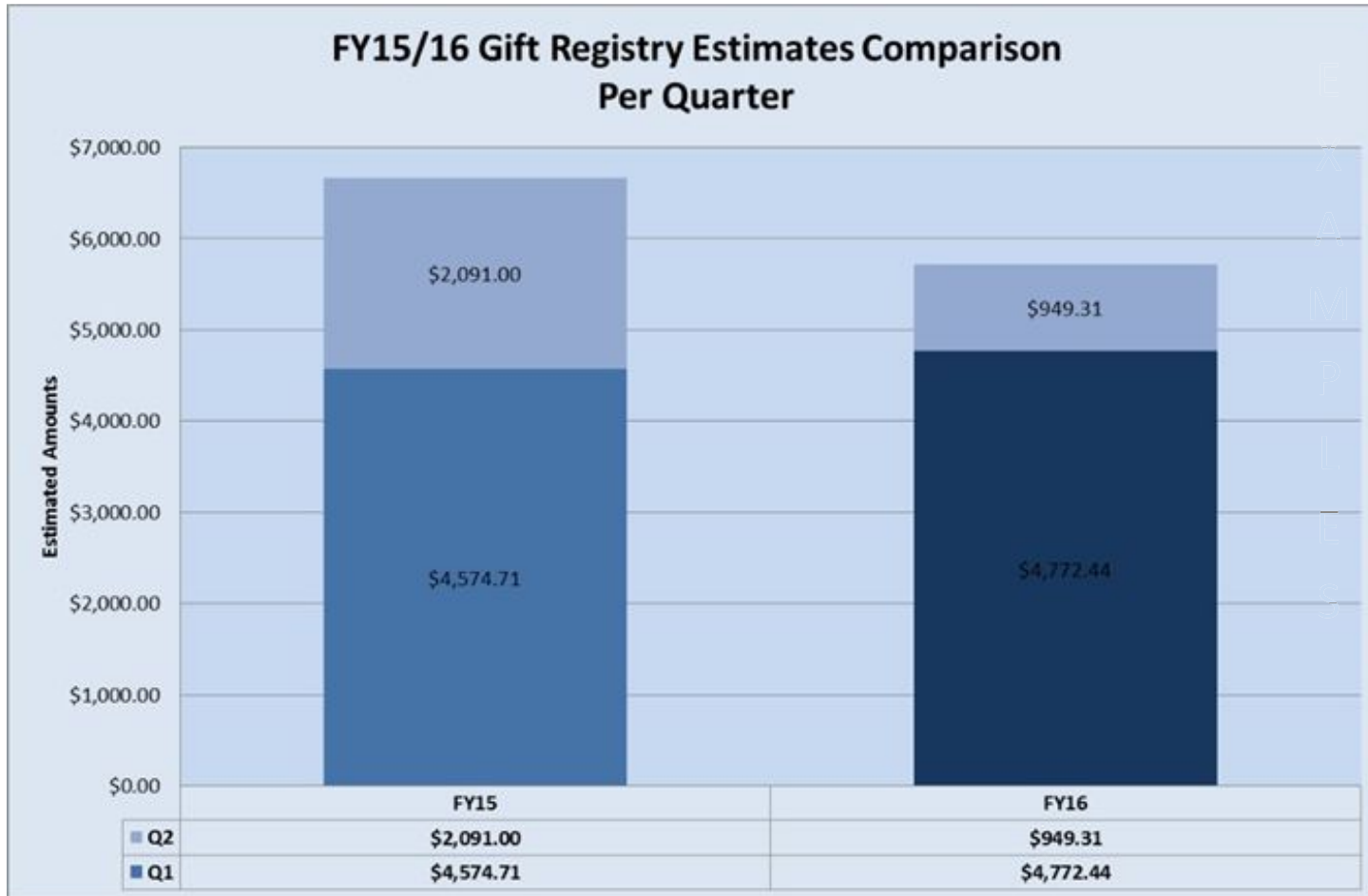
Answer Choices	Responses
Very satisfied	74.24% 464
Somewhat satisfied	18.24% 114
Neither satisfied nor dissatisfied	6.40% 40
Somewhat dissatisfied	0.48% 3
Very dissatisfied	0.64% 4
Total	625



FY15/16 Comparison



FY16 Gift Registry



Food Items: lunch or dinners during meetings or training, candies, doughnuts and cookies

Promotional items: ball caps, t-shirts, pens

Misc: golf, door prizes, bottles of wine

Conference registration fees



II. G. 1.
5/9/2016
FAC



JEA
Building Community
AGENDA ITEM SUMMARY

April 26, 2016

SUBJECT:	ELECTRIC SYSTEM AND WATER AND SEWER SYSTEM RESERVE FUND QUARTERLY REPORT
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Purpose:	<input checked="" type="checkbox"/> Information Only	<input type="checkbox"/> Action Required	<input type="checkbox"/> Advice/Direction
-----------------	--	--	---

Issue: Electric System and Water and Sewer System Reserve Fund Quarterly Report as of March 31, 2016. This report is provided for transparency into JEA’s reserve fund accounts and various cash balances. Staff is continuing to analyze JEA’s cash and reserve positions, balancing the cost of carrying cash against the importance of liquidity to meet JEA’s day-to-day operations, bond resolution requirements and credit ratings. Staff plans to report on this analysis at a future Finance and Audit Committee meeting.

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

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

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

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

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

Submitted by: PEM/MHD/JEO/BHG



MISSION
Energizing our community through high-value energy and water solutions.

VISION
JEA is a premier service provider, valued asset and vital partner in advancing our community.

VALUES
• Safety
• Service
• Growth
• Accountability
• Integrity

Commitments to Action

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

II. G. 1.
5/9/2016
FAC



INTER-OFFICE MEMORANDUM

April 26, 2016

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

FROM: Paul E. McElroy, Managing Director/CEO

TO: JEA Finance and Audit Committee

Kelly Flanagan, Chair
Tom Petway
Ed Burr
Husein Cumber

BACKGROUND:

At the May 7, 2012 Finance and Audit Committee meeting, staff presented a report 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. Staff also stated that this report would be provided to the JEA Board on a quarterly basis beginning in August 2012.

DISCUSSION:

This report is provided for transparency into JEA's reserve fund accounts and various cash balances. Staff is continuing to analyze JEA's cash and reserve positions, balancing the cost of carrying cash against the importance of liquidity to meet JEA's day-to-day operations, bond resolution requirements and credit ratings. Staff plans to report on this analysis at a future Finance and Audit Committee meeting.

RECOMMENDATION:

No action required; provided for information only.

Paul E. McElroy, Managing Director/CEO

PEM/MHD/JEO/BHG

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

For the Fiscal Quarter Ending March 31, 2016
(In Thousands of Dollars)

Electric System	<u>Fiscal Year</u>	<u>Fiscal Year</u>	<u>Fiscal Year</u>	<u>Fiscal Year</u>	<u>Detail</u>
	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>Page #</u>
Unrestricted					
Operations/Revenue Fund	\$ 46,588	\$ 43,178	\$ 46,624	\$ 50,961	
Debt Management Strategy Reserve	-	-	-	-	3
Self Insurance Reserve Fund					
• Property	10,000	10,000	10,000	10,000	4
• Employee health insurance	15,914	10,749	10,937	9,827	5
Rate Stabilization					
• Fuel	108,289	105,457	150,742	184,149	6
• DSM/conservation	3,891	3,570	2,886	2,879	7
• Environmental	10,023	16,639	23,430	29,509	8
• Debt Management	42,126	42,126	42,126	42,126	9
• Non-Fuel Purchased Power	-	12,000	38,000	34,402	10
Environmental	18,662	18,662	18,662	18,662	11
Customer Deposits	44,882	42,688	42,389	41,393	12
Total Unrestricted	300,375	305,069	385,796	423,908	
Unrestricted Days of Cash on Hand	129	123	182	205	
Restricted					
Debt Service Funds (Sinking Funds)	101,305	120,458	134,927	137,331	13
Debt Service Reserve Funds	64,841	64,841	64,595	60,582	14
Renewal and Replacement Funds/OCO (2)	140,486	146,910	145,711	134,726	15
Construction Funds	5,184	42	-	-	16
Total Restricted	311,816	332,251	345,233	332,639	
Total Electric System	\$ 612,191	\$ 637,320	\$ 731,029	\$ 756,547	
<hr/>					
Water and Sewer System					
Unrestricted					
Operations/Revenue Fund	\$ 5,886	\$ 9,227	\$ 22,588	\$ 22,684	
Debt Management Strategy Reserve	304	304	-	-	17
Rate Stabilization					
• Debt Management	20,290	20,291	20,290	20,290	18
• Environmental				-	19
Customer Deposit	13,860	12,787	13,255	13,979	20
Total Unrestricted	40,340	42,609	56,133	56,953	
Unrestricted Days of Cash on Hand	110	118	149	145	
Restricted					
Debt Service Funds (Sinking Funds)	80,317	75,019	67,720	66,208	21
Debt Service Reserve Funds	119,915	116,829	108,849	108,086	22
Renewal and Replacement Funds					
• R&R/OCO (3)	78,689	59,295	37,337	42,828	23
• Capacity Fees/State Revolving Loans	60,360	76,887	90,912	92,150	24
• Environmental	(9,857)	5,299	19,245	-	25
Construction Funds	2,305	326	664	-	26
Total Restricted	331,729	333,655	324,727	309,272	
Total Water & Sewer System	\$ 372,069	\$ 376,264	\$ 380,860	\$ 366,225	

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

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

(3) 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 March 31, 2016

Reserve/Fund Authorization: Debt Management Policy

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

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

	Actual as of 03/31/2016		Full Year			Projection		
	Current Quarter	Year -to-Date	2016 Forecast	2016 Budget	Prior Year Actual	2017	2018	2019
<i>(In Thousands)</i>								
Opening Balance	\$ -	\$ -	\$ -	N/A	\$ -	\$ -	\$ -	\$ -
Additions:								
Contributions				N/A	-			
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Deductions:								
Withdrawals			-	N/A	-			
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ending Balance	\$ -	\$ -	\$ -	N/A	\$ -	\$ -	\$ -	\$ -

	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ 12,257	\$ 12,257	\$ 12,257	\$ -	\$ -	\$ -	\$ 12,257	\$ 7,354	\$ 12,257
Additions:									
Contributions	-	-	-	-	-	-	-	-	-
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	-	-	-	-
Withdrawals	-	-	12,257	-	-	-	-	4,086	12,257
Sub-total	\$ -	\$ -	\$ 12,257	\$ -	\$ -	-	-	-	-
Ending balance	\$ 12,257	\$ 12,257	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,903	\$ 12,257

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 March 31, 2016

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 03/31/2016		Full Year			Projection		
	Current Quarter	Year -to-Date	2016 Forecast	2016 Budget	Prior Year Actual	2017	2018	2019
<i>(In Thousands)</i>								
Opening Balance	\$ 10,000	\$ 10,000	\$ 10,000	N/A	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Additions:								
Reserve Contribution				N/A	-			
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Deductions:								
Reserve Withdrawal				N/A				
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ending Balance	\$ 10,000	\$ 10,000	\$ 10,000	N/A	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000

	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ 3,500	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 3,500	\$ 10,000	\$ 8,700	\$ 10,000
Additions:									
Reserve Contribution	6,500					6,500	6,500	6,500	6,500
Sub-total	\$ 6,500	\$ -	\$ -	\$ -	\$ -	-	-	-	-
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 March 31, 2016

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.

(In Thousands)	Actual as of 03/31/2016		Full Year			Projection		
	Current Quarter	Year -to-Date	2016 Forecast	2016 Budget	Prior Year Actual	2017	2018	2019
Opening Balance	\$ 9,578	\$ 10,937	\$ 10,937	N/A	\$ 10,749	\$ 9,827	\$ 9,597	\$ 9,349
Additions:								
Employee Contributions	1,361	2,703	5,406	N/A	5,447	6,038	6,521	7,043
Retiree & Other Contributions	1,488	2,538	5,076		5,141	7,082	7,649	8,260
Employer Contributions	9,384	14,327	23,859		22,220	23,321	25,187	27,202
Sub-total	\$ 12,233	\$ 19,568	\$ 34,341	\$ -	\$ 32,808	\$ 36,441	\$ 39,356	\$ 42,505
Deductions:								
Payments for Claims	8,878	16,878	31,047	N/A	30,408	31,915	34,468	37,226
Actuary & Other Payments	407	1,101	4,404		2,212	4,756	5,136	5,547
Sub-total	\$ 9,285	\$ 17,979	\$ 35,451	\$ -	\$ 32,620	\$ 36,671	\$ 39,605	\$ 42,773
Ending Balance	\$ 12,526	\$ 12,526	\$ 9,827	N/A	\$ 10,937	\$ 9,597	\$ 9,349	\$ 9,080

(In Thousands)	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ 8,227	\$ 12,505	\$ 15,440	\$ 15,914	\$ 10,749	\$ 8,227	\$ 12,505	\$ 12,567	\$ 15,914
Additions:									
Employee Contributions	5,926	6,147	5,893	4,573	5,447	4,573	5,893	5,597	6,147
Retiree & Other Contributions	4,725	6,910	5,701	5,188	5,141	4,725	5,188	5,533	6,910
Employer Contributions	20,484	21,155	20,629	14,252	22,220	14,252	20,629	19,748	22,220
Sub-total	\$ 31,135	\$ 34,212	\$ 32,223	\$ 24,013	\$ 32,808				
Deductions:									
Payments for Claims	24,699	29,220	29,354	27,157	30,408	24,699	29,220	28,168	30,408
Actuary & Other Payments	2,158	2,057	2,395	2,021	2,212	2,021	2,158	2,169	2,395
Sub-total	\$ 26,857	\$ 31,277	\$ 31,749	\$ 29,178	\$ 32,620				
Ending balance	\$ 12,505	\$ 15,440	\$ 15,914	\$ 10,749	\$ 10,937	\$ 10,749	\$ 12,505	\$ 13,109	\$ 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 March 31, 2016

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 03/31/2016		Full Year			Projection		
	Current Quarter	Year -to-Date	2016 Forecast	2016 Budget	Prior Year Actual	2017	2018	2019
<i>(In Thousands)</i>								
Opening Balance	\$ 129,430	\$ 150,742	\$ 150,742	N/A	\$ 105,457	\$ 184,149	\$ 225,514	\$ 225,514
Additions:								
Contributions	20,296	55,590	90,013	25,285	95,224	41,365		
Sub-total	\$ 20,296	\$ 55,590	\$ 90,013	\$ 25,285	\$ 95,224	\$ 41,365	\$ -	\$ -
Deductions:								
Withdrawals					-			
Customer Fuel Rebate Credit		56,606	56,606	-	49,939			
Sub-total	\$ -	\$ 56,606	\$ 56,606	\$ -	\$ 49,939	\$ -	\$ -	\$ -
Ending Balance	\$ 149,726	\$ 149,726	\$ 184,149	N/A	\$ 150,742	\$ 225,514	\$ 225,514	\$ 225,514

	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ 55,935	\$ 24,990	\$ 92,362	\$ 108,289	\$ 105,457	\$ 24,990	\$ 92,362	\$ 77,407	\$ 108,289
Additions:									
Contributions	53,465	76,763	52,523	22,496	95,224	22,496	53,465	60,094	95,224
Sub-total	\$ 53,465	\$ 76,763	\$ 52,523	\$ 22,496	\$ 95,224	-	-	-	-
Deductions:									
Withdrawals	84,410	9,391				9,391	46,901	46,901	84,410
Customer Fuel Rebate Credit			36,596	25,328	49,939	25,328	36,596	37,288	49,939
Sub-total	\$ 84,410	\$ 9,391	\$ 36,596	\$ 25,328	\$ 49,939	-	-	-	-
Ending balance	\$ 24,990	\$ 92,362	\$ 108,289	\$ 105,457	\$ 150,742	\$ 24,990	\$ 105,457	\$ 96,368	\$ 150,742

Observations:

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

Electric System Rate Stabilization - Demand Side Management (DSM)

For the Fiscal Quarter Ending March 31, 2016

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 03/31/2016		Full Year			Projection		
	Current Quarter	Year -to-Date	2016 Forecast	2016 Budget	Prior Year Actual	2017	2018	2019
<i>(In Thousands)</i>								
Opening Balance	\$ 3,230	\$ 2,886	\$ 2,886	N/A	\$ 3,570	\$ 2,879	\$ 2,272	\$ 2,272
Additions:								
Contributions	1,594	3,104	6,833	6,942	7,059	7,510	6,844	6,844
Other								
Sub-total	\$ 1,594	\$ 3,104	\$ 6,833	\$ 6,942	\$ 7,059	\$ 7,510	\$ 6,844	\$ 6,844
Deductions:								
Withdrawals	1,881	3,047	6,840	7,674	7,743	8,117	6,844	6,844
Sub-total	\$ 1,881	\$ 3,047	\$ 6,840	\$ 7,674	\$ 7,743	\$ 8,117	\$ 6,844	\$ 6,844
Ending Balance	\$ 2,943	\$ 2,943	\$ 2,879	N/A	\$ 2,886	\$ 2,272	\$ 2,272	\$ 2,272

	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ 10,813	\$ 10,703	\$ 6,912	\$ 3,891	\$ 3,570	\$ 3,570	\$ 6,912	\$ 7,178	\$ 10,813
Additions:									
Contributions	7,978	6,657	6,683	6,929	7,059	6,657	6,929	7,061	7,978
Transfer from Rev Fd						-	-	-	-
Sub-total	\$ 7,978	\$ 6,657	\$ 6,683	\$ 6,929	\$ 7,059				
Deductions:									
Withdrawals	8,088	10,448	9,704	7,250	7,743	7,250	8,088	8,647	10,448
Sub-total	\$ 8,088	\$ 10,448	\$ 9,704	\$ 7,250	\$ 7,743				
Ending balance	\$ 10,703	\$ 6,912	\$ 3,891	\$ 3,570	\$ 2,886	\$ 2,886	\$ 3,891	\$ 5,592	\$ 10,703

Observations:

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

Electric System Rate Stabilization - Environmental

For the Fiscal Quarter Ending March 31, 2016

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.

(In Thousands)	Actual as of 03/31/2016		Full Year			Projection		
	Current Quarter	Year -to-Date	2016 Forecast	2016 Budget	Prior Year Actual	2017	2018	2019
Opening Balance	\$ 25,154	\$ 23,430	\$ 23,430	N/A	\$ 16,639	\$ 29,509	\$ 35,374	\$ 38,374
Additions:								
Contributions	1,740	3,454	7,432	7,320	7,586	7,942	3,000	3,000
Sub-total	\$ 1,740	\$ 3,454	\$ 7,432	\$ 7,320	\$ 7,586	\$ 7,942	\$ 3,000	\$ 3,000
Deductions:								
Withdrawals	142	132	1,353	2,442	795	2,077		
Sub-total	\$ 142	\$ 132	\$ 1,353	\$ 2,442	\$ 795	\$ 2,077	\$ -	\$ -
Ending Balance	\$ 26,752	\$ 26,752	\$ 29,509	N/A	\$ 23,430	\$ 35,374	\$ 38,374	\$ 41,374

	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ 2,467	\$ 4,232	\$ 5,343	\$ 10,023	\$ 16,639	\$ 2,467	\$ 5,343	\$ 7,741	\$ 16,639
Additions:									
Contributions	6,583	2,436	5,650	7,395	7,586	2,436	6,583	5,930	7,586
Sub-total	\$ 6,583	\$ 2,436	\$ 5,650	\$ 7,395	\$ 7,586	-	-	-	-
Deductions:									
Withdrawals	4,818	1,325	970	779	795	779	970	1,737	4,818
Sub-total	\$ 4,818	\$ 1,325	\$ 970	\$ 779	\$ 795	-	-	-	-
Ending balance	\$ 4,232	\$ 5,343	\$ 10,023	\$ 16,639	\$ 23,430	\$ 4,232	\$ 10,023	\$ 11,933	\$ 23,430

Observations:

- Rate Stabilization Fund for Environmental began in June 2010.

Electric System Rate Stabilization - Debt Management

For the Fiscal Quarter Ending March 31, 2016

Reserve/Fund Authorization: Bond Resolution and Pricing Policy

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

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

	Actual as of 03/31/2016		2016 Forecast	Full Year		Projection		
	Current Quarter	Year -to-Date		2016 Budget	Prior Year Actual	2017	2018	2019
(In Thousands)								
Opening Balance	\$ 42,126	\$ 42,126	\$ 42,126	N/A	\$ 42,126	\$ 42,126	\$ 42,126	\$ 42,126
Additions:								
Contributions				N/A	-			
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Deductions:								
Withdrawals					-			
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ending Balance	\$ 42,126	\$ 42,126	\$ 42,126	N/A	\$ 42,126	\$ 42,126	\$ 42,126	\$ 42,126

	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ 19,213	\$ 35,930	\$ 41,611	\$ 42,126	\$ 42,126	\$ 19,213	\$ 41,611	\$ 36,201	\$ 42,126
Additions:									
Contributions	16,717	5,681	6,581			5,681	6,581	9,660	16,717
Sub-total	\$ 16,717	\$ 5,681	\$ 6,581	\$ -	\$ -	-	-	-	-
Deductions:									
Withdrawals	-	-	6,066			-	-	2,022	6,066
Sub-total	\$ -	\$ -	\$ 6,066	\$ -	\$ -	-	-	-	-
Ending balance	\$ 35,930	\$ 41,611	\$ 42,126	\$ 42,126	\$ 42,126	\$ 35,930	\$ 42,126	\$ 40,784	\$ 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 March 31, 2016

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 03/31/2016		Full Year			Projection		
	Current Quarter	Year -to-Date	2016 Forecast	2016 Budget	Prior Year Actual	2017	2018	2019
<i>(In Thousands)</i>								
Opening Balance	\$ 38,000	\$ 38,000	\$ 38,000	N/A	\$ 12,000	\$ 34,402	\$ 25,170	\$ 13,425
Additions:								
Contributions					26,000			
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ 26,000	\$ -	\$ -	\$ -
Deductions:								
Withdrawals	514	514	3,598	-	-	9,232	11,745	9,937
Sub-total	\$ 514	\$ 514	\$ 3,598	\$ -	\$ -	\$ 9,232	\$ 11,745	\$ 9,937
Ending Balance	\$ 37,486	\$ 37,486	\$ 34,402	N/A	\$ 38,000	\$ 25,170	\$ 13,425	\$ 3,488

	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 12,000	\$ -	\$ -	\$ 2,400	\$ 12,000
Additions:									
Contributions				12,000	26,000	12,000	19,000	19,000	26,000
Sub-total	\$ -	\$ -	\$ -	\$ 12,000	\$ 26,000				
Deductions:									
Withdrawals									
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -				
Ending balance	\$ -	\$ -	\$ -	\$ 12,000	\$ 38,000	\$ -	\$ -	\$ 10,000	\$ 38,000

Observations:

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

Electric System Environmental Reserve

For the Fiscal Quarter Ending March 31, 2016

Reserve/Fund Authorization: Pricing Policy

Metric: Target equals the balance in the environmental liability account

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

	Actual as of 03/31/2016		Full Year			Projection		
	Current Quarter	Year -to-Date	2016 Forecast	2016 Budget	Prior Year Actual	2017	2018	2019
<i>(In Thousands)</i>								
Opening Balance	\$ 18,662	\$ 18,662	\$ 18,662	N/A	\$ 18,662	\$ 18,662	\$ 18,662	\$ 18,662
Additions:								
Contributions			-	N/A	-			
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Deductions:								
Withdrawals			-	N/A	-			
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ending Balance	\$ 18,662	\$ 18,662	\$ 18,662	N/A	\$ 18,662	\$ 18,662	\$ 18,662	\$ 18,662

	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ 16,946	\$ 20,899	\$ 18,359	\$ 18,662	\$ 18,662	\$ 16,946	\$ 18,662	\$ 18,706	\$ 20,899
Additions:									
Contributions	3,953		970			970	2,462	2,462	3,953
Sub-total	\$ 3,953	\$ -	\$ 970	\$ -	\$ -	-	-	-	-
Deductions:									
Withdrawals		2,540	667			667	1,604	1,604	2,540
Sub-total	\$ -	\$ 2,540	\$ 667	\$ -	\$ -	-	-	-	-
Ending balance	\$ 20,899	\$ 18,359	\$ 18,662	\$ 18,662	\$ 18,662	\$ 18,359	\$ 18,662	\$ 19,049	\$ 20,899

Observations:

- The Environmental Reserve began in FY 2008.

Electric System Customer Deposits

For the Fiscal Quarter Ending March 31, 2016

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 03/31/2016		Full Year		Projection			
	Current Quarter	Year-to-Date	2016 Forecast	2016 Budget	Prior Year Actual	2017	2018	2019
<i>(In Thousands)</i>								
Opening Balance	\$ 41,724	\$ 42,389	\$ 42,389	N/A	\$ 42,688	\$ 41,393	\$ 41,393	\$ 41,393
Additions:								
Net Customer Activity			-	N/A	-			
Loan Repayment to ES Revenue Fund					-			
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Deductions:								
Net Customer Activity	331	996	996		299			
Loan to ES Revenue Fund				N/A	-			
Sub-total	\$ 331	\$ 996	\$ 996	\$ -	\$ 299	\$ -	\$ -	\$ -
Ending Balance	\$ 41,393	\$ 41,393	\$ 41,393	N/A	\$ 42,389	\$ 41,393	\$ 41,393	\$ 41,393

	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ 38,801	\$ 42,767	\$ 43,454	\$ 44,882	\$ 42,688	\$ 38,801	\$ 42,767	\$ 42,518	\$ 44,882
Additions:									
Net Customer Activity	5,011	905	1,430			905	1,430	2,449	5,011
Loan Repayment to ES Revenue Fund	16,000					16,000	16,000	16,000	16,000
Sub-total	\$ 21,011	\$ 905	\$ 1,430	\$ -	\$ -	-	-	-	-
Deductions:									
Net Customer Activity	1,045	218	2	2,194	299	2	299	752	2,194
Loan to ES Revenue Fund	16,000					16,000	16,000	16,000	16,000
Sub-total	\$ 17,045	\$ 218	\$ 2	\$ 2,194	\$ 299				
Ending balance	\$ 42,767	\$ 43,454	\$ 44,882	\$ 42,688	\$ 42,389	\$ 42,389	\$ 42,767	\$ 43,236	\$ 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 March 31, 2016

Reserve/Fund Authorization: Bond Resolution

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

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

(In Thousands)	Actual as of 03/31/2016		Full Year			Projection		
	Current Quarter	Year -to-Date	2016 Forecast	2016 Budget	Prior Year Actual	2017	2018	2019
Opening Balance	\$ 43,948	\$ 134,927	\$ 134,927	N/A	\$ 120,458	\$ 137,331	\$ 129,640	\$ 132,021
Additions:								
Revenue Fund Deposits	44,163	88,279	183,627		181,006	183,251	189,153	186,306
Bond funded interest					-			
Sub-total	\$ 44,163	\$ 88,279	\$ 183,627	\$ -	\$ 181,006	\$ 183,251	\$ 189,153	\$ 186,306
Deductions:								
Principal and Int Payments	251	135,346	181,223	N/A	166,537	190,942	186,772	186,908
Sub-total	\$ 251	\$ 135,346	\$ 181,223	\$ -	\$ 166,537	\$ 190,942	\$ 186,772	\$ 186,908
Ending Balance	\$ 87,860	\$ 87,860	\$ 137,331	N/A	\$ 134,927	\$ 129,640	\$ 132,021	\$ 131,419

	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ 86,769	\$ 125,988	\$ 107,754	\$ 101,305	\$ 120,458	\$ 86,769	\$ 107,754	\$ 108,455	\$ 125,988
Additions:									
Revenue Fund Deposits	187,629	159,724	159,072	167,340	181,006	159,072	167,340	170,954	187,629
Bond funded interest	1,726					1,726	1,726	1,726	1,726
Sub-total	\$ 189,355	\$ 159,724	\$ 159,072	\$ 167,340	\$ 181,006	-	-	-	-
Deductions:									
Principal and Int Payments	150,136	177,958	165,521	148,187	166,537	148,187	165,521	161,668	177,958
Sub-total	\$ 150,136	\$ 177,958	\$ 165,521	\$ 148,187	\$ 166,537	-	-	-	-
Ending balance	\$ 125,988	\$ 107,754	\$ 101,305	\$ 120,458	\$ 134,927	\$ 101,305	\$ 120,458	\$ 118,086	\$ 134,927

Observations:

- September 30th ending balances are used to pay the October 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 October 1st of the following fiscal year).

Electric System Debt Service Reserve Account

For the Fiscal Quarter Ending March 31, 2016

Reserve/Fund Authorization: Bond Resolution

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

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

(In Thousands)	Actual as of 03/31/2016		Full Year Budget Amounts			Projection		
	Current Quarter	Year-to-Date	2016 Forecast	2016 Budget	Prior Year Actual	2017	2018	2019
Opening Balance	\$ 60,582	\$ 64,595	\$ 64,595	N/A	\$ 64,841	\$ 60,582	\$ 60,582	\$ 60,582
Additions:								
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Deductions:								
Release to Revenue Fund		4,013	4,013	N/A	246			
Sub-total	\$ -	\$ 4,013	\$ 4,013	\$ -	\$ 246	\$ -	\$ -	\$ -
Ending Balance	\$ 60,582	\$ 60,582	\$ 60,582	N/A	\$ 64,595	\$ 60,582	\$ 60,582	\$ 60,582

	Historical Actuals					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ 72,226	\$ 72,226	\$ 72,226	\$ 64,841	\$ 64,841	\$ 64,841	\$ 72,226	\$ 69,272	\$ 72,226
Additions:									
Proceeds from Bonds	-	-	-	-	-	-	-	-	-
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	-	-	-	-
Deductions:									
Defeasance			7,385		246	246	3,816	3,816	7,385
Sub-total	\$ -	\$ -	\$ 7,385	\$ -	\$ 246	-	-	-	-
Ending balance	\$ 72,226	\$ 72,226	\$ 64,841	\$ 64,841	\$ 64,595	64,595	64,841	67,746	72,226

Observations:

- 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 \$3.0 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 March 31, 2016

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

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

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

(In Thousands)	Actual as of 03/31/2016		Full Year			Projection		
	Current Quarter	Year -to-Date	2016 Forecast	2016 Budget	Prior Year Actual	2017	2018	2019
Opening Balance	\$ 151,861	\$ 145,711	\$ 145,711	N/A	\$ 146,910	\$ 134,726	\$ 170,606	\$ 174,816
Additions:								
R&R/OCO Contribution	37,622	74,272	147,883	-	110,351	179,093	170,461	153,116
Loans betw Capital Fds	-	-	-	-	-	-	-	-
Other	975	2,718	3,802	-	970	18,590	-	-
Sub-total	\$ 38,597	\$ 76,990	\$ 151,685	\$ -	\$ 111,321	\$ 197,683	\$ 170,461	\$ 153,116
Deductions:								
Capital Expenditures	25,664	57,907	162,668	-	112,483	161,803	166,251	134,206
Transfers betw Capital Fds	2	2	2	-	37	-	-	-
R&R/OCO Contribution	-	-	-	-	-	-	-	-
Transfer to Scherer	-	-	-	-	-	-	-	-
Sub-total	\$ 25,666	\$ 57,909	\$ 162,670	\$ -	\$ 112,520	\$ 161,803	\$ 166,251	\$ 134,206
Ending Balance	\$ 164,792	\$ 164,792	\$ 134,726	N/A	\$ 145,711	\$ 170,606	\$ 174,816	\$ 193,726

	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ 48,626	\$ 73,727	\$ 105,235	\$ 140,486	\$ 146,910	\$ 48,626	\$ 105,235	\$ 102,997	\$ 146,910
Additions:									
R&R/OCO Contribution	156,406	142,822	124,630	85,639	110,351	85,639	124,630	123,970	156,406
Loans betw Capital Fds	-	-	-	-	-	-	-	-	-
Other	2,876	943	2,423	4,014	970	943	2,423	2,245	4,014
Sub-total	\$ 159,282	\$ 143,765	\$ 127,053	\$ 89,653	\$ 111,321				
Deductions:									
Capital Expenditures	115,181	112,257	91,802	82,889	112,483	82,889	112,257	102,922	115,181
Bond Buy Back	-	-	-	-	-	-	-	-	-
Transfer to Scherer	19,000	-	-	-	-	-	-	-	-
Loans betw Capital Fds	-	-	-	340	37	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Sub-total	\$ 134,181	\$ 112,257	\$ 91,802	\$ 83,229	\$ 112,520				
Ending balance	\$ 73,727	\$ 105,235	\$ 140,486	\$ 146,910	\$ 145,711	\$ 73,727	\$ 140,486	\$ 122,414	\$ 146,910

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 March 31, 2016

Reserve/Fund Authorization: Bond Resolution

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

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

(In Thousands)	Actual as of 03/31/2016		Full Year		Projection			
	Current Quarter	Year -to-Date	2016 Forecast	2016 Budget	Prior Year Actual	2017	2018	2019
Opening Balance	\$ -	\$ 4	\$ 4	N/A	\$ 42	\$ -	\$ -	\$ -
Additions:								
Bond Proceeds					-			
Line of Credit					-			
Transfers b/w Capital Fds	-				-			
Other		2	2		37			
Sub-total	\$ -	\$ 2	\$ 2	\$ -	\$ 37	\$ -	\$ -	\$ -
Deductions:								
Capital Expenditures		6	6	4	75	-	-	-
Bond Funded Interest					-			
Transfers betw Capital Fds					-			
Other					-			
Sub-total	\$ -	\$ 6	\$ 6	\$ 4	\$ 75	\$ -	\$ -	\$ -
Ending Balance	\$ -	\$ -	\$ -	N/A	\$ 4	\$ -	\$ -	\$ -

(In Thousands)	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ 36,981	\$ 63,915	\$ 40,034	\$ 5,184	\$ 42	\$ -	\$ 21,083	\$ 24,359	\$ 63,915
Additions:									
Bond Proceeds	91,545		1,550			1,550	46,548	46,548	91,545
Line of Credit						-	-	-	-
Transfers b/w Capital Fds				3,091		3,091	3,091	3,091	3,091
Other	562		34	340	37	34	189	243	562
Sub-total	\$ 92,107	\$ -	\$ 1,584	\$ 3,431	\$ 37				
Deductions:									
Capital Expenditures	63,371	23,385	35,253	4,821	75	75	23,385	25,381	63,371
Bond Funded Interest	1,802					1,802	1,802	1,802	1,802
Line of Credit									
Transfers b/w Capital Fds			35	3,091		35	1,563	1,563	3,091
Other		496	1,146	661		496	661	768	1,146
Sub-total	\$ 65,173	\$ 23,881	\$ 36,434	\$ 8,573	\$ 75				
Ending balance	\$ 63,915	\$ 40,034	\$ 5,184	\$ 42	\$ 4	\$ 4	\$ 5,184	\$ 21,836	\$ 63,915

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 Debt Management Reserve

For the Fiscal Quarter Ending March 31, 2016

Reserve/Fund Authorization: Debt Management Policy

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

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

	Actual as of 03/31/2016		Full Year			Projection		
	Current Quarter	Year -to-Date	2016 Forecast	2016 Budget	Prior Year Actual	2017	2018	2019
<i>(In Thousands)</i>								
Opening Balance	\$ -	\$ -	\$ -	N/A	\$ 304	\$ -	\$ -	\$ -
Additions:								
Contributions					-			
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Deductions:								
Withdrawals					304			
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ 304	\$ -	\$ -	\$ -
Ending Balance	\$ -	\$ -	\$ -	N/A	\$ -	\$ -	\$ -	\$ -

	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ 6,458	\$ 6,458	\$ 6,458	\$ 304	\$ 304	\$ 304	\$ 6,458	\$ 3,996	\$ 6,458
Additions:									
Contributions						-	-	-	-
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	-	-	-	-
Deductions:									
Withdrawals			6,154		304	304	3,229	3,229	6,154
Sub-total	\$ -	\$ -	\$ 6,154	\$ -	\$ 304	-	-	-	-
Ending balance	\$ 6,458	\$ 6,458	\$ 304	\$ 304	\$ -	\$ -	\$ 304	\$ 2,705	\$ 6,458

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.
- \$6 million was used in Sept 2013 for a defeasance.

Water and Sewer Rate Stabilization Debt Management

For the Fiscal Quarter Ending March 31, 2016

Reserve/Fund Authorization: Bond Resolution and Pricing Policy

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

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

	Actual as of 03/31/2016		Full Year			Projection		
	Current	Year -to-Date	2016	2016	Prior Year	2017	2018	2019
	Quarter		Forecast	Budget	Actual			
<i>(In Thousands)</i>								
Opening Balance	\$ 20,290	\$ 20,290	\$ 20,290	N/A	\$ 20,290	\$ 20,290	\$ 20,290	\$ 20,290
Additions:								
Contributions	-	-	-	N/A	-			
Financial Statement Rounding								
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Deductions:								
Withdrawals								
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ending Balance	\$ 20,290	\$ 20,290	\$ 20,290	N/A	\$ 20,290	\$ 20,290	\$ 20,290	\$ 20,290

	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ 9,514	\$ 17,560	\$ 20,290	\$ 20,290	\$ 20,290	\$ 9,514	\$ 20,290	\$ 17,589	\$ 20,290
Additions:									
Contributions	8,046	2,730				-	-	-	-
Sub-total	\$ 8,046	\$ 2,730	\$ -	\$ -	\$ -	-	-	-	-
Deductions:									
Withdrawals						-	-	-	-
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	-	-	-	-
Ending balance	\$ 17,560	\$ 20,290	\$ 20,290	\$ 20,290	\$ 20,290	\$ 17,560	\$ 20,290	\$ 19,744	\$ 20,290

Observations:
 • Contributions began in June 2009.

Water & Sewer System Rate Stabilization - Environmental

For the Fiscal Quarter Ending March 31, 2016

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.

<i>(In Thousands)</i>	Actual as of 03/31/2016		Full Year			Projection		
	Current Quarter	Year -to-Date	2016 Forecast	2016 Budget	Prior Year Actual	2017	2018	2019
Opening Balance	\$ 4,936	\$ -	\$ -	N/A	\$ -	\$ -	\$ -	\$ -
Additions:								
Contributions	5,238	10,728	22,344		-	23,908	22,867	22,952
Sub-total	<u>\$ 5,238</u>	<u>\$ 10,728</u>	<u>\$ 22,344</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 23,908</u>	<u>\$ 22,867</u>	<u>\$ 22,952</u>
Deductions:								
Withdrawals	6,070	6,624	22,344		-	23,908	22,867	22,952
Sub-total	<u>\$ 6,070</u>	<u>\$ 6,624</u>	<u>\$ 22,344</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 23,908</u>	<u>\$ 22,867</u>	<u>\$ 22,952</u>
Ending Balance	<u>\$ 4,104</u>	<u>\$ 4,104</u>	<u>\$ -</u>	N/A	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Additions:									
Contributions						-	-	-	-
Sub-total	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Deductions:									
Withdrawals						-	-	-	-
Sub-total	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Ending balance	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

Observations:

- Rate Stabilization Fund for Environmental began in June 2010.

Water and Sewer System Customer Deposits

For the Fiscal Quarter Ending March 31, 2016

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 03/31/2016		Full Year			Projection		
	Current Quarter	Year -to-Date	2016 Forecast	2016 Budget	Prior Year Actual	2017	2018	2019
<i>(In Thousands)</i>								
Opening Balance	\$ 13,793	\$ 13,255	\$ 13,255	N/A	\$ 12,787	\$ 13,979	\$ 13,979	\$ 13,979
Additions:								
Allocated from Electric Loan Repayment	186	724	724	N/A	468			
Sub-total	\$ 186	\$ 724	\$ 724	\$ -	\$ 468	\$ -	\$ -	\$ -
Deductions:								
Allocated from Electric Loan to W&S Operations			-	N/A	-			
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ending Balance	\$ 13,979	\$ 13,979	\$ 13,979	N/A	\$ 13,255	\$ 13,979	\$ 13,979	\$ 13,979

	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ 8,517	\$ 9,727	\$ 12,627	\$ 13,860	\$ 12,787	\$ 8,517	\$ 12,627	\$ 11,504	\$ 13,860
Additions:									
Allocated from Electric Loan Repayment	1,210	2,900	1,233		468	468	851	851	1,233
Sub-total	\$ 1,210	\$ 3,900	\$ 1,233	\$ -	\$ 468	-	-	-	-
Deductions:									
Allocated from Electric Loan to W&S Operations		1,000		1,073		1,073	1,073	1,073	1,073
Sub-total	\$ -	\$ 1,000	\$ -	\$ 1,073	\$ -	-	-	-	-
Ending balance	\$ 9,727	\$ 12,627	\$ 13,860	\$ 12,787	\$ 13,255	\$ 9,727	\$ 12,787	\$ 12,451	\$ 13,860

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 March 31, 2016

Reserve/Fund Authorization: Bond Resolution

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

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

(In Thousands)	Actual as of 03/31/2016		Full Year			Projection		
	Current Quarter	Year -to-Date	2016 Forecast	2016 Budget	Prior Year Actual	2017	2018	2019
Opening Balance	\$ 24,051	\$ 67,720	\$ 67,720	N/A	\$ 75,019	\$ 66,208	\$ 83,075	\$ 82,929
Additions:								
Revenue fund deposits	24,097	48,153	101,092		102,789	120,883	121,878	122,454
Sub-total	\$ 24,097	\$ 48,153	\$ 101,092	\$ -	\$ 102,789	\$ 120,883	\$ 121,878	\$ 122,454
Deductions:								
Principal and interest payments	18	67,743	102,604	N/A	110,088	104,016	122,024	120,638
Sub-total	\$ 18	\$ 67,743	\$ 102,604	\$ -	\$ 110,088	\$ 104,016	\$ 122,024	\$ 120,638
Ending Balance	\$ 48,130	\$ 48,130	\$ 66,208	N/A	\$ 67,720	\$ 83,075	\$ 82,929	\$ 84,745

(In Thousands)	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ 71,496	\$ 80,936	\$ 81,675	\$ 80,317	\$ 75,019	\$ -	\$ 77,668	\$ 64,907	\$ 81,675
Additions:									
Revenue fund deposits	120,846	125,160	119,535	117,444	102,789	102,789	119,535	117,155	125,160
Bond funded interest						-	-	-	-
Sub-total	\$ 120,846	\$ 125,160	\$ 119,535	\$ 117,444	\$ 102,789	-	-	-	-
Deductions:									
Principal and interest payments	111,406	124,421	120,893	122,742	110,088	110,088	120,893	117,910	124,421
Sub-total	\$ 111,406	\$ 124,421	\$ 120,893	\$ 122,742	\$ 110,088	-	-	-	-
Ending balance	\$ 80,936	\$ 81,675	\$ 80,317	\$ 75,019	\$ 67,720	\$ 67,720	\$ 80,317	\$ 77,133	\$ 81,675

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 March 31, 2016

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.

(In Thousands)	Actual as of 03/31/2016		Full Year			Projection		
	Current Quarter	Year -to-Date	2016 Forecast	2016 Budget	Prior Year Actual	2017	2018	2019
Opening Balance	\$ 108,086	\$ 108,849	\$ 108,849	N/A	\$ 116,829	\$ 108,086	\$ 108,086	\$ 108,086
Additions:								
Construction reserve fund/bond issues			-	N/A	-			
Revenue fund			-	N/A	-			
Rounding			-					
Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Deductions:								
Revenue fund		763	763		7,980			
Sub-total	\$ -	\$ 763	\$ 763	\$ -	\$ 7,980	\$ -	\$ -	\$ -
Ending Balance	\$ 108,086	\$ 108,086	\$ 108,086	N/A	\$ 108,849	\$ 108,086	\$ 108,086	\$ 108,086

	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ 91,239	\$ 102,214	\$ 119,131	\$ 119,915	\$ 116,829	\$ 91,239	\$ 116,829	\$ 109,866	\$ 119,915
Additions:									
Construction reserve fund/bond issues	10,975	10,917	784			784	10,917	7,559	10,975
Revenue fund	-	6,000	3,821			-	3,821	3,274	6,000
Sub-total	\$ 10,975	\$ 16,917	\$ 4,605	\$ -	\$ -	-	-	-	-
Deductions:									
Revenue fund			3,821	3,086	7,980	3,086	3,821	4,962	7,980
Sub-total	\$ -	\$ -	\$ 3,821	\$ 3,086	\$ 7,980	-	-	-	-
Ending balance	\$ 102,214	\$ 119,131	\$ 119,915	\$ 116,829	\$ 108,849	\$ 102,214	\$ 116,829	\$ 113,388	\$ 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.

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

For the Fiscal Quarter Ending March 31, 2016

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

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

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

(In Thousands)	Actual as of 03/31/2016		Full Year			Projection		
	Current Quarter	Year -to-Date	2016 Forecast	2016 Budget	Prior Year Actual	2017	2018	2019
Opening Balance	\$ 67,192	\$ 37,337	\$ 37,337	N/A	\$ 59,295	\$ 42,828	\$ (5,536)	\$ (21,879)
Additions:								
R&R/OCO Contribution	26,468	61,835	109,750	-	62,793	110,582	113,066	115,276
Loans betw Capital Fds	-	-	-	-	22	-	-	-
Other	5,141	24,392	28,620	-	653	8,600	8,600	8,600
Sub-total	\$ 31,609	\$ 86,227	\$ 138,370	\$ -	\$ 63,468	\$ 119,182	\$ 121,666	\$ 123,876
Deductions:								
Capital Expenditures	26,713	51,464	132,816	-	85,426	167,546	138,009	135,241
Transfer to Capacity Fund	51	63	63	-	-	-	-	-
Transfer to Construction Fund	-	-	-	-	-	-	-	-
R&R/OCO Contribution	-	-	-	-	-	-	-	-
Sub-total	\$ 26,764	\$ 51,527	\$ 132,879	\$ -	\$ 85,426	\$ 167,546	\$ 138,009	\$ 135,241
Ending Balance	\$ 72,037	\$ 72,037	\$ 42,828	N/A	\$ 37,337	\$ (5,536)	\$ (21,879)	\$ (33,244)

	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ 11,539	\$ 28,840	\$ 64,260	\$ 78,689	\$ 59,295	\$ 11,539	\$ 59,295	\$ 48,525	\$ 78,689
Additions:									
R&R/OCO Contribution	49,946	76,157	91,245	48,373	62,793	48,373	62,793	65,703	91,245
Loans betw Capital Fds	-	-	-	-	22	-	-	6	22
Other (incl septic tank)	1,067	5,771	1,539	1,614	653	653	1,539	2,129	5,771
Sub-total	\$ 51,013	\$ 81,928	\$ 92,784	\$ 49,987	\$ 63,468				
Deductions:									
Capital Expenditures	33,712	46,508	68,355	67,488	85,426	33,712	67,488	60,298	85,426
Loan Repayment	-	-	-	-	-	-	-	-	-
Transfer to Constr. Fund	-	-	10,000	1,893	-	-	947	2,973	10,000
Other (incl septic tank)	-	-	-	-	-	-	-	-	-
Sub-total	\$ 33,712	\$ 46,508	\$ 78,355	\$ 69,381	\$ 85,426				
Ending balance	\$ 28,840	\$ 64,260	\$ 78,689	\$ 59,295	\$ 37,337	\$ 28,840	\$ 59,295	\$ 53,684	\$ 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 March 31, 2016

Reserve/Fund Authorization: Florida Statute and Rate Tariff

Metric: Tariff rate

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

(In Thousands)	Actual as of 03/31/2016		Full Year			Projection		
	Current Quarter	Year-to-Date	2016 Forecast	2016 Budget	Prior Year Actual	2017	2018	2019
Opening Balance	\$ 94,216	\$ 90,912	\$ 90,912	N/A	\$ 76,887	\$ 92,150	\$ 58,635	\$ 41,213
Additions:								
Capacity Fees	5,528	10,112	18,612	-	19,579	18,440	18,624	18,810
State Revolving Fd Loan				-	-			
Transfer from R&R/OCO Fund	51	63	363	-	246	650	650	650
Other				-	-			
Sub-total	\$ 5,579	\$ 10,175	\$ 18,975	\$ -	\$ 19,825	\$ 19,090	\$ 19,274	\$ 19,460
Deductions:								
Capital Expenditures	1,018	2,310	17,737	-	5,805	52,605	36,696	22,135
Other				-	-			
Sub-total	\$ 1,018	\$ 2,310	\$ 17,737	\$ -	\$ 5,805	\$ 52,605	\$ 36,696	\$ 22,135
Ending Balance	\$ 98,777	\$ 98,777	\$ 92,150	N/A	\$ 90,907	\$ 58,635	\$ 41,213	\$ 38,538

(In Thousands)	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ 21,463	\$ 41,025	\$ 45,454	\$ 60,360	\$ 76,887	\$ 21,463	\$ 45,454	\$ 49,038	\$ 76,887
Additions:									
Capacity Fees	10,311	10,820	17,394	18,298	19,579	10,311	17,394	15,280	19,579
State Revolving Fd Loan	14,667	3,798	-	-	-	-	1,899	4,616	14,667
Loan Repayments	-	-	-	-	246	-	-	49	246
Other	-	-	12	-	5	-	-	3	12
Sub-total	\$ 24,978	\$ 14,618	\$ 17,406	\$ 18,298	\$ 19,830				
Deductions:									
Capital Expenditures	5,268	7,096	2,270	1,758	5,805	1,758	5,268	4,439	7,096
Loans betw Capital Fds	-	-	-	-	-	-	-	-	-
Other	148	3,093	230	13	-	13	189	871	3,093
Sub-total	\$ 5,416	\$ 10,189	\$ 2,500	\$ 1,771	\$ 5,805				
Ending balance	\$ 41,025	\$ 45,454	\$ 60,360	\$ 76,887	\$ 90,912	\$ 41,025	\$ 60,360	\$ 62,928	\$ 90,912

Observations:

Water and Sewer Environmental

For the Fiscal Quarter Ending March 31, 2016

Reserve/Fund Authorization: Pricing Policy

Metric: Unit tariff rates times consumption

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

(In Thousands)	Actual as of 03/31/2016		Full Year			Projection		
	Current Quarter	Year -to-Date	2016 Forecast	2016 Budget	Prior Year Actual	2017	2018	2019
Opening Balance	\$ 103	\$ 19,245	\$ 19,245	N/A	\$ 5,299	\$ -	\$ -	\$ -
Additions:								
Environmental Contributions	1,660	2,076	11,056	-	22,056	18,458	8,753	12,331
Loans betw Capital Fds	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Sub-total	\$ 1,660	\$ 2,076	\$ 11,056	\$ -	\$ 22,056	\$ 18,458	\$ 8,753	\$ 12,331
Deductions:								
Capital Expenditures	1,454	1,766	10,693	-	7,318	17,808	8,103	11,681
Septic Tank Phase Out	63	64	363	-	203	650	650	650
Other	-	19,245	19,245	-	589	-	-	-
Sub-total	\$ 1,517	\$ 21,075	\$ 30,301	\$ -	\$ 8,110	\$ 18,458	\$ 8,753	\$ 12,331
Ending Balance	\$ 246	\$ 246	\$ -	N/A	\$ 19,245	\$ -	\$ -	\$ -

(In Thousands)	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ 5,920	\$ 9,795	\$ (8,158)	\$ (9,857)	\$ 5,299	\$ (9,857)	\$ 5,299	\$ 600	\$ 9,795
Additions:									
Environmental Contributions	14,577	21,747	21,193	21,018	22,056	14,577	21,193	20,118	22,056
Loans betw Capital Fds	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Sub-total	\$ 14,577	\$ 21,747	\$ 21,193	\$ 21,018	\$ 22,056				
Deductions:									
Capital Expenditures	10,702	39,700	22,892	5,862	7,318	5,862	10,702	17,295	39,700
Septic Tank Phase Out	-	-	-	-	203	203	203	203	203
Other	-	-	-	-	589	589	589	589	589
Sub-total	\$ 10,702	\$ 39,700	\$ 22,892	\$ 5,862	\$ 8,110				
Ending balance	\$ 9,795	\$ (8,158)	\$ (9,857)	\$ 5,299	\$ 19,245	\$ (9,857)	\$ 5,299	\$ 3,265	\$ 19,245

Observations:

Water and Sewer Construction / Bond Fund

For the Fiscal Quarter Ending March 31, 2016

Reserve/Fund Authorization: Bond Resolution

Metric: Capital expenditures per year minus internal funding available

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

(In Thousands)	Actual as of 03/31/2016		Full Year			Projection		
	Current Quarter	Year -to-Date	2016 Forecast	2016 Budget	Prior Year Actual	2017	2018	2019
Opening Balance	\$ 664	\$ 664	\$ 664	N/A	\$ 326	\$ -	\$ -	\$ -
Additions:								
Bond Proceeds			-	-	-			
Line of Credit			-	-	-			
Transfer from R&R/OCO Fund								
Other	17	17	17	-	344			
Sub-total	\$ 17	\$ 17	\$ 17	\$ -	\$ 344	\$ -	\$ -	\$ -
Deductions:								
Capital Expenditures					6			
Bond Proceeds					-			
Other			681	-	-			
Sub-total	\$ -	\$ -	\$ 681	\$ -	\$ 6	\$ -	\$ -	\$ -
Ending Balance	\$ 681	\$ 681	\$ -	N/A	\$ 664	\$ -	\$ -	\$ -

(In Thousands)	Historical					Statistical			
	2011	2012	2013	2014	2015	Low	Median	Mean	High
Opening Balance	\$ 18,708	\$ 29,622	\$ 7,419	\$ 2,305	\$ 326	\$ 326	\$ 7,419	\$ 11,676	\$ 29,622
Additions:									
Bond Proceeds	45,662	-	486	-	-	-	243	11,537	45,662
Line of Credit	-	-	-	-	-	-	-	-	-
Loans/trnsf btw CapFds	-	-	10,000	1,893	-	-	947	2,973	10,000
Other	-	-	3	476	344	-	3	165	476
Sub-total	\$ 45,662	\$ -	\$ 10,489	\$ 2,369	\$ 344				
Deductions:									
Capital Expenditures	34,172	20,243	14,855	3,784	6	6	14,855	14,612	34,172
Bond Proceeds	-	-	411	48	-	-	24	115	411
Line of Credit	-	-	-	-	-	-	-	-	-
Loans/trnsf btw CapFds	-	-	337	516	-	-	169	213	516
Other	576	1,960	-	-	-	-	288	634	1,960
Sub-total	\$ 34,748	\$ 22,203	\$ 15,603	\$ 4,348	\$ 6				
Ending balance	\$ 29,622	\$ 7,419	\$ 2,305	\$ 326	\$ 664	\$ 326	\$ 2,305	\$ 8,067	\$ 29,622

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. H.
5/9/2016
FAC



JEA
Building Community
AGENDA ITEM SUMMARY

April 26, 2016

SUBJECT:	JEA ENERGY MARKET RISK MANAGEMENT POLICY REPORT
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Purpose:	<input checked="" type="checkbox"/> Information Only	<input type="checkbox"/> Action Required	<input type="checkbox"/> Advice/Direction
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Issue: The JEA Board approved the Energy Market Risk Management (EMRM) Policy in March 2014. The Policy was developed to codify the risk, governance, limits, and criteria associated with managing energy market exposure, and to comply with requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act. The reporting section of the Policy requires that the CFO report quarterly on JEA's financial and physical fuel and power transactions. This report includes physical transactions greater than one year and all financial transactions. As background information, graphs presenting JEA's historical dispatch costs and power and natural gas market prices have been added.

Significance: High. The Policy governs JEA's wholesale energy market risk management and allows JEA to execute certain physical and financial transactions. The attached report is provided to the Board's Finance and Audit Committee and satisfies the requirements of the reporting section of the EMRM Policy.

Effect: Financial and physical transactions allow the JEA Fuels group to manage the risks inherent in the wholesale fuel and energy markets. The attached Finance and Audit Committee report summarizes JEA's current positions.

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

Recommended Board action: None required. The report is required by the EMRM Policy and is provided as information.

For additional information, contact: Steve McInall, 665-4309

Submitted by: PEM/ MJB/ SGM



MISSION	VISION	VALUES
<p>Energizing our community through high-value energy and water solutions.</p>	<p>JEA is a premier service provider, valued asset and vital partner in advancing our community.</p>	<ul style="list-style-type: none"> • Safety • Service • Growth • Accountability • Integrity

Commitments to Action

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

Physical Fuel and Purchase Power Positions as of 4/1/16

Table 1: JEA Generation Fleet Summary

Units	Primary Fuel Type	Contract Schedule
Northside 1 and 2	Petcoke, Coal	Quarterly; 1 Quarter in Advance
Northside 3	Natural Gas, Residual Oil	Market and Hedged; Stored Residual Oil
SJRPP 1 and 2	Coal	Contract Through 2017 and Partial 2018
Scherer 4	Coal	Contract through 2017
Brandy Branch	Natural Gas, Diesel	Market and Hedged /As Needed
Kennedy CT7 and 8	Natural Gas, Diesel	Market and Hedged /As Needed
Greenland CT1 and 2	Natural Gas	Market and Hedged

Table 2: Physical Positions

Plant	Energy Fixed Price (MWH)	Energy Fixed Price (%)	Expense Fixed Price (\$)	Expense Fixed Price (%)
Northside CFB				
FY16	850,081	39%	13,034,729	37%
FY17	-	0%	-	0%
FY18	-	0%	-	0%
SJRPP				
FY16	1,222,500	100%	43,451,700	100%
FY17	2,563,935	100%	88,145,300	100%
FY18	640,160	19%	22,673,143	25%
Scherer 4				
FY16	374,300	100%	10,438,700	100%
FY17	928,783	80%	30,054,199	94%
FY18	216,329	30%	16,400,875	77%
Renewable Purchase Power				
FY16	110,653	100%	7,296,307	100%
FY17	192,928	100%	13,553,279	100%
FY18	200,706	100%	15,491,455	100%
Other Purchase Power				
FY16	-	0%	-	0%
FY17	-	0%	-	0%
FY18	-	0%	-	0%

Table 3: Physical Counterparties (Contracts One Year or Greater)

Supplier/ Counterparty	Fuel Type	Contract Type	Generating Unit	Original Contract Volume	Remaining Contract Volume	Units	Original Contract Term	Remaining Contract Term
Coal Marketing Company	Coal	Index w/ Collar	SJRPP	1,500,000	552,500	Tons	1/1/14 - 12/31/16	4/1/16 - 12/31/16
Sunrise Coal	Coal	Fixed Price	SJRPP	250,000	100,875	Tons	1/1/15 - 12/31/16	4/1/16 - 12/31/16
Coal Marketing Company	Coal	Fixed Price	SJRPP	2,000,000	1,397,500	Tons	1/1/15 - 12/31/17	4/1/16 - 12/31/17
Coal Sales, LLC	Coal	Fixed Price	Scherer 4	452,300	113,724	Tons	1/1/14 - 12/31/16	4/1/16 - 12/31/16
Alpha- Eagle Butte	Coal	Fixed Price	Scherer 4	940,900	613,590	Tons	1/1/15 - 12/31/17	4/1/16 - 12/31/17
Arch Coal Sales Company, Inc	Coal	Fixed Price	Scherer 4	7,217	5,838	Tons	1/1/16 - 12/31/16	4/1/16 - 12/31/16
Coal Sales, LLC	Coal	Fixed Price	Scherer 4	250,000	212,741	Tons	1/1/16 - 12/31/17	4/1/16 - 12/31/16
BG	Natural Gas	Index w/Fixed Price Option	NG Fleet	445.6	115.1	Bcf (Billion Cubic Feet)	6/1/01 - 5/31/21	4/1/16 - 5/31/21

Figure 1A: FY 2016 Fuel Procurement

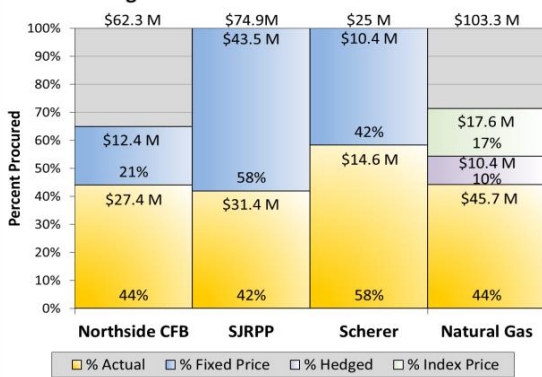


Figure 1B: FY 2017 Fuel Procurement

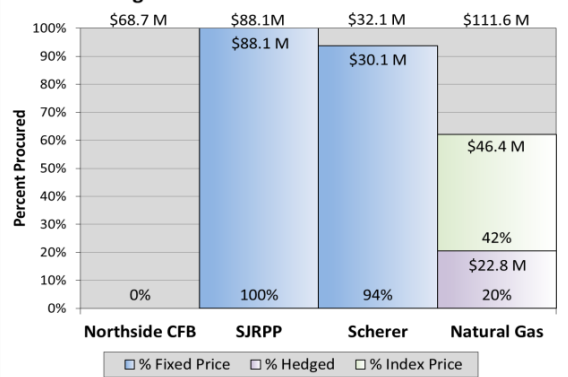
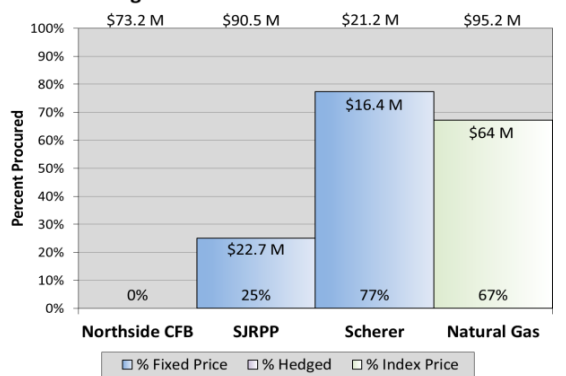


Figure 1C: FY 2018 Fuel Procurement



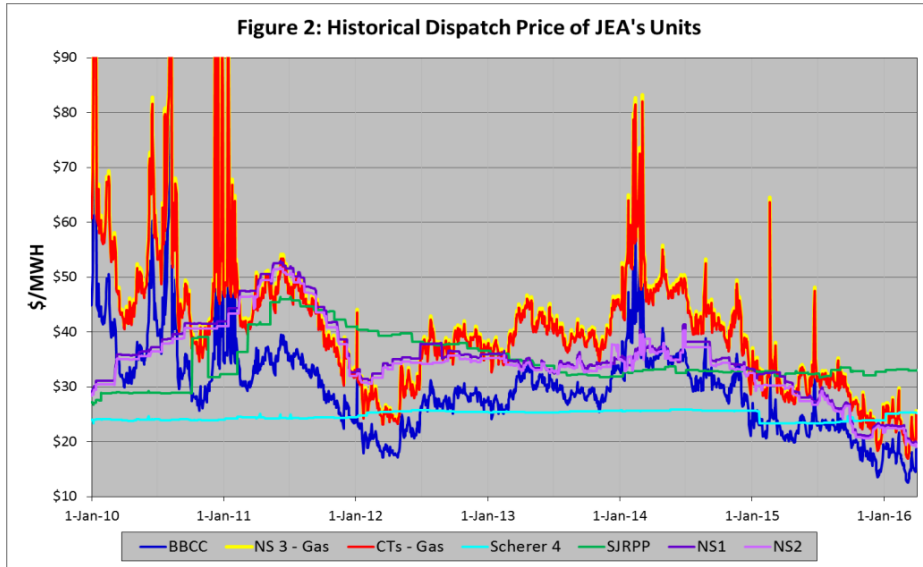


Figure 3: SOCO Power Market Review
Historical & Forward SOCO 7x24 Prices, (\$/MWh)

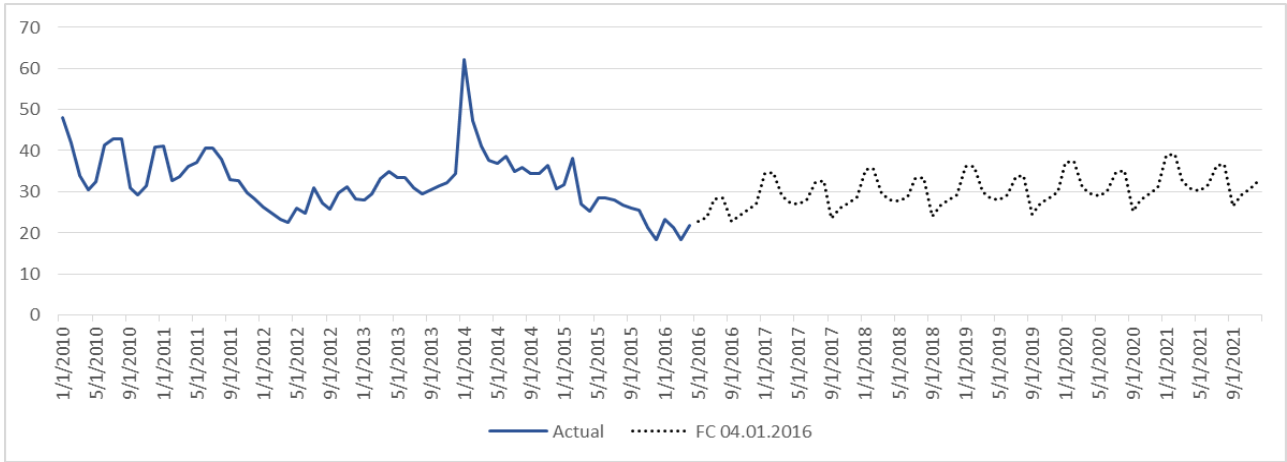


Figure 4: Natural Gas Market Review
Historical & Forward Henry Hub Prices, (\$/MMBtu)

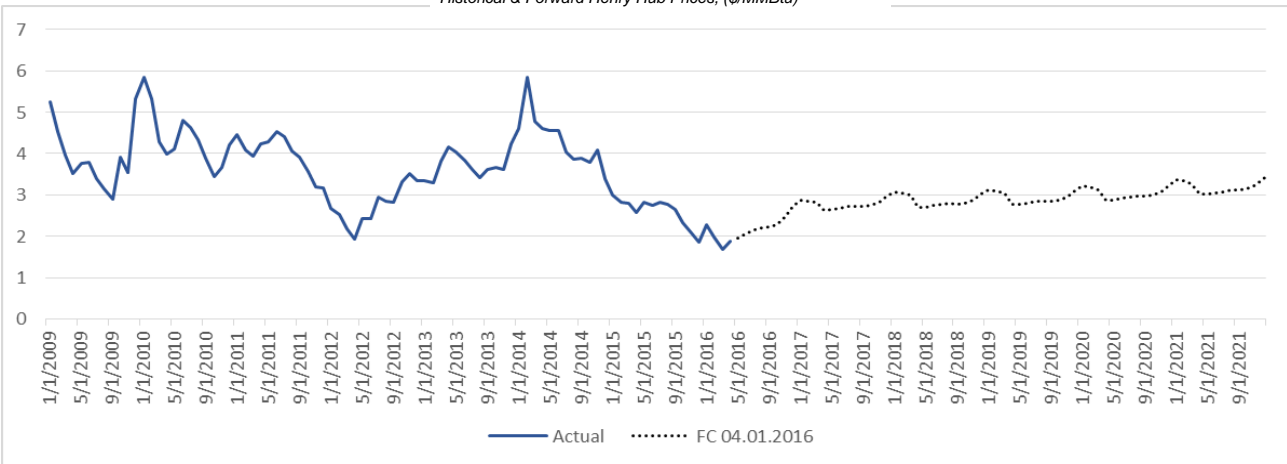


Table 4A: Financial Natural Gas Positions as of 4/1/2016

Month	Physical Volume	Hedged Volume	Percent Hedged	Unhedged Cost	Hedge Type	Hedge Price	Forecast at Time of Hedge	Mark-to-Market Value
May-16	3,767,300	600,000	15.9%	\$1.96	Collar	\$2.80 / \$4.00	\$3.77	\$503,490
Jun-16	4,217,000	600,000	14.2%	\$2.05	Collar	\$2.80 / \$4.00	\$3.80	\$448,800
Jul-16	4,448,100	600,000	13.5%	\$2.16	Collar	\$2.80 / \$4.00	\$3.85	\$395,490
Aug-16	4,593,900	600,000	13.1%	\$2.21	Collar	\$2.80 / \$4.00	\$3.86	\$372,000
Sep-16	3,450,700	600,000	17.4%	\$2.24	Collar	\$2.80 / \$4.00	\$3.84	\$366,780
FY16 Total	20,477,000	3,000,000	14.7%	\$2.12			\$3.83	\$2,086,560
Oct-16	3,803,600	600,000	15.8%	\$2.29	Collar	\$2.93 / \$4.50	\$3.87	\$416,100
Nov-16	3,209,600	600,000	18.7%	\$2.47	Collar	\$2.93 / \$4.50	\$3.98	\$333,660
Dec-16	3,365,100	600,000	17.8%	\$2.73	Collar	\$2.93 / \$4.50	\$4.20	\$234,660
Jan-17	3,298,300	600,000	18.2%	\$2.86	Collar	\$2.93 / \$4.50	\$4.39	\$196,320
Feb-17	2,807,400	600,000	21.4%	\$2.86	Collar	\$2.93 / \$4.50	\$4.38	\$207,390
Mar-17	2,779,400	600,000	21.6%	\$2.82	Collar	\$2.93 / \$4.50	\$4.32	\$226,530
Apr-17	1,984,600	600,000	30.2%	\$2.63	Collar	\$2.93 / \$4.50	\$4.11	\$276,840
May-17	2,508,600	600,000	23.9%	\$2.64	Collar	\$2.93 / \$4.50	\$4.11	\$273,390
Jun-17	2,733,700	600,000	21.9%	\$2.68	Collar	\$2.93 / \$4.50	\$4.15	\$259,620
Jul-17	3,076,900	600,000	19.5%	\$2.72	Collar	\$2.93 / \$4.50	\$4.19	\$243,480
Aug-17	3,056,900	600,000	19.6%	\$2.73	Collar	\$2.93 / \$4.50	\$4.20	\$245,580
Sep-17	2,624,200	600,000	22.9%	\$2.73	Collar	\$2.93 / \$4.50	\$4.19	\$248,310
FY17 Total	35,248,300	7,200,000	20.4%	\$2.67			\$4.17	\$3,161,880
Oct-17	2,841,200	-	0.0%	\$2.75	N/A	N/A	\$4.22	-
Nov-17	3,396,900	-	0.0%	\$2.82	N/A	N/A	\$4.32	-
Dec-17	2,742,700	-	0.0%	\$2.97	N/A	N/A	\$4.52	-
Jan-18	2,703,100	-	0.0%	\$3.07	N/A	N/A	\$4.70	-
Feb-18	2,398,800	-	0.0%	\$3.05	N/A	N/A	\$4.68	-
Mar-18	2,890,000	-	0.0%	\$2.99	N/A	N/A	\$4.61	-
Apr-18	1,997,200	-	0.0%	\$2.71	N/A	N/A	\$4.33	-
May-18	2,546,400	-	0.0%	\$2.71	N/A	N/A	\$4.33	-
Jun-18	2,749,600	-	0.0%	\$2.74	N/A	N/A	\$4.37	-
Jul-18	3,190,400	-	0.0%	\$2.78	N/A	N/A	\$4.41	-
Aug-18	3,104,100	-	0.0%	\$2.79	N/A	N/A	\$4.42	-
Sep-18	2,525,200	-	0.0%	\$2.78	N/A	N/A	\$4.42	-
FY18 Total	33,085,600	-	0.0%	\$2.85			\$4.44	-

Volume - mmBtu
Cost - \$/mmBtu

Table 4B: Counterparty Exposure

Supplier/Counterparty	Fuel Type	Contract Type	Hedged Volume	Mark-to-Market Value
Wells Fargo Bank, N.A.				
FY16	Natural Gas	Puts and Calls	3,000,000	\$2,086,560
FY17	Natural Gas	Puts and Calls	7,200,000	\$3,161,880
FY18	Natural Gas	Puts and Calls	---	---
Royal Bank of Canada				
FY16	Natural Gas	Swaps, Puts, Calls	---	---
FY17	Natural Gas	Swaps, Puts, Calls	---	---
FY18	Natural Gas	Swaps, Puts, Calls	---	---

Figure 5: Natural Gas Positions FY2016-FY2018

